

UNIVERSITY OF WISCONSIN OSHKOSH

THE SCHOOL OF GRADUATE STUDIES 2004-2006 BULLETIN

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Note to Readers

THE GRADUATE FACULTY invite your attention to the numerous degree, achievement and certificate programs and the varied courses in this publication. We are dedicated to high standards of scholarly achievement and professional development. Graduates of the University of Wisconsin Oshkosh Graduate School may be found regionally, nationally, and worldwide in positions of leadership and responsibility. We are proud to present this edition of the Bulletin.

This Bulletin does not establish or constitute a contract between the University of Wisconsin Oshkosh and students enrolled at this institution. The Bulletin provides descriptive and summary information that outlines University and School of Graduate Studies rules, regulations, course listings, degree programs, and fee schedules which are in effect at the times of publication. The University retains the exclusive right to change, modify, or interpret, at any time, the descriptions contained in this Bulletin. The University administration and faculty, with the concurrence of the Board of Regents and the administration of the University of Wisconsin System, also retains the right to change fees and to add, modify, or withdraw courses or degree, achievement or certificate programs at any time. The student is responsible for verifying the information contained herein.

The University of Wisconsin Oshkosh is committed to a policy of fairness and equal opportunity for all. A diverse student body, faculty, and staff, which reflect the variety of pluralism of society, is desired and encouraged. Moreover, equal access to benefits, programs, services, employment, and education opportunities is assured for all, without regard to sex, color, marital or parental status, race, age, national origin, religion, handicap, sexual preference, political affiliation or beliefs, membership in the Military Reserves or National Guard, and arrest or conviction record, ancestry, creed, disability, sexual orientation or other protected class or status. Inquiries regarding University compliance with equal opportunity/affirmative action laws and regulations may be directed to the University Director of Affirmative Action, 920-424-2296 or 920-424-0330.

Graduate students entering University of Wisconsin Oshkosh graduate programs during the period Summer, 2004, through Spring, 2006, are expected to assume full responsibility for the contents of this Bulletin.

Safety and Health Policy

The University of Wisconsin System will provide and maintain adequate facilities for a safe and healthy learning environment. It is the University's responsibility to work with faculty and staff so that they are equipped to educate their students on practices and procedures that ensure safety for all members of the university. Employees with instructional responsibilities are expected to comply with state and federal safety laws and regulations in their institutional areas. Certain courses and research projects require that the student work with hazardous materials while engaging in academic studies. Instructors of these courses and research projects shall inform and train students on procedures that will maintain the students personal health and safety and provide them with information on the hazards of specific chemicals that will be used during their course of study. Furthermore, instructors will enforce and follow safety policies. Before using hazardous materials and equipment, the student shall review the procedures and information, and discuss any associated concerns with the instructor.

Hazardous Water and Chemical Exposure

Any persons present near chemicals (including hazardous water) 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 particularly dangerous. Women who are in their first trimester of pregnancy should avoid exposure.

COLLEGE OF BUSINESS ADMINISTRATION

INFORMATION SYSTEMS

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I. FACULTY

Arbaugh, Bandy, Cross, DeDee, Desai, Dishaw, Dunn, Eierman, Feinauer, Frederickson, Griepentrog, Gudmundson, Hagen, Hart, Hartenian, Hartman, Hegedus, Huffman, Hungerford, Hyatt, Iversen, Kunkel, Makar, Marks, Moon, Niendorf, Philip, Schellenger, Sibley, Simons, Sridhar, Tattikonda, L., Tippins, Tower, Westort, Wresch

II. PURPOSE

The MSIS degree has a flexible curriculum designed for professionals who want to make a career change into the field of information technology or, for IT professionals, enhance and update their IT and management skills. All undergraduate majors are acceptable. The MSIS program prepares students for a wide range of positions related to information systems. Depending on prior background, graduates of the MSIS may pursue positions such as: Systems Analyst, Database Administrator, Information Systems Manager, Network Administrator, Programmer, Project Manager.

III. DEGREE

Completion of the program will lead to the degree: Master of Science (MS).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the Graduate School specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Common Body of Knowledge:

Applicants are required to have a common body of business knowledge equivalent to the foundation course requirements. Normally, this requirement is satisfied if applicants have earned an undergraduate business degree and completed undergraduate course equivalents from AACSB accredited or other approved business programs, with a C or better.

Applicants who have completed courses but cannot satisfy all of the above criteria will be required to demonstrate a current competency level in those areas.

Applicants without an undergraduate business degree and who lack adequate course preparation in business may be admitted to the MSIS program but will be expected to take appropriate foundation courses or their equivalents. Units (crs.) earned in these courses are not applicable to the 30 units (crs.) required for the graduate degree and must be completed prior to taking MSIS core courses. A proficiency option is also available for all foundation course requirements.

Foundation Courses:

Subject	Catalog #	Units (crs.)	Title
Business Administration			
	700	3	Accounting Foundations
	710	1.5	Foundations of Information Systems
	712	3	Foundations of Statistics
	730	1.5	Finance Foundations
	740	1.5	Foundations of Production Management
	750	1.5	Organizational Foundations
	770	1.5	Marketing Foundations

Testing:

Admission in Full Standing is based on an undergraduate grade point average (UGPA) of at least 2.75 (4.0 scale), or an average of at least 2.90 during the last half of undergraduate work; **AND** a satisfactory score on the GMAT* (Graduate Management Admission Test), a minimum of 450 or higher, taken within the last five years, **AND** a composite index, comprised of the UGPA and GMAT score, which meets the condition:

$$(UGPA \times 200) + GMAT \geq 1050; \text{ OR}$$

$$(\text{Last half UGPA} \times 200) + GMAT \geq 1100$$

Therefore, if an undergrad GPA is 3.0 or higher, a minimum GMAT score of 450 is needed for Full Standing admission. If an undergrad GPA is below 3.0, a minimum GMAT score greater than 450 is needed for Full Standing admission.

*or equivalent GRE.

Undergraduate Major

Students with a bachelor's degree in any discipline may apply for admission to the graduate program.

V. SUMMARY

A. Structure

The program is comprised of core course tracks, and electives.

B. Academic Plans of Study

Information Systems is the description for the Information Systems plan of study.

C. Minimum Unit (Cr.) Requirements

30 units (crs.) applicable to the graduate degree constitute the minimal requirement for all students in the program.

D. Admission To Candidacy

Students must satisfy fully the Graduate School requirements for advancement to candidacy, stated in the first section of this Bulletin.

E. Graduation Requirements

No more than six (6) units (crs.), regardless of the number of courses, with grades below B may apply to an Information Systems Masters degree.

VI. DEGREE REQUIREMENTS

Core Courses: (9 – 18 credits*)

Subject

Catalog #	Units (crs.)	Title
Business Administration		
758	1.5	Project Management
769	1.5	Project Execution & Control
781	3	Systems Analysis and Design
782	3	Data and Database Systems
785	3	Networking and Data Communication
786	3	Distributed Information Systems
787	3	Information Resources Management, Strategy, and Policy

*Students with significant prior background will be allowed to substitute elective credits for core courses.

MSIS Tracks (6 credits from either Track 1 or Track 2)

Track 1 – Software Development Track

783	3	Object-oriented Software Development
784	3	Software Design and Development

Track 2 – Process/Management Track

741	3	Opns & Process Management
769	1.5	ERP I
769	1.5	ERP II
769	1.5	Implementing Reengineering

ELECTIVES (6 to 15 additional credits)

Select 6 credits from the following (categories for organizational purposes only):

Software Development Courses

783	3	Object Oriented Software Development
784	3	Software Design and Development

Process/Management Courses

741	3	Operations & Process Management
769	1.5	ERP I
769	1.5	ERP II
769	1.5	Implementing Reengineering

E-Commerce Courses

774	1.5	E-Commerce
769	1.5	Technical Foundations for E-Commerce
769	1.5	Securing Company Information
769	1.5	Computer Fraud Fundamentals

Management Courses

788	1.5	Personal & Professional Development
790	1.5	Organizational Leadership & Change
792	1.5	International Business
793	1.5	Business Environments: Law, Regulation, and Ethics

Project Management Courses

759	1.5	Advanced Project Management
769	1.5	Project Portfolio Management

Other Business Courses

731	3	Financial Management
752	3	Cost Management
761	3	Human Resource Management
769	1.5	Seminar in Management Topics: E-Commerce to E-Business
771	3	Marketing Strategy
		Other Pre-approved courses

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BUSINESS ADMINISTRATION

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I. FACULTY

Arbaugh, Bandy, Beck, Cross, DeDee, Desai, Dishaw, Dunn, Eierman, Feinauer, Frederickson, Godfrey, Gripen-trog, Gudmundson, Hagen, Hart, Hartenian, Hartman, Hegedus, Huffman, Hyatt, Kunkel, Lilly, Makar, Marks, Moon, Niendorf, Philip, Schellenger, Sibley, Simons, Srid-har, Tatikonda, L., Tippins, Tower, Westort, Wresch

II. PURPOSE

The graduate program in business administration is designed to qualify the graduate for broad managerial responsibility in business, government, educational institutions, health care and other organizations. Courses comprising the Master of Business Administration program are offered in Green Bay, Stevens Point, Oshkosh and on-line. With classes offered during the early evening hours, it is possible to pursue the MBA degree on either a full-time or a part-time basis.

III. DEGREE

Completion of the program will lead to the degree: Master of Business Administration (MBA).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the Graduate School specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Common Body of Knowledge:

Applicants are required to have a common body of business knowledge equivalent to the foundation course requirements. Normally, this requirement is satisfied if applicants have earned an undergraduate business degree and completed undergraduate course equivalents from AACSB accredited or other approved business programs, with a C or better.

Applicants without an undergraduate business degree and who lack adequate course preparation in business may be admitted to the MBA program but will be expected to take appropriate foundation courses or their equivalents. Units (crs.) earned in these courses are not applicable to the 30-33 units (crs.) required for the graduate degree and must be completed prior to taking MBA core courses. A proficiency option is also available for all foundation course requirements.

Foundation Courses:

Subject	Catalog #	Units (crs.)	Title
Business Administration			
	700	3	Accounting Foundations
	710	1.5	Foundations of Information Sys-tems
	712	3	Foundations of Statistics
	730	1.5	Finance Foundations
	740	1.5	Foundations of Production Man-agement
	750	1.5	Organizational Foundations
	770	1.5	Marketing Foundations
Economics			
	704	1-3	Basic Economic Theory

Testing:

Admission in Full Standing is based on an undergraduate grade point average (UGPA) of at least 2.75 (4.0 scale), or an average of at least 2.90 during the last half of undergraduate work; **AND** a satisfactory score on the GMAT* (Graduate Management Admission Test), a minimum of 450 or higher, taken within the last five years, **AND** a composite index, comprised of the UGPA and GMAT score, which meets the condition:

$(UGPA \times 200) + GMAT \geq 1050$; **OR**

$(\text{Last half UGPA} \times 200) + GMAT \geq 1100$

Therefore, if an undergrad GPA is 3.0 or higher, a minimum GMAT score of 450 is needed for Full Standing admission. If an undergrad GPA is below 3.0, a minimum GMAT score greater than 450 is needed for Full Standing admission.

*The GMAT may be waived based on the completion of a **domestic** Masters or higher degree or a current (less than 5 years old) GRE score. In addition, the MBA Program is also undergoing a pilot study accepting an overall undergraduate GPA of 2.75 or a last half undergraduate GPA of 2.9 and one of the following professional certifications in lieu of the GMAT: CPA (Certified Public Accountant), CFA (Certified Financial Analyst), CFP (Certified Financial Planner), CLU (Certified Life Underwriter), CMA (Certified Management Accountant), CPIM (Certified in Production and Inventory Mgmt), CIRM (Certified in Resource Management), CPCU (Chartered Property Casualty Underwriter), CPM (Certified Purchasing Manager), Member, Society of Actuaries, PE (Professional Engineer—test certification only).

Undergraduate Major:

Students with a bachelors degree in any discipline may apply for admission to the graduate program.

V. SUMMARY

A. Structure

The program is comprised of core course tracks, and electives.

B. Academic Plans of Study

Business Administration is the description for the Business Administration plan of study.

The curriculum code for the business administration program is MBA.

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C. Minimum Unit (Cr.) Requirements

30-33 units (crs.) applicable to the graduate degree constitute the minimal requirement for all students in the program.

D. Admission to Candidacy

Students must satisfy fully the Graduate School requirements for advancement to candidacy, stated in the first section of this Bulletin.

E. Graduation Requirements

No more than six (6) units (crs.), regardless of the number of courses, with grades below B may apply to the MBA degree.

VI. DEGREE REQUIREMENTS

Core Courses:

Subject

Catalog #	Units (crs.)	Title
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A. Management Core

Business Administration

788	1.5	Personal and Professional Development
790	1.5	Organizational Leadership and Change
792	1.5	International Business
793	1.5	Business Environments: Law, Regulation and Ethics
794	3	Strategic Management

B. Functional Core

Business Administration

731	3	Financial Management
741	3	Operations and Process Management
752	3	Cost Management
754	3	Information Systems in Organizations
761	3	Human Resources Management
771	3	Marketing Strategy

Electives

Students may consult with the program advisor in selecting electives from the following offerings:

Subject

Catalog #	Units (crs.)	Title
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Business Administration

608	3	Advanced Accounting
622	3	Business Law II
694	3	International Business Study Tour
702	3	Advanced Cost Management
709	1-3	Topics in Accounting (see course description)
720	3	Legal Aspects of Business
722	1-3	Planning for Management in the Future
732	3	Investment Analysis and Portfolio Management
733	3	Money and Capital Markets
734	1-3	International Financial Management and Investments

735	1-3	Current Topics in Finance (see course description)
742	3	Quantitative Analysis in Production
743	1-3	Topics in Operations Management
758	1.5	Project Management
759	1.5	Advanced Topics in Project Management
762	3	Organizational Reward Systems
763	3	Labor Relations
765	3	Venture Management
767	1-3	Advanced Human Resource Topics (see course description)
769	1-3	Seminar in Management Topics
772	3	Research for Marketing Decisions
773	1-3	International Marketing Management
774	1-3	Seminar in Marketing Topics
777	1-3	Consumer Behavior
781	3	Systems Analysis and Design
782	3	Data and Database Systems
783	3	Object Oriented Software Development
784	3	Software Design and Development
785	3	Networking and Data Communications
786	3	Distributed Information Systems
795	6	Business Administration Thesis
796	1-3	Independent Study in Business Administration
798	1.5	Advanced Interpersonal Skills

Other Requirements

Completion of Business Administration 794 during the last 9 units (crs.) of graduate study.

Comments

A thesis may be submitted in lieu of 6 units (crs.) of electives. A thesis requires the approval of the director of graduate programs of the College of Business Administration.

VII. COURSE DESCRIPTIONS

Please see the College of Letters and Science Graduate Service Courses section of this Bulletin for description of the following course:

Subject

Catalog #	Units (crs.)	Title
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Economics

704	1-3	Basic Economic Theory
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Business Administration 608

3 units (crs.)

Advanced Accounting II

Advanced accounting theory and practice placing emphasis upon the areas of partnerships, business combinations and consolidated statements, branch accounting and fund accounting. Prerequisite: Business Administration 308. 408/608

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Business Administration 622 3 units (crs.)

Business Law II

This course primarily involves an in-depth study of commercial paper (e.g. promissory notes and checks), agency law, general and limited partnerships, corporate law, secured transactions, bankruptcy and accountant's legal liability. Articles III, IV and IX of the Uniform Commercial Code are applied in this course. Secondly, this course covers some government regulation of business areas and international law. Prerequisite: Business Law I. 422/622 (Spring)

Business Administration 694 1-3 units (crs.)

International Business Study Tour

Requirements for study tours includes:(1) travel to various countries directed by business faculty members to provide students direct contact with economic and business issues in other societies. (2) reading background material; (3) attendance at classes; (4) participating in field lectures; (5) writing a report and/or other assignments. For graduate credit, an additional research assignment, paper or project is also required. Undergraduate credit, consent of the instructor, for graduate credit, admission to full standing in the MBA program and consent of the instructor. 494/694

Business Administration 700 1-3 units (crs.)

Accounting Foundations

This course introduces students to principles of 1) financial accounting and the preparation, interpretation, and analysis of general purpose financial statements for parties external to the organization, and 2) management accounting, the use of accounting information for planning and control, decision making, and costing of organizational activities.

Business Administration 702 3 units (crs.)

Advanced Cost Management

Analysis of underlying concepts and techniques of cost accounting and reporting systems, including recent developments, and management control systems in manufacturing, service, and nonprofit organizations. Prerequisites: Business Administration 752.

Business Administration 709 1-3 units (crs.)

Topics in Accounting

Current topics in Accounting will cover a set of selected current and relevant topics that are either not covered or not covered in depth in regular courses, but are of interest to graduate business students. This course may be repeated as different topics will be covered in different terms.

Business Administration 710 1-3 units (crs.)

Foundations of Information Systems

Introduction to computer information systems and the use of computer systems in organizations. The course includes the description and use of computer hardware and software. Focus of the course is on the development, management and use of management information systems from the viewpoint of the user. Prerequisite: Computer

literacy (knowledge and ability to use Windows operating system, word processing, spreadsheet, database management systems, and presentation packages).

Business Administration 712 3 units (crs.)

Foundations of Statistics

An accelerated exposure to the fundamental statistical techniques essential to management decision-making including probability, frequency distributions, dispersion, inference, estimation, confidence intervals, and hypothesis testing in both a classical and Bayesian context.

Business Administration 720 3 units (crs.)

Legal Aspects of Domestic and International Business Transactions

This course involves a study of the legal rights and duties arising from business transactions. It covers the requirements for an enforceable contract, contract defenses, and breach of contract. This course also examines various statutes that apply to commercial transactions regarding the execution of the contract, obligations of the parties, and payment or financing. International conventions and/or treaties affecting business transactions, licenses for international business, and exporting and importing are also studied. Prerequisite: None.

Business Administration 722 1-3 units (crs.)

Planning for Management in the Future

The course investigates the range of probable alternative futures that business and government will face during the coming decades. The writings of a number of leading futurists are compared. The principal forecasting techniques are described, including environmental as well as technological forecasting. The mechanics of developing and implementing business plans are explored.

Business Administration 730 1-3 units (crs.)

Finance Foundations

A study of the principles of finance and their application to the financial decision-making of the firm. Emphasis is on the financial objectives of the firm, the allocation of funds within the firm, projecting the firm's fund requirements, and the sources of funds. Prerequisite: Business Administration 700.

Business Administration 731 3 units (crs.)

Financial Management

A financial approach to business management with emphasis on decision-making within the firm. The course examines the financial theory and techniques of analysis underlying the management of assets and financing of the business unit. Prerequisite: Business Administration 730.

Business Administration 732 3 units (crs.)

Investment Analysis and Portfolio Management

Analysis of techniques for evaluating the selection of securities and managing institutional and individual portfolios. The course examines recent developments in

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investment alternatives, such as option writing, which supplement traditional portfolio approaches. Prerequisite: Business Administration 731.

Business Administration 733 *3 units (crs.)* **Money and Capital Markets**

Identification and analysis of principal suppliers and users of funds in financial markets. Topics include domestic and international market structure, intermediary functions of institutions, and the impact of monetary and fiscal policies. Prerequisites: Business Administration 730.

Business Administration 734 *3 units (crs.)* **International Financial Management and Investments**

International Financial Management and Investments is a study of corporate finance and investments in an international framework. The basic principles and theories are the same as those used in a domestic setting, however different markets and new risks are encountered. Understanding these markets and learning to manage the risks are the primary objectives of this course. The course will be a lecture/discussion format and will include the use of case studies to facilitate understanding. Specific topic will include a study of the international monetary system, the currency market (including spot, futures, forwards, options and swaps), capital budgeting, portfolio management for corporations and households, and international stock markets. Prerequisite: Business Administration 730.

Business Administration 735 *1-3 units (crs.)* **Current Topics in Finance**

Current Topics in Finance will cover a set of selected current and relevant topics that are either not covered or not covered in depth in regular courses, but are of interest to graduate business students. This course may be repeated because different topics will be covered in different semesters.

Business Administration 740 *1-3 units (crs.)* **Foundations of Production Management**

Introduction to principles of production in manufacturing and service activities including facility location, process and project planning and control, sequencing and scheduling, quality control and work measurement. Prerequisite: Business Administration 712.

Business Administration 741 *3 units (crs.)* **Operations and Process Management**

The operations (production) function of organizations is studied for both manufacturing and non-manufacturing systems (services). A primary focus is on the management of processes used to provide quality good and services. Topics include the following: operations planning and scheduling; supply chain management; determining and classifying core processes; managing processes; material requirements planning (MRP) and Enterprise Resource Planning (ERP); forecasting; inventory management; just-in-time (JIT); project management; product service and process design; quality improvement; manufacturing

strategies; and location. Prerequisite: All foundation courses.

Business Administration 742 *3 units (crs.)* **Quantitative Analysis in Production Management**

Emphasizes forecasting and computer assisted production and inventory control systems. Forecasting applications include topics from qualitative analysis, time series analysis, causal factors and control systems. The computer assisted production and inventory control systems emphasize material requirements planning (MRP), including capacity planning, master scheduling, shop floor control and production economics. Emphasis is on case studies and applications. Prerequisite: Business Administration 740.

Business Administration 743 *1-3 units (crs.)* **Topics in Operations Management**

Study of selected topics within the field of operations management. Topics vary by semester. Prerequisite: Business Administration 740.

Business Administration 750 *1-3 units (crs.)* **Organizational Foundations**

This course is designed to give students a basic understanding of management and related organizational issues. Current issues and developments in management theory will be examined with a focus on organizational processes, structures, individual and group relationships. Topics to be covered include: Motivation, perception, attitudes, group dynamics, organization development, organization structure, organization culture, and basic human resource management topics (job analysis, performance appraisal, the legal environment).

Business Administration 752 *3 units (crs.)* **Cost Management**

This course emphasizes accounting as an information system for managerial purposes such as planning and control, decision making, and costing products and services. It also examines the role of the accountant in the organization and how management accounting interfaces with other business functions.

Business Administration 753 *3 units (crs.)* **Managerial Problem Solving**

A quantitative approach to solving management problems by employing innovative statistical and operations research techniques. Prerequisite: Business Administration 712.

Business Administration 754 *3 units (crs.)* **Information Systems in Organizations**

The focus of this course is upon the interrelationships among the functional organization information flows with a view towards improving these interrelationships and the decision-making processes within the total organization; the concepts of data base management systems are investigated, and the principal available systems are

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evaluated; plans for implementation of a common data base are developed.

Business Administration 758 *1.5 units (crs.)* **Project Management**

The course examines project management from a theoretical/practitioner perspective. The course will be organized along four major phases of the project management process: 1) Project Selection and Definition; 2) Project Planning; 3) Project Execution and Control; 4) Project Closing. Students will examine key outcomes, documents, and techniques available for successfully managing the challenges of each phase. Specific topics covered will include: project selecting and scope definition, work breakdown structures and statements of work, project scheduling, project team selection and developments, and strengths and weaknesses of various management tools.

Business Administration 759 *1.5 units (crs.)* **Advanced Topics in Project Management**

This course is oriented toward the more experienced project manager and/or those who supervise project managers. The focus of the course will be to address current topics in the field of project management and assess whether and how they should be addressed in organizations. Course topics will vary depending on currency of and level of interest in the topic and may include: 1) Critical Chain Project Management; 2) The role of a project office and how to develop one in your organization; and 3) Capturing knowledge from individual projects for use throughout the organization. Prerequisite: Business 758.

Business Administration 761 *3 units (crs.)* **Human Resources Management**

This course is designed to provide non-human resources managers with the skills necessary to successfully manage human resources. The course recognizes the growing need for managers, supervisors, team leaders, and the typical employee to understand the core competencies of human resources to prepare of successfully managing human resources. The course emphasizes the relationship between human resources strategy and business strategy with a focus on the role human resources management plays in supporting implementation of business objectives.

Business Administration 762 *1-3 units (crs.)* **Organizational Reward Systems**

Covers topics related to the use of intrinsic and extrinsic rewards to achieve organizations' strategic goals. Specific topics include: motivational theories, compensation surveys, job evaluation, performance appraisal, merit pay, variable or at risk pay, team compensation, supplemental compensation, and non-monetary compensation. Designed for those individuals working in human resources management or whose responsibilities include significant management of human resources. Prerequisite: Business Administration 761 or consent of instructor.

Business Administration 763 *3 units (crs.)* **Labor Relations**

Covers topics related to the management of the employer employee relationship in both organized and unorganized environments. Specific topics include: labor law, contract negotiation and administration, grievances and arbitration processes, labor management cooperation, quality of work life, discipline and employee rights. Designed for those individuals working, or planning on working, in human resource management or general management.

Business Administration 765 *3 units (crs.)* **Venture Management**

Entrepreneurship explored at individual and organizational levels. At the individual level, topics include starting a business, writing a business plan, conducting an entrepreneurial self-assessment, and exploring stages of new venture development. At the organizational level, topics include characteristics of entrepreneurial organizations, development of a corporate culture supporting creation of new products and services, and mechanisms for changing the corporate culture.

Business Administration 767 *1-3 units (crs.)* **Advanced Human Resources Topics**

This course covers special topics in human resources management and is intended for students already in, or preparing for, positions in the human resources management profession. Topics to be addressed include, but are not limited to, employee relations in non-union and unionized organizations; the strategic role of human resources management as a competitive asset and the role of the human resources department in setting and implementing strategy; impact of teams on human resources management; need for and use of human resources information systems. Other topics which may be addressed include current legal developments, role of human resources professionals in safety management systems, role of human resources professionals in managing change. Prerequisite: Business Administration 761 or permission of the instructor.

Business Administration 769 *1-3 units (crs.)* **Seminar in Management Topics**

Contemporary problems, philosophies, and techniques in the field. This seminar will provide an opportunity to study in-depth issues and developments of particular concern to students, faculty and the business community.

Business Administration 770 *1-3 units (crs.)* **Marketing Foundations**

The basic marketing factors of the firm - price, promotion, product and distribution are discussed along with the legal and societal environment in which the firm must employ these tools. Emphasis is placed on the analysis of consumer needs upon which pricing, promotion, product and distribution decisions must be made.

BUSINESS ADMINISTRATION

Business Administration 771 *3 units (crs.)* **Marketing Strategy**

A functionally integrated approach to planning, implementing and controlling marketing strategies and tactics. Emphasis is placed upon the use of marketing information systems, modeling, and quantitative techniques in the identification and exploitation of environmental opportunities and upon the formulation of strategies in product development, physical distribution and channel management, marketing communication and pricing. Case studies and business simulations. Prerequisite: Business Administration 770.

Business Administration 772 *3 units (crs.)* **Research for Marketing Decisions**

The role of the marketing information system in the recognition, investigation and analysis of marketing problems. The application of quantitative methods is stressed with emphasis upon advanced research design, the use of multi variate statistics for hypothesis testing of multiple variable relationships and computer analysis. The ability to design and carry through research is developed through a marketing research project. Prerequisite: Business Administration 712 and 770.

Business Administration 773 *3 units (crs.)* **International Marketing Management**

This course emphasizes the planning, organizing, coordinating, and controlling functions of international/multinational marketing management. Analysis and discussion of cultural, economic and structural variations worldwide proved opportunities for applying marketing principles. Prerequisite: Business Administration 770 and 792.

Business Administration 774 *1-3 units (crs.)* **Seminar in Marketing Topics**

Current issues and developments will be discussed in depth on a major topic in marketing. The focus will be on the theories and their managerial implications. Prerequisite: Business Administration 770 or consent of instructor.

Business Administration 777 *3 units (crs.)* **Consumer Behavior**

Economics of developed societies are driven by consumer tastes and preferences. Course explores current theories of consumer behavior from a marketing management perspective. Topics include: high and low involvement information processing; cultural, social, and reference group influences on behavior; ethics; consumerism; and segmentation. Several methodologies are introduced. Prerequisites: Business Administration 770.

Business Administration 781 *3 units (crs.)* **Systems Analysis and Design**

Students will learn the theory of the information systems development process. The course will focus on tools and techniques used in the analysis and design of information

systems. Emphasis will be placed in the use of classical and structured tools for describing data flow, data structure, process flow, file design, input and output design, and program specifications in the development and maintenance of information systems. The course will survey important skills required in systems analysis such as fact-finding, project management, and cost-benefit analysis. Prerequisite: At least concurrent enrollment in a 3-credit programming course.

Business Administration 782 *3 units (crs.)* **Data and Database Systems**

Students will learn and apply data modeling theory and databases technologies, including SQL and management issues such as security, privacy, backup and recovery. Prerequisite: Business Administration 710 or equivalent, and one programming course.

Business Administration 783 *3 units (crs.)* **Object-Oriented Software Development**

Study of selected topics within the field of Management Information Systems. Topics vary by semester. Prerequisite: A 3-credit programming course.

Business Administration 784 *3 units (crs.)* **Software Design & Development**

Study of the theory and practical application of software design for business applications. Students will learn the principles of software and development using an event-driven programming language. Topics include procedural and event-driven programming, software design for maintainability and reusability, and GUI design. Prerequisite: Business Administration 781, 782 and 783, a 3-credit Visual Basic course.

Business Administration 785 *3 units (crs.)* **Network and Data Communication**

Networking technologies offer tools that can extend the reach of an organization as well as facilitate the implementation of new and redesigned processes. Students completing this course will gain an understanding of the theory of network technology, its uses, and management. Students will gain experience in the configuration of networks, including LAN based and Internet based systems. Prerequisite: At least concurrent enrollment in Business 781.

Business Administration 786 *3 units (crs.)* **Distributed Information Systems**

The objective of the Distributed Information Systems Projects course is to develop student knowledge and skills in the design and development of distributed, or client/server, information systems. A secondary objective is to develop project management and life-long learning skills. Students enrolled in the course will manage the development of distributed information system projects using various development tools. Students are expected to manage their learning of these tools. Prerequisite: Business 781, at least concurrent enrollment with Business 782 and 785.

BUSINESS ADMINISTRATION

Business Administration 787 *3 units (crs.)* **Information Resource Management, Strategy, and Policy**

Students will understand how to manage information resources, project management (development, maintenance, and operations), pricing decisions, evaluation of system alternatives, and utilizing specific approaches, methods, and tools for directing technology projects. In addition, the course will acquaint students with the issues, procedures, and opportunities associated with the use of information technology in organizations with the management of the IS functions. Prerequisites: Business 781, 782, 785; At least concurrent enrollment in Business 784.

Business Administration 788 *1.5 units (crs.)* **Personal and Professional Development**

This course helps students identify their own personal and professional goals, develop strategies to achieve them, and encourage others they work with to do likewise. Topics covered in this course include developing self-awareness, determining values and priorities, career management, and developing skill in coaching and mentoring. The course is conducted in such a way that students are expected to be co-coaches and co-mentors for each other. To help students gain the familiarity with each other necessary to play these roles, the class includes a day-long retreat where students work through a variety of problem-solving exercises in a relaxed, non-classroom setting. A primary outcome of this course is a personal development plan that students can use to pursue their professional goals during and after their time in the MBA program. (To be taken during the first nine units (crs.) of program.)

Business Administration 790 *1.5 units (crs.)* **Organizational Leadership and Change**

This course explores leadership and change within organizational settings. Concepts, theories, skills and applications are addressed in the areas of leadership, motivation, types of change and the process of change, leadership and change management are applied in diagnosing and solving problems related to change at all levels (individual, team and organization). Organizational features such as strategy, structure, processes, technology and culture are treated as targets of changes and as contingency factors for other types of change. Prerequisites: Business Administration 788 or consent of instructor.

Business Administration 792 *1.5 units (crs.)* **International Business**

This course will analyze the increasing impact that international business has on our domestic well-being and will stress the significant rewards which can accrue from the penetration of international markets. The challenges and risks of international business activities will be discussed. The student will be provided with both the conceptual and analytical tools with which to better capitalize on the opportunities and avoid the pitfalls encountered in the international arena.

Business Administration 793 *1.5 units (crs.)* **Business Environments: Law, Regulation and Ethics**

This course involves a study of public laws, government regulations, and the influence of ethics on business. A course objective is to prepare students to be able to recognize problem areas and engage in legal and ethical analysis to manage risk. The course generally examines business ethics and social responsibility, dispute resolution, duties and liabilities of managers and their organizations to their stakeholders, administrative law, securities regulation, antitrust law, employment and diversity regulation, environment regulation, products liability, consumer protection, and the regulation of international trade.

Business Administration 794 *1-3 units (crs.)* **Strategic Management**

This capstone course provides students the opportunity to apply the concepts and techniques they have learned throughout the MBA program. It is also intended to expose students to tools and techniques associated with strategic thinking, such as establishing mission and objectives, assessing external conditions, and determining the relative strengths and weaknesses of organizations in single-business, diversified, and international/global contexts. Strategic choice and implementation will also be emphasized. Experiential activities will be heavily used in the course. The need to effectively integrate material from a variety of courses will be critical to success in this course. Prerequisite: Must be taken in last nine units (crs.) of MBA program.

Business Administration 795 *1-6 units (crs.)* **Business Administration Thesis**

MBA students may register for 6 credits of thesis after securing the approval of the thesis topic and advisor from the Director of Graduate Programs of the College of Business Administration and after filing the thesis topic and Advisor Approval Form in the Graduate Office. Pass/Fail course.

Business Administration 796 *1-3 units (crs.)* **Independent Study in Business Administration**

Each registration to maximum accumulation of 3 credits. To provide advanced students with an opportunity for study in areas of special interest. Prerequisite: At or before registration an Independent Study Topic and Instructor Approval Form must be filed with the Graduate Office.

Business Administration 797 *1 unit (cr.)* **Internship**

Professional business internship under faculty supervision, including professional work plan and final paper. Students must work at least eight weeks full-time in a professional setting. Prerequisites: All foundation courses, nine hours of MBA/MSIS level courses, full standing.

Business Administration 798

1.5 units (crs.)

Advanced Interpersonal Skills

Students will learn and develop skills that will help them become more effective in their communication and relationships with others in the workplace. Topics addressed include communication and influence strategies, conflict management, managing work teams, and critical and creative thinking. Students will also be given the opportunity to develop their skill at making formal presentations. Prerequisite: Business 788.

COLLEGE OF EDUCATION AND HUMAN SERVICES

COUNSELOR EDUCATION

Nona L. Wilson, Program Coordinator and Department Chair

Office: Nursing/Education 1

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I. FACULTY

Barnes, Hargis, Olson, Saginak, Urofsky, Wilson

II. PURPOSE

The Graduate Program in Counseling is designed to prepare counselors for schools (K-12), for higher education settings, and for community counseling agencies.

III. DEGREE

Completion of the Program will lead to the degree: Master of Science in Education (MSE).

IV. Additional Admissions Requirements/Information

Admission to the Counselor Education Department is a two-part process:

A. Admission to the School of Graduate Studies

Please refer to the School of Graduate Studies requirements outlined in the first section of this Bulletin.

The Graduate Studies office forwards completed applications to the Department.

B. Admission to the Counselor Education Department

1. Along with the application materials submitted to the School of Graduate Studies, applicants submit the following items which are forwarded to the Department:

- a completed Application Supplement (available from the department)
- two letters of reference
- a current, typewritten resume outlining previous work experience, volunteer service, and educational activity that support the applicant's desire to enter the counseling profession.

2. The Admissions committee reviews the applicants' files and selects applicants to invite to campus for on-campus interviews.

3. Applicants who are selected to proceed in the admissions process are notified of the dates and times for required on-campus interviews. Those who are not selected

are notified in writing that they have not been admitted to the department.

4. Within 2 weeks of the on-campus interviews, the department notifies applicants in writing whether they have been granted or denied admission.

5. When admitted, students have one calendar year from the date of acceptance to begin their coursework. Students who do not begin coursework within one year must re-apply.

Admission Standards

1. Grade Point Average

The department seeks applicants with a minimum undergraduate grade point average of 3.00 overall, or 3.25 in the last one-half of their undergraduate program. If an applicant's grade point average is below 3.00, then the department will require additional supporting documentation. Such documentation can be provided through the following:

- Graduate Record Exam (GRE) scores
- Summary of educational achievements and goals not reflected in grade point average.
- Two additional letters of reference from individuals who attest to the applicant's ability to successfully complete graduate work.
- Official documentation of grades of B or higher in counseling-related graduate courses.

2. Application Supplement:

The department seeks applicants whose supplements:

- clearly articulate professional goals that are compatible with the degree being sought,
- demonstrate an ability to meaningfully reflect on—and grow from—life experiences,
- convey a commitment to graduate study,
- reveal writing skills commensurate with graduate study.

3. References:

The department seeks applicants with letters of reference from individuals who have direct knowledge of the applicant's qualifications. Letters should address the following:

- professional experience, skills and attitudes.
- academic ability and potential for graduate study,
- interpersonal skills that may indicate success in counselor-training program.

4. Resume:

The department seeks applicants with two years (or equivalent) experience in human services. This experience may be in the form of professional employment, volunteer service, or internship experiences.

5. On-campus Interviews:

The department seeks applicants who demonstrate the following during the on-campus interviews:

- understanding of the counseling profession,
- awareness of the demands of graduate study,
- professional demeanor,
- compatibility with professional counseling values and ethics, including support for a diversity of life-styles and belief systems.
- indicators of flexibility in the above.

Application Deadlines

There are two admission cycles per year: Fall and Spring. Fall applications are due **September 1** and successful applicants can expect to begin their coursework the following Fall. Spring applications are due **February 1** and successful applicants can expect to begin their coursework the following Spring. The Department will give priority consideration to applications that are submitted and complete by those dates (September 1/February 1). A complete application is one that provides both the materials submitted by the applicant as well as all required materials provided by other sources. Applications received or completed after the deadlines will be considered on an individual and space-available basis as determined by the department.

V. SUMMARY

A. Structure

The department offers 3 emphases:

- (1) Community Counseling
- (2) School Counseling
- (3) Student Affairs and College Counseling.

Within each emphasis area students complete core, emphasis-specific, and elective courses.

B. Academic Plans of Study

The following are the descriptions for the Counselor Education plan(s) of study:

- Counseling* (School)
- Counseling* (Community)
- Counseling* (Student Affairs and College Counseling)
- GAP* (Career Counselor)

C. Minimum Unit (Cr.) Requirements

All emphases require 48 graduate credits.

D. Admission to Candidacy

Students must satisfy fully the Graduate School requirements for Admission to Candidacy, stated in the first section of the Graduate Bulletin. In addition, they must complete a minimum of 15 credits and no more than 24 credits before applying for candidacy. Completed credits must include the following courses:

- 701, Theoretical Foundations in Counseling, (with a grade of 3.0 (B) or higher)
- 702, Counseling Process, (with a grade of 3.0 (B) or higher)
- 705, Counseling Techniques for Personal Growth.

Transfer credits cannot be used to fulfill the 15 credits needed apply for candidacy. Students must be admitted to candidacy in order to progress beyond 24 credits in the department and prior to enrolling in 794, Counseling Practicum. The department grants or denies candidacy through a full-faculty vote after close review of students' progress.

Additional criteria are outlined in the Department's student handbook.

VI. DEGREE REQUIREMENTS

Core Courses:

Subject Catalog #	Units (crs.)	Title
Counselor Education		
700	2	Professional Orientation in Counseling
701	3	Theoretical Foundations of Counseling
702	3	Counseling Process
704	3	Assessment Techniques in Counseling
705	1	Counseling Techniques for Personal Growth
708	3	Career Development
711	3	Life Span Development in Counseling
731	3	Group Counseling Process
744	1	Consultation in Counseling
788	3	Social and Cultural Foundations of Counseling
794	5	Counseling Practicum
797	3	Counseling Internship I
798	3	Counseling Internship II
Educational Foundations		
770	3	Foundations of Educational Research

Emphases

In addition to the Core Courses:

Subject Catalog #	Units (crs.)	Title
A. Community Counselor		
Counselor Education		
729	3	Community Counseling
730	3	Mental Health Counseling
And: 3 credit hours of department approved elective course work.		
B. School Counselor		
Counselor Education		
733	3	School Counseling: Organization and Administration
735	3	Counseling with Children and Adolescents
And: 3 credit hours of department approved elective course work.		
C. Student Affairs and College Counseling		
Counselor Education		
709	3	Student Affairs and College Counseling
745	3	Student Development and the College Environment

And: 3 credit hours of department approved elective course work.

COUNSELOR EDUCATION

Electives

Students must consult with their advisor in selecting recommended electives from the following offerings:

Subject

Catalog #	Units (crs.)	Title
Counselor Education		
724	1-3	Current Issues in Counseling
727	1-3	Dynamics of Substance Abuse in the Family
728	3	Grief Counseling
751	3	Eating Disorders: Family Systems Concepts
752	3	Counseling Abusive Families
776	3	Chemical Dependency Counseling
778	4	Practicum in Career Counseling
779	3	Field Work Experience in Career Counseling
780	3	Career Development Theories and Practices
784	3	Seminar in Family Counseling
790	3	Group Counseling Practicum
792	3	Professional Development Seminar
795	3-6	Counselor Education Thesis
796	1-3	Independent Study
Educational Foundations		
543	3	The Adult Learner
550	3	Adolescent Psychology
607	3	Education and Diverse Populations
705	2-3	Child Psychology
706	3	Multicultural Education
713	3	Principles of Appraisal and Evaluation in Education
Secondary Education		
607	3	Alcohol, other Drug Prevention Policies
704	3	Curriculum Foundations in the Secondary School
Special Education		
552	3	Child and Youth With Disabilities
710	3	Conferencing Techniques for Special Educators
Psychology		
503	3	Psychology of Abnormal Behavior
665	3	Psychology of Personality
681	3	Introduction to Counseling
Sociology		
513	3	Rural Sociology
521	3	Social Psychology
537	3	Industrial Psychology
539	3	Sociology of the Family
553	3	Juvenile Delinquency
Social Work		
571	3	Child and Family Welfare
575	3	Treatment and Mistreatment of Offenders
615	3	Community Organization Theory and Practice
643	3	Dynamics of Family Systems
668	3	Social Welfare Policy

Interdisciplinary Studies

625	3	Aging: Dimensions and Processes
626	3	Aging: Needs, Services and Issues
760	3	Aging Policy

Other Requirements

Culminating Experience

The culminating experience is the Counseling Internship II course (Counselor Education 798). Students completing the School Counseling emphasis must also complete a Portfolio. Students should contact their advisor or the coordinator of the School Counseling emphasis for details. Students may also elect to complete a thesis in addition to the Counselor Education 798 course.

LICENSURE AS A SCHOOL COUNSELOR IN WISCONSIN

Students must complete the following requirements established by the Wisconsin Department of Public Instruction (WDPI) for the initial educator level of licensure as a school counselor.

A Master's Degree from an approved school counseling and guidance program and the institutional endorsement (UW Oshkosh School Counseling Program is approved).

One of the following:

1. Eligibility for a license to teach or completion of an approved program and 2 years of successful teaching experience at the early childhood through adolescence level.
2. An approved one-year, full-time internship in school counseling at the early childhood through adolescence level.
3. A minimum of 2 years of successful experience as a licensed school counselor. "Successful experienced" in this subparagraph means experience as a licensed school counselor in an assigned position of one-half time or more as a school counselor under the supervision of a cooperating school counselor and a written recommendation from the school system administration.

A 3-year nonrenewable license may be issued to an applicant who has obtained the institutional endorsement and has completed all requirements but is not eligible for or does not hold a license to teach. Students who do not possess or qualify for a Wisconsin teaching license are required to complete additional courses and requirements. Students should contact the coordinator of the School Counseling emphasis for details.

GRADUATE ACHIEVEMENT PROGRAM (GAP)

NOTE: participation in the GAP is temporarily suspended.

VII. COURSE DESCRIPTIONS

Please see the Graduate Service Courses section of this Bulletin for descriptions of the following course(s):

Subject

Catalog #	Units (crs.)	Title
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Educational Foundations 770

Foundations of Educational Research 3 unit (crs.)

Counselor Education 680

Introduction to Counseling

This course is designed to give an overview of counseling theories, helping skills, and the counseling profession to non-counselor education majors. It is designed to serve as an introduction/overview to the field of counseling. 480/680

Counselor Education 700

Professional Orientation in Counseling

This course provides students with an overview of issues in the ethical practice of professional counseling in schools, community agencies, and higher education settings. Topics addressed will include ethical decision-making; professional credentials and affiliations; and standards of practice, research, and training in counseling.

Counselor Education 701

Theoretical Foundations of Counseling

This course introduces students to the theory, knowledge and skills which provide the foundation for the counseling process. Students will be involved in a variety of individual and group structured counseling process experiences to assist in the integration of the cognitive with the affective domains of counseling. Prerequisite: Permission of instructor.

Counselor Education 702

Counseling Process

An introduction to the process and techniques involved in developing an effective counseling relationship. The course is designed to aid the student to gain insight into the counseling relationship particularly for his/her personhood as a variable in the counseling process. Prerequisite: Counselor Education 701 (may be taken concurrently). Open to Counselor Education majors only.

Counselor Education 704

Assessment Techniques in Counseling

Foundations of standardized group testing and non-test assessment techniques. The selection and interpretation of such tools within the counseling process. Prerequisite: Counselor Education 701 (may be taken concurrently).

Counselor Education 705

Counseling Techniques for Personal Growth

Explores and develops needs and concerns of self in relation to the counseling profession by experiencing

openness, trust, risk-taking, and feedback and examining the relationship between the cognitive and affective self. Prerequisite: Counselor Education 701 (may be taken concurrently). Open to Counselor Education Majors only. Pass/Fail course.

Counselor Education 708

Career Development

This course provides students with a comprehensive overview of career development over the lifespan as it relates to the world of work, education, avocation, and the interrelationships of family and other life roles. Foundational and contextual dimensions are explored including career path factors, influences of work ethics, and the changing workforce; career choice, decision-making, and implementation; job satisfaction/stress and lifestyle management; career development theories; career counseling services, assessment, and occupational information resources including computer applications; job search strategies, and future trends and issues. This course enables students to expand their career counseling knowledge and skills from a lifespan perspective.

Counselor Education 709

Student Affairs and College Counseling

This course is designed to introduce students to current trends and issues in higher education with an emphasis on the field of Student Affairs and College Counseling, including its history, development, and philosophies. A thorough overview of the profession is presented to provide students with knowledge and skills typically required for pursuing a career in a wide range of student services settings today. Discussion and activities are directed toward examining the continual challenges with which higher education is faced today, and the challenges encountered in meeting them.

Counselor Education 711

Life Span Development in Counseling

This course provides students with an overview of human growth and development based on a life-span approach from infancy through the aged, with an emphasis on the developmental theories as a basis for understanding counseling theories. It presents strategies for working with clients from a developmental perspective and provides opportunities for students to examine their own developmental processes. The course includes a focus on addressing developmental issues in schools, community agencies, and higher education settings with an emphasis on ethical considerations.

Counselor Education 723

Career Education for the Handicapped

Provides basic career education theory as well as methodology to incorporate career education into daily instruction and Individual Education Plans for mild to moderately handicapped students from kindergarten to post-secondary levels. Prerequisite: Special Education 552 or consent of instructor.

3 units (crs.)

3 units (crs.)

3 units (crs.)

3 units (crs.)

1 unit (cr.)

COUNSELOR EDUCATION

Counselor Education 724 1-3 units (crs.)
Current Issues in Counseling

A course in topics of current interest. May be repeated, under different topics, for credit. Only 6 credits may be applied to the MSE Degree in Counseling. Prerequisite: Consent of instructor.

Counselor Education 726 1-3 units (crs.)
Substance Abuse Prevention

A course designed to aid participants to conceptualize and develop strategies of alcohol and drug abuse prevention in school setting. Prerequisite: Consent of instructor.

Counselor Education 727 1-3 units (crs.)
Dynamics of Substance Abuse in the Family

This course examines the effects of chemical abuse on the family and identifies strategies for aiding mental health professionals to work with dysfunctional family systems. Prerequisite: Consent of instructor.

Counselor Education 728 3 units (crs.)
Grief Counseling

This course provides students with knowledge of the grieving process with regard to non-death as well as death-related losses. It presents strategies for working with clients experiencing 'uncomplicated' and 'complicated' grief and provides opportunities for students to examine their own loss histories. The course includes program development methods for addressing grief in schools, community agencies, and higher education settings.

Counselor Education 729 3 units (crs.)
Community Counseling

This course focuses on issues and concerns specific to the area of community counseling. Course content includes community counseling models, community counselors' roles and functions, types of community systems, and issues commonly addressed by community counselors. Prevention programming, crisis intervention, consultation, advocacy, outreach, and program development and management will be addressed as well as the impact of social and cultural variables on community counseling. Prerequisite: Counselor Education 700 and 701. Open to Counselor Education majors only.

Counselor Education 730 3 units (crs.)
Mental Health Counseling

An overview of the study of psychopathology, this course is designed to address etiology, assessment, diagnosis, and treatment and interventions with persons with maladaptive behaviors and mental disorders. Applications and limitations of diagnostic systems will be considered as well as the role of diagnosis, case conceptualization, and the nature of treatment from a variety of theoretical orientations. Prerequisite: Counselor Education 700, 701 and 729. Open to Counselor Education majors only.

Counselor Education 731 3 units (crs.)
Group Counseling Process

An examination of traditional and new counseling and guidance groups with particular emphasis on effective counselor skills and techniques for group work. Prerequisite: Counselor Education 702 and 705. Open to Counselor Education majors only.

Counselor Education 733 3 units (crs.)
School Counseling

This course provides an overview of comprehensive school counseling and guidance programs. It will include the historical background, theories, knowledge and skills to prepare the student to implement and integrate a program of counseling and guidance in the education setting. Prerequisite: Counselor Education 701 (may be taken concurrently). Open to Counselor Education majors only.

Counselor Education 735 3 units (crs.)
Counseling With Children and Adolescents

Counseling with Children and Adolescents is designed for students who intend to counsel in elementary, middle, and high schools. It also is open to Community Counseling students. The course provides students with knowledge and practice in counseling strategies appropriate for children and adolescents. Prerequisite: Counselor Education 733. Open to Counselor Education majors only.

Counselor Education 744 1 unit (cr.)
Consultation in Counseling

This course provides students with an understanding of the theory and practice of consultation and collaboration. Emphasis is placed on the consultation process and students' development of a personal model of consultation and collaboration. Detailed exploration of organizational, higher education, mental health, behavioral, and school-based consultation and collaboration including legal and ethical considerations, and professional trends and issues. Prerequisite: Counselor Education 700, 701 and 702

Counselor Education 745 3 units (crs.)
Student Development and the College Environment

This course is designed to familiarize students with major theories of student development, and apply key theoretical concepts that address students' cognitive, intellectual, identity/personality, ethical, moral, career, and social development during the college years. Issues that reflect the diversity, complexity, and change in higher education today are also examined. Emphasis is placed on examining student needs, satisfaction, and cultures; the impact of campus environments on student development; and analysis of programs/services outcomes. Students are provided with the opportunity to design and implement needs and outcomes assessments that reflect specific theoretical perspectives.

COUNSELOR EDUCATION

Counselor Education 751 *3 units (crs.)*

Eating Disorders: Family Systems Concepts

This course focuses on characteristics of eating disorder clients and how the family system supports the development of eating disorders. Family systems concepts such as triangulation, enmeshment, communication, homeostasis, multigenerational issues, and life cycle development will be addressed in the context of families with eating disorders. Therapeutic strategies and interventions will also be presented.

Counselor Education 752 *3 units (crs.)*

Counseling Abusive Families

A course designed to assist counselors in the prevention, intervention and treatment of abuse within families. Particular attention will be given to spouse abuse, sexual abuse of children, physical abuse of children, physical neglect of children, and abuse of the elderly.

Counselor Education 776 *3 units (crs.)*

Chemical Dependency Counseling

An examination of the dynamics of substance abuse including physical and emotional effects. Review of traditional and contemporary treatment modalities with major focus on counseling approaches. Prerequisite: Counselor Education 702, Psychology 686 or consent of instructor.

Counselor Education 778 *4 units (crs.)*

Practicum in Career Counseling

Supervised career counseling practice and related activities in structured school or non-school settings and the Education Diagnostic Service Center. Emphasis is upon demonstrated integration of theory, skills and techniques into an effective counseling posture dealing with career concerns. Prerequisite: Counselor Education 708, 780 and consent of instructor.

Counselor Education 779 *3 units (crs.)*

Field Work Experience in Career Counseling

A course designed as a requirement of the Graduate Achievement Program (GAP): Career Counselor. Focuses on new techniques and materials in career counseling with individuals or groups, assessment techniques, career information and career education, evaluation and research, and current issues in the field. Prerequisites: Counselor Education 708 and consent of instructor.

Counselor Education 780 *3 units (crs.)*

Career Development Theories and Practices

A course designed as a requirement of the Graduate Achievement Program (GAP): Career Counselor. Focuses on new techniques and materials in career counseling with individuals or groups, assessment techniques, career information and career education, evaluation and research, and current issues in the field. Prerequisites: Counselor Education 708 and consent of instructor.

Counselor Education 784 *3 units (crs.)*

Seminar in Family Counseling

An introduction to major concepts, theories, and current practices in the area of marriage and family counseling. The course integrates the counseling process and present theoretical techniques for working with families. Prerequisite: Counselor Education 731 or consent of instructor. Open to Counselor Education majors only.

Counselor Education 785 *3 units (crs.)*

Field Work Experience

Supervised field experiences in a college student development, community/agency setting, or school (K-12) setting.

Counselor Education 786 *8 units (crs.)*

School Counselor Internship I

This course is a post master's degree course designed to meet Wisconsin Department of Public Instruction requirements for licensure as a school counselor in Wisconsin. The course requires a full school year of experience in a public or parochial elementary or secondary school performing the functions of a school counselor under supervision of a licensed school counselor and a University supervisor. Only those individuals who have the approval of the Department may enroll for this course. Prerequisite: Consent of Department.

Counselor Education 787 *8 units (crs.)*

School Counselor Internship II

The second one-half of the full year counseling experience described under Counselor Education 786. Prerequisite: Counselor Education 786.

Counselor Education 788 *3 units (crs.)*

Social and Cultural Foundations of Counseling

An investigation of the concepts of social change counseling as they relate to working with persons from special populations. Consideration of unique concerns and counseling strategies relating to persons from special populations such as ethnic and racial minorities, women, persons with disabilities, aging, etc. Prerequisite: Counselor Education 701. Open to Counselor Education majors only.

Counselor Education 790 *3 units (crs.)*

Group Counseling Practicum

Experience in group counseling to include developmental processes with groups. Supervision through individual and group critiques by use of audio and visual taping. Prerequisite: Counselor Education 731, 794 and consent of instructor. Open to Counselor Education majors only.

Counselor Education 791 *3 units (crs.)*

Community Field Work Experience

Supervised counseling and program development experiences in community counseling settings or personnel offices in business or industry. Experiences directed toward competencies in counseling, supervision,

COUNSELOR EDUCATION

administration, and in-service education. Students will be required to work at least one day per week at a field placement site, as well as meet in a weekly class setting. Prerequisite: Counselor Education 797.

Counselor Education 794 *5 units (crs.)* **Counseling Practicum**

Supervised counseling practice and related activities in structured counseling setting and in the Department's Counseling Laboratory. Emphasis in the course is upon theory, skills, and techniques into an effective counseling demonstrated integration of counseling and development style. Students are responsible for their professional conduct. Prerequisite: Counselor Education 701, 702, 704, 708, 731 and admission to candidacy.

Counselor Education 795 *1-6 units (crs.)* **Counselor Education Thesis**

Each registration with maximum accumulation of 6 cr. Registration for thesis credit for MSE Counseling students who have submitted an approved Thesis Proposal and Advisor Appointment Form to the Graduate Office. Pass/Fail course.

Counselor Education 796 *1-3 units (crs.)* **Independent Study**

Each registration with maximum accumulation of 6 cr. Registration for advanced students who want to pursue a topic under the direction of Counselor Education Faculty. Prerequisite: Independent Study Topic and Instructor Approval Form must be filed at or before registration.

Counselor Education 797 *3 units (crs.)* **Counseling Internship I**

This course focuses on providing site-based counseling and related services in settings that are consistent with an emphasis in school, student development in higher education, or community counseling. Student counselors will demonstrate an integration of theoretical concepts and effective counseling and psycho educational skills. The campus-based component of the course is experiential in nature; the required site-based component of the course will be a supervised placement with a minimum of 300 clock hours to include 120 hours of direct client services. Prerequisite: Counselor Education 794 with a grade of B or better. Open to Counselor Education majors only. Repeatable for credit for up to 9 credits.

Counselor Education 798 *3 units (crs.)* **Counseling Internship II**

A continuation of Counselor Education 797 Counseling Internship I; this is an experiential course with a focus on site-based counseling and related services. Student counselors will demonstrate an integration of theoretical concepts and effective counseling and psycho educational skills. A supervised placement with a minimum of 300 clock hours including 120 hours of direct client services is required. Prerequisite: Counselor Education 797 with a grade of B or better. Open to Counselor Education majors only. Repeatable for credit up to 9 credits.

Counselor Education 799 *0-0 units (crs.)* **Registration for Comprehensive Examination** Pass/Fail course.

CURRICULUM AND INSTRUCTION

Elementary Education/Secondary Education

John Lemberger, Program Coordinator
Office: Education 208A
Telephone: 920-424-2477
Website: www.coehs.uwosh.edu/ci
E-mail: candi@uwosh.edu

I. FACULTY

Beeth, Erdman, Fast, Fondrie, Hankes, Henn-Reinke, Hones, Lemberger, McCall, Rose, Wineberg

II. PURPOSE

The Master of Science in Education: Curriculum and Instruction Degree provides licensed teachers with the opportunity to expand their knowledge of teaching and education. In this program teachers are given some freedom in designing programs that reflect individual interests to enhance classroom teaching. The program provides a strong basis in curriculum and issues education, in analyzing curriculum in various subject areas, for interpreting and formulating educational research, for engaging in scholarly writing, for expanding professional knowledge in education, and for reflecting on one's practice.

III. DEGREE

Completion of the Program will lead to the degree: Master of Science in Education (MSE).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the Graduate School specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Grade Point Average

For program admission, applicants must have at least an undergraduate 3.0 cumulative GPA (4.0 scale) or an average of at least 3.25 during the last half or approximately 60 credits of undergraduate work.

Licensure

Applicants must hold a regular five year Wisconsin teacher licensure or have eligibility for the same. A photocopy of any current teaching licenses is required as part of the documentation for admission to the program.

Add-on Licensure

Students with a B.S./B.A. or M.S. degree and a regular teaching license who wish to earn an add-on license in one of the Curriculum and Instruction graduate program's licensure areas (PK-3, 1-8, ESL, and Bilingual) at the graduate level must be accepted into the MSE Curriculum and Instruction graduate program.

Undergraduate Major

Most often, the baccalaureate will have been taken in Early Childhood or Elementary Education, Middle School Education, or related fields. High school teachers, special education teachers, and those seeking English as a Second Language, Bilingual Education-Spanish or Bilingual Education-Hmong licensure should contact the program coordinator for more information.

Application Deadlines

The School of Graduate Studies must receive the completed application and paid fee by April 1 for admission to the following fall semester, and by September 1 for the following spring and summer semesters.

Unadmitted (to the Graduate School) students will not be able to register for graduate classes applying to the MSE Curriculum and Instruction degree. If there are still openings in a Curriculum and Instruction graduate course during the first week of classes in a given semester, unadmitted students may be able to register. The student must take the initiative in inquiring about the status of courses and registering.

V. SUMMARY

A. Structure

The Program is comprised of core courses, foundation courses and, teaching emphases courses. Teachers seeking additional licensure will need to fulfill any remaining undergraduate deficits.

B. Academic Plans of Study

Curriculum & Instruction is the description for the Curriculum & Instruction plan of study.

C. Minimum Unit (Cr.) Grade Requirements

36 units (crs.) applicable to the graduate degree constitute the minimal requirement for all students. Only those courses with a grade of "B" or higher will count for the Masters Degree in Curriculum and Instruction.

D. Admission to Candidacy

Students must satisfy fully the Graduate School requirements for advancement to candidacy as stated in the first section of this Bulletin. Students must meet with the program coordinator. Students should apply for Admission to Candidacy immediately after completing 15-21 units (crs.), including at least two of the three following courses: Elementary Education/ Secondary Education 723 Issues in Connecting the Curriculum, Elementary Education/Secondary Education 734 Classroom Assessment and Curriculum and Instruction, Educational Leadership 325/525 Instructional Technology. Students with questions should contact the program coordinator.

E. Enrollment Restrictions

Students admitted to the Curriculum and Instruction program will have preference over non-admitted students when registering for graduate courses applying to their master's program. Please contact the Curriculum and Instruction department for more information about enrollment restrictions.

CURRICULUM AND INSTRUCTION

VI. DEGREE REQUIREMENTS

Subject

Catalog #	Units (crs.)	Title
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A. Core - 15 units (crs.) required

Educational Foundations

770	3	Foundations of Educational Research
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Elementary Education/Secondary Education

723	1-3	Issues in Connecting the Curriculum
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734	3	Classroom Assessment and Curriculum and Instruction
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Elementary Education/Secondary Education

792	3	Seminar in Curriculum and Instruction (take final Spring semester evening)
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Educational Leadership

325/525	3	Instructional Technology
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Recommended Course: Elementary Education/Secondary Education 720, Curriculum, Instruction & Action Research

NOTE: Students electing to do a thesis do not enroll in Elementary Education 792 and must register for Elementary Education/Secondary Education Curriculum & Instruction 795 Thesis.

B. Foundations - Two of the following (6 units (crs.)):

One of the following not taken in the Foundation Section or not taken in undergraduate course content:

Educational Foundations

703	3	Education and the Making of American Society
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706	3	Multicultural Education
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Educational Leadership

735	3	Legal Aspects in Education
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C. Teaching Emphasis: Choose One

1. Early Childhood (non-licensure) (PK-3) (15 units (crs.))

Elementary Education

711	3	Early Childhood Education PreK-3
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713	1	Early Childhood Education Topics (Fall)
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At least two of the following:

Elementary Education

722	3	Science in Early Childhood, Elementary and Middle School
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724	3	Language Arts in Early Childhood, Elementary, and Middle School
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726	3	Social Studies Elementary and Middle School
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729	3	Mathematics in the Elementary School
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Reading Education

620	3	Literature, Language Development and the Young Child
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Electives - 5 units (crs.) individually planned with coordinator

Recommended Courses: Elementary Education 730, Cognitive Guided Mathematics; Reading Education 610,

Assessment and Planning for Literacy Instruction

2. Early Childhood-Middle Childhood (non-licensure) (PK-6) (15 units (crs.))

Elementary Education

716	3	Issues in PK – 12 Elementary Education
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At least three of the following:

Elementary Education

722	3	Science in Early Childhood, Elementary and Middle School
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724	3	Language Arts in EC, Elementary, and Middle School
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726	3	Social Studies in Elementary and Middle School
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729	3	Mathematics in the Elementary School
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Reading Education

705	3	Reading in the Elementary School
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Electives - 3 units (crs.) individually planned with coordinator

Recommended Courses: Elementary Education 730, Cognitively Guided Mathematics; Reading Education 610, Assessment and Planning for Literacy Instruction

3. Middle School (non-licensure) (5-8) (15 units (crs.))

Secondary Education

732	3	Middle School Education
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713	1	Middle School Education Topics (Spring)
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At least two of the following:

Elementary Education

722	3	Science in Early Childhood, Elementary and Middle School
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724	3	Language Arts in EC, Elementary, and Middle School
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729	3	Mathematics in the Elementary School
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726	3	Social Studies in the Elementary and Middle School
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Reading Education

640	3	Reading/Language in the Content Areas
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Electives - 5 units (crs.) individually planned with coordinator

Recommended Courses: Secondary Education 736, Science Curriculum; Reading Education 610, Assessment and Planning for Literacy Instruction

4. ESL (licensure minor) (ESL minors receive the same licensure grade as their major (PK-3, PK-6, 1-6, 1-8, 6-12, or PK-12)) (26 units (crs.))

Elementary Education/Secondary Education

346/546	3	Methods of Teaching ESL
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348/548	3	Principles of Bilingual Education
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351/551	3	Authentic Assessment for ESL
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		Bilingual Education
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352/552	3	ESL and Multicultural Materials
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CURRICULUM AND INSTRUCTION

353/553	3	Hmong Language, Culture, and Learning
794	1-4	Practicum

English

583	3	Introduction to English Linguistics
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Electives - 6 units (crs.) individually planned with the coordinator. Available to most teachers already licensed in WI. 377/577 Latino(a) Language, Culture and Learning may be substituted for 353/553 Hmong Language, Culture and Learning. See coordinator for additional course requirements for licensure.

5. Bilingual/Bicultural Education (Spanish) (licensure minor) (Bilingual-Bicultural Spanish minors receive the same licensure grade as their major (PK-3, PK-6, 1-6, 1-9, 6-12 or PK-12)) (22 units (crs.))

Elementary/Secondary Education

300/500	0	Bilingual Language Fluency Assessment
346/546	3	Methods of Teaching ESL
348/548	3	Principles of Bilingual/Bicultural Education
349/549	3	Content Area Instruction in Bilingual Education
351/551	3	Authentic Assessment for ESL/Bilingual Education
352/552	3	ESL and Multicultural Materials
794	1-4	Practicum

English

383/583	3	Introduction to English Linguistics
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Electives – 9 units (crs.) individual planned with the coordinator. Available to most teachers already licensed in WI. See coordinator for additional course requirements for licensure. Recommended course: 377/577 Latino(a) Language, Culture and Learning.

6. Bilingual/Bicultural Education (Hmong) (licensure minor)(Bilingual-Bicultural Hmong minors receive the same licensure grade as their major (PK-3, PK-6, 1-6, 1-8, 6-12 or PK-12)) (26 units (crs.))

Elementary/Secondary Education

300/500	0	Bilingual Language Fluency Assessment
346/546	3	Methods of Teaching ESL
348/548	3	Principles of Bilingual/Bicultural Education
349/549	3	Content Area Instruction in Bilingual Education
351/551	3	Authentic Assessment for ESL/Bilingual Education
352/552	3	ESL and Multicultural Materials
353/553	3	Hmong Language, Culture and Learning
794	1-4	Practicum

English

383/583	3	Introduction to English Linguistics
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Electives – 9 units (crs.) individually planned with the coordinator. Available to most teachers already licensed in WI. See coordinator for additional course requirements for licensure.

7. Individually Planned Non-Licensure (15 units (crs.))

Available to classroom teachers interested in improving their teaching whose needs are not met by other teaching emphasis, with coordinator approval. Meet with the coordinator to determine a plan related to your teaching assignment. Examples: the middle school math teacher who selects several math courses from the UW Oshkosh MS Math Education and who also desires Foundations and Pedagogy courses; the middle school English teacher who selects several English courses from the UW Oshkosh MS English who also desires Foundations and Pedagogy courses.

8. Early Childhood (PK-3) Licensure (15 credits)

Limited to currently licensed special education teachers and to licensed elementary 1-6 & 4-8 teachers seeking to add PK licensure.

Elementary Education

514	3	Organization and Administration of Pre-School Programs in Early Childhood Education
711	3	Early Childhood Education
713	1	Early Childhood Topics
794	1-4	Practicum

Educational Leadership

502	3	Literature for Children
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Special Education

520	3	Introduction to the Young Child with Disabilities (elementary education teachers only)
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One of the following not taken in Foundations section or not taken in undergraduate course content:

Educational Foundations

703	3	Education and the Making of American Society
706	3	Multicultural Education

Educational Leadership

735	3	Legal Aspects in Education
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Electives - Sufficient to constitute a minimum of 15 units (crs.) to complete the teaching emphasis, drawn from the PK-3 non-licensure teaching emphasis

Additional Requirements

See coordinator regarding additional undergraduate course requirements and student teaching for licensure.

9. Early Childhood-Middle Childhood (PK-6) (15 credits)

Limited to currently licensed special education teachers and to licensed PK-3 teachers seeking to add 4-6 licensure.

Educational Leadership

502	3	Literature for Children (special education teachers only)
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Elementary Education

794	1-4	Practicum
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Educational Foundations

703	3	Education and the Making of American Society
706	3	Multicultural Education

CURRICULUM AND INSTRUCTION

Additional requirements

See coordinator regarding additional undergraduate course requirements and student teaching for licensure, drawn from the 1-6 non-licensure teaching emphasis.

10. Middle Childhood-Early Adolescence (1-8) (15 credits) Limited to currently licensed special education teachers and to licensed PK-3 teachers seeking to add 4-8 licensure.

Educational Leadership

502	3	Literature for Children (special education teachers only)
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Elementary Education

794	1-4	Practicum
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Educational Foundations

703	3	Education and the Making of American Society
706	3	Multicultural Education

Additional requirements

See Graduate Program Coordinator regarding additional undergraduate course requirements and student teaching for licensure, drawn from the PK-6 non-licensure teaching emphasis. PI 34 requires a licensable minor as part of the elementary education licensure requirements.

Alternative Licensure Program for ESL and Bilingual Education

An alternative licensure track for ESL and Bilingual Education emphasis within the MSE in Curriculum and Instruction degree program has been established. The alternative licensure program will be offered only at the graduate level for teachers who already have a Wisconsin License or are eligible for a Wisconsin license in elementary education or one of the four core content areas (English, mathematics, science, and social studies) in secondary education. See the Graduate Program Coordinator for details.

Alternative to Student Teaching

The MSE C&I program provides an alternative to student teaching for previously licensed teachers. See the Graduate Program Coordinator for eligibility requirements.

OFF-CAMPUS PROGRAM

The Graduate Program is offered at the University of Wisconsin Sheboygan, Sheboygan, Wisconsin.

Program Requirements

A. Core: 15 units (crs.) required

Educational Foundations

770	3	Foundations of Educational Research
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Elementary/Secondary Education

723	3	Connecting the Curriculum
734	3	Classroom Assessment and Curriculum & Instruction
792	3	Seminar in Curriculum & Instruction

Educational Leadership

609	3	Classroom Microcomputer Applications
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B. Foundations: 6 units (crs.) required

703	3	Education and the Making of American Society
706	3	Multicultural Education

C. Teaching Emphasis: 15 units (crs.) required

546	3	Methods of Teaching ESL
716	3	Issues in Elementary Education
725	3	The Teaching of Writing
726	3	Social Studies in the Elementary and Middle School
730	3	Cognitively Guided Mathematics Instructions

Electives - 3 units (crs.) may be substituted for Elementary/Secondary 726

Comments

This is a specific program of studies. Contact the Program Coordinator for information and a listing of courses offered at the University of Wisconsin Sheboygan site.

LICENSURE REQUIREMENTS

(Extending Elementary or Early Childhood Licensure)

Certification is now referred to as licensure by Wisconsin Department of Public Instruction.

Requirements:

Applicants must hold teacher licensure or have eligibility for the same in Early Childhood, Elementary, or Middle School Education. High school teachers, special education teachers and those seeking English as a second language, Bilingual Education, Spanish, or Bilingual Education Among licensure should contact the program coordinator for more information.

Time limitation for licensure students seeking licensure concurrent with admission to and progress in the M.S.E. Curriculum and Instruction must enroll in and successfully complete Elementary Education/Secondary Education 794 Practicum (or undergraduate level student teaching) within two years of completing their licensure course work requirements. Students who do not do so are subject to meeting the licensure requirements in place at the time of registration for Elementary Education and Secondary Education 794 or undergraduate student teaching.

VII. COURSE DESCRIPTIONS

Please see the appropriate Graduate Program entry in this Bulletin for descriptions of the following course(s):

Subject	Catalog #
Educational Leadership	735
Reading Education	620, 705, 712
Educational Foundations	703, 706, 770
Secondary Education	732

Electives may also be taken from Elementary Education, and Secondary Education. See Secondary Education course listings.

Elementary Education**Elementary Education 500** *0-0 units (crs.)***Bilingual Language Fluency Assessment**

Registration for and completion of the Bilingual Language Fluency Assessment is required in the first or second semester of enrollment in the Bilingual Licensure Program and prior to enrolling in core courses in this program.

Elementary Education 514 *3 units (crs.)***Organization and Administration of Pre-School Programs in Early Childhood Education**

Different organizational plans of Head Start, day care, and other preschool programs. These include staffing, housing, admissions, nutrition and health policies, school records, budgeting, community resources, family-community-agency involvement and relationships, and school-community relations with particular emphasis on State of Wisconsin accreditation and licensing requirements. Prerequisite: Elementary Education 312/512 or consent of instructor. 314/514

Elementary Education 546 *3 units (crs.)***Methods of Teaching English as a Second Language**

In this course we will: review developments in second language theory and practice, explore ways to teach, and integrate the skills of reading, writing, listening and speaking, both within ESL classes and in content area instruction. We will survey a variety of approaches to ESL methods, discuss ways to focus on culture in language teaching, and to create community among second language learners and to build bridges between schools and diverse linguistic and cultural communities. We will address the needs of second language learner assessment and classroom management. 346/546

Elementary Education 548 *3 units (crs.)***Principles of Bilingual/Bicultural Education**

In this course we will: explore historical and political dimensions of bilingual/bicultural education, often from comparative perspectives; examine theoretical assumptions and recent research findings about learning through first and second languages; and discuss practical implications of critical theory and research for those who work with bilingual/bicultural children, adolescents, families and communities. 348/548

Elementary Education 549 *3 units (crs.)***Content Area Instruction Bilingual Education**

In this course we will: explore the theories, practices, and possibilities for bilingual education across content areas. We will examine the teaching of content area subjects to bilingual children and adolescents in both bilingual (first language) classrooms as well as mainstream classrooms. Students will thus have the chance to prepare for content area teaching in English as well as Hmong or Spanish. 349/549

Elementary Education 551 *3 units (crs.)***Authentic Assessment for ESL/Bilingual Education**

A seminar course relating to specific topics in the assessment of English language learners. The course will focus on developments in authentic placement, diagnostic and achievement language assessment, and the use of portfolio and performance assessment with English language learners. Various assessment tools (English and Spanish) will be reviewed. 351/551

Elementary Education 552 *3 units (crs.)***ESL and Multicultural Materials, Elementary/Secondary**

In this course we will: review developments in second language theory and practice; explore ways to develop curriculum, and integrate the academic skills of reading, writing, listening and speaking in content-area instruction; survey, and critically analyze, a variety of ESL and multicultural materials for elementary and secondary instruction; discuss ways to focus on culture in the curriculum and address ways to connect curriculum to second language learner assessment and instruction. 352/552

Elementary Education 553 *3 units (crs.)***Hmong Language, Culture & Learning**

Nyob zoo. Designed to familiarize educators and others with the language, culture and educational issues relevant to Hmong people in Wisconsin and the United States. Areas of exploration will include the nature of Hmong language, Hmong history, the traditional family and clan structure, child-rearing mores, healing practices, marriage and funeral practices, and educational beliefs and practices. Contemporary developments and adjustment issues within the Hmong communities will be discussed, especially school achievements and challenges, intergenerational conflicts, youth gangs, and the need to provide high expectations and supportive educational environments for Hmong children, youth and families. Cross-listed: Elementary Education/Secondary Education 553. 353/553

Elementary Education 577 *3 units (crs.)***Latino(a) Language, Culture and Learning**

This course is designed to familiarize educators and others with historical, cultural and educational issues relevant to Latinos(as) in Wisconsin and the United States. Areas of exploration will include elements of surface and deep level culture, as well as historical perspectives on Pre-Columbian Latin America, the European conquest, and contemporary Latino(a) experience. The role of ethnic pride as a factor in high-level student achievement will also be explored. Each of these areas will be explored in relation to the development of biculturalism/multiculturalism within the English-Spanish bilingual classroom. The class will be conducted in Spanish and all assignments will be completed in Spanish. Prerequisites: Spanish fluency.

Elementary Education 710 *3 units (crs.)***Foundations of Curriculum Planning**

Concepts of curriculum as they are affected by educational ideologies, history and culture, the nature of the learner,

CURRICULUM AND INSTRUCTION

and by current trends and issues. Prerequisite for all curriculum courses for students in the Master of Science - Educational Leadership.

Elementary Education 711 *3 units (crs.)* **Early Childhood Education**

The needs and interests of preschool ages; methods, curriculum issues and trends in Early Childhood Education with special emphasis on nutrition, and home, school, community, and agency relations. Designed to give teachers of young children a basic knowledge of early childhood education and to meet state guidelines for Licensure. Prerequisite: Education Foundations 235 or consent of instructor.

Elementary Education 713 *1 unit (cr.)* **Early Childhood Education Topics**

A seminar course relating to specific topics in early childhood education. The theme of the course will vary annually but will focus on current problems, trends and research in early childhood education. The proposed course must be taken concurrently with the annual UW Oshkosh Conference - Early Childhood Education. (Fall)

Elementary Education 715 *1-3 units (crs.)* **Current Trends in Curriculum and Instruction**

A course relating to specific concerns of curriculum and instruction educators. The theme of the course will vary frequently but will focus on current problems, trends, and research in curriculum and instruction. The course may be taken repeatedly with different sub-topics upon approval of department chair or graduate coordinator.

Elementary Education 716 *3 units (crs.)* **Issues in PK-12 Education**

Examination of current critical issues in education on the local, state, national, and international levels, with particular reference to early childhood, elementary, middle and high schools. May be repeated twice after ten year intervals.

Elementary Education 718 *2-3 units (crs.)* **Curriculum in the Elementary School**

Consideration of basic concepts of curriculum development; the relation 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.

Elementary Education 720 *1-3 units (crs.)* **Curriculum, Instruction and Action Research**

Class participants will study readings about action research and analyze reports of completed action research projects. Participants will develop and carry out individual or collaborative projects in their schools which focus on the improvement of their practice, their understanding of their practice, or the situations in which they work. Class readings will include information about action research, examples of research studies conducted by teachers and

other school practitioners, and readings focusing on the major areas addressed by the research projects. The course may be taken repeatedly with students registering for part one during the summer semester and part two during the spring semester.

Elementary Education 722 *3 units (crs.)* **Science in Early Childhood, Elementary and Middle School**

Designed to familiarize teachers with recent trends in elementary science, including a study of objectives and related methods of evaluation, the nature of the child, the psychological bases for curriculum development, curricular patterns and programs, instructional strategies, and the facilities and equipment appropriate for teaching science in the elementary classroom.

Elementary Education 723 *1-3 units (crs.)* **Issues in Connecting the Curriculum**

Part one: Frameworks for Connecting Curriculum. Participants will examine the historical and contemporary settings for making curriculum connections, practical concerns such as working with colleagues, scheduling, and communicating with parents. Assignments will provide practical applications for education. Participants will analyze, apply and adapt frameworks to a curriculum integration project that could be studied through action research. Part Two: Action Research on Connecting Curriculum. Participants directly involved in the school settings formulate significant questions that invite exploration of profession growth. Participants write action research questions, establish qualitative data gathering techniques, organize and interpret data, and draw conclusions that will affect their connecting curriculum work directly. Part Three: Assessing Connected Curriculum. Participants' questions important to connected curriculum about working with colleagues and parents, rubrics and grading. Direct, practical assistance will be provided to help teachers maintain academic challenge and important content. Participants will delve into evaluating students and programs developed to "make school more like real life." Prerequisites: Admissions will be handled through Curriculum and Instruction. A participant in any part must be will to attend all Connecting the Curriculum meetings in addition to course participation. (Similar arrangement as Fox Valley Writing Project course Elementary Education/Secondary Education 725 Teaching of Writing.) Most participants will enroll as a team from their district. Most participants will register for three credits. Participants with experience with curriculum frameworks may wish to register for two credits and attend parts 2 & 3. Students will an exploratory interest in CTC and limited time may register for 1 credit and attend Part 1. Students who register for less than three credits will agree on an attendance and assignment plan prior to the first class meeting.

Elementary Education 724 *3 units (crs.)* **Language Arts in Early Childhood, Elementary, and Middle School**

Emphasizes the newer concepts in the Language Arts, or Communications programs, with an examination of the role

CURRICULUM AND INSTRUCTION

played in the modern curriculum by the Language Arts. Attention is focused on the relevance of language for today and on modern practices of the schools in the area of language, literature, and composition.

Elementary Education 725 *3-4 units (crs.)* **Teaching of Writing**

The study of theory, research and strategies for teaching writing. Students will polish composition skills by completing individual writing assignments. The course builds understanding of theory/practice relationships in writing instruction. Course also listed as Secondary Education 725 and English 725. (Summer)

Elementary Education 726 *3 units (crs.)* **Social Studies in the Elementary and Middle School**

Latest trends and issues in social studies curriculum of elementary/middle school. Evaluation of different strategies for teaching and developing curriculum. Stresses action research. (Summer, even years)

Elementary Education 727 *1-3 units (crs.)* **Current Issues in Writing Instruction**

Current issues related to the study of theory, research and strategies for teaching writing. Students will polish composition skills by completing individual writing assignments and studying aspects of writing K-12.

Elementary Education 729 *3 units (crs.)* **Mathematics in the Elementary School**

Designed to familiarize teachers with recent trends in elementary school mathematics, including mathematical learning theory, methods of teaching mathematics, and mathematics curriculum materials for grades K-8.

Elementary Education 730 *1-3 units (crs.)* **Cognitively Guided Mathematics Instruction**

This two-part course focuses on developing understanding of primary level mathematics through applied problem solving. Emphasis is placed on the content and principles of Cognitively Guided Instruction, a highly regarded mathematics reform approach. All participants must enroll in Part I (1 credit). Part II (2 credits) includes 18 hours of implementation/reflection sessions during the school year. Part I will be scheduled for 30 hours during a one-week summer session.

Elementary Education 731 *1 unit (cr.)* **Cognitively Guided Mathematics Instruction Abroad**

Teachers participating in this 1-credit course will develop understanding of primary level mathematics through applied problem solving. Emphasis will be placed on the content and principles of Cognitively Guided Instruction, a highly regarded mathematics reform approach. Additionally, teachers will develop an understanding of culturally responsive mathematics instruction and come to realize that young children across cultures share intuitive solution strategies when solving whole number mathematics problems. International locations will be

selected. The course will be scheduled for 30 hours during a 1-week session.

Elementary Education 734 *3 units (crs.)* **Classroom Assessment and Curriculum and Instruction**

This course will provide knowledge about assessment that is integrated with and responsive to the curriculum, and about how to use assessment to promote maximum student achievement throughout the curriculum. The course participants will reason through and learn how to determine what assessments are appropriate and most effective to promote student success at individual student, classroom, building, and district levels.

Elementary Education 792 *3 units (crs.)* **Seminar in Curriculum and Instruction**

An integrating experience where the student synthesizes the "core" and other courses of the program into a product related to the student's target career choice.

Elementary Education 794 *1-4 units (crs.)* **Practicum**

Supervised experiences in an educational setting structured to meet the needs of the graduate student. Consent of Department Chair required.

Elementary Education 795 *1-6 units (crs.)* **Curriculum and Instruction Thesis**

Registration with maximum accumulation of 6 cr. registration for thesis credit is open only to students who have filed an approved Thesis Topic and Advisor Form in the Graduate Office. Pass/Fail course.

Elementary Education 796 *1-3 units (crs.)* **Independent Study**

The amount of credit allowed for independent study may not exceed one registration except with the approval of the student's advisor and the department chair. Approval must be secured before Independent Study is begun. Students registering for Independent Study must submit prior to registration a description of the subject to be covered and the work to be done. This description must be signed by the student, the graduate faculty member supervising the study, the graduate advisor, the department chair, and the associate dean. Independent study may not be used for collecting information for the thesis.

Secondary Education

Secondary Education 500 *0-0 units (crs.)* **Bilingual Language Fluency Assessment**

Registration for and completion of the Bilingual Language Fluency Assessment is required in the first or second semester of enrollment in the Bilingual Licensure Program and prior to enrolling in core courses in this program.

CURRICULUM AND INSTRUCTION

Secondary Education 546 *3 units (crs.)*

Methods of Teaching English as a Second Language

In this course we will: review developments in second language theory and practice, explore ways to teach, and integrate the skills of reading, writing, listening and speaking, both within ESL classes and in content area instruction. We will survey a variety of approaches to ESL methods, discuss ways to focus on culture in language teaching, and to create community among second language learners and to build bridges between schools and diverse linguistic and cultural communities. We will address the needs of second language learner assessment and classroom management. 346/546

Secondary Education 548 *3 units (crs.)*

Principles of Bilingual/Bicultural Education

In this course we will: explore historical and political dimensions of bilingual/bicultural education, often from comparative perspectives; examine theoretical assumptions and recent research findings about learning through first and second languages; and discuss practical implications of critical theory and research for those who work with bilingual/bicultural children, adolescents, families and communities. 348/548

Secondary Education 549 *3 units (crs.)*

Content Area Instruction Bilingual Education

In this course we will: explore the theories, practices, and possibilities for bilingual education across content areas. We will examine the teaching of content area subjects to bilingual children and adolescents in both bilingual (first language) classrooms as well as mainstream classrooms. Students will thus have the chance to prepare for content area teaching in English as well as Hmong or Spanish. 349/549

Secondary Education 551 *3 units (crs.)*

Authentic Assessment for ESL/Bilingual Education

A seminar course relating to specific topics in the assessment of English language learners. The course will focus on developments in authentic placement, diagnostic and achievement language assessment, and the use of portfolio and performance assessment with English language learners. Various assessment tools (English and Spanish) will be reviewed. 351/551

Secondary Education 552 *3 units (crs.)*

ESL and Multicultural Materials, Elementary/Secondary

In this course we will review developments in second language theory and practice; explore ways to develop curriculum, and integrate the academic skills of reading, writing, listening and speaking in content-area instruction; survey, and critically analyze, a variety of ESL and multicultural materials for elementary and secondary instruction; discuss ways to focus on culture in the curriculum and address ways to connect curriculum to second language learner assessment and instruction. 352/552

Secondary Education 553 *3 units (crs.)*

Hmong Language, Culture & Learning

Nyob zoo. Designed to familiarize educators and others with the language, culture and educational issues relevant to Hmong people in Wisconsin and the United States. Areas of exploration will include the nature of Hmong language, Hmong history, the traditional family and clan structure, child-rearing mores, healing practices, marriage and funeral practices, and educational beliefs and practices. Contemporary developments and adjustment issues within the Hmong communities will be discussed, especially school achievements and challenges, intergenerational conflicts, youth gangs, and the need to provide high expectations and supportive educational environments for Hmong children, youth and families. Cross-listed: Elementary Education/Secondary Education 553. 353/553

Secondary Education 577 *3 units (crs.)*

Latino(A) Language, Culture and Learning

This course is designed to familiarize educators and others with historical, cultural and educational issues relevant to Latinos(as) in Wisconsin and the United States. Areas of exploration will include elements of surface and deep level culture, as well as historical perspectives on Pre-Columbian Latin America, the European conquest, and contemporary Latino(a) experience. The role of ethnic pride as a factor in high-level student achievement will also be explored. Each of these areas will be explored in relation to the development of biculturalism/multiculturalism within the English-Spanish bilingual classroom. The class will be conducted in Spanish and all assignments will be completed in Spanish. Prerequisites: Spanish fluency.

Secondary Education 704 *3 units (crs.)*

Curriculum Foundations in the Secondary School

Principles and concepts of curriculum development in the secondary school, with consideration of the factors basic to planning, the aims of the secondary school, the organization of the curriculum, current developments and elements desirable in the curricula of secondary schools.

Secondary Education 710 *3 units (crs.)*

Foundations of Curriculum Planning

Concepts of curriculum as they are affected by educational ideologies, history and culture, the nature of the learner, and by current trends and issues. Prerequisite for all curriculum courses for students in the Master of Science - Educational Leadership.

Secondary Education 713 *1 unit (cr.)*

Middle School Education Topics

A seminar course relating to specific topics in middle school education. The theme of the course will vary frequently but will focus on current problems, trends and research in middle school education. The proposed course must be taken concurrently with the annual UW Oshkosh Conference - Middle School Education.

CURRICULUM AND INSTRUCTION

Secondary Education 715 *1-3 units (crs.)*

Current Trends in Curriculum and Instruction

A course relating to specific concerns of curriculum and instruction educators. The theme of the course will vary frequently but will focus on current problems, trends, and research in curriculum and instruction. The course may be taken repeatedly with different sub-topics upon approval of department chair or graduate coordinator.

Secondary Education 716 *3 units (crs.)*

Issues in PK-12 Education

Examination of current critical issues in education on the local, state, national, and international levels, with particular reference to early childhood, elementary, middle and high schools. May be repeated twice after ten year intervals.

Secondary Education 720 *1-3 units (crs.)*

Curriculum, Instruction and Action Research

Class participants will study readings about action research and analyze reports of completed action research projects. Participants will develop and carry out individual or collaborative projects in their schools which focus on the improvement of their practice, their understanding of their practice, or the situations in which they work. Class readings will include information about action research, examples of research studies conducted by teachers and other school practitioners, and readings focusing on the major areas addressed by the research projects. The course may be taken repeatedly with students registering for part one during the summer semester and part two during the spring semester.

Secondary Education 723 *1-3 units (crs.)*

Issues in Connecting the Curriculum

Part one: Frameworks for Connecting Curriculum. Participants will examine the historical and contemporary settings for making curriculum connections, practical concerns such as working with colleagues, scheduling, and communicating with parents. Assignments will provide practical applications for education. Participants will analyze, apply and adapt frameworks to a curriculum integration project that could be studied through action research. Part Two: Action Research on Connecting Curriculum. Participants directly involved in the school settings formulate significant questions that invite exploration of profession growth. Participants write action research questions, establish qualitative data gathering techniques, organize and interpret data, and draw conclusions that will affect their connecting curriculum work directly. Part Three: Assessing Connected Curriculum. Participants' questions important to connected curriculum about working with colleagues and parents, rubrics and grading. Direct, practical assistance will be provided to help teachers maintain academic challenge and important content. Participants will delve into evaluating students and programs developed to "make school more like real life." Prerequisites: Admissions will be handled through Curriculum and Instruction. A participant in any part must be will to attend all Connecting the Curriculum meetings in addition to course participation. (Similar arrangement as Fox Valley Writing Project course Elementary

Education/Secondary Education 725 Teaching of Writing.) Most participants will enroll as a team from their district. Most participants will register for three credits. Participants with experience with curriculum frameworks may wish to register for two credits and attend parts 2 & 3. Students will an exploratory interest in CTC and limited time may register for 1 credit and attend Part 1. Students who register for less than three credits will agree on an attendance and assignment plan prior to the first class meeting.

Secondary Education 725 *3-4 units (crs.)*

Teaching of Writing

The study of theory, research and strategies for teaching writing. Students will polish composition skills by completing individual writing assignments. The course builds understanding of theory/practice relationships in writing instruction. Course also listed as Secondary Education 725 and English 725. (Summer)

Secondary Education 727 *1-3 units (crs.)*

Current Issues in Writing Instruction

Current issues related to the study of theory, research and strategies for teaching writing. Students will polish composition skills by completing individual writing assignments and studying aspects of writing K-12.

Secondary Education 730 *1-3 units (crs.)*

Cognitively Guided Mathematics Instruction

This two-part course focuses on developing understanding of primary level mathematics through applied problem solving. Emphasis is placed on the content and principles of Cognitively Guided Instruction, a highly regarded mathematics reform approach. All participants must enroll in Part I (1 credit). Part II (2 credits) includes 18 hours of implementation/reflection sessions during the school year. Part I will be scheduled for 30 hours during a one-week summer session.

Secondary Education 731 *1 unit (cr.)*

Cognitively Guided Mathematics Instruction Abroad

Teachers participating in this 1-credit course will develop understanding of primary level mathematics through applied problem solving. Emphasis will be placed on the content and principles of Cognitively Guided Instruction, a highly regarded mathematics reform approach. Additionally, teachers will develop an understanding of culturally responsive mathematics instruction and come to realize that young children across cultures share intuitive solution strategies when solving whole number mathematics problems. International locations will be selected. The course will be scheduled for 30 hours during a 1-week session.

Secondary Education 732 *3 units (crs.)*

Middle School Education

Coverage of the goals, objectives, and curriculum of the middle school/intermediate school. Explores the unique educational and social needs of boys and girls 10-15 years of age who are in grades 5-9. The nature of children in this

CURRICULUM AND INSTRUCTION

age group is analyzed in terms of changing times and trends.

Secondary Education 733 *3 units (crs.)* **English/Language Arts Curriculum**

Trends and perspectives in the teaching of English. A consideration of recent research and developments in the area of reading, writing, speaking, listening, and observing. Comprehensive reading in professional literature and scholarship in the fields of linguistics, literature, and communicative arts. Attention to materials, units of study, and processes of evaluation.

Secondary Education 734 *3 units (crs.)* **Classroom Assessment and Curriculum and Instruction**

This course will provide knowledge about assessment that is integrated with and responsive to the curriculum, and about how to use assessment to promote maximum student achievement throughout the curriculum. The course participants will reason through and learn how to determine what assessments are appropriate and most effective to promote student success at individual student, classroom, building, and district levels.

Secondary Education 736 *3 units (crs.)* **Science Curriculum**

A critical review of recent curricular programs in biology, chemistry, physics, earth science, environmental education and selected elementary science programs. An analysis of the fundamental psychological and philosophical principles underlying the recent changes in science curricula. The role of a science curriculum coordinator in constructing and implementing a K-12 science program. A study of recent research in science teaching stressing the implications of this information for changing teacher behavior.

Secondary Education 737 *3 units (crs.)* **Social Studies Curriculum**

Current problems, research, and trends in social studies curricula and methods of teaching. Particular attention to the supervisory role in curriculum development and improvement of instruction.

Secondary Education 739 *3 units (crs.)* **Mathematics Curriculum**

A study of current trends, problems, and research in mathematical learning theory, methods of teaching mathematics, and development of mathematics curriculum materials for grades K-12. Prerequisite: Completion of minimum requirements for the mathematics minor or elementary area of specialization in mathematics as outlined in the undergraduate catalog or consent of instructor.

Secondary Education 743 *1-3 units (crs.)* **Curriculum Development in Specified Middle and Secondary School Areas**

For teachers and/or supervisors interested in developing new programs and courses within a given school subject or area. Through this course, the university will provide instructional assistance within which curriculum developments, consistent with a given school's philosophy, could be designed, implemented, and evaluated according to a cooperatively planned timetable. Schools can contract with the university for curriculum development assistance in the areas of curriculum design; construction and/or selection of programs and materials; and program implementation and evaluation. These areas can be taken as separate 1 credit courses or compositely for up to 3 credits. Prerequisites: Teaching experience and contractual agreement with a school system.

Secondary Education 792 *3 units (crs.)* **Seminar in Curriculum and Instruction**

An integrating experience where the student synthesizes the "core" and other courses of the program into a product related to the student's target career choice.

Secondary Education 794 *1-4 units (crs.)* **Practicum**

Supervised experiences in an educational setting structured to meet the needs of the graduate student. Consent of Department Chair required.

Secondary Education 796 *1-3 units (crs.)* **Independent Study**

Approval must be secured before Independent Study is begun. An individual will conduct independent research in an area of his/her choosing to meet specific instructional needs not provided by current course offerings. Students registering for independent study must submit at, or before, registration a description of the subject to be covered and the work to be done. The description must be signed by the student, the graduate faculty member supervising the study, the graduate advisor, the coordinator, and the Associate Dean. Independent study may not be used for collecting information for the thesis.

EDUCATIONAL LEADERSHIP

Perry Rettig, Program Coordinator
Office: Nursing/ Education 612
Telephone: 920-424-1490
E-mail: rettig@uwosh.edu

I. FACULTY

Cramer, Frieberg, Frisch, Garcia, Hagen, Kisubi, Lampe, Rettig, Winterfeldt

II. PURPOSE

The graduate program in Educational Leadership is designed to prepare professionals for leadership and change-agent roles in various educational and helping settings. The program attempts to meet individual needs by providing wide latitude in student/advisor program planning consistent with the career goals and needs of the clientele served by the program. The program attracts persons from public and private/parochial school settings, vocational technical institutions, persons from the clergy and helping agencies, and persons engaged or interested in the educational and training components of business and industry.

Upon completion of the MS Educational Leadership degree program students will be able to develop: (1) leadership, decision making, and change agent skills; (2) written, oral, technological, and interpersonal communication skills; (3) understanding of and appreciation for individuality with respect to race, culture, ethnicity, gender, learning style, learning preferences, ability, social class, and socioeconomic status; (4) professional practice based on sound knowledge of the history, current issues, and future trends in education and guided by theory and research; (5) requisite skills and attitudes to become critical thinkers capable of assessing and comparing different forms and sources of information to come to a reasoned conclusion; and (6) caring which involves stepping out of one's own personal frame of reference into the others.

III. DEGREE

Completion of the program will lead to the degree: Master of Science (MS).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the Graduate School specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

Interview

Qualified applicants will be contacted to arrange for an admission interview.

References

Three reference letters are required.

V. SUMMARY

A. Structure

The program is comprised of core courses, emphases, and electives.

B. Academic Plans of Study

The following are the descriptions for the Educational Leadership plan(s) of study:

Educational Leadership (General)
Educational Leadership (Library Science)
MS Cooperative Program with Madison

C. Minimum Unit (Cr.) Requirements

36 units (crs.) applicable to the graduate degree constitute the minimal requirement for students who choose to write a thesis.

36 units (crs.), applicable to the graduate degree, constitute the minimal requirement for students who choose to complete 17-794, Seminar in Educational Leadership. Students expecting to enroll in their final seminar course (17-794) should meet with their adviser during the semester prior to enrollment to discuss possible topics and seminar course procedures. Students must enroll for the Comprehensive Exam (Educational Leadership 799) when enrolling in Seminar.

VI. DEGREE REQUIREMENTS

Core Courses (15 units (crs.):

Subject

Catalog #	Units (crs.)	Title
Educational Leadership		
714	3	Leadership for Curriculum Development
720	3	Supervision of Instruction
730	3	Organization and Administration of Educational Systems
732	3	Multicultural Education for Leaders
Educational Foundations		
770	3	Foundations of Educational Research

Emphases/Research Areas

In addition to the Core Courses; 15-18 units (crs.); select one:

Curriculum

1. K-12 Theme
2. Adult Education
3. Specialty Area Theme

Library Media

4. Initial Instructional Library Media Specialist (Initial DPI 5 Licensure 901)
5. Instructional Library Media Specialist (DPI Licensure 902)
6. Instructional Library Media Supervisor (DPI Licensure 91)

EDUCATIONAL LEADERSHIP

Supervision

7. Adult Supervision
8. Director of Instruction (License 10)

Technology/Computer

9. Integration of Technology into Classrooms
10. Technology Leadership Specialist

At the initial interview with the Program Coordinator, students will identify an area of emphasis, or theme, which will provide direction in planning course work beyond the core.

Students in K-12 school settings may earn additional State of Wisconsin licensure as Director of Instruction, Instructional Library Media Specialist, Instructional Library Media Supervisor, or Instructional Technology Coordinator by taking that Department of Public Instruction approved program as their area of emphasis.

Students desiring licensure as principal, Director of Special Education and Pupil Services, and Director of Instruction in the State of Wisconsin should discuss, with the Program Coordinator, entry into the Cooperative Program in Educational Administration, offered in cooperation with the University of Wisconsin Madison. See information in first part of this Bulletin.

Electives

Students are expected to consult with the Program Coordinator in selecting recommended electives.

Culminating Experience

Each student must successfully demonstrate proficiency in integrating the knowledge of the discipline. Options include:

Thesis (3-6 units (crs.))

Seminar Course (3 units (crs.))

Additionally each student must successfully complete the comprehensive examination and develop a portfolio demonstrating program learning.

Comments

Students in K-12 school settings already holding the Master's degree may be able to obtain licensure for Director of Instruction, Instructional Library Media Specialist, Instructional Library Media Supervisor, or Instructional Technology Coordinator, without obtaining another Master's degree. Eligible students should discuss this option with the Program Coordinator.

LICENSURE REQUIREMENTS

Degree requirements may exceed licensure requirements.

A. Director of Instruction (DPI License 10)

Subject

Catalog #	Units (crs.)	Title
Educational Leadership		
641	3	Instructional Strategies
714	3	Leadership for Curriculum Development
720	3	Supervision of Instruction
723	3	Leadership for Staff Development

730	3	Organization and Administration of Educational Systems
731	3	Educational Leadership
732	3	Multicultural Education for Leaders
733	3	Effective Communication for Leaders
735	3	Legal Aspects in Education
770	3	Research Methods in Educational Administration
782	3	Administration and Supervision of Special School Programs
793	3	Internship in Educational Administration

B. Instructional Library Media Specialist (901)

This is a five-year only, non-renewable license. To continue as a Library Media Specialist, you must complete the 902 within five years of receiving the 901. Must also hold a Non-Library/Media license as a teacher in Wisconsin.

Educational Leadership

302/502	3	Literature for Children
303/503	3	Literature for Young Adults
304/504	3	Developing Information Literacy Skills
317/517	3	Classification and Cataloging
321/521	3	Building Library Collections
325/525	3	Instructional Technology
329/529	3	General Reference
334/534	3	Administration of the School Media Center
724	3	Practicum in Educational Leadership

C. Instructional Library Media Specialist (902) Must hold a 901 license

308/508	3	Multimedia Design and Production I
420/620	3	The Internet as an Instructional Tool
705	3	Recent Trends in Literature for Children and Young Adults
714	3	Leadership for Curriculum Development
741	3	Computers in the Library and Media Center
752	3	Multimedia Design and Production II

D. Instructional Library Media Supervisor (91)

Must have eligibility to hold the Instructional Library Media Specialist (902) certification, hold a master's degree, and have three years school experience.

Educational Leadership

720	3	Supervision of Instruction
730	3	Organization and Administration of Ed Systems
740	3	Supervision of the School Media Center and Systems
794	3	Seminar in Educational Leadership

EDUCATIONAL LEADERSHIP

TECHNOLOGY EMPHASIS AREA

Educational Leadership with emphasis in Integrating Technology into the Schools (MS Educational Leadership, 36 units (crs.))

Educational Leadership

714	3	Leadership for Curriculum Development
720	3	Supervision of Instruction
730	3	Organization and Administration of Educational Systems
732	3	Multicultural Education for Leaders

Educational Foundations

770	3	Foundations of Educational Research
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Note:

At the time this material was submitted DPI requirements had recently changed. Please contact the department for the most current information regarding this emphasis.

VII. COURSE DESCRIPTIONS

Educational Leadership 502 *3 units (crs.)* Literature for Children

Literature for children aged three to fourteen. Emphasis on: criteria for evaluation and aids for selection of materials; the reading interests, needs, and abilities of children; and reading, listening and viewing guidance in the classroom and in school and public libraries. Prerequisite: Admission I for PEP Students. 302/502.

Educational Leadership 503 *3 units (crs.)* Literature for Young Adults

Criteria for evaluation and aids for selection of materials for young people aged thirteen to eighteen as well as extensive reading of the literature. Reading, listening and viewing guidance techniques appropriate for the classroom and for the school and public library. 303/503

Educational Leadership 504 *3 units (crs.)* Developing Information Literacy Skills

Preparing library media specialists to teach students information literacy skills (the ability to access, evaluate and use information from a variety of sources) through the study of the goals and methods of library/media instruction, and to integrate those skills into the curriculum.

Educational Leadership 508 *3 units (crs.)* Multimedia Design and Production I

A direct experience in the development and production of multimedia materials. Focus will be on students' needs and objectives related to their professional fields; education, library, business, health fields, etc., Prerequisites: Successful completion of Educational Leadership 325/525 or instructor consent. Special fee: \$10.00. 308/508

Educational Leadership 517 *3 units (crs.)* Classification and Cataloging

Theory and principles of library classification. Practical problems in classifying by the Dewey Decimal system; main entry of personal authors, practice in constructing unit cards. 317/517

Educational Leadership 521 *3 units (crs.)* Building Library Collections

Principles of selecting collections in school media centers; investigation of selection aids, reviewing tools with acquisition procedures; and with sources of order information. 321/521

Educational Leadership 525 *3 units (crs.)* Instructional Technology

A basic course in the selection and utilization of media and computers in the teaching-learning process. Media technology is studied as a means of enhancing and improving learning. Prerequisite: Admission I for PEP students. 325/525

Educational Leadership 529 *3 units (crs.)* General Reference

Study of basic titles in a general reference collection. Organization by type of material: encyclopedias, dictionaries, yearbooks, indexes, and electronic data bases. Theory, current trends, and future prospects of reference service libraries. 329/529

Educational Leadership 534 *3 units (crs.)* Administration of the School Media Center

Techniques of administering the multi-media instructional materials center in elementary and secondary schools. Problems in planning quarters, equipment, personnel, budgets, services, investigation of current standards. Prerequisite: Educational Leadership 317/517 and 321/521. 334/534

Educational Leadership 558 *3 units (crs.)* Multicultural Education Materials for Children and Adolescents

This course will introduce students to a variety of multicultural books, non-print media and electronic databases for children and adolescents. It will prepare them to incorporate these materials into the curriculum of the K-12 classroom and into activities of the school media center. 358/558

Educational Leadership 575 *1-3 units (crs.)* Current Issues in Technology and Media

A series of discussions by guest lecturers on current trends, issues, problems, and services in technology and media followed by class discussion. Theme will vary frequently. May be special topics course. Course may be taken three times provided the subject of the course is not repeated. 375/575

EDUCATIONAL LEADERSHIP

Educational Leadership 609 3 units (crs.)

Classroom Microcomputer Applications

Survey of contemporary instructional microcomputer applications, providing hands-on experiences with those applications most commonly used by classroom teachers. Students develop operational proficiency with drill and practice, tutorial, simulation, and word processing programs, and learn how to appropriately integrate each of these courseware types into classroom practice. No previous experience with computers is required. 409/609

Educational Leadership 620 3 units (crs.)

The Internet as an Instructional Tool

Integration of the Internet into classrooms to promote student learning is the focus of this course. Topics covered will include: electronic communication, the Internet, search engines and online searching, information literacy, legal and ethical issues, hardware and software requirements, web page design and evaluation, and development and delivery of instructional units which incorporate the Internet. Prerequisite: Educational Leadership 325/525, an equivalent technology class, or permission of instructor. 420/620

Educational Leadership 641 3 units (crs.)

Instructional Strategies

The course focuses upon such instructional strategies as developing appropriate objectives, developing creative thinking, exercises in deductive and inductive thinking, methods of effective questioning, and techniques for clarifying values. The course is an introduction into the self-directed learning environment. 441/641

Educational Leadership 651 1-3 units (crs.)

Field Tour of Libraries

Field tours to famous libraries to enable students to explore history, organization, services, and specialties of famous libraries in the United States or abroad. Each time the course is offered, it will involve libraries of a specific geographic area. 451/651

Educational Leadership 686 3 units (crs.)

The Library Story Hour

Storytelling and survey of literary sources with emphasis on folk literature. Principles of selection, methods of adaptation, techniques of presentation, and planning story hour programs. Prerequisite: Educational Leadership 502. 486/686

Educational Leadership 705 3 units (crs.)

Recent Trends in Literature for Children and Young Adults

Recent developments in contemporary literature for children and young adults through wide reading of the literature and an investigation of reading interest studies. Listening and viewing media are also considered. Prerequisite: Educational Leadership 502 and/or 503.

Educational Leadership 714 3 units (crs.)

Leadership for Curriculum Development

This course is designed to develop skills for leading staff in the planning, implementation, and evaluation of the curriculum.

Educational Leadership 715 1 unit (cr.)

Introduction to Computers in Education

An introduction to the use of the microcomputer as a tool of instruction. The major emphasis is on computer awareness and developing student confidence in using the computer as a learning and teaching tool. Internet searching and productivity tools including word processing, electronic presentations, and spreadsheets are explored.

Educational Leadership 719 1-3 units (crs.)

Issues in Professional Leadership

A course in topics of current interest for advanced graduate students having an interest or background in professional leadership. May be repeated under different topics, but only 3 credits may be applied toward a degree.

Educational Leadership 720 3 units (crs.)

Supervision of Instruction

Introduction to the foundations, techniques, roles, and needed skills for effective supervision in a school setting. Views supervisor as leader for instructional improvement and as innovator in curriculum change. Focus on basic principles of supervision and their practical application.

Educational Leadership 723 3 units (crs.)

Leadership for Staff Development

Course considers the purposes of staff development, critical attributes of effective staff development programs, and various staff development formats. Participants will develop skills in the planning, implementation, and evaluation of staff development programs. Skills needed to lead a staff development team and facilitate needed change will be developed.

Educational Leadership 724 3 units (crs.)

Practicum in Educational Leadership

The practicum course will deal with a broad range of problems and representative issues in school and classroom leadership. The primary purpose of the course is to provide educational leadership students with an opportunity to apply the theoretical concepts studied in the prerequisite courses to problems and issues identified in the school setting.

Educational Leadership 725 3 units (crs.)

Evaluation of Educational Programs

Study and practice of the theory, criteria and process for assessing educational programs and learner evaluations. Prerequisite: Consent of department.

EDUCATIONAL LEADERSHIP

Educational Leadership 730 *3 units (crs.)* **Organization and Administration of Educational Systems**

Introduction to the organizational and administrative structure of American educational systems. Basic survey of administrative theory and its relationship to the administrative functioning and the administration of educational systems.

Educational Leadership 731 *3 units (crs.)* **Educational Leadership**

The purpose of this course is to provide an analysis of those factors critical to the leader. Focus will be on the development of expert knowledge of the function and structure of the organization, skill in leadership and management of the educational enterprise, and the keen ability to analyze and solve problems affecting the educational process.

Educational Leadership 732 *3 units (crs.)* **Multicultural Education for Leaders**

The study of cultural diversity in American society as it relates to the educational leader who carries out professional tasks in a wide variety of settings. It builds skills for designing programs, and for developing staff in institutions working with people from diverse cultural backgrounds.

Educational Leadership 733 *3 units (crs.)* **Effective Communication for Leaders**

Leadership competence is the product of communication competence. Leadership effectiveness is enhanced through the development of such communication skills as listening, critical and creative thinking, compliance gaining, encoding and decoding nonverbal messages and public address. In this course, the graduate student will be provided with the contemporary leadership communication theory and research. They will study several leadership and communication topics, including: symbolism, leadership communication style, theoretical approaches to leadership, transformational leadership, creativity, power and influence, team building, charisma and the ethics of leadership.

Educational Leadership 735 *3 units (crs.)* **Legal Aspects in Education**

Fundamental legal principles affecting schools and school systems with an emphasis on laws, judicial decision, and constitutional provisions. The legal basis for education will explore basic survey of legal topics pertinent to education, such as rights of teachers and students, civil rights and desegregation, torts, collective bargaining, and church-state issues.

Educational Leadership 737 *3 units (crs.)* **The Principalship**

The role of the school principal as a reflective practitioner will be the focus of this course. Course content will examine: the relationship of craft knowledge to theoretical knowledge, the role of the principal in leadership, the

change process, human resource management and the instructional program.

Educational Leadership 739 *2 units (crs.)* **Advanced Seminar in School Administration**

A seminar approach in viewing current topics and issues in school administration for those in active practice in the field. This course may be retaken for credit after a 3 year interval.

Educational Leadership 740 *3 units (crs.)* **Supervision of School Media Centers and Systems**

Study and discussion of techniques of supervision of school media systems on various jurisdictional levels, municipal, district, state. Current problems such as centralized acquisition, processing, in-service training, organization of elementary school centers. Prerequisite: 901 certification.

Educational Leadership 741 *3 units (crs.)* **Computers in the Library and Media Center**

This course is an introduction to the use of the computer in the library and media center. During the course a variety of computers and media center related computer programs will be studied and evaluated. The course will also examine how database management, word processing, and spreadsheet programs can be utilized in the management of the media center.

Educational Leadership 746 *3 units (crs.)* **Teaching the Gifted Individual**

Teaching methods for maximum growth of the accelerated child; curriculum modifications; classroom and administrative modifications; teacher characteristics and achievement of the gifted; grouping for learning; the gifted child in the peer group; ways in which parents may meet the challenge. Prerequisite: Consent of instructor.

Educational Leadership 750 *3 units (crs.)* **Shared Decision Making in a Learning Community**

This course will explore motivation theories and concepts in organizational change and group dynamics that are requisite to the establishment of a learning community. It will provide the learner with an opportunity to develop an understanding of self-efficacy and empowerment in the workplace through an enriched understanding of participative and democratic principles inherent within the Quality environment.

Educational Leadership 751 *1-3 units (crs.)* **Continuous Quality Improvement with Curriculum Applications**

The course's focus will be on authentic applications of Continuous Quality Improvement (CQI) concepts in appropriate settings. Teachers will work in teams to brainstorm issues concerning curriculum problems or other academic issues. CQI philosophies and tools will be learned, discussed, debated, and demonstrated in several learning environments. One learning opportunity will be in

EDUCATIONAL LEADERSHIP

a workshop setting, another will be conducted in the individual teacher's classroom or staff person's place of work and another will take place in a large group session consisting of teams of participants. The course may be repeated because the course content will be changed every time it is offered.

Educational Leadership 752 *3 units (crs.)*

Multimedia Design and Production II

A basic course in the selection and utilization of multimedia and computers in the teaching-learning process. Multimedia technology is studied as a means of enhancing and improving learning. Prerequisite: Educational Leadership 308/508 or permission of instructor.

Educational Leadership 754 *3 units (crs.)*

Integrating Technology into Classrooms

This course will focus upon the integration of technology into classrooms to promote higher order thinking skills and mastery of challenging material. Prerequisite: Educational Leadership 325/525, an equivalent technology course or consent of instructor.

Educational Leadership 756 *3 units (crs.)*

Funding and Managing Educational Technology

This course will focus upon the development and refinement of technology plans, grant writing, budgeting, facility design, and current issues to enable educators to lead their districts in the area of technology. Prerequisite: Consent of instructor.

Educational Leadership 758 *3 units (crs.)*

Networking Schools

In this advanced level technology course you will study those networks which connect computers and allow users to share resources and exchange information easily. Becoming skillful in building, maintaining, and evaluating telecommunications and computer networks will enable you to provide the leadership needed to be effective in helping students and colleagues meet their informational needs in educational settings. Prerequisite: Consent of instructor.

Educational Leadership 760 *3 units (crs.)*

Teaching from a Distance

Teaching students from a distance requires fine tuning one's instructional methods. This course will explore distance learning opportunities, methodologies, and challenges as they relate to classroom instruction. Prerequisite: Consent of instructor.

Educational Leadership 770 *3 units (crs.)*

Research Methods in Educational Administration

Introduction to the research processes. Role of theory and hypothesis testing in research. Introduction to research problems, questions, hypotheses, variables, constructs, definitions, measurement, research and experimental

designs, sampling, descriptive statistics, proposal writing, types of research and statistical computing. Critical analysis of published research. Prerequisite: Graduate standing.

Educational Leadership 782 *3 units (crs.)*

Administration and Supervision of Special School Programs

This course will address the issues of excellence and equity in the education of all children and examine the special/compensatory school programs, aimed at promoting these principles. Trends which shape conditions conducive to providing education for diverse groups in American education will be examined. The course focus will be on the administration and supervision of special compensatory school programs designed to equalize educational opportunity for all students in order to assist them in making their unique contribution to society.

Educational Leadership 783 *3 units (crs.)*

Politics of Education

The primary objective of this course is to provide students with a variety of learning opportunities to enhance their abilities to understand, examine critically, and carry out important areas of responsibility related to the politics of education in elementary and secondary school organizations. Many topics will be addressed, but eight major organizers will guide our activities. They are: power and influence in politics and education; values and power influencing the allocation of resources; political stakeholder analysis, legislative roles and policymaking among senators, representatives, and board members; school finance with regard to revenues, expenditures, and debt; federalism and the separation of powers among legislative, executive, and judicial branches of government; media and the politics of education; federal and state budget processes; and political culture as it relates to education.

Educational Leadership 784 *3 units (crs.)*

Field Research Designs and Methodologies in Educational Administration

Research design for problems related to organization, policy, and community analysis; function of concepts and theory in exploratory research, field methodologies of participant-observation and open-ended interviewing; field work required. Prerequisite: Consent of instructor.

Educational Leadership 785 *3 units (crs.)*

Staff Personnel Systems in Education

The primary objective of this course is to provide students with a variety of learning opportunities to enhance their abilities to understand, examine critically, and carry out the important areas of responsibility related to staff personnel in educational organizations. Though many topics will be addressed throughout the semester, six major organizers will guide our activities. They are; recruitment, selection, assignment, evaluation, professional development, and collective bargaining.

EDUCATIONAL LEADERSHIP

Educational Leadership 786 *3 units (crs.)*
Applied Research in Educational Administration
Supervised applied research on topics in the administration of elementary and secondary education, vocational, technical, higher and/or special education at state, local, or national levels. Prerequisite: Consent of instructor.

Educational Leadership 787 *3 units (crs.)*
The School Superintendency
The primary objective of this course is to provide students with a variety of learning opportunities to enhance their abilities to understand, examine critically, and carry out the important areas of responsibility related to the superintendency in educational organizations. Many topics will be addressed, but nine major organizers will guide our activities. They are: the superintendent as decision maker and planner, school boards, policy development and administration, dynamic school district leadership, management of school districts, the superintendent and the media, leadership in the larger community, personal development, and becoming a superintendent.

Educational Leadership 793 *3 units (crs.)*
Internship in Educational Administration
The Administrative Internship is a field experience under the supervision of a successful, practicing school administrator that gives the interning student practical experience in day-to-day school operations. The field experience requires the student to perform as an acting assistant principal, director of instruction, or pupil services administrator in a school or district setting. It is intended to bridge the gap between academic studies and actual practice of educational administration. Normally, the student chooses the internship location and local supervisor, subject to approval by the University of Wisconsin Oshkosh professor. The internship should provide students with practical administrative experience under the direct guidance of a practicing educational administrator. This experience should prepare the student to assume the position for which he/she is gaining certification. It is designed and intended to be individualized to insure a wide breadth of experiences, especially in areas where the student has not had extensive prior study or experience.

Educational Leadership 794 *3 units (crs.)*
Seminar in Educational Leadership
An integrating experience where the student synthesizes the "core" courses of the program into a working model related to the student's target career choice. Prerequisite: Educational Leadership 714, 720, 730, 732 and 770. (This course is to be taken in the final semester of the student's graduate program). Pass/Fail course.

Educational Leadership 795 *3-6 units (crs.)*
Thesis
Each registration with a maximum of 6 credits to be accumulated. Registration for thesis credit for Master of Science - Educational Leadership. Open only to students who have filed a Thesis Proposal and Advisor Approval Form in the Graduate Office. Pass/Fail course.

Educational Leadership 796 *1-3 units (crs.)*
Independent Study
Each registration with a maximum accumulation of 6 cr. Registration for independent study for Master of Science - Educational Leadership. Students must submit Independent Study Topic and Instructor Approval Form with their registration.

Educational Leadership 799 *0-0 units (crs.)*
Registration for Comprehensive Examination
Registration in the final term for applicants for the Master of Science - Educational Leadership degree. Pass/Fail course.

READING EDUCATION

READING EDUCATION

Joan L. Simmons, Program Coordinator and Department Chair

Office: Education 208

Telephone: 920-424-4444

Website: www.coehs.uwosh.edu/reading

E-mail: reading@uwosh.edu

I. FACULTY

Genisio, Lambert, Scanlan, Shearer, Simmons, Stinnett

II. PURPOSE

The graduate program in reading provides certified teachers with the opportunity to develop expertise in reading. The program is designed for those who wish to be licensed as reading teachers or who wish to prepare for service as reading specialists.

Upon completion of a M.S.E. in Reading Education, students will demonstrate knowledge and the skill and ability to apply that knowledge, of: elementary school reading programs and the students they serve; secondary school reading programs and the students they serve; literacy assessment techniques applicable to individual students and classroom groups; interactive literacy intervention techniques; educational research methodology; research in the area of reading education; and the administration and supervision of K-12 reading programs. They will provide leadership in the field of reading; and as life-long learners, stay up-to-date about literacy instruction and assessment. They will demonstrate knowledge of and use current technology in appropriate situations and display appropriate and effective oral and written communication skills. They will strive to have a positive impact on the literacy development of their students. They will maintain a positive personal attitude about the value of reading and display a professional attitude and related behaviors. They will show a commitment to belonging to a community of learners and display an ability to effectively work with others.

III. DEGREE

Completion of the program will lead to the degree: Master of Science in Education (MSE).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the Graduate School specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

Interview

Qualified applicants will be contacted to arrange for interview.

Licensure

Applicants must hold licensure, or have eligibility for same.

References

3 reference letters are required.

Undergraduate Major

The baccalaureate degree must have been taken in teacher education.

Prior Coursework

If the candidate has not completed the following courses in prior work, they must be taken as part of the program:

1. Children and Youth with Disabilities in general education
2. Child or Adolescent Literature

V. SUMMARY

A. Structure

The program is comprised of core courses and electives.

B. Academic Plans of Study

The following are the descriptions for the Reading plan(s) of study:

Reading Education

Reading Education - Cooperative

GAP (Reading Education)

C. Minimum Unit (Cr.) Requirements

36 units (crs.) applicable to the graduate degree constitute the minimal requirement for students who elect to complete a thesis and for those who elect not to complete a thesis.

D. Admission to Candidacy

Students must satisfy fully the Graduate School requirements for advancement to candidacy, stated in the first section of this Bulletin. Those selecting a thesis must also submit a thesis proposal.

VI. DEGREE REQUIREMENTS

Core Courses

Subject

Catalog #	Units (crs.)	Title
Reading Education		
705	3	Reading in the Elementary School
720	3	Interactive Literacy Intervention
721	3	The Readers'/Writers' Workshop Approach Secondary Level
735	3	Adolescent Literacy: Programs/Practices
765	3	Literacy Assessment
780	3	Administration and Supervision of Reading Programs (for students seeking Reading Specialist Licensure)
785	3	Practicum in Reading (for students seeking Reading Specialist Licensure)
790	3	Seminar in Reading Research
798	0	Registration for Reflective Journey of a Reading Educator
799	0	Registration for Comprehensive Examination

Educational Foundations

770	3	Foundations of Educational Research
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Electives

Students are expected to consult with their advisors in selecting recommended electives from the following offerings:

Subject

Catalog #	Units (crs.)	Title
Reading Education		
612	3	Holistic School Reading Programs
620	3	Literacy and Language Development in Young Children
635	3	Adolescent Literacy Methods
640	3	Literacy and Language in the Content Areas
713	3	Sustaining Change in Holistic Literacy Programs
715	3	Issues in Reading: (Annual Symposium Theme)
762	3	Reading for Gifted Students
764	1-3	Exemplary Practices in Reading Programs
770	3	Functional and Recreational Reading
772	3	Psycholinguistics and Reading
778	3	Implementing Reading Programs in Middle, Junior, and Senior High Schools
782	3	Problems in the Evaluation of Reading
792	3	Theoretical Foundations of Reading
795	3-6	Thesis
796	1-3	Independent Study

Other Requirements

Students who submit a thesis must orally defend the thesis.

Students must complete Reading Education 798, "Reflective Journey of a Reading Educator." A major paper is required in Reading Education 790.

Comments

Students must obtain approval of their advisor prior to registering for courses.

With approval of the advisor, elective courses may be taken in related areas outside Reading Education.

Students enrolled in the M.S.E.-Reading Cooperative Program with the University of Wisconsin Green Bay may take up to 12 graduate units (crs.) from the University of Wisconsin Green Bay in their plan of study. A list of appropriate and applicable courses to be used as required or elective courses has been developed.

VII. GRADUATE ACHIEVEMENT PROGRAM (GAP) AND CERTIFICATION REQUIREMENTS

Graduate Achievement Program (GAP)

The Graduate Achievement Program (GAP) in Reading is designed for individuals who have completed a Master's Degree and who wish additional graduate study in Reading for professional enrichment and growth, for meeting state license renewal requirements and for career advancement. Specifically the program will enable reading specialists to extend their proficiencies in planning, establishing, and evaluating reading programs, interpreting research and theories related to reading, leadership related to reading curriculum, programs, and issues.

Admission Requirements

To be admitted to the Graduate Achievement Program (GAP) in Reading, the candidate must have completed a master's degree with a reading emphasis from a regionally accredited university with a grade point of 3.00 or better.

Program Requirements

The Graduate Achievement Program (GAP) in Reading is designed as an issues-centered curriculum that is an individually designed sequence of 18 units (crs.).

1. Required courses: 9 units (crs.) from the following courses (not taken in the master's program) selected in cooperation with advisor:

Reading Education

713	3	Sustaining Change in Holistic Reading Programs
715	3	Issues in Reading
764	1-3	Exemplary Practices: Special Focus
780	3	Administration and Supervision of Reading Programs
782	3	Problems in the Evaluation of Reading
785	3	Practicum in Reading
790	3	Seminar in Reading Research
792	3	Theoretical Foundations of Reading

2. Electives: 9 units (crs.) taken with consent of advisor.

Comments

A specific program of studies planned by student and advisor is filed with the Graduate School during the first semester of enrollment.

No units (crs.) other than those which may be taken from within the cooperative reading program will be accepted in transfer.

The culminating experience is an oral examination in the semester of the final enrollment.

READING EDUCATION

LICENSE REQUIREMENTS

1. Reading Teacher License (316)

To be recommended for this license, (K-12) the student must be admitted in a graduate program and complete 18 units (crs.) as follows:

Core Courses:

Subject

Catalog #	Units (crs.)	Title
Reading Education		
705	3	Reading in the Elementary School
720	3	Interactive Literacy intervention
721	3	The Readers'/Writers' Workshop Approach Secondary Level
735	3	Adolescent Literacy: Programs/Practices
765	3	Literacy Assessment

The following courses are needed for 316 certification and if not completed previously, must be included in the program.

- Children and Youth with Disabilities in general education
- Child or Adolescent Literature

2. Reading Specialist License (317)

To be recommended for this license, students must complete the M.S.E. Reading degree, which includes the following:

Subject

Catalog #	Units (crs.)	Title
Reading Education		
780	3	Administration and Supervision of Reading Programs
785	3	Practicum in Reading

Comment

At least 9 of the required units (crs.) for licensure (316 or 317), including Reading Education 720, must be taken at the University of Wisconsin Oshkosh.

VIII. COURSE DESCRIPTIONS

Please see the Graduate Service Courses section of this Bulletin for descriptions of the following course(s):

Subject

Catalog #	Units (crs.)	Title
Educational Foundations		
770	3	Foundations of Educational Research

Reading Education 610

3 units (crs.)

Assessing and Planning for Literacy Instruction

This course is designed to provide pre-service teachers a contextually-set opportunity to employ assessment and instructional strategies. Decoding strategies that include phonics are covered along with strategies for the development of fluency and comprehension. Other literacy related aspects such as spelling and writing are included

along with the importance of motivating children to read. A supervised field experience is arranged. Prerequisite: Reading Education 305. 410/610

Reading Education 610

3 units (crs.)

Assessing and Planning for Literacy Instruction

This course is designed to provide pre-service teachers a contextually-set opportunity to employ assessment and instructional strategies. Decoding strategies that include phonics are covered along with strategies for the development of fluency and comprehension. Other literacy related aspects such as spelling and writing are included along with the importance of motivating children to read. A supervised field experience is arranged. Prerequisite: Reading Education 305. 410/610

Reading Education 612

3 units (crs.)

Holistic School Reading Programs: Issues and Implications

This course is designed to provide students with an opportunity to explore in depth issues and ideas related to school reading programs influenced by holistic theories and beliefs. 412/612

Reading Education 620

3 units (crs.)

Literacy and Language Development in Young Children

Prepares teachers of young children to understand language acquisition and emergent literacy. Focus is on developmentally appropriate practice in reading and writing including the use of sound-symbol relationships (phonics). The importance of the home-school partnership is also emphasized. Prerequisites: Reading Education 305 or Elementary Education 311. 420/620 (Fall)

Reading Education 635

3 units (crs.)

Adolescent Literacy Methods

Historical perspectives, basic instructional techniques, approaches to problems in one's own instructional area, roles in and designs for a total school program, what research and authorities suggest, and consideration of contemporary issues and concerns. 435/635

Reading Education 640

3 units (crs.)

Literacy and Language in the Content Areas

A course designed to provide practical guidelines for those who are or will be elementary, middle school, or secondary content area teachers to assist them in using reading, writing, speaking, and listening as complementary learning processes for the content area. Students of this course bring their expertise of the subject to be taught (such as english, social studies, science, mathematics, music, art, etc.), and the course assists students in dealing with the language component of the content area. Students will be given experience in producing study, pattern, and concept guides, techniques for effectively presenting vocabulary, and in using reading, writing, speaking, and listening to facilitate learning in content areas. 440/640

READING EDUCATION

Reading Education 701 *1 unit (cr.)*
Overview of School Reading Programs
This course is intended for non-teaching school personnel. It will provide an overview of school reading programs and allow students to become aware of current methods, materials, and strategies used for effective reading instruction.

Reading Education 705 *3 units (crs.)*
Reading in the Elementary School
Prepares teachers in the components of an elementary school reading program, including the role of language in literacy development, contextually-appropriate phonics instruction and strategic practices in all aspects of literacy instruction. Classroom organization, individualization, materials and assessment, and the role of the family are considered.

Reading Education 713 *3 units (crs.)*
Sustaining Change in Holistic Literacy Programs
This course invites inservice teachers influences by the whole language philosophy to reflect on their beliefs and practices in light of current information about assisting students to learn to read and write. It will assist teachers in strengthening their own voices as they articulate their responses to critical voices from inside and outside the profession. It will support teachers as they continue to make changes in the literacy programs within their district, school and classrooms.

Reading Education 715 *3 units (crs.)*
Issues in Reading: (Annual Symposium Theme)
A seminar course dealing with the current issues, trends, and innovations in the teaching and learning of reading. Attendance at a research symposium is required. (Summer)

Reading Education 720 *3 units (crs.)*
Interactive Literacy Intervention
This course enables teachers of reading to provide intervention experiences for elementary-aged children. After using a variety of assessment strategies including observations, students develop an individualized instructional plan and create lessons that are based on the strengths and needs of the child. A clinical experience is provided. Prerequisite: Reading Education 705 and 765. (Fall)

Reading Education 721 *3 units (crs.)*
The Readers'/Writers' Workshop Approach: Secondary Level
A supervised laboratory experience in reading/writing instruction with middle and high school students for teachers seeking 316 and/or 317 licensure. This course provides structured individual and group activities with students of all ability levels, from grades 5 through 12. Instruction will focus on reading, writing, and study strategies to be used with trade books and textbooks. Prerequisite: Reading Education 635 or 735. (Spring)

Reading Education 723 *3 units (crs.)*
Reading Recovery 1
This course will provide experienced teachers with instruction and practice in the use of Reading Recovery strategies. Teachers will be trained to use informal assessment techniques, especially observations which are grounded in knowledge of reading process and development; to provide intervention of emergent, struggling readers; and to provide instruction and support in daily individualized tutoring sessions. Teachers will also develop an understanding of how theory and research support the Reading Recovery program. Open only to students with district/Valley Area Reading Recovery Consortium approval.

Reading Education 724 *3 units (crs.)*
Reading Recovery II
This course builds on the first semester course (Reading Recovery I), providing instruction and practice in assessing tutoring "hard to accelerate" children. Teachers refine their abilities to make instructional decisions, reflect on and explain those decisions, keep records, and monitor a successful reentry into regular classroom instruction. Open only to students with district/Valley Area Reading Recovery Consortium approval.

Reading Education 725 *1 unit (cr.)*
Reading Recovery Continuing Contract For Trained Teachers
This course is designed to further trained Reading Recovery teachers' understandings of the theories and practices used in Reading Recovery. Teachers will examine their own theories of reading and writing acquisitions and how they may or may not match the child's theory of what reading and writing is all about. Prerequisites: Reading 723 and 724.

Reading Education 735 *3 units (crs.)*
Adolescent Literacy: Programs and Practices
Students will explore, analyze, and critique research in reading, theories of reading, issues and problems in reading and the relationship of other disciplines to reading in the context of the secondary school and their own interest and research. Implications of recent trends in reading, such as the current interest in content area reading and reading comprehension, are also concerns of this course.

Reading Education 762 *3 units (crs.)*
Reading for Gifted Students
A course designed to identify the special needs and problems involved in teaching gifted students in the area of reading, with specific teaching methods discussed. Existing services and resources available for gifted students in the area of reading will also be identified. Prerequisite: One graduate course in reading.

READING EDUCATION

Reading Education 764 *1-3 units (crs.)* **Exemplary Practices in Reading Programs**

A seminar course relating to specific concerns of reading educators. The theme of the course will vary frequently but will focus on current problems, trends, and research in reading. The course may be retaken provided the subject of the course is not repeated. Prerequisites: 6 graduate credits in reading or consent of instructor.

Reading Education 765 *3 units (crs.)* **Literacy Assessment**

Causes and types of reading problems are considered and procedures for working with reading problems are examined. Laboratory experiences in administering and interpreting standardized and informal tests are provided. Prerequisite: Reading Education 635, 705 or 735 or consent of the instructor.

Reading Education 770 *3 units (crs.)* **Functional and Recreational Reading**

A consideration of content, methods, and materials to be used in developing appreciation and specialized reading skills in various functional and recreational reading pursuits.

Reading Education 772 *3 units (crs.)* **Psycholinguistics and Reading**

A descriptive introduction to psycholinguistics and in-depth study of a number of aspects of reading in the light of psycholinguistics. Topics developed will be concerned with the nature of reading emerging from the functioning of human intellect and the instruction of reading.

Reading Education 778 *3 units (crs.)* **Implementing Reading Programs in the Middle, Junior and Senior High Schools**

The articulation and implementation of a reading program for grades six through twelve including the nature of evolving models, participant roles and pertinent research evidence. Prerequisite: Reading Education 635 or 735.

Reading Education 780 *3 units (crs.)* **Administration and Supervision of Reading Programs**

A study of the basic principles and functions of administration and supervision as they apply to reading programs, analyses of the roles of superintendent, principals, curriculum directors, supervisors, reading consultants, and reading teachers in the reading program. Prerequisite: Reading Education 705, 721, 720, 735 and 765. (Fall)

Reading Education 782 *3 units (crs.)* **Problems in the Evaluation of Reading**

Problems in the evaluation of reading achievement and reading problems. Formal and informal tests in reading. Planning a reading evaluation. Theoretical and practical considerations. Prerequisite: Reading Education 765 or equivalent.

Reading Education 785 *3 units (crs.)* **Practicum in Reading**

This course is designed to give graduate students in reading an opportunity to develop and engage in field-based leadership activities that prepare them for the role of reading specialist. Emphasized are self-developed projects that provide new leadership skills and abilities and the sharing of experiences. Prerequisite: Reading Education 705, 720, 721, 735 and 765. (Spring)

Reading Education 790 *3 units (crs.)* **Seminar in Reading Research**

Research applications to reading. Criticism and evaluation of research in reading. Preparing, conducting, and reporting research in reading. Prerequisite: Education Foundations 770 or equivalent. (Spring)

Reading Education 792 *3 units (crs.)* **Theoretical Foundations of Reading**

This course examines the process of reading from various theoretical views and research findings. Models of reading and related issues are analyzed. Prerequisites: At least 12 credits in reading.

Reading Education 795 *3-6 units (crs.)* **Reading Thesis**

Registration for MSE-Reading students who have filed a Thesis Proposal and Advisor Approval Form. Pass/Fail course.

Reading Education 796 *1-3 units (crs.)* **Independent Study**

Registration open to MSE-Reading students who present an Independent Study/Related Readings contract with their registration.

Reading Education 798 *0-0 units (crs.)* **Reflective Journey of a Reading Educator**

Registration required in final term for applicants for the MSE-Reading degree. Pass/Fail course.

Reading Education 799 *0-0 units (crs.)* **Registration for Comprehensive Examination**

Registration required in final term for applicants for the MSE-Reading degree. Pass/Fail course.

SPECIAL EDUCATION

Bertram Chiang, Program Coordinator
 Office: Nursing/Education 508
 Telephone: 920-424-2246
 Website: www.coehs.uwosh.edu/departments/special_education/index.html
 E-mail: chiang@uwosh.edu

I. FACULTY

Chiang, Cimera, Clark, Fiedler, Fischer, Kitz, Rylance, Stiver, Swanger

II. PURPOSE

The graduate program in Special Education leads to a master's degree. The degree can include teaching licensure in the elective portion of the program.

III. DEGREE

Completion of the program will lead to the degree: Master of Science in Education (MSE).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/ INFORMATION

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

Admission in Full Standing

The minimum overall undergraduate grade point average for full standing admission in the graduate program is 3.00.

Admission with Deficiencies

Applicants who lack adequate undergraduate preparation may be admitted with deficiencies and will be expected to complete up to 18 units (crs.) in general professional licensure requirements.

Admission for Licensure

Admission to the School of Graduate Studies is ordinarily required for post-baccalaureate students pursuing licensure, even if completion of the M.S.E. is not intended. Renewal of provisional/ emergency licensure similarly requires admission to Graduate Studies.

Determination of Emphases

On the Application for Admission to the School of Graduate Studies form, applicants are requested to explicitly indicate intention to complete Special Education licensure or degree-only without licensure.

Interview

Qualified applicants should contact the program coordinator to arrange for an interview.

References

Applicants must provide two letters from professionals in education, Special Education, or related disciplines.

Academic Advisors

A faculty academic advisor will be assigned after admission to Graduate School.

V. SUMMARY

A. Structure

The program offers a choice of 3 elective emphases in combination with the M.S.E. degree. These are: (1) Non-licensure/Degree only, (2) Cross Categorical Special Education Licensure: Middle Childhood through Early Adolescence (Ages 6-13) and/or Early Adolescence through Adolescence (Ages 10-21), and (3) Early Childhood Special Education (Ages Birth through 8). The Cross Categorical Special Education licensure program prepares individuals to teach in a classroom serving students who are identified as having either learning disabilities (LD), emotional/behavioral disorders (ED), or mental retardation/cognitive disabilities (CD).

B. Academic Plans of Study

The following are the descriptions for the Special Education plan(s) of study:

Cross Categorical Special Education Licensure
Early Childhood Special Education
Non-licensure/degree only

C. Special Education Concentration Areas

In the Cross Categorical Special Education licensure program, students must complete a concentration in one of the disability categorical areas of (1) learning disabilities, (2) emotional/behavioral disorders, or (3) mental retardation/cognitive disabilities. This area of concentration work will be completed through a portfolio process interwoven throughout the Cross Categorical Special Education licensure course work.

D. Minimum Unit (Cr.) Requirements

30 units (crs.) applicable to the graduate degree constitute the minimal requirement for all students.

E. Admission to Candidacy

Students must satisfy fully the Graduate School requirements for advancement to candidacy as stated in the first section of this Bulletin. Ordinarily, the candidacy application is filed while taking Special Education 781 Introduction to Advanced Studies in Special Education.

F. Culminating Experience

Students may choose Special Education 794 Field Report in Special Education or Special Education 795 as the culminating experience.

G. Course Availability

Some Special Education licensure and M.S.E. degree required courses are not offered every semester or summer session. Long- and short-term planning necessitates contacting the department office or academic advisor to keep abreast with course offering schedules, recommended course sequence and prerequisites.

SPECIAL EDUCATION

H. Program Of Studies

An initial program of studies is prepared for the applicant at the time of admission to Graduate School. Credentials, experience, and goals are used to determine waivers and requirements.

I. Course Sequencing

In general, 700-level graduate courses are to be taken after completion of non-licensure or licensure requirements. Licensure requirements have specific sequences.

VI. DEGREE REQUIREMENTS

The M.S.E. degree program requires a minimum of 30 units (crs.) of which 15 units (crs.) are required and 15 units (crs.) are electives. At least 15 of the 30 total units (crs.) must be taken at the 700-level.

The option without licensure is designed to meet the needs of professionals in related fields; e.g., Elementary or Secondary Education, Occupational, Physical or Speech Therapy. In addition, special educators who already possess licensure and do not desire additional licensure can complete the M.S.E. degree program.

Core Courses

Subject	Catalog #	Units (crs.)	Title
Special Education			
	705	3	Administrative Organization, Collaboration, and Leadership in Special Education
	781	3	Introduction to Advanced Studies in Special Education
	790	3	Critical Analysis of Special Education Research and Literature
	794	3	Field Report in Special Education
		OR	
	795	3	Thesis
Educational Foundations			
	770	3	Foundations of Educational Research

VII. EMPHASES REQUIREMENTS

A. Non-Licensure Emphasis

A course on Children and Youth with Disabilities in General Education (Special Education 352/552) or an equivalent introductory Special Education course is required as a prerequisite. Units (crs.) earned in this course will not apply to the degree.

Courses Required

Course requirements for non-licensure emphasis include:

Catalog #	Units (crs.)	Title
Special Education		
581	3	Behavior Change and Management
680	3	Direct Instruction Strategies

Non-Licensure Electives

All students are required to take 9 units (crs.) of electives. Students may choose elective units (crs.) from the following list as well as from licensure/specialty courses. **Preapproval from graduate academic advisor is required for all electives.**

Subject	Catalog #	Units (crs.)	Title
Special Education			
	553	3	Characteristics of Children & Youth with Disabilities
	580	3	Curriculum & Instruction in Special Education
	606	3	Technology in Special Education
	612	3	Assessment and Curriculum in Early Intervention: Birth to Three
	613	3	Assessment and Curriculum for children and Youth with Disabilities: Ages Three to Eight Years
	614	3	Advocacy, Family Empowerment, and Special Education Law
	623	3	Direct Instruction Multisensory Methods for Teaching Decoding and Encoding
	631	3	Adolescents with Learning and Behavior Problems: Best Practices in Middle School and Secondary Settings
	663	3	Teaching Students with Significant Disabilities
	670	3	Fundamentals in Special Education Assessment
	671	3	Assessment for Instructional Planning in Special Education
	681	3	Advanced Behavior Management and Instruction
	767	1-4	Field Work in Special Education
	783	1-3	Issues in Special Education
	796	1-3	Independent Study

B. Licensure Emphases

All post-baccalaureate licensure applicants seeking Wisconsin licensure are ordinarily required to be admitted to the graduate program.

Licensure requirements, as determined by the Wisconsin Department of Public Instruction, are comprised of three parts: (1) General Professional, (2) Special Education Core Curriculum, and (3) Middle Childhood through Early Adolescence and/or Early Adolescence through Adolescence course work (for the Cross Categorical Special Education license) OR Early Childhood Special Education and Early Childhood PK-3 course work (for the early childhood special education license).

A maximum of 15 units (crs.) related to licensure are applicable to the M.S.E. degree requirements. No General Professional coursework may be applied toward the M.S.E. degree program.

SPECIAL EDUCATION

General Professional Coursework Required for Licensure:

The professional education course content requirements cover the following areas: Educational Foundations, Curriculum and Instruction, Reading Education, and Health Education.

Educational Foundations requirements consist of courses in Educational Psychology and Child and Adolescent Development. The area of Curriculum and Instruction includes Early Childhood and Elementary and Secondary methods courses.

Courses in Reading Education include Reading Methods and Strategies, Literature and Language Arts for the Young Child, and Reading and Language Arts in the Content Area.

A Health Education requirement reviews health concerns facing elementary schools. This course is only required for students specializing in Early Childhood Special Education.

In addition, applicants without a prior teaching license will be evaluated for compliance with state requirements governing human relations experiences and PPST scores.

Cross Categorical Special Education Licensure Requirements:

Cross Categorical Special Education licensure prepares individuals to teach in classrooms serving students who are identified as having learning disabilities (LD), emotional/behavioral disorders (ED), or mental retardation/cognitive disabilities (CD). In addition to coursework, all students are required to have a portfolio of evidence documenting the standards required for teacher licensure have been met.

Cross Categorical Special Education Core Curriculum Requirements:

Subject	Catalog #	Units (crs.)	Title
Special Education			
	552	3	Children and Youth with Disabilities in General Education
	553	3	Characteristics of Children and Youth with Disabilities
	580	3	Curriculum and Instruction in Special Education
	581	3	Behavior Change and Management
	601	3	Advanced Practicum Experience in Special Education
	606	3	Technology in Special Education
	614	3	Advocacy, Family Empowerment, and Special Education Law
	663	3	Teaching Students with Significant Disabilities
	670	3	Fundamentals in Special Education Assessment
	671	3	Assessment for Instructional Planning in Special Education
	680	3	Direct Instruction Strategies

Middle Childhood through Early Adolescence and/or Early Adolescence through Adolescence Requirements:

Subject	Catalog #	Units (crs.)	Title
Special Education			
	631	3	Adolescents with Learning and Behavior Problems: Best Practices in Middle School and Secondary Settings
	681	3	Advanced Behavior Management and Instruction
	685	1 or 2	Seminar in Cross Categorical Special Education Teaching (Middle Childhood through Early Adolescence, PK-9)
	686	5 or 10	Student Teaching in Cross Categorical Special Education (Middle Childhood through Early Adolescence, PK-9)
	689	1 or 2	Seminar in Cross Categorical Special Education Teaching (Early Adolescence through Adolescence, 6-12)
	690	5 or 10	Student Teaching Cross Categorical Special Education (Early Adolescence through Adolescence, 6-12)

For graduate students without any prior teaching license, a 10 unit (cr.) student teaching experience is required.

Early Childhood Special Education Licensure Requirements

Early childhood special education licensure prepares individuals to teach in classrooms serving children with disabilities ages birth through eight.

Early Childhood Special Education Core Curriculum Requirements:

Subject	Catalog #	Units (crs.)	Title
Special Education			
	553	3	Characteristics of Children and Youth with Disabilities
	580	3	Curriculum and Instruction in Special Education
	581	3	Behavior Change and Management
	601	3	Advanced Practicum Experience in Special Education
	606	3	Technology in Special Education
	614	3	Advocacy, Family Empowerment, and Special Education Law
	663	3	Teaching Students with Significant Disabilities
	670	3	Fundamentals in Special Education Assessment
	680	3	Direct Instruction Strategies

SPECIAL EDUCATION

Early Childhood PK-3 Requirements:

Subject	Catalog #	Units (crs.)	Title
Elementary Education			
	312	3	Education in the Early Years
	313	3	Preschool/Kindergarten Curriculum and Techniques
	314	3	Organization/Administration of Preschool Programs
	318	2	Assessment in Early Childhood

Early Childhood Special Education and Early Childhood PK-3 Requirements:

Subject	Catalog #	Units (crs.)	Title
Special Education			
	612	3	Assessment and Curriculum in Early Intervention: Birth to Three
	613	3	Assessment and Curriculum for Children with Disabilities Ages 3 to 8
Special Education			
	618	1 or 2	Seminar in Early Childhood Special Education Teaching
	619	5 or 10	Student Teaching in Early Childhood Special Education

For graduate students without any prior teaching license, a 10 unit (cr.) student teaching experience is required.

VIII. COURSE DESCRIPTIONS

Special Education 552 *3 units (crs.)* Children and Youth with Disabilities in General Education

This course is designed to provide a rigorous overview of current best practice in academic and behavioral methods for maintaining students with disabilities in general education settings. Particular emphasis is placed on high incidence disabilities such as learning disabilities, behavior disorders, cognitive disabilities, and language and speech disorders. Prerequisite: 2.75 GPA. 352/552

Special Education 553 *3 units (crs.)* Interdisciplinary Approaches to Working with Children & Youth with Disabilities

This course provides information about typical and atypical language and motor development in children and youth (ages birth to 21 years). Course topics include milestones of typical language and motor development, characteristics of specific language/motor disorders, and sensory impairments (hearing and visual impairments). An interdisciplinary focus that highlights the work of related service providers such as occupational, physical and speech therapists and consultants for individuals with visual and hearing impairments serves as the context for the course. Recommended approaches that support individuals with language/motor disorders and sensory

impairments such as basic sign language, Picture Exchange Communications System, and sensory integration strategies are embedded into course topics. The course is required of all undergraduate and graduate students enrolled in the special education teacher licensure program. Teacher competencies of the Council for Exceptional Children are used to frame the course. Prerequisite: Spec Ed 352/552: Children with Disabilities in General Education Settings.

Special Education 580 *3 units (crs.)* Curriculum and Instruction in Special Education

Students will be introduced to factors that influence curriculum content, scope and sequence, preparation and evaluation of curricular strategies, and materials. A major focus of this course will be extensive student involvement in curriculum development, implementation, and evaluation. Prerequisite: Special Education 353/553. 380/580

Special Education 581 *3 units (crs.)* Behavior Change and Management

Theoretical and practical understanding of methods used in modifying behavior in general, and problem behavior in particular. Methods of controlling behavior will be drawn from research and applied to the classroom. Approaches are developed to anticipate, inhibit, redirect, and prevent problem behavior through techniques which have high probability of encouraging the total learning process. 381/581

Special Education 601 *2 units (crs.)* Advanced Practicum Experience in Special Education

This is a field-based experience where special education majors will directly work with children and youth with disabilities birth to age 21. Special Education majors will receive experience in assessment and instructional remediation practices. Registration will be concurrent with a special education assessment or methods course. This field-based experience will occur within one or two semesters prior to student teaching. Pass/Fail course. 401/601

Special Education 606 *3 units (crs.)* Technology in Special Education

This course is to address uses of technology that are specifically related to special education, such as assistive and adaptive technology, and augmentative communication. It will address classroom arrangements for use of technology, uses of technology for content area instruction, and word processing technology for special learners. It will also address legal issues related to the provision of technology and methods of using technology to collaborate with other professionals and to gain information about special education. Prerequisite: Students must have completed sophomore practicum or equivalent coursework and Educational Leadership 325. 406/606

Special Education 612 *3 units (crs.)*
Assessment and Curriculum in Early Intervention: Birth to Three

This course will address information necessary to prepare future early interventionists to work with young children ages birth to three years and their families. A family-based, interagency focused approach is outlined in current legislation. Special focus will be given to the unique features of birth to three service delivery models currently in place across the State of Wisconsin and the United States. This course is a required course in the Early Childhood Special Education Teacher Licensure sequence. It complements Assessment and Curriculum for Children with Disabilities Ages Three through Eight Years. Prerequisite: Elementary Education 311; Sophomore Practicum or equivalent course work and PK-3 requirements (Elementary Education 312, 313, 314, 318). May be taken concurrently. 412/612

Special Education 613 *3 units (crs.)*
Assessment and Curriculum for Children with Disabilities Ages Three to Eight Years

This course will focus on the best practices in assessment and curricula for young children with suspected or identified disabilities ages three through eight years. Issues related to service provision in preschool and early primary environments will be addressed. Emphasis will be placed on linking assessment finding to intervention practices. Inter- and transdisciplinary team models will be explored as a way to provide quality educational services to young children in the least restrictive environment. Methods to embed and monitor individual education plan goals in the daily routine will be discussed. Information in this course complements content included in the "Assessment and Curriculum in Early Intervention: Birth to Three". Prerequisite: Elementary Education 311; Sophomore Practicum or equivalent course work and PK-3 requirements (Elementary Education 312, 313, 314 and 318) may be taken concurrently. 314/613

Special Education 614 *3 units (crs.)*
Advocacy, Family Empowerment, and Special Education Law

This course addresses three interrelated topics: (1) the role and responsibility of special education professionals to serve as advocates for students with disabilities and their families, (2) the skills and strategies needed by special education professionals to effectively support, collaborate with, and empower families of students with disabilities, and (3) special education legal issues. 414/614

Special Education 618 *1-2 units (crs.)*
Seminar in Early Childhood Special Education Teaching

This course will deal with the problems associated with teaching students in early childhood special education settings. Innovative programs and intervention strategies will be discussed and analyzed. The course is taken concurrently with Special Education 419/619. Prerequisite: Admission to student teaching and Admission II.

Special Education 619 *5-10 units (crs.)*
Student Teaching in Early Childhood Special Education

Observation, participation, and responsible teaching experiences under supervision in a class of early childhood special education students. Prerequisite: Admission II, restricted to special education majors. Corequisite: Special Education 418/618. 419/619

Special Education 623 *3 units (crs.)*
Direct Instruction Multisensory Methods for Teaching Decoding and Encoding

The content of this course is designed to train individuals how to teach both decoding (reading) and encoding (spelling) to dyslexic students by means of direct instruction and appropriate practice strategies. Issues associated with dyslexia and related reading disabilities will be discussed. The emphasis will be on instruction that uses teaching methods to teach word meaning using the Simultaneous Multi-Sensory Paradigm. Additionally, the course is designed to meet the methodological needs of current and future teachers who work with or anticipate working with students who have difficulty learning to read and/or spell, whether they have been diagnosed as dyslexic or not. 423/623

Special Education 631 *3 units (crs.)*
Adolescents with Learning and Behavior Problems Best Practices in Middle School and Sec Settings

This course is designed to provide a rigorous overview of current best practice in assessment, curricula, instruction, and transition for students with learning and behavior problems in middle school and secondary settings. Course content will include the following topic areas as they relate to adolescents: legal issues and legislation, problems and issues, service delivery models, transition, academic and behavioral interventions, curricula, and assessment. 431/631

Special Education 658 *3 units (crs.)*
Teaching Students with Disabilities in Regular Education Classrooms

Survey of special education children with central emphasis upon instructional provisions. Emphasis on appropriate educational programming for special education children within the framework of the regular class. Attention given to materials, resources, parent counseling, and psychological aspects. For non-majors only. Prerequisite: Junior standing.

Special Education 663 *3 units (crs.)*
Teaching Students with Significant Disabilities

This course examines functional curricula, instructional practices and functional behavioral assessment and support for students with severe disabilities. Additional topics include working collaboratively with related services personnel, the use of assistive technology in educational programming, supervising, paraprofessionals in the classroom, and teaching self-advocacy skills. 463/663

SPECIAL EDUCATION

Special Education 665 *1-2 units (crs.)*
Problems in Teaching Individuals with Mentally Retarded/Cognitively Disabilities
Innovative programs and intervention strategies will be discussed and analyzed. Prerequisite: Admission to student teaching. Corequisite: Special Education 466/666. 465/665

Special Education 666 *5-10 units (crs.)*
Teaching Individual with Mental Retardation/Cognitively Disabilities
Observation, participation, and responsible teaching experiences under supervision in a class of mentally retarded students. Prerequisite: Admission to student teaching. Corequisite: Special Education 465/665. 466/666

Special Education 667 *1-2 units (crs.)*
Problems in Teaching Individuals the Learning Disabilities
This course will deal with the problems associated with teaching learning disabled students. Innovative programs and intervention strategies will be discussed and analyzed. The course is taken concurrently with Special Education 468/668. Prerequisite: Admission to student teaching. Corequisite: Special Education 468/668. 467/667

Special Education 668 *5-10 units (crs.)*
Student Teaching of Individuals with Learning Disabilities
Observation, participation, and responsible teaching experiences under supervision in a class of learning disabled students. Prerequisite: Admission to student teaching. Corequisite: Special Education 467/667. 468/668

Special Education 670 *3 units (crs.)*
Fundamental in Special Education Assessment
This course deals with the appropriate selection, administration, and interpretation of assessment techniques and measures in order to identify students for special education. The course will familiarize the student with basic assessment terminologies and principles as well as various tests measuring achievement, aptitude, readiness, and social skills. The emphasis of this course is on making eligibility rather than instructional planning decision-making. 470/670

Special Education 671 *3 units (crs.)*
Assessment for Instructional Planning in Special Education
This course provides students with hands-on experience in assessment procedures through observation, administration, and interpretation of formal and informal assessment measures, including curriculum-based assessment. Students will write IEPs and plan instructional lessons with monitoring techniques. Prerequisite: Special Education 353/553 and 470/670. 471/671

Special Education 680 *3 units (crs.)*
Direct Instruction Strategies
This course presents a general approach to instructional strategies for special education. Topics covered will include principles of design, implementation, delivery and evaluation of effectiveness of direct instruction educational interventions. Prerequisite (undergraduate students only): Elementary Education 360, Reading 305; Sophomore Practicum or equivalent course work; Special Education 470 and 471 (may be taken concurrently). This course should be taken the last semester prior to student teaching. 480/680

Special Education 681 *3 units (crs.)*
Advanced Behavior Management and Instruction
This course builds upon effective behavior management and instruction concepts, principles, and techniques covered in Special Education 381/581 and Special Education 480/680. Course emphasis is on understanding the process of behavioral change, instructional classroom management, self-management strategies, crisis intervention, social skills instruction, study and organizational skills, and metacognitive strategies. Prerequisite: Sophomore Practicum or equivalent work, and Special Education 480/680 (may be taken concurrently). 481/681

Special Education 682 *2 units (crs.)*
Practicum in Physical Education, Art, or Music for Special Education
Supervised field experience with special education students working within existing programs in area of specialization. Designed for physical education, music, or art teachers seeking licensure for special fields special education. Prerequisite: Physical Education 482/682, Music 490/690 or Art 300/796, and consent of instructor. 482/682 (0+4)

Special Education 683 *1-2 units (crs.)*
Problems in Teaching Emotionally/ Behaviorally Disturbed
This course will deal with the problems associated with teaching emotionally disturbed students. Innovative programs and intervention strategies will be discussed and analyzed. Prerequisite: Admission to student teaching. Corequisite: Special Education 484/684. 483/683

Special Education 684 *5-10 units (crs.)*
Student Teaching in Emotionally/Behavioral Disturbance
Observation, participation, and responsible teaching experiences under supervision in a class of emotionally disturbed students. Prerequisite: Admission to student teaching. Corequisite: Special Education 483/683. 484/684

SPECIAL EDUCATION

Special Education 685 *1-2 units (crs.)*
Seminar in Cross Categorical Special Education Teaching (Middle Childhood Through Early Adolescence)

This course will deal with the problems associated with teaching students in cross categorical special education programs (middle school through early adolescence) (students labeled as learning disabled, emotionally/behaviorally disordered, and/or mentally retarded/cognitively disabled). Innovative programs and intervention strategies will be discussed and analyzed. Prerequisite: Admission to student teaching and Admission II. Corequisite: Special Education 486/686. 485/685

Special Education 686 *5-10 units (crs.)*
Student Teaching in Cross Categorical Special Education (Middle Childhood Through Early Adolescence)

Observation, participation, and responsible teaching experience under supervision in a cross categorical special education in a class at the middle childhood through early adolescence level (learning disabilities, emotional/behavioral disorders, and/or mental retardation/cognitive disabilities). Prerequisite: Admission II, restricted to special education majors. Corequisite: Special Education 485/685. 486/686

Special Education 689 *1-2 units (crs.)*
Seminar in Cross Categorical Special Education Teaching (Early Adolescence Through Adolescence)

This course will deal with the problems associated with teaching students in cross categorical special education programs (early adolescence through adolescence), (students labeled as learning disabled, emotionally/behaviorally disordered, and/or mentally retarded/cognitively disabled). Innovative programs and intervention strategies will be discussed and analyzed. Prerequisite: Admission to student teaching and Admission II. Corequisite: Special Education 490/690.

Special Education 690 *5-10 units (crs.)*
Student Teaching in Cross Categorical Special Education (Early Adolescence Through Adolescence)

Observation, participation, and responsible teaching experience under supervision in a cross categorical special education class at the early adolescence through adolescence level (learning disabilities, emotional/behavioral disorders, and/or mental retardation/cognitive disabilities). Prerequisite: Admission II, restricted to special education majors. Corequisite: Special Education 489/689. 490/690

Special Education 705 *3 units (crs.)*
Administrative Organization, Collaboration, and Leadership in Special Education

This course focuses on preparing graduate students for leadership and collaboration roles in special education and general education. Course content addresses special education organization and administration, supervision and

evaluation, collaboration and consultation, and conflict resolution skills. Prerequisite (undergraduate students only): Admission II. This course should be taken just prior to or after student teaching.

Special Education 710 *3 units (crs.)*
Conferencing Techniques for Special Educators

Lectures and simulation activities on techniques used for effective conferencing with parents and other teachers and professionals. Prerequisite: Special Education 352/552.

Special Education 711 *2 units (crs.)*
Language Development Field Work

Supervised opportunity to remediate an identified expressive language lag within the developmental process in a school aged child. The student will work with the child's parents and train them to function as teachers of verbal behavior.

Special Education 730 *3 units (crs.)*
Basic Instructional Strategies for Special Education

Acquisition, maintenance, and generalization of basic skills in problem learners will be covered. Theory and practice with students will be included in relation to reading, writing, arithmetic, spelling, and language.

Special Education 741 *2 units (crs.)*
Behavior Management Laboratory and Practicum

Independently designed laboratory experience. Details to be arranged through Special Education department.

Special Education 751 *3 units (crs.)*
Education Mentally Retarded/ Cognitively Disabled Post-School Adult

Post-school opportunities for all levels of mentally retarded. Sheltered workshops, job placement, adult training, and adult recreational opportunities. Areas of financial support as they apply to the local level.

Special Education 761 *2 units (crs.)*
Practicum in Teaching Communicative Disorders

Practicum in K-6 setting for graduate students in communicative disorders. Supervised observation, participation and responsible teaching experiences in communicative disorders. Prerequisite: 100 clock hours of clinical work under appropriate supervision, 3 credits of clinical practice, completion of bachelors degree, education course prerequisites for student teaching, and recommendation of clinical instructor.

Special Education 762 *2 units (crs.)*
Practicum in Teaching Communicative Disorders

Practicum in grades 7-12 setting similar to Special Education 761. Prerequisites: Same as for Special Education 761.

SPECIAL EDUCATION

Special Education 765 *1 unit (cr.)*

Practicum Seminar-Communicative Disorders

Must be taken in conjunction with Secondary Education 761 and Secondary Education 762 for K-12 certification. Designed to aid students to integrate remediation theories and techniques with problems which occur in teaching.

Special Education 767 *2-4 units (crs.)*

Field Experience in Special Education

Recent trends in the education and programming for children and adolescents. Experiences designed in accordance with the student's fields of interest and preparation needs. Extended observation and participation in a wide variety of programs required.

Special Education 769 *4 units (crs.)*

Competency Based Field Work

Competency based field work is designed as a qualifying course enabling students who pass it to perform practicum Special Education 668 and 683 within their own classroom. The acquisition and maintenance of pre-identified competencies will be demonstrated during this course.

Special Education 781 *3 units (crs.)*

Introduction to Advanced Studies in Special Education

A course in topics of current interest in special education. This course will provide students with different viewpoints and opposing positions to provoke critical thinking and discussion and provide a starting point for graduate students to research issues in-depth as thesis or field report topics. In addition, to ensure students' understanding of statistical applications in data-based research studies, basic educational statistics will be introduced. This required course should be taken as the first core required course in the special education graduate program. It must be taken prior to Special Education 790.

Special Education 783 *1-3 units (crs.)*

Current Issues

A course in topics of current relevance for advanced graduate students having an interest or background in special education. May be repeated under different topics. Prerequisite: consent of instructor.

Special Education 788 *2-6 units (crs.)*

International Seminar in Special Education

On-site observation of provisions made by leading countries for the education and training of individuals with disabilities. Intensive evaluation of the programs by the student and small groups. Seminar groups directed by the instructor with local leading educators will supplement the visits. Prerequisite: consent of instructor.

Special Education 790 *3 units (crs.)*

Critical Analysis of Special Education Research and Literature

The focus of this course is upon developing student ability to critically evaluate research within educational literature. This course will include extensive practice of critical analysis of research reports and synthesis of bodies of research information. This course should be taken at the end of the student's graduate program, just prior to completion of the thesis or field report in special education. Prerequisite: Special Education 781 and Educational Foundations 770.

Special Education 791 *2 units (crs.)*

Enrichment Practicum in Special Education

A practicum for additional experience related to teaching. Can be taken for a) remediation of deficit skills, b) experience in an additional major area of specialization, or c) varied experience within a major area of specialization. Prerequisite: Eligibility for or completion of one of the following required practice (Special Education 619, 666, 668, or 684) and consent of chairperson.

Special Education 794 *3 units (crs.)*

Field Report in Special Education

The Field Report in Special Education is an alternative to the Special Education Thesis as the culminating experience. Registration open only to those MSE Special Education students who have filed a field report proposal and advisor approval form. Pass/Fail course.

Special Education 795 *1-6 units (crs.)*

Special Education Thesis

Each registration with a maximum accumulation of 6 cr. Registration open only to those MSE Special Education students who have filed a thesis proposal and advisor approval form with the Graduate Office. Pass/Fail course.

Special Education 796 *1-3 units (crs.)*

Independent Study

Registration open to those MSE Special Education students who have filed an Independent Study Contract and instructor approval form.

SERVICE COURSES

COLLEGE OF EDUCATION AND HUMAN SERVICES

HUMAN SERVICES

Human Services 577 *3 units (crs.)*

Family and Community Advocacy

Studies the knowledge and develops the skills for acquiring power for families and communities through advocacy processes. Skills include outreach, use of public and private records, interacting with agency staff, documenting and analyzing problems, use of census reports and state and federal statutes writing press releases, letters to the editor and networking with other activists.

Human Services 586 *1-3 units (crs.)*

Drug Abuse and Behavior

Surveys the psychological, sociological, medical, and legal facets of the drug use and abuse problem as it affects our society today. Emphasis upon societal pressures which contribute to the problem, personality characteristics of drug abusers, the drugs most commonly abused. Prerequisite: Consent of instructor. 386/586.

Human Services 780 *3-6 units (crs.)*

Graduate Practicum

Experience in the practicum includes doing an analysis and writing an organizational study of the human service workplace related to the student's area of emphasis. All students will be required to be involved in the practicum experience. Prerequisites: The 'core' of the community Human Services program.

Human Services 794 *3 units (crs.)*

Thesis Preparation Seminar

An advanced seminar dealing with planning and writing a thesis. Will be concurrent with Human Services 795. Prerequisites: The "core" of the Community Human Services program.

Human Services 795 *3 units (crs.)*

Thesis

An integrating experience where the student synthesizes the "core" courses of the program into a working model related to the student's target career choice. Will be concurrent with Human Services 794. Prerequisites: The "core" of the Community Human Services Program.

SERVICE COURSES

Courses with the "SRVS CRS" subject heading are education service courses. Service Courses 500 and above carry graduate credit but the units (crs.) do not apply toward

graduate degree programs unless prior approval is granted by the Assistant Vice Chancellor, School of Graduate Studies. Other education graduate courses listed here may count towards a graduate degree with the favorable endorsement of the program coordinator and the approval of the Assistant Vice Chancellor, School of Graduate Studies.

Service Courses in Education 600 *1 unit (cr.)*

Assessment of Dyslexia

This course is designed to prescribe the assessment procedures, both Norm and Criterion Referenced, that are needed to identify the presence of dyslexia in individuals 5 years of age through adulthood. Course participants will be required to do a "write up" on the administration of three assessment batteries. 400/600

Service Courses in Education 605 *3 units (crs.)*

Survival in the Classroom

This course is designed to help teachers identify and explore solutions to fundamental problems of instruction and discipline. 405/605

Service Courses in Education 621 *1-3 units (crs.)*

Contemporary Topics in Education

Focuses upon professional growth through problem solving, self expression, group thinking and independent study. Educators work on problems growing out of their professional needs. Course may be repeated with change of topic to a maximum of 9 credits. Prerequisite: A practicing professional educator. Pass/Fail course. 421/621

Service Courses in Education 622 *1-3 units (crs.)*

Contemporary Issues in Education

The focus of this course is on professional growth and development via exploration of theory and practice related to current issues and educational initiatives. Course may be repeated with change of topic to a maximum of 9 credits. 422/622

Service Courses in Education 704 *2 units (crs.)*

School Improvement in Elementary Education: Elementary Education Institute

This course is for participants in the Elementary Education Institute which is offered each summer. The course will examine results of elementary school curriculum and school improvement research. Working together as school teams, the participants will develop school improvement projects utilizing applicable research findings. The improvement projects will be implemented in the schools during the next year. Prerequisite: An EEI participant should be a practicing professional elementary teacher/administrator, have support from his/her school for a school improvement project designed by the school staff, and be accepted as a team member in the Elementary Education Institute program. Pass/Fail course.

SERVICE COURSES

Service Courses in Education 708 *1 unit (cr.)*
The 4MAT System: Teaching to Learning Styles with Right/Left Mode Techniques, Level I

This course introduces participants to learning style theory, right/left information processing research, and the 4MAT System cycle of instructional design. The intended audience can be practicing teachers, graduate students, college/university faculty, and school administrators.

Service Courses in Education 709 *2 units (crs.)*
The 4MAT System: Teaching to Learning Styles with Right/Left Mode Techniques, Level II

This course extends participants' understanding of the 4MAT System with an in-depth study of experiential learning theory, whole-brained knowing, the connection between 4MAT and modalities, the methodology behind concept-based 4MAT units, strategies for evaluating 4MAT units, and overview of 4MAT as a model to enhance understanding of the change process, and participant presentations of right/left information processing research, and the 4MAT System cycle of instructional design. The intended audience can be practicing teachers, graduate students, college/university faculty, and school administrators.

Service Courses in Education 729 *1-3 units (crs.)*
Supervision of Student Teachers

Role of the supervising teacher in student teaching or internship programs. Development of understanding and skills essential in working effectively with student teachers. Prerequisite: Bachelors degree, certification, and at least one year of teaching experience.

EDUCATIONAL FOUNDATIONS

EDUCATIONAL FOUNDATIONS

Anthony Koyzis, Chairperson
Office: Nursing/Education 605
Telephone: 920-424-1490

I. FACULTY

Adams, Koyzis, Leung, Meyerson, Parks, Paxton, Petronicolos

Educational Foundations 543 *3 units (crs.)* **The Adult Learner**

The biological, psychological, and social characteristics of the adult learner, including middle aged persons as well as those in later life. The intellectual abilities adults possess will be examined with specific references to educational processes. Prerequisite: Educational Foundations 230, 235, 240, 377 or equivalent. 343/543

Educational Foundations 550 *3 units (crs.)* **Adolescent Psychology**

A study of pre-adolescence and adolescence as a psychosocio-cultural phenomenon. Emphasis will be placed upon the basic conflicts and adjustment patterns of adolescents. Contemporary interests and problems of pre-adolescents and adolescents in school situations will be stressed. Prerequisite: Advanced standing including Psychology 201. 350/550

Educational Foundations 589 *3 units (crs.)* **Education of Gifted and Talented Students**

Issues in identifying, motivating, and providing for the learning of gifted and talented children and youth. Attention is given to creative processes taught on individual and group bases. 389/589

Educational Foundations 607 *3 units (crs.)* **Education and Diverse Populations**

This course deals with the educational needs of members of diverse populations (African-Americans, American Indians, Hispanic-Americans, Asian-Americans, disabled individuals, lower socio-economic and/or female persons) and related concerns they may face in the traditional educational setting. 407/607

Educational Foundations 635 *2-3 units (crs.)* **Human Development & Education**

Consideration of major theories, principles, problems, issues, and recent research findings on human development. Physical, intellectual, social, and personality development throughout the lifespan will be examined in the context of education. One emphasis will be on students' reflections of their own development and their observations of the development of others. A second emphasis, related to the first, is how these reflections and observations may contribute to the development of children and adolescents under their care as whole persons.

Students may enroll for 2 or 3 credits at either the undergraduate or graduate level. Prerequisite: Bachelor's degree or consent of instructor. 435/635

Educational Foundations 671 *2-3 units (crs.)* **Learning Processes in Children**

Reading and discussing a variety of new materials in the areas of early childhood learning and generating applications of research findings to working with children. Some areas discussed: learning in the newborn, learning to love and to fear, play, attitude conditioning, motivation for learning, self-concept development, Piaget, Montessori, cognitive growth, IQ change, approaches to teaching young children. Prerequisite: Educational Foundations 235 or equivalent. 471/671

Educational Foundations 702 *3 units (crs.)* **Statistical Foundations in Education**

Descriptive statistical techniques, including measures of central tendency, variability, normal curve, percentile ranks, and standard scores. Correlational techniques, parametric and nonparametric statistical tests. Emphasis on school related research problems. Prerequisite: Educational Foundations 310 or equivalent.

Educational Foundations 703 *3 units (crs.)* **Education and the Making of American Society**

Philosophical, social and historical foundations of American education will be explored. Specifically, this course will focus on contemporary and historical thoughts and issues in American education as they relate to the larger society.

Educational Foundations 704 *3 units (crs.)* **Psychological Foundations of Education**

A psychological basis for the study of human abilities and learning. Research evidence along with empirical findings is provided to relate theoretical principle to classroom practices. Individual difference, motivation, retention and transfer, and evaluation and their implications to teaching.

Educational Foundations 705 *2-3 units (crs.)* **Child Psychology**

Growth of children from birth to adolescence. Emphasizes the child as a whole being, with major divisions dealing with physical, social, emotional, and intellectual development. Prerequisite: Psychology 201.

Educational Foundations 706 *3 units (crs.)* **Multicultural Education**

This course is designed to develop an understanding of cultural processes and sensitivity to diverse cultural groups. The course includes multicultural content as it relates to teaching, procedures for identifying various forms of bias in educational materials and teaching styles appropriate for culturally diverse learning styles. Prerequisite: Admission II (Professional Education Program).

EDUCATIONAL FOUNDATIONS

Educational Foundations 708 *3 units (crs.)*

Social Analysis of Educational Policy

A course focusing on the study of social analysis of educational policy. In particular, this course will examine some of the ways in which social scientists and other thinkers have sought to understand recurring concerns and issues that have troubled and have shaped educational policy, educational policy making and policy actors over the years. The focus of the course will be on the study of educational policy initiative in the U.S. and globally.

Educational Foundations 713 *3 units (crs.)*

Principles of Appraisal and Evaluation in Education

The construction, and administration, and interpretation of diagnostic and other evaluative devices in the educational setting. Special attention given to recent philosophical orientations toward the utilization of measurement data for evaluative purposes. Prerequisite: Educational Foundations 310 or consent of instructor.

Educational Foundations 760 *2 units (crs.)*

Learning Theory and Educational Practice

Oriented primarily toward learning theory and secondarily to applying this theory to practical educational problems. Designed as a specific 2-credit core course to which the student can add 1 credit modules. The core course will stress the understanding of theory, while the modules will stress applications of theory.

Educational Foundations 761 *1 unit (cr.)*

Learning Theory for Discipline and Classroom Management

What various authorities have to say about fostering desirable and preventing undesirable behavior in the classroom. A 1-credit module designed to accompany Education Foundations 760.

Educational Foundations 762 *3 units (crs.)*

Piaget: Theory and Application

A study of the learning theory of Jean Piaget and its application to the classroom.

Educational Foundations 770 *3 units (crs.)*

Foundations of Educational Research

Introduction to the concepts, tools and procedures which are essential for planning and conducting research in education and related fields. Preparing a research proposal and organization of a research report. Emphasis is given to the interpretation and analysis of research literature from the behavioral and social sciences.

Educational Foundations 794 *3 units (crs.)*

Special Topics in Educational Psychology

Focuses on a variety of special problems encountered by teachers and others interested in human behavior.

Educational Foundations 796 *1-3 units (crs.)*

Independent Study

Because there is no graduate program in Educational Foundations, Independent Study in this area must be undertaken with the approval of a department offering a graduate program, but under the direction of a member of the Educational Foundations staff. Prerequisite: Independent Study Topic and Instructor Approval Form must be completed prior to registration.

COLLEGE OF LETTERS AND SCIENCE

BIOLOGY AND MICROBIOLOGY

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I. FACULTY

Adler, Bentivenga, Cooper, Dorn, Dilkes, Holton, Kallas, Kleinheinz, Kostman, Lammers, Lansman, McDermott, Moon, Michalski, Pillsbury, Rainboth, Sandrin, Shors, Stelzer, Vaughan, Wise

II. PURPOSE

The Graduate Program in Biology/Microbiology is designed to provide the advanced training appropriate for professional competitiveness in public and private job sectors. It is particularly applicable to: a) persons employed in governmental agencies or private industries especially those dealing with health, agricultural or environmental issues; b) secondary school teachers and c) persons preparing to pursue a Ph.D. degree in biology, microbiology or a sub discipline of these fields.

III. DEGREE

Completion of the Program will lead to the degree: Master of Science (MS).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the Graduate School, specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Admission with Deficiencies

Applicants who lack adequate undergraduate preparation may be admitted with deficiencies and will be expected to take those courses specified by the Program. This requirement may be waived if the applicant has taken course work, which is considered, by the candidacy committee, to be equivalent to the course(s) lacking.

Grade Point Average

A Grade Point Average of 3.00 in overall undergraduate program, or 3.25 during the last half (60 units (crs.)) of undergraduate work, is required for admission.

References and Test Score

Three reference letters and scores from the general Graduate Record Examination (GRE) are required.

Undergraduate Major

Normally, the baccalaureate will have been taken in Biology, Microbiology, Natural Science or related fields.

V. SUMMARY

A. Structure

The Program is comprised of emphases and electives.

The Program offers a choice of 2 emphases. These are: (1) Biology and (2) Microbiology

B. Academic Plans of Study

The following are the descriptions for the Biology/Microbiology plan(s) of study:

Biology (General - Botany)

Biology (General - Zoology)

Biology (Microbiology)

C. Minimum Unit (Cr.) Requirements

30 units (crs.) applicable to the graduate degree constitute the minimal requirement for all students. At least 15 units (crs.) being applied to the M.S. degree must be in graduate-only courses (700 numbers).

D. Admission to Candidacy

Students must pass a written comprehensive examination and satisfy fully the Graduate School requirements for advancement to candidacy stated in the first section of this Bulletin. The exam is prepared and the results are evaluated by an Advancement to Candidacy Committee (of three graduate faculty from the department) selected by the student. It is strongly recommended that students complete this exam as early as possible (e.g., during the second semester for most students).

VI. DEGREE REQUIREMENTS

All emphases require the following courses:

Subject

Catalog #	Units (crs.)	Title
Biology		
2 units (crs.) of graduate seminar, from the following list:		
728	1	Botany Seminar
748	1	Zoology Seminar
768	1	Microbiology Seminar
2 units (crs.) of research methods from the following list:		
709	2	Introduction to Biological Research
769	2	Introduction to Microbiological Research
4 units (crs.) of Advanced Topics from the following list:		
765	2	Advanced Topics in Microbiology
766	2	Advanced Topics in Biology
6 units (crs.) of Thesis research:		
795	1-6	Biology/Microbiology Thesis

Other Requirements:

Writing of a thesis based on scientific research and an oral defense of thesis before a committee of at least three faculty.

BIOLOGY AND MICROBIOLOGY

Electives:

All course work taken for an emphasis must be specifically approved for that emphasis. Students are expected to consult first with the Program Coordinator, and later with their thesis advisor and Admission to Candidacy Committee in selecting electives from the following list (or other appropriate courses):

Subject	Catalog #	Units (crs.)	Title
Biology			
	504	3	Plant Taxonomy
	508	5	Comparative Anatomy
	511	3	Animal Behavior
	512	2	Medical Bacteriology Lecture
	513	2	Medical Bacteriology Lab
	515	3	Virology
	516	3	Developmental Biology
	517	3	Cell/Development Biology Lab
	519	5	General Animal Physiology
	521	3	Mycology
	525	3	Field Ecology
	526	3	Introductory Limnology
	527	3	Microbial Ecology
	528	3	Ornithology
	530	3	Ichthyology
	532	3	Entomology
	535	3	Systematic Biology
	536	3	Fresh Water Algae
	537	3	Plant Anatomy
	539	3	Industrial Microbiology
	541	3	Immunology
	545	5	Plant Physiology
	549	3	General Ecology
	550	3	Electron Microscopy
	552	3	Biology of Aging
	553	3	Introduction to Arachnology
	554	3	Parasitology
	558	2	Freshwater Invertebrates
	572	3	Advanced Molecular and Cell Biology
	573	2	Biology Field Trip
	574	3	Immunology/Virology Lab
	575	3	Microbial Genetics
	576	3	Population and Community Ecology
	577	2	Microbial Genetics Lab
	586	3	Systems Ecology
	589	3	Principles of Biotechnology
	590	2	Biotechnology Lab
	650	5	Microbial Physiology
	702	4	Current Debates in Evolutionary Biology
	765	2	Advanced Topics in Microbiology
	766	2	Advanced Topics in Biology
	796	1-3	Independent Study in Biology/Microbiology
	799	0	Registration for Comprehensive Examination
Chemistry			
	523	3	Analytical Separations
	535	4	Organic Chemistry II
	536	1	Advanced Organic Lab
	547	3	Physical Chemistry
	548	1	Physical Chemistry Lab

549	3	Physical Chemistry
551	1	Physical Chemistry Lab
621	3	Instrumental Analysis
635	3	Interpretive Spectroscopy

Geography

563	3	Biogeography
571	3	Cartography
591	3	Computer Cartography
671	3	Geographic Information Systems
672	3	Adv. Geographic Info. Systems

Geology

565	3	Hydrogeology
566	3	Ground Water Hydrology

Mathematics

585	3	Applied Regression Analysis
586	3	Linear Statistical Models
601	3	Mathematical Statistics I
602	3	Mathematical Statistics II

Physics

507	3	Physical Optics
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Psychology

567	3	Psychopharmacology
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Comments

The following core subjects are considered a foundation for study in the emphases. The student's Admission to Candidacy Committee will use the results of the written comprehensive exam, along with consideration of the student's field of research specialization and career goals, to determine whether courses or equivalent exercises in these areas should be required for completion of the degree. Courses at this university for graduate credit are provided in most, but not all, the subjects listed, thus a student may be required to complete a course or equivalent exercise without credit toward the degree. It is anticipated that students qualified for acceptance into the graduate program will be well-prepared for advanced training in biological sciences, and that the prescription of specific courses by the Admission to Candidacy Committee will be the exception, not the rule (e.g., in cases of students pursuing an emphasis different from their baccalaureate training).

A. Biology

Biodiversity
Genetics
Molecular Biology
Physiology
Cell Biology
Ecology
Evolution
Intermediate Chemistry (Organic, Biochemistry)
Basic Mathematics (Statistics, Calculus)
Basic Physics

B. Microbiology

Molecular Biology
General Microbiology
Applied Microbiology (e.g., Medical, Food, Ecological, Industrial)
Microbial Genetics
Microbial Physiology
Virology
Immunology
Intermediate Chemistry (Organic, Biochemistry)
Basic Mathematics (Statistics, Calculus)
Basic Physics

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VII. COURSE DESCRIPTIONS

Biology 504 3 units (crs.)

Plant Taxonomy

Introduction to the theory and principles underlying systematic botany, and to the methodologies of plant classification and nomenclature. Survey of major families of flowering plants emphasizing structure and diversity. Prerequisites: One semester of general biology (2+2) (Fall)

Biology 508 5 units (crs.)

Comparative Anatomy

A comparative study of representative vertebrates. Prerequisite: One semester of general biology. 308/508 (3+4) (Spring)

Biology 511 3 units (crs.)

Animal Behavior

An introduction to the behavior mechanisms of invertebrate and vertebrate animals emphasizing the naturalistic point of view. Prerequisite: Biology 340 or 343. 311/511 (2+2) (Spring)

Biology 512 2 units (crs.)

Medical Bacteriology (Lecture)

Bacterial pathogens and their relationships to diseases; prevention and control of infectious diseases. Prerequisite: Biology 309 and 341/541. 312/512 (2+0) (Spring)

Biology 513 2 units (crs.)

Medical Bacteriology(Lab)

Isolation study, identification and laboratory handling of pathogenic bacteria. Prerequisite: Biology 309 and 341/541. 313/513 (0+2) (Spring)

Biology 515 3 units (crs.)

Virology

Principles of animal and human molecular virology. Topics include replication, expression, pathogenesis, methods of diagnosis and detection, current uses of viruses in gene therapy and vaccine applications, viruses and cancer and other diseases, persistent infections, and emerging viruses. Prerequisite: Biology 323 or consent of instructor. 315 (3+0) (Spring)

Biology 516 3 units (crs.)

Developmental Biology

Developmental Biology will first examine, at a morphological level, different strategies of embryonic development in diverse organisms, and then study molecular cues that cells use to migrate, differentiate and eventually form a normal organism. Prerequisite: Biology 323/523 or equivalent; Biology 343 strongly recommended. 316/516 (3+0) (Spring)

Biology 517 3 units (crs.)

Cell/Development Biology Laboratory

This laboratory focuses on current techniques in cell and developmental biology. Students will perform experiments involving tissue culture, immunohistology and genetic engineering. Students will be given some of the responsibility for designing and executing experiments. Consequently students must be able to work in the lab outside of the scheduled hours. Prerequisite: Biology 343 and either 323/523 or 316/516 or concurrent enrollment in Biology 316/516. 317/517 (1+4) (Spring-even year)

Biology 519 5 units (crs.)

General Animal Physiology

Structure/function relationships common to a variety of animal body plans on the molecular, cellular, tissue, and organ-system levels. Prerequisite: One year of chemistry; Biology 323. Biology 230 strongly recommended. (Fall, Spring)

Biology 521 3 units (crs.)

Mycology

A study of the fungi: characteristics, physiology, habits and laboratory identification of molds, yeasts, mushrooms and related organisms. Prerequisite: One semester of general biology. 321/521 (2+2) (Fall)

Biology 522 1 unit (cr.)

Mushroom Identification

The collection and identification of mushrooms and other fleshy fungi. Prerequisite: Biology 321/521 (may be taken concurrently). 322/522 (Fall)

Biology 525 3 units (crs.)

Field Ecology

An introductory field ecology course that will cover comparative, experimental and theoretical approaches to basic and applied questions in ecology. Field and laboratory exercises will treat various levels of organization including populations, communities and ecosystems. Studies will be carried out in a variety of local aquatic and terrestrial habitats. Students will gain first-hand experience with modern sampling and analytical techniques in ecology. Prerequisite: Biology 105 and Biology 349/549 (may be taken concurrently). (Fall)

Biology 526 3 units (crs.)

Introductory Limnology

The physical, chemical and biological character of lakes and streams. Methods of field measurements, collection and analysis of water samples. Investigation of aquatic communities. Prerequisites: one semester of general biology, one year of general chemistry, and consent of instructor. 326/526 (2+2) (Fall, odd years)

Biology 527 3 units (crs.)

Microbial Ecology

A study of the activities of microorganisms in a variety of natural habitats and their relevance to the overall quality of the environment. Emphasis will be on specific processes:

BIOLOGY AND MICROBIOLOGY

transformations in biogeochemical cycles, symbiotic relationships, microbial relationships with other living organisms, hydrocarbon oxidations, and biotransformation of novel compounds. Prerequisite: Biology 231, 233, 309 or consent of instructor. 327/527 (2+3) (Fall, odd years)

Biology 528 *3 units (crs.)* **Ornithology**

An introduction to the systematics, evolution, anatomy, behavior, and ecology of birds of the world. Field Trips. Prerequisite: Biology 230. 328/528 (2+3) (Spring)

Biology 530 *3 units (crs.)* **Ichthyology**

The biology of fishes including functional anatomy, evolution, taxonomy, ecology, physiology, behavior and development. Field trips required. Prerequisite: Biology 230 and one year of general chemistry with laboratory. 330/530 (2+3) (Fall, odd years)

Biology 532 *3 units (crs.)* **Entomology**

An introduction to the study of insects. Principles of biology, ecology and classification are emphasized. Elements of morphology, physiology, and collection and preservation techniques are included. Field trips. General collection of insects (assembled during the term is required. Prerequisite: One term of general biology. (Spring)

Biology 535 *3 units (crs.)* **Systematic Biology**

A study of the principles of taxonomy, nomenclature, classification and systematics incorporating the most recent approaches to derivation and application of hierarchical/ classification systems. Quantitative methods, their underlying assumptions, and their logical outcomes will be stressed. Prerequisite: Two semesters of biology, including a survey course, required. 335/535 (2+2) (Fall, even years)

Biology 536 *3 units (crs.)* **Fresh Water Algae**

Classification, biochemistry, physiology and ecology of fresh water algae. Emphasis on the roles algae play in aquatic ecosystems and on applications in environmental monitoring, aquaculture, and as experimental systems for basic research in photosynthesis. Prerequisite: Biology 231, 233 or 309. 336/536 (2+2) (Fall, even years)

Biology 537 *3 units (crs.)* **Plant Anatomy**

Structural aspects of cells, tissues, and organs comprising the plant body, their functional role in the ecology and life history of the plant, and their relationship to human affairs. Prerequisite: One semester of general biology required. Biology 231, strongly recommended. 337/537 (Spring-odd years)

Biology 539 *3 units (crs.)*

Industrial Microbiology

A study of microorganisms and microbial processes important to a variety of industrial applications: special reference to food, biotechnical, and environmental processes and their applications. Prerequisite: Biology 309. 339/539 (Fall, even years)

Biology 541 *3 units (crs.)* **Immunology**

Principles of immunology, with emphasis on the cellular and molecular basis of immune function, including clinical aspects of host immune processes. Areas of immunology currently under investigation will also be examined. Prerequisite: Biology 323 or consent of instructor. Strongly recommended: Biology 233 or 309. (3+0) (Fall)

Biology 545 *5 units (crs.)* **Plant Physiology**

An experimental study of plant growth, metabolism, nutrition, reproduction and response to environment. Prerequisite: One term of general biology, one year of general chemistry and Biology 231. (4+3) (Spring)

Biology 549 *3 units (crs.)* **General Ecology**

Basic Principles which influence and govern the plant and animal relations with their environments. An explanation of the distribution, abundance, and specialization of the present-day organisms, and of extinction. Prerequisite: One semester of general biology. 349/549 (2+1) (Fall-Spring)

Biology 550 *4 units (crs.)* **Electron Microscopy**

Electron Microscopy is an intensive, hands-on course covering the practices, procedures and operational theories of Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM). Topics covered include specimen preparation, ultramicrotomy, microscope design and microscope function. The laboratory provides experience with all techniques necessary to prepare, observe, and photograph biological specimens on the SEM and TEM. (Fall)

Biology 552 *3 units (crs.)* **Biology of Aging**

The course is designed to familiarize the students with the latest biological knowledge on the complex process of aging, a multifaceted phenomenon not unique to the human species. Prerequisite: Biology 107, and Biology 211, 212, 221, or consent of instructor. 352/552 (3+3)

Biology 553 *3 units (crs.)* **Introduction to Arachnology**

An introduction to the arachnid orders with emphasis on spiders, harvestmen, scorpions, and solfugids. Morphology, classification, ecology, and collecting techniques will be emphasized. A collection of spiders and

BIOLOGY AND MICROBIOLOGY

harvestmen is required. Prerequisite: None. Strongly recommended: Biology 230. 353/553 (1+4)

Biology 554 *3 units (crs.)* **Parasitology**

A look at the most common mode of life. Emphasis will be placed on parasites of medical and veterinary importance. Topics will include life cycles, identification and diagnosis, disease, host-parasite interaction and co-evolution. Prerequisites: One term of general biology and Biology 230.

Biology 558 *2 units (crs.)* **Freshwater Invertebrates**

In this course Benthic organisms and zooplankton will be studied. Sampling techniques for different situations will be used. Data will be analyzed using several diversity techniques. The role of benthos and zooplankton in aquatic systems will be examined. Prerequisites: An introductory biology course and consent of instructor. 358/558 (0+4) (Spring interim, odd years)

Biology 567 *2 units (crs.)* **Field Ornithology**

An intensive, highly field-oriented course intended to provide the practical "hands-on" experience essential to students interested in field biology. Field studies will emphasize identification and natural history of local avian species using a variety of field techniques. In addition to fieldwork, the course will involve lecture, specimen labs, and readings to examine important aspects of systematics, anatomy, physiology, behavior, ecology, and conservation as they apply to birds (Spring Interim at Pigeon Lake Field Station).

Biology 572 *3 units (crs.)* **Advanced Molecular and Cell Biology**

In-depth consideration of topics such as replication, transcription, translation and regulation of gene expression. Mechanisms that guide and drive cellular function and metabolism will be covered in detail. Studies of aberrant cell behavior (e.g. cancer and cell death) will be included. This course will emphasize scientific literature and quantitative problem-solving. Prerequisite: Biology 323, 343 and Chemistry 106. 372/572 (Fall)

Biology 573 *2 units (crs.)* **Biology Field Trip**

Formal library and classroom study of an area of interest followed by field study of that area. Site of study will change from year to year and could include Florida Everglades and Keys, Gulf Coast, Desert Southwest, etc. A final examination will follow the trip. Prerequisite: Consent of instructor. See instructor for special course fees. May be taken more than once for credit but only 2 credits will apply toward the major or minor at the undergraduate level or MS Biology degree. To receive credit, student must be enrolled at beginning of semester. 373/573 (Spring)

Biology 574 *3 units (crs.)*

Immunology/Virology Laboratory

Laboratory course integrating principles of immunology and virology. Techniques employed include, but are not limited to, western blotting, SDS-PAGE, PCR and applications, ELISAs, tissue culture, and microscopy. Course is designed for students interested in molecular methods used to study virus/host interactions, including microbiology, biology, and medical technology majors. Prerequisite: Biology 315/515 or 341/541 (may be taken concurrently). (Fall)

Biology 575 *3 units (crs.)*

Microbial Genetics

Structure of microbial genome mutation, expression and exchange of genetic information, genetic analysis, genetic engineering. Prerequisite: Biology 309 and Biology 340 or 343. 375/575 (Fall)

Biology 576 *3 units (crs.)*

Population and Community Ecology

An introduction to the study of populations and communities. Examines population-level phenomena (e.g., density, demography, reproduction) and population-level interactions within biological communities (e.g., competition, predation, parasitism). Labs involve discussions of papers from the literature, data analysis, and computer simulations. Prerequisite: Biology 349 or consent of instructor. 376/576 (2+3) (Fall)

Biology 577 *2 units (crs.)*

Microbial Genetics Laboratory

A laboratory course to study the genetics of bacteria and their viruses. Genetic mapping will be introduced using techniques involving mutagenesis, recombination, plasmid transfer, transduction and transformation systems. Prerequisite: Biology 309 and 375/575 (may be taken concurrently). 377/577 (0+4) (Fall)

Biology 586 *3 units (crs.)*

Ecosystem Ecology

An introduction to the study of ecosystems with an emphasis on biogeochemical cycles, energy budgets, and other emergent properties. Laboratory will focus on comparative and experimental approaches to the study of local ecosystems (streams, lakes, wetlands, forests). Students will acquire hands-on experience with techniques used by ecosystem ecologists such as nutrient analysis of streamwater, determination of ecosystem metabolism, and analysis of forest and wetland soils. Prerequisite: Biology 349 or consent of instructor. (2+2) (Spring)

Biology 589 *3 units (crs.)*

Principles of Biotechnology

A survey of methods and processes used in industrial microbiology and the techniques used in the development of new processes (recombinant DNA, monoclonal antibodies and genetic improvement). Prerequisite: Biology 323 and 343. Strongly recommended: Biology 375 or consent of instructor. 389/589 (3+0) (Spring)

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Biology 590 *2 units (crs.)*

Biotechnology Laboratory

A laboratory course that complements the lecture course Biology 389/589 in biotechnology. Students will gain hands-on experience in some of the principles of cell culture, product isolation and purification, and molecular genetic manipulation of genes that are basic to many areas of this broad and rapidly changing field. Exercises are planned in cell culture, computer analysis of cell culture parameters, protein isolation and purification, gene cloning and nucleic acid probe techniques, DNA sequencing, and computer analysis of DNA and protein sequences. If taken at the undergraduate level, the course may not be repeated for graduate credit. Prerequisite: Biology 309. Strongly recommended: Biology 372/572 and 375/575. 390/590 (0+4) (Spring, odd years)

Biology 644 *3 units (crs.)*

Neurobiology

Advanced study of the nervous systems of animals: principles, techniques, development, pathology, research frontiers. Prerequisite: One year of chemistry, Biology 323 and a grade of C or better. Biology 212, 319/519, Psychology 383 or equivalent. 444/644 (Spring)

Biology 650 *5 units (crs.)*

Microbial Physiology

Physiological metabolic processes of bacteria with emphasis on growth, nutrition, synthesis of cellular constituents and energy yielding processes. Prerequisite: Biology 309. Strongly recommended: Chemistry 302. 450/650 (3+4) (Fall)

Biology 702 *4 units (crs.)*

Current Debates in Evolutionary Biology

Recent advances and debates in evolutionary biology, approaches will involve reading primary research articles and books, compiling and analyzing data, and preparing research reports. Prerequisite: Graduate standing. Topics will change with each offering.

Biology 708 *4 units (crs.)*

Systematics and Evolutionary Genetics

Interrelates and synthesizes the theory of Organic Evolution in the light of findings and practices of two related biological disciplines, viz., 1) Systematic Biology (dealing with the logical and empirical premises of classification systems, species concept, significance of higher taxa, taxonomic methods and their evaluation) and 2) Evolutionary Genetics (dealing with the laws of genetics and bio-mathematics as applied to evolving populations). Prerequisite: Biology 107, 231 or a semester course in general zoology. (4+0)

Biology 709 *2 units (crs.)*

Introduction to Biological Research

A course wherein a graduate student would formulate a sound approach to biological research. The objectives include a working knowledge of the literature and

techniques of research in the area. (Fall, Spring; Arrange with thesis advisor)

Biology 728 *1 unit (cr.)*

Botany Seminar

The student will review the literature and make a presentation and critical analysis of a current problem in plant science. (Fall, Spring)

Biology 748 *1 unit (cr.)*

Zoology Seminar

The student will review the literature and make a presentation and critical analysis of a current topic in animal science. (Fall, Spring)

Biology 749 *3 units (crs.)*

Field Zoology

Field trips, observing local animals; identification and study of collected species. Prerequisite: One year of biology.

Biology 751 *4 units (crs.)*

Biochemical Genetics

DNA structure, replication of genetic material, mutation, and genetic exchange in various organisms with emphasis on prokaryotes and viruses. Prerequisite: Biology 309 and 340. (2+2)

Biology 765 *2 units (crs.)*

Advanced Topics in Microbiology/Virology

Recent advances in bacteriology, virology, and immunology will be discussed in detail. Course may be repeated for a total of 6 credits. (2+0) (Fall, Spring)

Biology 766 *2 units (crs.)*

Advanced Topics in Biology

Recent advances in biological science will be examined in detail. Content varies with offering. Course may be repeated for a total of 6 credits. (Fall, Spring)

Biology 768 *1 unit (cr.)*

Microbiology Seminar

The student will review the literature and make a presentation and critical analysis of a current problem in microbiology. (Fall, Spring)

Biology 769 *2 units (crs.)*

Introduction to Microbiological Research

Theory and applications of selected analytical methods widely used in biological research. (0+4) (Spring)

Biology 780 *4 units (crs.)*

Community Energetics

Dynamics of the biotic community. A consideration of nutrient sources, utilization, release and cycling, and energy, its sources and its flow through trophic components of the community. Prerequisite: Biology 349. (4+0)

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Biology 795 *1-6 units (crs.)*

Biology/Microbiology Thesis

Each registration with maximum accumulation of 6 cr. Registration for thesis credit for MS Biology/Microbiology students. Prerequisite: Thesis Proposal and Advisor Approval Form must be filed in Graduate Office. Pass/Fail course.

Biology 796 *1-3 units (crs.)*

Independent Study in Biology/Microbiology

Registration for MS Biology/Microbiology students who have filed Independent Study Topic and Instructor Approval Form with Graduate Office.

Biology 799 *0-0 units (crs.)*

Registration for Comprehensive Examination

Required registration for MS Biology/Microbiology students in their final term who are not registered for credit courses. Pass/Fail course.

ENGLISH

ENGLISH

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I. FACULTY

Baker, Benda, Boehler, Cannon, Dingleline, Dunckel, Feldman, Foss, Gemin, Hayashi, Helmers, Henson, Hill, Hodgell, Hostetler, Klemp, Landry, Lauter, Maguire, Mazzeo, Moore, Newson-Horst, Ngaboh-Smart, Niesen, Nuernberg, Pauliny, Quiring, Rindo, Roberts, Robson, Roth, Shaffer, Tatonetti

II. PURPOSE

The Master of Arts in English Program is designed to fill the needs of individuals seeking a graduate degree entirely on a part-time basis. Most classes are offered in late afternoon or evening hours throughout the normal school year. Pending sufficient enrollment, summer courses also may be offered. It is possible to enroll on a full-time basis as well. Completion of the terminal degree of Master of Arts in English may enable persons in such professional areas as Education, Law, Government and Business to reaffirm and extend their commitment to such work activities or make a career change. In addition to providing a sense of personal satisfaction, the Master of Arts in English degree may also provide a foundation for continued studies elsewhere toward a Doctor of Philosophy in English or other closely related fields in the Humanities.

III. DEGREE

Completion of the Program will lead to the degree: Master of Arts (M.A.).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Full Standing

Admission with full standing to the Master of Arts in English Program requires that applicants have:

1. A baccalaureate degree from a regionally accredited institution.
2. Official undergraduate transcript(s), documenting an undergraduate GPA of 3.0 (4.0 scale).
3. Proficiency in reading, writing and speaking in Standard English form(s).

Probationary Admission

Applicants who show promise but lack adequate undergraduate preparation may, at the discretion of the Master of Arts Committee, be admitted on probationary status and will be expected to take and successfully complete graduate-level course(s) specified by the Program. If, at the end of one academic year following Probationary Admission, a student does not successfully complete such courses, then

he or she is no longer considered a Master of Arts in English student and must reapply to the English Program in order to be considered for reentry. Contact the Graduate Studies office for information about reapplication.

Conditional Admission

Applicants who meet the the School of Graduate Studies full standing criteria but have not taken the required Graduate Record Examination (GRE) general test may be admitted conditionally. If, at the end of one academic year following Conditional Admission, a student does not complete the GRE general test, then he or she is no longer considered a Master of Arts in English student and must reapply in order to be considered for reentry to the Program.

Grade Point Average

Official undergraduate transcript(s), documenting an undergraduate GPA of 3.0 (4.0 scale).

References and Standardized Test Scores

Three professional and/or academic reference letters and official scores from the general Graduate Record Examination (GRE) are required.

Application Essay

In addition to the UW Oshkosh School of Graduate Studies application packet, those wishing to be considered for admission to the Master of Arts in English Program must submit an essay of 1,250 words, which will enable the Master of Arts Committee to determine if candidates for admission have the requisite writing skills to successfully complete the program.

Undergraduate Major

Normally, the baccalaureate will have been taken in English or other English-language-based studies in the Humanities (e.g., History, Sociology, Psychology, Education, Government). Regardless of undergraduate major, proficiency in speaking, reading and writing in Standard English form(s) is required.

V. SUMMARY

A. Structure

The Program is comprised of a combination of required and elective courses, culminating in an Assessment Portfolio and either a Creative Writing Thesis or Critical Thesis. Students may arrange their own programs within scheduling options to emphasize literature, rhetoric and composition, creative writing or linguistics, but it will not be possible to work exclusively in any one of these areas.

B. Academic Plans of Study

English is the description for the English plan of study.

C. Minimum Credit Requirements

36 graduate-level credits including required English Department courses and elective courses (elective courses are to be taken within and outside the English Department for an interdisciplinary experience); an Assessment Portfolio and a Thesis. Of these 36 credits, at least 18 credits must be at the 700 level. Contact the UW Oshkosh Master of Arts in English Program for more details on required and elective graduate-level credit distribution.

D. Admission to Candidacy

Students must be admitted to candidacy after having earned a minimum of 9 but no more than 21 degree credits. Admission to candidacy requires the student to be in full standing, to have completed all deficiencies (if applicable) and to file an Application for Admission to Candidacy form (formal plan of study). Students are expected to submit a prospectus for the Master of Arts in English Thesis (Creative Writing Thesis or Critical Thesis) within one semester after reaching the stage of candidacy.

VI. DEGREE REQUIREMENTS

The M.A. in English requires the following courses:

Subject

Catalog #	Units (crs.)	Title
18 credits of 700-level courses including:		
English		
703	3	Seminar in Criticism: Optional Content
704	3	Research Methods
795	3	English Thesis

Maximum of 15 credits from English Department dual-level graduate courses (500 or 600 level)

6 credits at the graduate level from at least one other department at the University of Wisconsin Oshkosh. If both these courses are dual-level courses, rather than 700-level courses, then the student must take a minimum of six 700-level courses in English, in order to comply with the rules of the Graduate School that 18 of the total 36 credits be at the 700 level. Optional content classes, with different subtitles and the signature of the department chair, may be taken twice.

Other Requirements

The Thesis Project

Each degree candidate will write a thesis of approximately sixty to eighty pages; it will be a substantial work of original research or empirical study in areas such as literature, linguistics, rhetoric, or creative writing.

The Portfolio

Students will gradually assemble a collection of writings that demonstrates progress in critical thinking and in writing. The portfolio will include an essay outlining the student's goals for graduate study (submitted as part of the admissions process), three graduate papers, and a thesis. The portfolio will be more than a collection of papers, however: it will be an expression of introspective personal intellectual development and expanding scholarly insight.

Electives

Students are expected to consult first with the program Coordinator, and later with their thesis advisor and Admission to Candidacy Committee in selecting electives from the following list (or other appropriate courses):

Elective 700-level English Department courses include:

Subject

Catalog #	Units (crs.)	Title
English		
701	3	Seminar in Literature: Optional Content
702	3	Language in Society: Optional Content
708	3	Contemporary American Poetry: Optional Content
709	3	Special Topics in Creative Writing: Optional Content
710	3	Seminar in Cultural Studies: Optional Content
711	3	Seminar in American Ethnic Writers: Optional Content
712	3	Seminar in Women Writers: Optional Content
796	3	Independent Study

Elective dual-level English Department courses include:

Subject	Catalog #	Units (crs.)	Title
English			
	501	3	Modern Grammars
	503	3	Creative Writing: Fiction I
	504	3	Advanced Fiction Writing
	505	3	Creative Writing: Poetry I
	506	3	Advanced Poetry Writing
	508	3	Autobiography Theory & Practice
	517	3	Technical Writing
	519	3	African-American Literature: Optional Content
	520	3	Psycholinguistics
	522	3	Theories of Writing
	529	3	Playwriting I
	530	3	Playwriting II
	531	3	Contemporary Literature: Optional Content
	532	3	Early Women Writers: Optional Content
	533	3	Twentieth Century Poetry
	535	3	Personal Narratives: Optional Content
	536	3	Bible as Literature
	537	3	Early Twentieth Century Drama
	539	3	Contemporary British & Continental Drama
	541	3	History of the English Language
	542	3	Literature of the Romantic Era: Optional Content
	543	3	Nature Writing
	544	3	Milton
	546	3	Chaucer and His Age
	547	3	Shakespeare I
	550	3	Literary Study Tour: Optional Content
	551	3	Medieval Literature: Optional Content
	553	3	The English Renaissance, 1485-1660
	554	3	Rhetoric, Culture & Travel

ENGLISH

555	3	Early British Drama
556	3	Special Topics in Early British Drama: Optional Content
557	3	Literature & Other Arts: Optional Content
558	3	Postcolonial African Literature: Optional Content
561	3	Asian-American Literature: Optional Content
562	3	British Literature of the Long 18th Century: Optional Content
563	3	Eighteenth-Century English Novel
564	3	Nineteenth-Century English Novel
565	3	Modern British Fiction: Optional Content
567	3	African Literature
569	3	Victorian Poetry and Prose
570	3	Native American Literature II: Optional Content
571	3	African American Women Writers: Optional Content
572	3	American Short Story: Optional Content
573	3	Colonial and Federalist Literature
574	3	American Romanticism
575	3	American Realism & Naturalism
576	3	20th-Century Literature: Optional Content
577	3	Major Figures in American Fiction 1800-1865: Optional Content
578	3	Modern American Novel: Optional Content
579	3	American Poetry: From Whitman to the Present
580	3	American Drama
581	3	Foundations of Literary Criticism
582	3	Contemporary Cultural Mythology: Optional Content
583	3	Introduction to English Linguistics
584	3	Sociolinguistics
586	3	Rhetoric of Literature
587	3	Special Topics in Rhetoric & Composition: Optional Content
590	3	Film and Literary Studies
591	3	Gay and Lesbian Literature: Optional Content
592	3	Special Topics in Literature: Optional Content
605	3	Special Topics in Creative Writing: Optional Content
648	3	Shakespeare II: Optional Content
652	3	Applied Linguistics
682	3	Recent Literary Criticism: Optional Content

VII. COURSE DESCRIPTIONS

English 501 *3 units (crs.)*

Modern Grammars

Intensive study of English grammar, sentence structure and mechanics. Designed for students preparing to teach English and for others who desire to master fundamentals of the language. 301/501

English 503 *3 units (crs.)*

Creative Writing: Fiction I

An elective course designed to provide opportunity for analysis of original student writing through a seminar or workshop approach. Assigned readings of professional

fiction as well as selected student samples are offered for in-class discussion and critique. 303/503

English 504 *3 units (crs.)*

Advanced Fiction Writing

A course designed to provide further opportunity for analysis and critique of students' creative fiction. Class structure, requirements, and assignments are similar to English 303, but greater emphasis is placed on the scope and development of work. Prerequisite: English 303 or consent of instructor. 304/504

English 505 *3 units (crs.)*

Creative Writing: Poetry I

An elective course designed to provide a workshop approach to student writing and analysis. Student poetry is given constructive in-class critique. Requirements include a minimum of one original poem each week and outside reading in contemporary poetry, with attention to form and content. 305/505

English 506 *3 units (crs.)*

Advanced Poetry Writing

A course designed to provide further opportunity, through a workshop approach, for close analysis and critique of student writing. Class structure, requirements, and assignments are similar to English 305, but each student is expected to demonstrate increased proficiencies in the discovery and development of a personal style. 306/506

English 508 *3 units (crs.)*

Autobiography: Theory and Practice

The course is designed to explore the definition and expression of personal identity through the genre of autobiography. There will be three areas of focus: the composition of an autobiography by the students, primary readings of autobiographies, and writing and language theory about the construction of narrative and the representation of the self through writing. 308/508

English 517 *3 units (crs.)*

Technical Writing

An elective composition course, designed to develop proficiency in writing technical and scientific reports and articles related to students' areas of specialization. Recommended by some major departments. Prerequisites: 60 credits or consent of instructor. 317/517

English 519 *3 units (crs.)*

African American Literature II: Optional Content (ES)

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Studies may include African American literature of the 18th, 19th, and 20th Centuries, oral tradition poetry, and surrounding cultural materials. 319/519

English 520 3 units (crs.)**Psycholinguistics**

An introduction to the study of mental processes involved in listening, speaking and learning language. Particular attention is given to language acquisition and development and the implications psycholinguistic findings have for the teaching of children who are learning to speak, read, and write. Prerequisites: English 301 or English 383. 320/520

English 522 3 units (crs.)**Theories of Writing**

A study of cognitive, social, rhetorical, and historical influences on the writing process. This course will cover the major theoretical perspectives in the field of composition and their application to the teaching, learning, and practice of writing. 322/522

English 524 3 units (crs.)**Gender in Literature: Optional Content**

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the director. A study of literature from various periods illustrating gender roles in their cultural and social contexts. Prerequisite: English 281 or consent of instructor. Cross-listed: English 324/Women's Studies 324. Students may receive credit for only one of the two cross-listed courses.

English 526 3 units (crs.)**Studies in Classical Mythology**

A survey of Greek and Roman mythology and its influence on Western literature and art. Prerequisite: English 281 or consent of instructor.

English 527 3 units (crs.)**Detective Fiction**

A study of detective fiction in the short story and the novel. Prerequisite: English 281 or consent of instructor.

English 529 3 units (crs.)**Creative Writing: Playwriting I**

A workshop in playwriting, focusing on the distinctive qualities of theatrical representation and the basic skills of dialogue, plot, and collaboration with supporting theater artists. 329/529

English 530 3 units (crs.)**Creative Writing: Playwriting II**

An advanced workshop in playwriting focusing intensively on student writing with invited feedback from directors, designers, dramaturgs, and other writers. Students will complete a one-act play or other proposed project. Prerequisite: English 329 or consent of instructor. 330/530

English 531 3 units (crs.)**Contemporary Lit: Optional Content**

This course may be offered with different content. With a

different subtitle, it may be taken twice with the signature of the department chair. Studies in poetry and fiction from the past 25 years. 331/531

English 532 3 units (crs.)**Early Women Writers - Optional Content**

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of women writers before 1900. The content will vary from term to term, and may include such subjects as Ancient, Medieval, Renaissance, Early American, Eighteenth and Nineteenth-Century Women Writers. Cross-listed: English 332/Women's Studies 332. Prerequisite: English 281 or consent of instructor. Students may receive credit for only one of the two cross-listed courses.

English 533 3 units (crs.)**British Poetry: Optional Content**

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A seminar focusing on the themes, technical innovations, and theories of influential British poets.

English 534 3 units (crs.)**Wisconsin in Literature**

Studies in Wisconsin literature, legends, and lore. Prerequisite: English 281 or consent of instructor.

English 535 3 units (crs.)**Personal Narratives: Optional Content**

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Studies may include biographies, autobiographies, memoirs, diaries, letters, journals, oral history interviews and/or as-told-to-narratives. 335/535

English 536 3 units (crs.)**The Bible as Literature**

The principal literary genres of the Old and New Testaments, emphasizing thematic content and historical background. The text studied is the King James Version. 336/536

English 540 3 units (crs.)**Arthurian Legend and Romance**

A study of the Arthurian legend from the earliest sources, the development of Arthurian Romance cycles, and the influence of the legend in other British literature. Prerequisite: English 281 or consent of instructor.

English 541 3 units (crs.)**History of the English Language**

The history of modern English focusing on its vocabulary, dialects, kindred languages, grammar, and pronunciation. Includes an introduction to Old and Middle English. 341/541

ENGLISH

English 542 3 units (crs.)

Literature of the Romantic Era: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of major figures, genres, and themes from the Romantic Era, 1798-1836, with special attention given to critical reading and analytical skills. 342/542

English 543 3 units (crs.)

Nature Writing: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A course in reading and writing about the natural world. Writers discussed may include Henry David Thoreau, Aldo Leopold, Annie Dillard, and others. Student writing will represent a significant portion of the coursework. Writing assignments may include essays on natural history, journal entries, environmental advocacy pieces, eco-fiction, and others consistent with the focus of the course. 343/543

English 544 3 units (crs.)

Milton

Milton's major and minor poems and selected prose writings in relation to the background of the literature and his times. 344/544

English 545 3 units (crs.)

Twentieth-Century Women Writers - Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Studies in literature written by women in the 20th century, with emphasis on works by contemporary authors. Prerequisite: English 281 or consent of instructor. Cross-listed: English 345/Women's Studies 345. Students may receive credit for only one of the two cross-listed courses.

English 546 3 units (crs.)

Chaucer and His Age

A study of the major works in medieval English literature with emphasis on Chaucer. 346/546

English 547 3 units (crs.)

Shakespeare I

Selected major plays in relation to dramatic conventions of the time and to modern productions. 347/547

English 550 3-4 units (crs.)

Literary Study Tour: Optional Content

This course may be offered with different content. With a different subtitle it may be taken twice with the signature of the department chair. A course in British, American, or post-colonial literature which includes a conducted tour of sites in England, the U.S., or other regions pertinent to the focus the tour takes in any given year. Offered jointly by the English Department and the Division of Continuing Education. Itineraries, special course fees, and specific

course requirements will be available whenever the course is offered. 350/550

English 551 3 units (crs.)

Medieval Literature: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of medieval literature including such subjects as Anglo-Saxon literature, Nordic literature, Icelandic Sagas, non-Chaucerian Middle English, Medieval drama, and Monastic literature. Prerequisite: English 281. 351/551

English 553 3 units (crs.)

Early Modern British Literature 1485-1660: Optional Content

This course may be offered with a different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of the significant plays, poetry, and prose, which may include works of More, Spenser, Marlowe, Jonson, Bacon, Donne, and the Cavaliers and the Metaphysicals. Excludes Shakespeare. 353/553

English 554 3 units (crs.)

Rhetoric, Culture, and Travel

A study of travel narratives that investigates issues of representation, construction of self and others, and assumptions about culture, customs, and behavior. Fiction and nonfiction will be considered, as well as films, photographs, advertisements, and maps. 354/554

English 556 3 units (crs.)

Special Topics in Early British Drama: Optional Content

This course may be offered with different content. With a different subtitle, and the signature of the department chair, it may be taken twice. This study of English drama will focus on one of a variety of topics relevant to medieval, early-modern, and/or Restoration periods, such as the Early-modern Theater as Political Space, The Drama of Revenge, Early-Modern Drama as Colonialist Discourse, or Problematizing Gender in Medieval, Early-modern, and Restoration drama. Prerequisite: English 281 or consent of instructor. 356/556

English 556 3 units (crs.)

Special Topics in Early British Drama: Optional Content

This course may be offered with different content. With a different subtitle, and the signature of the department chair, it may be taken twice. This study of English drama will focus on one of a variety of topics relevant to medieval, early-modern, and/or Restoration periods, such as the Early-modern Theater as Political space, the Drama of Revenge, Early-Modern Drama as Colonialist Discourse, or Problematizing Gender in Medieval, Early-modern, and Restoration drama. 356/556

English 557 3 units (crs.)

Literature and Other Arts: Optional Content

ENGLISH

This course may be offered with different content; with a different subtitle it may be taken twice with the signature of the department chair. Different versions of the course will address a literary theme, period or genre in relation to a specific form of visual, aural or performing art. 357/557

English 558 *3 units (crs.)*

Postcolonial African Literature: Optional Content

This course may be offered with different content. With a different subtitle it may be taken twice with the signature of the department chair. This course presents a selection of prose, poetry, and drama that constructs the literary tradition of newly independent countries in the 20th century such as Africa, India, and Jamaica. Among topics to be covered are nationalism, identity, gender, and oral traditions. Prerequisite: English 281 or consent of instructor. 358/558

English 561 *3 units (crs.)*

Asian American Literature: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. This course will concentrate on different themes or different Asian American cultures or different periods of development in the body of literature. 361/561

English 562 *3 units (crs.)*

British Literature of the Long Eighteenth Century: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Genres covered may include poetry, essays, satire, and/or drama of the long eighteenth century (1660-1837); topics covered may include imperialism, nationalism, gender, class, and/or racial issues, country life versus city life, Enlightenment, revolution, and literary professionalism. The course may or may not cover the entire period of the long eighteenth century. 362/562

English 563 *3 units (crs.)*

Eighteenth-Century English Novel

A study of the novel before 1800: Defoe, Richardson, Fielding, Sterne and Smollett; the development of the historical romance, Gothic romance, and the novel of manners. 363/563

English 564 *3 units (crs.)*

19th Century British Novel: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of the British novel from 1800 to 1900 which might include Austen, Scott, Bronte, Thackeray, Dickens, Eliot, Meredith, and Hardy.

English 565 *3 units (crs.)*

Modern British Fiction: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of

the department chair. A study of 20th century British fiction. 365/565

English 566 *3 units (crs.)*

Science Fiction

An examination of major 20th-century works in science fiction. Prerequisite: English 281 or consent of instructor.

English 567 *3 units (crs.)*

African Literature

A course on the culture and literature of African national communities. The focus will be on authors from various national communities whose writings have significantly shaped African literature. This course will include works by both men and women. 367/567

English 569 *3 units (crs.)*

Literature of the Victorian Period: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of the major figures, texts, and themes of the Victorian era. Prerequisite: English 281 or consent of instructor.

English 569 *3 units (crs.)*

Victorian Poetry and Prose

A study of the major poets and prose writers of the Victorian era. 369/569

English 570 *3 units (crs.)*

Native American Literature II: Optional Content (ES)

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Studies may include Native American literature of the 19th and 20th Centuries, oral tradition, poetry, and surrounding cultural materials. 370/570

English 571 *3 units (crs.)*

African-American Women Writers: Optional Content (ES)

This course may be offered with different content. With a different subtitle it may be taken twice with the signature of the department chair. An examination of work by African-American women writers such as Toni Morrison, Gloria Naylor, Alice Walker, Paule Marshall, and others. 371/571

English 572 *3 units (crs.)*

American Short Story: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of major writers and their techniques from Poe to the present. 372/572

ENGLISH

English 573 *3 units (crs.)*
Colonial and Federalist Literature
American writing from the beginning through the early years of the republic. 373/573

English 574 *3 units (crs.)*
American Romanticism
A study of writers such as Emerson, Fuller, Thoreau, Irving, Cooper, Melville, Hawthorne, Stowe, and/or others. 374/574

English 575 *3 units (crs.)*
American Realism and Naturalism
Studies of American prose from the Civil War to World War I: Twain, Howells, Adams, James, Crane, and others. 375/575

English 576 *3 units (crs.)*
Twentieth-Century Literature: Optional Content
This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Studies of fiction, poetry, drama, and criticism from 1920 to the present. 376/576

English 577 *3 units (crs.)*
Major Figures of American Literature: Optional Content
This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of one, two or three writers from any period in American Literature, Louise Erdrich, Edgar Allan Poe, Richard Wright, Nathaniel Hawthorne, Herman Melville, Emily Dickinson, Toni Morrison and Adrienne Rich. Prerequisite: English 281 or consent of instructor. 377/577

English 578 *3 units (crs.)*
Modern American Novel: Optional Content
This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. A study of the development of the American novel after 1920. 378/578

English 579 *3 units (crs.)*
American Poetry: Optional Content
This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. This course focuses on American poetry. It may be taught by highlighting a certain era in poetry such as modernism or by sampling a range of poets across the centuries. The featured writers in the course might include such figures as Phyllis Wheatley, Emily Dickinson, Walt Whitman, Langston Hughes, H. D., Adrienne Rich, or Joy Harjo among others. 379/579

English 580 *3 units (crs.)*
Modern Drama: Optional Content
This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. The content of this course, a study

of modern and contemporary drama, will vary from semester to semester, and may include drama from around the world or from a particular culture. The course features an introduction to various forms of drama. 380/580

English 581 *3 units (crs.)*
Foundations of Literary Criticism
An analysis of critical theories and their influence from the Greeks and Romans to the present; application of these theories to selected literary texts. 381/581

English 582 *3 units (crs.)*
Contemporary Cultural Mythology: Optional Content
An introduction to types of cultural studies that emphasizes the range of interpretations of everyday texts and events. The course features criticism such as structuralism, semiotics, and feminism and application of theories to selected literary texts. 382/582

English 583 *3 units (crs.)*
Introduction to English Linguistics
An introduction to sounds, word forms and sentence structures of English. Special emphasis on theories of grammar affecting today's classroom. 383/583

English 584 *3 units (crs.)*
Sociolinguistics
An introduction to theories and methodologies that describe variation in language. Special attention will be given to the social factors that affect language use, language policy, and attitudes toward language in education and everyday interactions. 384/584

English 585 *3 units (crs.)*
Computers and Writing
In this course, students will explore the potential effects of computers on the writing process and on writing pedagogy. We will survey the research on the effects of computers on the social and cognitive aspects of writing, and we will study some theoretical works that attempt to predict the ways in which writing will continue to change in an increasingly computer-rich society. Students will analyze and critique hypertextual essays and stories, and will compose hypertexts of their own. Prerequisite: English 281 or consent of instructor.

English 586 *3 units (crs.)*
The Rhetoric of Literature
A rhetorical approach analyzes literature as a persuasive device. In this course, students will read a variety of literary works and discuss the personal and social viewpoints and biases that these works reveal; explore theoretical and psychological studies of the nature of narrative as a discursive act; and discuss the rhetorical power of literature as compared with other forms of discourse that are more commonly thought of as 'rhetorical.' 386/586

ENGLISH

English 587 *3 units (crs.)*
Special Topics in Rhetoric and Composition: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Students will study, in substantial depth, one topic in the field of rhetoric and composition. The topic will be chosen by the instructor. 387/587

English 590 *3 units (crs.)*
Film and Literary Studies: Optional Content

This course may be offered with different content. With a different subtitle, and the signature of the department chair, it may be taken twice. The course will examine the relationship between film, literature and the culture in which and for which they are produced. Films that adapt novels, short stories, and/or plays will be examined, and films themselves will be examined as texts. A brief review of artistic terms (with regard to writers and film makers) will be provided. These will be the tools used to discuss how the artists affect us in terms of theme, plot, characterization, mood, and imagery. 390/590

English 591 *3 units (crs.)*
Gay and Lesbian Literature: Optional Content

This course may be offered with different content. With a different subtitle it may be taken twice with the signature of the department chair. An examination of lesbian and gay literature, with emphasis on work by contemporary authors. Readings will be arranged thematically, with particular attention to identity politics and to the AIDS epidemic. Cross-listed with Women's Studies 391. 391/591

English 592 *3 units (crs.)*
Special Topics in Literature: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. The course focuses on topics that cross generic, temporal, and/or regional boundaries. Possible topics to be covered include gothicism; sex, sensibility and romanticism; subjectivity, identity, and agency; and the literature of aging. 392/592

English 593 *3 units (crs.)*
Latina/o Literature: Optional Content (HU) (ES)

This course may be offered with a different content. With a different subtitle, it may be taken twice with the signature of the department chair. Course content will concentrate on the different themes, histories, cultures, or periods of development in the body of Latina/o literature. Prerequisite: English 281 or the consent of instructor.

English 594 *3 units (crs.)*
Multiethnic Literatures: Option Content

This course may be offered with a different content. With a different subtitle, it may be taken twice with the signature of the department chair. Course content will highlight the similarities and differences between and among different themes, cultures, histories, or periods of development in a variety of ethnic literary traditions. The ethnic literatures

introduced may include or stem from Asian, Pacific Islander, Latina/o, African, European, Jewish, and/or indigenous literary traditions. Prerequisites: English 281 or consent of instructor.

English 595 *3 units (crs.)*
Caribbean Literature: Optional Content

This course may be offered with different content. A study of Caribbean literature in English or English translation. Topics might include women's writing, travel narratives, or colonial/post-colonial discourse. Prerequisites: English 281 or consent of instructor.

English 605 *3 units (crs.)*
Creative Writing: Optional Content

This course may be offered with different content. With a different subtitle it may be taken twice with the signature of the department chair. Advanced study in creative writing, which may include workshops in experimental fiction or avant-garde forms, novel writing, publishing, and/or chapter/book production. Prerequisite: A 300-level creative writing course or permission of instructor. 405/605

English 648 *3 units (crs.)*
Shakespeare II: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. An intensive seminar in the advanced study of Shakespeare's works; focus may be on one of a variety of topics and/or approaches to Shakespearean drama. Prerequisite: English 347. 448/648

English 652 *3 units (crs.)*
Applied Linguistics

A survey of how research in linguistics can be used to solve human problems. While the focus will be on second language acquisition, language teaching, and testing, other possible topics include language planning and forensic linguistics. Prerequisite: English 301 or English 383. 452/652

English 682 *3 units (crs.)*
Recent Literary Criticism: Optional Content

This course may be offered with different content. With a different subtitle and the signature of the department chair, it may be taken twice. Students will analyze one or more major schools of interpretation. Theoretical works by major critical figures will be read and theories will be applied to selected texts. Prerequisite: English 281 and English 381. 482/682

English 701 *3 units (crs.)*
Seminar in Literature: Optional Content

A study of literature as a mode of human understanding, with various cultural and/or cross-cultural emphases. Optional content. With different subtitles and the signature of the department chair, it may be taken twice. Prerequisite: Admission to the Graduate Program.

ENGLISH

English 702 *3 units (crs.)*

Language in Society: Optional Content

An advanced course in Sociolinguistics concentrating on phenomena such as global languages, language shift, and language death, or bilingualism, bi-dialectalism and identity. Optional content. With different subtitles and the signature of the department chair, it may be taken twice. Prerequisite: Admission to a graduate degree program.

English 703 *3 units (crs.)*

Seminar in Criticism: Optional Content

An examination of selected theories and their application in literary and cultural criticism. Optional content. With a different subtitle and the signature of the department chair, this course may be taken twice. Prerequisite: Admission to a graduate degree program.

English 704 *3 units (crs.)*

Methods of Research

Admission to graduate program or consent of instructor. Examination of the many print and electronic bibliographic research sources in English. May include readings on computing technologies, theories of textual transmission, history transmission, history of scholarship, and history of English studies.

English 708 *3 units (crs.)*

American Poetry: Technique and Practice

Advanced study of the theories, movements and techniques in American Poetry from the 1920s to the present. Movements to be studied include Imagist, Objectivist, Free Verse, Formalist, Beat Generation, Black Mountain School, Concrete, and Action Poetry. Students will also create their own poems based on the form, style, and techniques of their choice.

English 709 *3 units (crs.)*

Special Topics in Creative Writing: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. Advanced study in creative writing, which may include workshops in experimental fiction or avant-garde forms, novel writing, publishing, and/or chapbook production.

English 710 *3 units (crs.)*

Seminar in Cultural Studies: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. This course will concentrate on different theoretical discourses or different periods of development of Cultural Studies as a formal field of study. Prerequisite: Admission to the Graduate Program or consent of instructor.

English 711 *3 units (crs.)*

Seminar in American Ethnic Writers: Optional Content

This course may be offered with different content. With a different subtitle, it may be taken twice with the signature of the department chair. This course will concentrate on different themes of different Ethnic cultures or different periods of development in the body of literature, emphasizing comparative analysis. Prerequisite: Admission to the Graduate Program or consent of instructor.

English 712 *3 units (crs.)*

Seminar in Women Writers: Optional Content

The content of the course will vary to examine women writers of different time periods, different ethnic backgrounds, or different themes. May be repeated twice with different content with consent of the Chair of the English Department. Students will be expected to have familiarity with various critical theories.

English 725 *3-4 units (crs.)*

Teaching of Writing

The study of theory, research and strategies for teaching writing. Students will polish composition skills by completing individual writing assignments. The course builds understanding of theory/practice relationships in writing instruction. This course is also cross-listed as Elementary Education 725 and Secondary Education 725.

English 795 *1-6 units (crs.)*

English Thesis

Each registration with maximum accumulation of 6 cr.

English 796 *1-3 units (crs.)*

Independent Study

Each registration with maximum accumulation of 6 cr.

MATHEMATICS EDUCATION

Carol Seaman, Program Coordinator
 Office: Swart 111
 Telephone: 920-424-1059
 Website: www.uwosh.edu/departments/mathematics/msprog.htm
 E-mail: seaman@uwosh.edu

I. FACULTY

Bullington, Beam, Benzaid, Edwards, Eroh, Ganapathy, Gunawardena, Hart, Koker, McDougal, Moghadam, Mousavi, Muthuvel, Price, Ramanayake, Seaman, Szydluk, J., Szydluk, S., Winters, Zhang

II. PURPOSE

The graduate program in Mathematics Education is designed to enhance the professional expertise of the secondary and post secondary mathematics teacher. The program is structured to meet the needs of the individual graduate student.

III. DEGREE

Completion of the program will lead to the degree: Master of Science (MS).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

Admission with Deficiencies

Applicants who lack adequate undergraduate preparation may be admitted with deficiencies and will be expected to take mathematics courses specified by the program coordinator.

Grade Point Average

A grade point average of 2.75 in all undergraduate mathematics courses is required.

Undergraduate Course Work

The applicant must have taken 30 units (crs.) of Mathematics which should include: one year of calculus, two semesters of modern algebra, one semester of geometry and one semester of probability and statistics.

Undergraduate Major

Normally, the baccalaureate will have been taken in mathematics or related fields.

V. SUMMARY

A. Structure

The program is comprised of core courses and electives.

B. Academic Plans of Study

Mathematics Education is the description for the Mathematics Education plan of study.

C. Minimum Unit (Cr.) Requirements

A minimum of 30 approved graduate units (crs.), which must include at least 18 upper-level (700) units (crs.), are required for the degree.

D. Admission to Candidacy

Students must satisfy fully the School of Graduate Studies requirements for advancement to candidacy stated in the first section of this Bulletin.

VI. DEGREE REQUIREMENTS

Core Courses:

Subject	Catalog #	Units (crs.)	Title
Secondary Education			
	739	3	Advanced Study in Curriculum
Mathematics			
	720	2-3	Combinatorial Mathematics
	730	3	Advanced Euclidean Geometry
	742	3	Algebra

Electives:

Students are expected to consult with the program coordinator in selecting recommended electives from the following offerings:

Subject	Catalog #	Units (crs.)	Title
Mathematics			
	505	3	Statistics for Quality and Productivity
	542	3	Abstract Algebra
	546	3	Linear Algebra
	549	3	Elementary Number Theory
	552	3	Computing Mathematics with Applications
	555	3	Introduction to Numerical Analysis
	556	3	Linear Numerical Analysis
	575	3	Applied Mathematical Analysis I
	576	3	Applied Mathematical Analysis II
	581	3	Stochastic Modeling
	585	3	Applied Regression Analysis
	586	3	Linear Statical Models
	601	3	Mathematical Statistics I
	602	3	Mathematical Statistics II
	667	3	Advanced Calculus
	680	3	Elementary Topology
	701	2	Workshop in Computing Mathematics
	702	2-3	Statistics Workshop
	712	3	Problem Solving for Teachers
	718	3	Historical and Philosophical Foundations of Mathematics
	722	3	Discrete Structures
	746	1-3	Workshop on Current Topics
	757	2-3	Advanced Topics in Mathematics
	793	1	Mathematics Seminar
	795	3	Mathematics Thesis
	796	1-3	Independent Study in Mathematics
	799	0	Registration for Comprehensive Examination

MATHEMATICS EDUCATION

Other Requirements

A minimum of at least 18 units (crs.) in Mathematics, which must include core courses in at least 2 of the following core areas: algebra, combinatorics and geometry. The respective courses in the above areas are:

Subject

Catalog #	Units (crs.)	Title
Algebra Mathematics		
742	3	Algebra
Combinatorics Mathematics		
720	2-3	Combinatorial Mathematics
Geometry Mathematics		
730	3	Advanced Euclidean Geometry

All students must take Secondary Education 739 Advanced Study in Curriculum Mathematics (3 units (crs.)) and at least 3 additional units (crs.) in Computer Science and/or Education.

The remaining units (crs.) can be approved electives usually selected from:

Mathematics
Computer Science
Education
Thesis (3 units (crs.))

Completion of a comprehensive exam after all course work has been successfully completed or concurrent with last course to be completed in the program.

VII. CERTIFICATION REQUIREMENTS

Degree program approved for licensure by Wisconsin Department of Public Instruction.

VIII. COURSE DESCRIPTIONS

Please see the Curriculum and Instruction section of this Bulletin for descriptions of the following course(s):

Subject

Catalog #	Units (crs.)	Title
Secondary Education		
739	3	Mathematics Curriculum

Course credit from the following courses does not apply to the MS-Mathematics Education graduate degree: Mathematics 317/517, 371/571, 413/613, 415/615

Mathematics 505 *3 units (crs.)*

Statistics for Quality and Productivity

Statistical process control charts including Shewart and CUSUM. Design of experiments including factorials, fractional factorials and designs to explore response surfaces. The roles of blocking, confounding and randomization. The course will be about 25% statistical process control and about 75% design of experiments. Prerequisite: Mathematics 302. 305/505

Mathematics 517 *4 units (crs.)*

Probability and Statistics for Elementary and Middle School Programs

An introduction to probability and statistics emphasizing problem solving and communication. Topics include sample spaces, permutations and combinations, random

variables, expected value, probability distributions, hypothesis testing and statistical inference. This course will employ technology and contain a historical component. Prerequisites: Mathematics 104 or equivalent, Mathematics 211 and Mathematics 217, each with a grade of 'C' or better. 317/517

Mathematics 542 *3 units (crs.)*

Abstract Algebra I

A survey course in modern algebra including such topics as: basic properties of the integers, a study of groups and their properties with examples and applications, other systems including rings and fields. Prerequisite: Mathematics 222. 342/542

Mathematics 546 *3 units (crs.)*

Linear Algebra

An introduction to finite dimensional vector spaces, linear transformations, matrices and determinants (with applications to systems of linear equations) and characteristic values and characteristic vectors. Additional topics may include: advanced work involving characteristic values and characteristic vectors, Jordan canonical form, inner products, quadratic forms. Prerequisite: Mathematics 256 with a grade of 'C' or above. 346/546

Mathematics 549 *3 units (crs.)*

Elementary Number Theory

Divisibility, primes, congruences, quadratic reciprocity, number theoretic functions, Diophantine equations, continued fractions, and selected topics. Prerequisite: Mathematics 222 with a grade of 'C' or above. 349/549

Mathematics 552 *3 units (crs.)*

Computing Mathematics with Applications

An introduction to programming in Mathematica or a similar software package. The course begins by exploring the numerical, algebraic and graphical capabilities of the software. Topics include lists, functions and programming with applications to number theory, discrete mathematics, analysis and probability. Prerequisite: Mathematics 172. 352/552

Mathematics 555 *3 units (crs.)*

Introduction to Numerical Analysis

Topics in numerical computations selected from polynomial interpolation, solution of nonlinear equations, numerical integration, numerical solution of differential equations, and approximation. Prerequisite: Mathematics 273, Computer Science 221 or equivalent. 355/555

Mathematics 556 *3 units (crs.)*

Linear Numerical Analysis

Topics in numerical linear algebra selected from: Gaussian elimination, matrix inversion, eigenvector and eigenvalue computations, error analysis, condition numbers and pivoting strategies. Prerequisites: Mathematics 273, Mathematics 256, Computer Science 221 or equivalent. 356/556 (Spring)

MATHEMATICS EDUCATION

Mathematics 571 *3 units (crs.)*
Differential Equations
An introductory course treating ordinary differential equations of the first and second order; linear equations with constant coefficients; solutions using series, the Laplace transform, and numerical methods. Prerequisite: Mathematics 172. 371/571

Mathematics 575 *3 units (crs.)*
Applied Mathematical Analysis I
Topics in mathematics applicable to the physical sciences: Vector analysis, Green's theorem and generalizations, analytic function theory. Prerequisite: Mathematics 273. 375/575

Mathematics 576 *3 units (crs.)*
Applied Mathematical Analysis II
Topics in mathematics applicable to the physical sciences: Solutions of certain classical differential equations (ordinary and partial), Fourier methods, and applied linear algebra. Prerequisite: Mathematics 371/571. 376/576

Mathematics 581 *3 units (crs.)*
Stochastic Modeling
Conditional probability and conditional expectation, Markov Chains, Poisson Processes, Branching Processes and Population Growth. Prerequisites: Mathematics 256, Mathematics 301. 381/58

Mathematics 585 *3 units (crs.)*
Applied Regression
A practical introduction to regression emphasizing applications rather than theory. Simple and multiple regression analysis, basic components of experimental design, and elementary model building. Both conventional and computer techniques will be used in performing the analyses. Prerequisites: Mathematics 256 and Mathematics 301 or consent of the instructor. 385/585

Mathematics 586 *3 units (crs.)*
Linear Statistical Models
A unified approach to the application of linear statistical models in analysis of variance (ANOVA), and experimental design. In ANOVA topics from single-factor ANOVA and multifactor ANOVA will be considered. Experimental design will include, randomized blocks, Latin squares, and incomplete block designs. Prerequisites: Mathematics 256 and Mathematics 302. 386/586

Mathematics 601 *3 units (crs.)*
Mathematical Statistics I
Probability and combinatorial methods. Discrete and continuous, univariate and multivariate distributions, expected values, moments, normal distributions and derived distributions. Prerequisites: Mathematics 273 and Mathematics 301 or consent of instructor. 401/601

Mathematics 602 *3 units (crs.)*
Mathematical Statistics II
Estimation, testing hypothesis, analysis of variance, comparison of means, least squares analysis, regression and correlation. Prerequisite: Mathematics 401. 402/602 (Spring)

Mathematics 613 *4 units (crs.)*
Modern Algebra for Elementary and Middle School Programs
An intuitive and investigative study of selected mathematical structures (groups, rings, integral domains, fields and vector spaces), sets, operations and functions including historical aspects. Emphasis is on problem solving. Prerequisites: Mathematics 104 or equivalent, Mathematics 211 and Mathematics 217, each with a grade of 'C' or better. 413/613

Mathematics 615 *4 units (crs.)*
Modern Geometry for Elementary and Middle School Programs
An informal approach to geometry. Topics are chosen from transformational (motion) geometry (reflections, rotations, translations and glide-reflections), symmetry, fractal geometry, spatial visualization, topology and graph theory including historical aspects. Emphasis is on problem solving and reasoning using technology and math manipulative. The course will contain a historical component. Prerequisites: Mathematics 104, or equivalent, Mathematics 211 and Mathematics 217, each with a grade of 'C' or better. 415/615

Mathematics 667 *3 units (crs.)*
Advanced Calculus
Real number properties and the topology of the real numbers. Limits, continuity, differentiation, and integration. Sequences and infinite series. Prerequisite: Mathematics 273 with a grade of 'C' or above. 467/667

Mathematics 680 *3 units (crs.)*
Introduction to Topology
An introduction to the fundamental concepts of point set topology. Topics are chosen from: general topological spaces, functions and continuity, open and closed sets, neighborhoods, homeomorphism, properties of topological spaces, subspaces, products, and quotients. Emphasis will be placed on proofs and examples, with particular attention given to metric spaces. Prerequisites: Mathematics 222 and Mathematics 273. 480/680

Mathematics 701 *2 units (crs.)*
Workshop in Computing Mathematics
Areas of mathematics which have direct applications in the secondary schools and which can be advantageously analyzed on digital computers. Prerequisite: Prior computing experience or concurrent registration in a programming course.

MATHEMATICS EDUCATION

Mathematics 702 Statistics Workshop

2-3 units (crs.)

For teachers of mathematics and other individuals interested in using examples from various topics with practical applications in algebra, probability, statistics, and computers. Prerequisite: One or more courses in statistics or consent of instructor.

Mathematics 712 Problem Solving for Teachers

3 units (crs.)

This course is for teachers of middle and high school mathematics who are interested in improving their own problem solving skills and are looking for ideas on how to implement more problem solving into their classrooms. The first part of the course will engage the student in problem solving and mathematical modeling. The specific types of problems will depend on the interest and background of the class. The remainder of the course will focus on curricular issues and ways teachers can teach via problem solving. Prerequisite: Consent of the Department.

Mathematics 714 Developing Problem Solving Focus TC

2 units (crs.)

Developing a Problem Solving Focus Trial Course. Prerequisite: Mathematics 172.

Mathematics 718 Historical and Philosophical Foundations of Math

3 units (crs.)

A survey of the historical development and corresponding philosophical pressures on mathematics from the Babylonians to the present.

Mathematics 720 Combinatorial Mathematics

2-3 units (crs.)

Fundamentals of combinatorial mathematics including permutations, combinations, recurrence relations, the principle of inclusion-exclusion, graph theory, and selected topics. Prerequisite: consent of instructor.

Mathematics 722 Discrete Structures

3 units (crs.)

A survey of mathematical structures useful in theoretical computer science. Structures studied will include Boolean algebra, monoids, graphs and finite machines. Boolean algebra as applied to rating networks. Structures, homomorphic structures and quotient structures are considered. Finite machines, their homeomorphisms and their use as recognizers are considered. This theory is the basis for the introduction of some fundamentals of machine design and construction. As time permits, additional topics in coding theory, computability and formal languages may be considered. Prerequisite: A course in abstract algebra or consent of instructor.

Mathematics 730 Advanced Euclidean Geometry

3 units (crs.)

A survey of advanced Euclidean geometric results concerning concurrency, collinearity, symmetric points, cyclic quadrilaterals, equicircles and the nine-point circle. The study of course topics will employ deductive, analytic and transformational techniques.

Mathematics 742 Algebra

3 units (crs.)

An advanced study of topics selected from groups, rings, and fields. Prerequisite: Mathematics 342, or consent.

Mathematics 746 Workshop on Current Topics

1-3 units (crs.)

A workshop in special topics of interest. This course may be repeated for credit with different topics. Prerequisite: Consent of instructor.

Mathematics 757 Advanced Topics in Mathematics

2-3 units (crs.)

Advanced topics selected from such fields as: algebra, analysis, topology, number theory, geometry, statistics, and applied mathematics. May be repeated for a maximum of 6 credits. Prerequisite: Consent of instructor.

Mathematics 793 Mathematics Seminar

1 unit (cr.)

Individual investigation and presentation by graduate students and faculty members of recent developments in mathematics. Prerequisite: Consent of instructor.

Mathematics 795 Mathematics Thesis

1-6 units (crs.)

Each registration accumulating to a maximum of 3 cr. Pass/Fail course.

Mathematics 796 Independent Study

1-3 units (crs.)

Registration for qualified MS Mathematics Education students who submit an approved Independent Study Topic and Instructor Approval Form at or prior to registration. The combination of Mathematics 757 and Mathematics 796 may not exceed 6 cr.

Mathematics 799 Registration for Comprehensive Examination

0-0 units (crs.)

Pass/Fail course.

PHYSICS

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I. FACULTY

Briley, Jambunathan, Kaltcheva, Knispel, Lattery, Rioux, Umlor

II. PURPOSE

The graduate program in Physics is designed to prepare students for positions in industry, education, or for advanced study in doctoral programs. Therefore, upon completing the program students will be able to: 1) demonstrate an increased ability to apply physical principles, analytic, computational, and experimental techniques appropriate to determining specified information about physical systems relevant to the individual program of the student; 2) demonstrate the ability to plan, implement, and complete an independent research project; and 3) demonstrate the ability to communicate results in written and oral form and to retrieve published or computer archived information.

III. DEGREE

Completion of the program will lead to the degree: Master of Science (M.S.).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

Interview

An admissions interview (by telephone, if appropriate) is recommended to determine if the program matches the applicant's educational and career goals.

References

Three reference letters are required.

Undergraduate Major

Depending on the research area sought, the baccalaureate will normally have been taken in physics, broad field science, engineering or related fields.

V. SUMMARY

A. Structure

The core of the program is graduate research conducted in the thesis course Physics 795. Preparation for this research is gained in the required courses and in the approved elective courses appropriate for each of the three research areas.

B. Academic Plans of Study

Physics is the description for the Physics plan of study.

C. Minimum Unit (Cr.) Requirements

30 units (crs.) applicable to the graduate degree constitute the minimal requirement for all students in the program.

D. Admission to Candidacy

Students must satisfy fully the School of Graduate Studies requirements for advancement to candidacy as stated in the first section of this Bulletin. In addition, they must select a thesis topic approved by their advisory committee.

VI. DEGREE REQUIREMENTS

Core Courses:

Subject	Catalog #	Units (crs.)	Title
Physics			
	795	3-6	Physics Thesis

RESEARCH AREAS

In addition to the thesis core, the following courses are required for each of the following research areas:

Subject	Catalog #	Units (crs.)	Title
A. Professional			
Physics			
	519	3	Digital Signal Processing
	608	3	Statistical Physics and Thermodynamics
	617	3	Electricity and Magnetism
	619	3	Introductory Quantum Mechanics
	791	1	Graduate Seminar

B. Instrumentation

Subject	Catalog #	Units (crs.)	Title
Physics			
	505	3	Electronic Circuits and Devices
	511	3	Digital Instrumentation
	519	3	Digital Signal Processing
	605	3	Modern Instrumentation and Interfacing
	615	3	Microprocessor Applications
	791	1	Graduate Seminar

C. Education

Subject	Catalog #	Units (crs.)	Title
Physics			
	511	3	Digital Instrumentation
	535	3	Demonstration and Laboratory Techniques in Physics
	605	3	Modern Instrumentation and Interfacing

Educational Foundations

	770	3	Foundations of Educational Research
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Electives

By consulting with their thesis advisor, students should elect courses appropriate to their research area and to their individual interest and background from the following:

Subject	Catalog #	Units (crs.)	Title
Chemistry			
	523	3	Analytical Separations
	535	4	Organic Chemistry II
	536	1	Advanced Organic Laboratory

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547	3	Physical Chemistry I
548	1	Physical Chemistry laboratory I
549	3	Physical Chemistry II
551	1	Physical Chemistry Laboratory II
621	3	Instrumental Analysis
635	3	Interpretive Spectroscopy
652	3	Polymer Science
661	3	Inorganic Chemistry
663	1	Inorganic Laboratory

Computer Science

571	3	Computer Graphics
591	3	Data Communication and Computer Networks
680	3	Special Topics in Advanced Computer Science

Mathematics

542	3	Abstract Algebra I
546	3	Linear Algebra
549	3	Elementary Number Theory
552	3	Computing Math with Applications
555	3	Introduction to Numerical Analysis
571	3	Differential Equations
575	3	Applied Mathematical Analysis I
576	3	Applied Mathematical Analysis II
581	3	Stochastic Modeling
585	3	Applied Regression Analysis
586	3	Linear Statistical Models
601	3	Mathematical Statistics I
602	3	Mathematical Statistics II
667	3	Advanced Calculus
680	3	Elementary Topology
685	2	Seminar in Mathematical Problem Solving

Physics

505	3	Electronic Circuits and devices
507	3	Physical Optics
511	4	Digital Instrumentation
519	3	Digital Signal Processing
533	3	Our Changing View of the Physical Universe
535	3	Demonstration and Laboratory Techniques in Physics
605	3	Modern Instrumentation and Interfacing
608	3	Statistical Physics and Thermodynamics
615	3	Microprocessor Applications
617	3	Electricity and Magnetism
618	3	Analytical Mechanics
619	3	Introductory Quantum Mechanics
649	3	Quantum Physics: Nuclei and Solids
670	3	Solid State Physics
746	1-3	Workshop on Current Topics
771	2	Theory of Atomic Structure
772	3	Magnetic Resonance
773	3	Advanced Signal Processing
775	2	Atomic Collision Theory
776	3	Seismology
777	3	Advanced Physics Microcomputer Instrumentation
778	3	Advanced Electronics Topics
796	1-3	Independent Study

Other Requirements

Completion of research and thesis (3-6 cr.), including a satisfactory oral defense.

Comment

Required courses within each research area may be waived if they have been taken as an undergraduate student. Courses appropriate for the individual student's research area will be substituted with the approval of the admission committee.

VII. COURSE DESCRIPTIONS

Please see the Graduate Service Courses section of this Bulletin for descriptions of the following course(s):

Subject

Catalog #

Chemistry

523, 535, 536, 547, 548, 549, 551, 621, 635, 652, 661, 663

Computer Science

571, 591, 680

Please see the appropriate Graduate Program entry in this Bulletin for descriptions of the following course(s):

Subject

Catalog #

Educational Foundations

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Mathematics

542, 546, 549, 552, 555, 571, 575, 576, 581, 585, 586, 601, 602, 667, 680, 685

Physics/Astronomy 505

3 units (crs.)

Electronic Circuits and Devices

DC and AC circuit theory with emphasis placed on the external electrical properties of analog electronic devices and their practical applications. Prerequisite: Physics 108 or Physics 110 or instructor's permission. 305/505 (2+2)

Physics/Astronomy 507

3 units (crs.)

Physical Optics

Review of geometrical optics, interference, diffraction, polarization, double refraction, electromagnetic theory of light, introduction to quantum optics and lasers. Prerequisite: Physics 110 and Mathematics 172. 307/507 (3+0)

Physics/Astronomy 511

4 units (crs.)

Digital Instrumentation

Fundamentals and applications of combinational and sequential digital circuits, memory and storage, microprocessors, digital-to-analog and analog-to-digital conversion, emphasizing use in measurement and instrumentation. Credit may not be earned for both Physics 211 and 311/511. Prerequisite: Previous physics or electronics course, Mathematics 122 or consent of instructor. 311/511 (3+2)

PHYSICS**Physics/Astronomy 519** 3 units (crs.)**Digital Signal Processing**

The fundamentals of digital signal processing techniques with an emphasis on their computer implementation: linear shift-invariant systems, the Z-transform, the discrete and continuous fourier transforms, digital filter design, and inverse filters. Familiarity with calculus, complex numbers, and BASIC or FORTRAN is assumed. 319/519 (3+0)

Physics/Astronomy 533 3 units (crs.)**Our Changing View of the Physical Universe**

This course traces the evolution of our conception of the physical universe from its prehistoric beginnings to the current cosmological theories. 333/533 (3+0)

Physics/Astronomy 535 3 units (crs.)**Demonstration and Laboratory Techniques in Physics**

A laboratory course to provide the high school physics teacher with opportunities to handle the physical apparatus used in modern physics curricula. Prerequisite: A two-semester sequence in General Physics. 335/535 (1+3)

Physics/Astronomy 605 3 units (crs.)**Modern Instrumentation and Interfacing**

Use, calibration, and interfacing of transducers. Integrated use of computers and transducers for data acquisition and experimental control. Prerequisite: Physics 211, 305, 311 or consent of instructor. 405/605 (2+2)

Physics/Astronomy 608 3 units (crs.)**Statistical Physics and Thermodynamics**

Temperature, entropy, and other thermal quantities introduced from microscopic considerations and related to macroscopic thermodynamic variables. Calculation of macroscopic properties of matter from microscopic models. Prerequisite: Physics 320. 408/608 (3+0)

Physics/Astronomy 615 3 units (crs.)**Microprocessor Applications**

Hardware and software for input-output applications on microprocessors, use of polling and interrupts, and comparison of various microprocessors for I/O applications. Laboratory included. Prerequisite: Physics 211 or 311, and Computer Science 310. 415/615 (2+2)

Physics/Astronomy 617 3 units (crs.)**Electricity and Magnetism**

An advanced treatment of important topics in electricity and magnetism. Prerequisite: Physics 320. 417/617 (3+0)

Physics/Astronomy 618 3 units (crs.)**Analytical Mechanics**

Advanced treatment of important topics in classical mechanics. Prerequisite: Physics 320. 418/618 (3+0)

Physics/Astronomy 619 3 units (crs.)**Introductory Quantum Mechanics**

Development of quantum mechanics principles and application to important simple physical systems. Prerequisite: Physics 320. 419/619 (3+0)

Physics/Astronomy 649 3 units (crs.)**Quantum Physics: Nuclei and Solids**

Quantum physics applied to nuclei and elementary particles, special relativity, statistics of particles and physics of solids. Prerequisite: Physics 320. 449/649 (3+0)

Physics/Astronomy 670 3 units (crs.)**Solid State Physics**

Introduction to the structure of solids, lattice vibrations, heat capacity, electrical conductivity of metals and semi-conductors, superconductivity, magnetic and mechanical properties of solids and a survey of non-crystalline condensed matter states. Prerequisite: Physics 109 and 110. 470/670 (3+0)

Physics/Astronomy 746 1-3 units (crs.)**Workshop on Current Topics**

A workshop in special topics of interest. This course may be repeated for credit with different topics. Prerequisite: Consent of instructor.

Physics/Astronomy 771 2 units (crs.)**Theory of Atomic Structure**

Methods of determining the atomic states in multi-electron atoms up to the rare earths. Hartree-Fock Hamiltonian and the single electron spherical harmonic wave functions. The multiple states, the term states and their energies are derived using perturbation theory, coupling of angular momenta and the Wigner-Eckart Theorem. Prerequisite: Physics 419/619. (2+0)

Physics/Astronomy 772 3 units (crs.)**Magnetic Resonance**

Techniques and theory of electron paramagnetic resonance and nuclear magnetic resonance as applied to the properties of solids and liquids. Prerequisite: Modern physics course or consent of instructor. (3+0)

Physics/Astronomy 773 3 units (crs.)**Advanced Signal Processing**

Advanced digital signal processing techniques important to applied physics such as the numerical solution of partial differential equations, digital inverse theory, power spectral estimation, and state-space variable methods. Applications will be taken from areas of current student/faculty research interest, normally instrumentation and seismology. Prerequisite: Physics 519 or consent of instructor. (3+0)

Physics/Astronomy 775 2 units (crs.)**Atomic Collision Theory**

The quantum mechanics of scattering theory will be developed with emphasis in the area of atomic collisions. A

PHYSICS

range of methods that have been found of use in research will be surveyed. Prerequisite: Physics 619. (2+0)

Physics/Astronomy 776 *3 units (crs.)* **Seismology**

The use of seismic waves for exploring the earth's interior. Emphasis is placed on reflection seismology: its data acquisition, processing, and interpretation. Familiarity with geological concepts, calculus, complex numbers, and BASIC or FORTRAN is assumed. (3+0)

Physics/Astronomy 777 *3 units (crs.)* **Advanced Physics Microcomputer Instrumentation**

Applications of real-time programming and digital control to data acquisition, experimental system & device testing and experiment & production control. Expertise in user language and assembler programming and knowledge of digital and analog electronics are assumed. (2+2)

Physics/Astronomy 778 *3 units (crs.)* **Advanced Electronics Topics**

Advanced digital and analog electronic topics are covered. Areas suitable to microcomputer interfacing for experimental control are emphasized. Design of programmable logic array applications, use of instrumentation and isolation amplifiers and phase-locked loops, devices and techniques used in radio and microwave electronics will be included. Knowledge of basic analog and digital electronics assumed. (2+2)

Physics/Astronomy 791 *1 unit (cr.)* **Graduate Seminar**

Reading, consultation and discussions by graduate students and faculty members concerning current research and recent developments in Physics. 1-credit each registration with a maximum accumulation of 3 credits. Prerequisite: Graduate standing.

Physics/Astronomy 795 *1-6 units (crs.)* **Physics Thesis**

Each registration with maximum accumulation of 6 cr. Registration for Physics students for thesis credit. Prerequisite: Thesis Proposal and Advisor Approval Form must be filed with Graduate Office prior to registration. Pass/Fail course.

Physics/Astronomy 796 *1-3 units (crs.)* **Independent Study in Physics**

Each registration with maximum accumulation of 6 cr. registration for advanced Physics students for independent work on topics chosen by the student and an instructor. Prerequisite: Independent Study Topic and Instructor Approval Form must be filed at or prior to registration.

PSYCHOLOGY

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I. FACULTY

Adams, Koch, McCann, McFadden, Moon, Perlman,
Rauscher, Subramony, Vreven

II. PURPOSE

The graduate program in Psychology is designed to allow preparation for (a) professional employment with a variety of specializations, or (b) continued graduate study leading to a doctoral degree at another institution.

III. DEGREE

Completion of the program will lead to the degree: Master of Science (M.S.).

IV. ADDITIONAL ADMISSION REQUIREMENTS/INFORMATION

In addition to the requirements of the School of Graduate Studies, specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

References

Three reference letters are required. Ideally, these should come from faculty who are familiar with the applicant's academic potential.

Testing

Applicants are required to take the Graduate Record Examination (GRE) (General test).

1. Students in the Industrial/Organizational emphasis are required to submit a 2-3 page personal statement covering the origins of their interest in working in Industrial/Organizational Psychology, relevant experience (work or volunteer) in this field, and any other relevant personal information.

2. Students in the Experimental emphasis are required to submit a type-written personal statement at least a page in length, describing reasons for wanting to come to UW Oshkosh and areas of research interest. The admissions committee is particularly interested in details about research experience, including class projects, presentations, etc.

Undergraduate Major

Normally, the baccalaureate will have been taken in psychology or a related field, but those who have majored in other areas may be accepted.

V. SUMMARY

A. Structure

The programs are comprised of required courses, and electives. The program currently offers a choice of two emphases. These are: (1) Experimental; (2) Industrial/Organizational.

B. Academic Plans of Study

The following are the descriptions for the Psychology plan(s) of study:

a. Psychology (*Experimental*)

b. Psychology (*Industrial/Organizational*)

C. Minimum Unit (Cr.) Requirements

Unit (cr.) requirements are different for each emphasis.

The minimum requirements applicable to the degree emphases are: Experimental, 32 units (crs.); Industrial/Organizational, 40 units (crs.).

D. Admission To Candidacy

Students must satisfy the School of Graduate Studies requirements for advancement to candidacy as stated in the first section of this Bulletin.

VI. DEGREE REQUIREMENTS

Core Courses:

Subject

Catalog #	Units (crs.)	Title
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A. Experimental

Psychology

705	3	Psychometrics
722	1	Ethics in Psychology
730	3	Statistical Principles in Experimental Design
731	3	Multivariate Statistical Methods
774	2+2	Psychological Research (repeated)
792	3	Experimental Research Methods
795	6	Psychology Thesis

Elective Courses 9 units (crs.) from the following:

712	3	Motivation and Emotion
775	3	Learning and Cognition
777	3	Biological Psychology
780	3	Seminar in Social Psychology
785	3	Seminar in Developmental Psychology
790	3	Seminar in Experimental Psychology
796	1-3	Independent Study in Psychology

Or other courses approved by the student's advisory committee.

B. Industrial/Organizational Psychology

722	1	Ethics in Psychology
724	3	Organizational Psychology
726	3	Personnel Psychology
727	3	Research Methods

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728	6	Practicum
730	3	Statistical Principles in Experimental Design
731	3	Multivariate Statistical Methods
732	3	Training and Organizational Development
746	3	Seminar in Current Topics
795	3-6	Psychology Thesis

Elective Courses from the following:

Electives may consist of any 700 level course that is approved by the student's advisory committee.

Comments:

All students enrolled in the program are expected to behave in accordance with American Psychological Association Ethical Principles. Failure to do so may result in serious consequences including dismissal from the program.

VII. COURSE DESCRIPTIONS

The following courses are not applicable to Psychology M.S. programs: **Psychology** 503, 538, 567; 655, 664, 665, 673, 681

Psychology 503 *3 units (crs.)*

Psychology of Abnormal Behavior

A description and interpretation of behavior types considered deviant and/or maladaptive. Various methods of treatment including psychotherapy are considered. Prerequisite: 9 credits of psychology or consent of instructor. 303/503

Psychology 538 *3 units (crs.)*

Adult Development and Aging

A study of the developmental tasks of early, middle, and late adulthood. Work, marriage, parenthood, retirement, death, and other issues will be examined with regard to cognitive, emotional, motivational, and psycho-social functioning through the adult years. Prerequisite: Psychology 101, 104 or 110. 338/538

Psychology 567 *3 units (crs.)*

Psychopharmacology

Overview of how the major classes of psychoactive drugs affect the brain and behavior. Topics include the biological mechanisms of drug action, neuroanatomy, neurophysiology, the development of tolerance and dependency, and clinical use of drugs. Prerequisite: 6 credits of Psychology and consent of instructor. 367/567

Psychology 655 *3 units (crs.)*

Sensation and Perception

A general discussion of the phenomenological and physiological principles and theories of sensation and perception. Prerequisite: 9 credits of Psychology to include Psychology 101, 104 or 110. 455/655

Psychology 664 *3 units (crs.)*

History of Psychology

An orientation course covering the historical antecedents and systems of psychology. Prerequisite: 15 credits of Psychology including Psychology 299, 371, and either 303 or 473 or consent of chairperson. 464/664

Psychology 665 *1-3 units (crs.)*

Psychology of Personality

A general course dealing with the description, development, and explanation of the human personality. Prerequisite: Consent of instructor. 465/665

Psychology 673 *3 units (crs.)*

Theories of Personality

An intensive study of the modern theories of personality such as: Freud, Jung, Erikson, Fromm, Rogers, and Bandura. Prerequisite: 9 credits of Psychology or consent of instructor. 473/673

Psychology 681 *3 units (crs.)*

Introduction to Counseling

A survey of the theories and techniques which are used in the practice of counseling and psychotherapy. The characteristics of the therapeutic relationship, along with role playing experiences serve to introduce the work of the helping professions. Prerequisite: Senior standing and Psychology 303. 481/681

Psychology 690 *1-3 units (crs.)*

Special Topics

A psychology course on a topic not regularly taught in the Department's curriculum or advanced treatment of existing course content. Students may take the course twice with different content. Descriptions of the course will be available in the Psychology Department office at the beginning of the semester prior to the one when the course is offered. Prerequisite: 9 units (crs.) of Psychology.

Psychology 705 *3 units (crs.)*

Psychometrics

A thorough analysis of both classical and modern psychometric theory. Emphasis will be placed on the application of psychometric principles in the construction of tests and other measures used in both psychological research and practice.

Psychology 712 *3 units (crs.)*

Motivation and Emotion

This course will examine contemporary theories and research about motivation and emotion. A historical perspective on the study of these phenomena by psychologists will also be presented. Applications to applied psychological practice will be made. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

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Psychology 722 *1 unit (cr.)*
Ethics in Psychology
This course will cover the philosophical foundations of the ethical principles of psychologists, approaches to clinical decision making, and the ethical dilemmas occurring in clinical practice, research/teaching, and I/O Psychology. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 724 *3 units (crs.)*
Organizational Psychology
Examination of theory and research in Organizational Psychology. Topics include social influences in the organization, leadership, job satisfaction, motivation, job design, and group processes. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 726 *3 units (crs.)*
Personnel Psychology
Current methods in selection and classification, job analysis, testing, and measures of performance. Reliability of predictors. Classroom work stresses application of these techniques by industrial/organizational psychologists. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 727 *3 units (crs.)*
Research Methods
An in-depth examination of conceptual and practical issues associated with the design and implementation of behavior science research. Topics include: 1) identifying a research question, 2) designing a study, 3) measuring and manipulating variables, 4) collecting and analyzing data, and 5) communicating the results. Classroom work emphasizes application of concepts across research settings. Activities include report writing and the use of statistical programs. Prerequisite: Psychology 730 or consent of instructor.

Psychology 728 *3 units (crs.)*
Industrial/Organizational Psychology Practicum
Supervised, practical experience in problem solving and applied research for graduate students in Industrial/Organizational Psychology. The course may be repeated for a total of 12 credits. Pass/Fail course. Prerequisite: Admission to the M.S. Psychology Program or consent of the instructor.

Psychology 730 *3 units (crs.)*
Statistical Principles in Experimental Design
Principles of inferential statistics in experimental design. Methods of statistical and hypothesis testing. Analysis of variance and analysis of covariance for various simple and complex experimental designs. Prerequisite: Psychology 203 or an equivalent course and admission to the Psychology M.S. Program or consent of the instructor.

Psychology 731 *3 units (crs.)*
Multivariate Statistical Methods
Multivariate statistical methods useful in behavioral scientific research, including multiple correlation/regression, canonical correlation/regression, discriminant analysis, multivariate analysis of variance, factor analysis, and other topics. Prerequisites: Psychology 730 or an equivalent course and admission to the Psychology M.S. program or consent of the instructor.

Psychology 732 *3 units (crs.)*
Training and Organizational Development
This course gives the graduate student an in-depth understanding of the main concepts of training and organizational development. The class readings have been designed to meet two objectives: 1) to provide a broad overview of training, management development, and organizational development; 2) to allow for a more extensive treatment of selected topics. This course will emphasize the research and psychological perspectives to studying training systems. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 733 *3 units (crs.)*
Aging and Work
This course examines changes in the nature of work, the workforce, and the workplace in an aging society. Topics to be addressed include: work/family relations; human factors/ ergonomics, workplace technology, and aging processes; cognitive aging and job performance; the recruitment, training, and management of middle-aged and older workers; and the impact of retirement on individuals and organizations. Prerequisites: Admission to the M.S. Psychology Program or consent of the instructor.

Psychology 746 *1-3 units (crs.)*
Seminar on Current Topics
Current topics in one area of psychology are offered. Course content is expected to differ from offering to offering. Prerequisite: Admission to M.S. Psychology Program or consent of instructor.

Psychology 774 *2 units (crs.)*
Psychological Research
Supervised research activity requiring completion of a research project and paper or poster based upon a theoretical or empirical project in psychology. May be repeated once for credit, for a total of 4 credits. Prerequisite: Psychology 772 and consent of instructor. Pass/Fail course.

Psychology 775 *3 units (crs.)*
Learning and Cognition
This course provides an integrative examination of learning and cognition in humans and animals. It is designed to introduce graduate students to fundamental facts, theories, and research in this very broad field. The course emphasizes several themes: the neural basis of learning and cognition, computational approaches in the field, and the critical evaluation of current research.

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Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 777 *3 units (crs.)* **Biological Psychology**

An overview of contemporary methodology and research in biological psychology. Content includes neuroanatomy, neurophysiology, and an in depth analysis of the biological bases of behavior and cognitive functions. Topics include the physiology of sensation, perception, movement, motivation, sleep, learning, memory, emotion, and abnormal behavior. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 780 *3 units (crs.)* **Seminar in Social Psychology**

This seminar deals with classic and current theoretical issues and research findings in the area of social psychology. We will examine research in the areas of attitudes and behavior, personal perception, cognitive dissonance theory, attribution theory, social comparison, social influence, affiliation, conformity, social learning theory, theories of emotion, and theories of aggression. The class emphasizes methodology including issues in measurement, casual inference, and external validity. We will also discuss some areas of applied social psychology, e.g., psychology and the law. Prerequisite: Admission to the MS Psychology Program or consent of instructor.

Psychology 785 *3 units (crs.)* **Seminar in Developmental Psychology**

This course will review and discuss major conceptual approaches to the study of development through the lifespan, from conception to death, in the domains of cognition, personality, and social-emotional processes. The course will draw on theories and research in the physical and social sciences. Important empirical studies will be reviewed and their strengths, limitations, and implications for theories of normative and successful human development will be discussed. The course will meet three broad objectives: (1) develop an appreciation for the existing psychological research on human development; (2) foster critical reflection about the current status and future directions; and (3) develop research background specific to the students' own areas of development psychology interest. Prerequisite: Admission to the MS Psychology program or consent of instructor.

Psychology 790 *3 units (crs.)* **Seminar in Experimental Psychology**

Critical analysis of current research in different specialized topics of experimental psychology. Emphasis is upon literature review and the preparation of critique papers on pertinent problem areas. May be repeated for a total of 6 credits. Prerequisite: Admission to the M.S. Psychology Program or consent of instructor.

Psychology 792 *3 units (crs.)* **Experimental Research Methods**

This course is designed to develop an understanding of science in general and to teach techniques for behavioral research that will serve as the basis for future research, as well as provide training in some real-world working skills (research design, for example). The format consists of interactive discussions and lectures, classroom presentations by students, and an overall focus on how to apply the concepts and techniques learned during the course.

Psychology 795 *3-6 units (crs.)* **Psychology Thesis**

Each registration with maximum accumulation of 6 cr. Research and preparation of a thesis for M.S. Psychology students. Prerequisite: Thesis Proposal and Advisor Approval Form must be filed with the Graduate Office. Pass/Fail course.

Psychology 796 *1-3 units (crs.)* **Independent Study in Psychology**

Each registration with maximum accumulation of 4 cr. Individualized study by M.S. Psychology student. Prerequisite: Independent Study Topic and Instruction Approval Form must be filed at or prior to registration. Pass/Fail course.

Psychology 799 *0-0 units (crs.)* **Registration for Comprehensive Examination**

Pass/Fail course.

PUBLIC ADMINISTRATION

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I. FACULTY

Ameringer, Birnbaum, Khan, Maher, Simmons

II. PURPOSE

The graduate program in Public Administration is designed to enhance the administrative knowledge and skills of persons employed in public and not-for-profit agencies. It seeks to synthesize coursework and employment experiences in a complementary manner. The design makes the program accessible to part-time students who may not be able to come to the campus on a regular basis by utilizing evening and weekend classes supplemented by internet communication.

III. DEGREE

Completion of the program will lead to the degree: Master of Public Administration (MPA).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the program has established the following policies and procedures for admission:

Professional Work

Applicants should have work experience in a public or non-profit agency. A written description of responsibilities is needed, along with a resume. What constitutes work experience may include extensive activity as a volunteer or agency experience of relatively short duration if the work is sufficiently professional in nature. Questions about eligibility should be addressed to the MPA program coordinator.

References

Three reference letters are required from individuals who can assess applicant's likelihood of success in graduate school.

Writing Sample

A writing sample is required. Applicants will prepare a typed two page response to a question posed in the Graduate School Application packet.

V. SUMMARY

A. Structure

The program is comprised of core courses and electives.

B. Academic Plans of Study

The following are the descriptions for the Public Administration plan(s) of study:

- Public Admin (General)*
- Public Admin (General) - Cooperative*
- Public Admin (Health)*
- Public Admin (Health) - Cooperative*

C. Minimum Unit (Cr.) Requirements

36 units (crs.) applicable to the graduate degree constitute the requirement for all students in the program.

D. Admission to Candidacy

Students must satisfy the School of Graduate Studies requirements for advancement to candidacy stated in the first section of this Bulletin.

VI. DEGREE REQUIREMENTS

Computer Competence

All students must demonstrate computer competence by coursework, an examination, or completion of MPA 735, Computer Applications in Public Administration. MPA 735 does not apply toward the 36 unit (cr.) requirement for the MPA degree.

Core Courses

Subject	Catalog #	Units (crs.)	Title
Political Science			
	711	3	Politics, Policy and Public Administration
	721	3	Public Policy Analysis
	723	3	Organization Structure and Behavior
	732	3	Quantitative and Qualitative Tools for Public Administration
	742	3	Human Resource Management in the Public Sector
	752	3	Public Budgeting and Finance
	760	3	Administrative Law
	OR		OR
	762	3	Health Care Administration Law (for students in Health Care emphasis)
	780	3	Capstone Seminar
	OR		OR
	790	3	Field Project

Health Care Emphasis (12 units (crs.))

Students must take the following courses if they have designated Health Agency Administration as their emphasis:

Subject	Catalog #	Units (crs.)	Title
Political Science			
	729	3	Health Care Agency Organization and Management
	773	3	Advanced Seminar in Health Care Policy

Plus six additional elective units (crs.).

Elective MPA Courses (12 Units (Crs.))

Subject	Catalog #	Units (crs.)	Title
Political Science			
	726	3	State and Local Government
	727	3	Municipal Management
	728	3	Social Service Policy and Administration

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729	3	Health Care Organization and Management
737	3	Information Resource Use in the Public and Non-Profit Sector
750	3	Strategic Planning in Public and Non-Profit Organizations
751	3	Program Evaluation
756	3	Managing Economic Development
757	3	Regional and Metropolitan Development
760	3	Administrative Law
762	3	Health Care Administration Law
771	3	Marketing for Non-Profit Organizations
780	3	Capstone Seminar
796	1-3	Independent Study in Public Administration

Electives

Students are expected to consult with the program coordinator in selecting recommended electives from the following offerings:

Subject	Catalog #	Units (crs.)	Title
Business Administration			
	700	3	Accounting Foundations
	722	3	Planning for Management in the Future
	731	3	Financial Management
	752	3	Managerial Accounting
	756	3	Organization and their Environments
	761	3	Human Resource Development
	762	3	Organization Reward System
	763	3	Collective Bargaining Systems Counseling
Counselor Education			
	680	3	Introduction to Counseling
	708	3	Career Development and Occupation Information
Human Services and Professional Leadership			
	730	3	Organization and Administration of Public Education
	732	3	Multicultural Education for Leaders
Economics			
	521	3	Labor Economics
	539	3	Urban and Regional Economics and Policy
	603	3	Public Sector Economics
	630	3	Human Resource Economics
	704	3	Basic Economic Theory
Nursing			
	701	3	Research in Nursing
	702	3	Seminar in Emergent Health Care Systems
Political Science			
	507	3	Administrative Law and Procedure
	563	3	Public Administration, Bureaucracy, and Political Process
	564	3	Administrative Leadership and Behavior in the Public Sector

569	3	Administrative Management in Government
Social Work		
615	3	Community Organization Theory and Practice
668	3	Social Welfare Policy
Sociology		
539	3	Sociology of the Family
Urban and Regional Studies		
500	3	Planning
517	3	Land Use Regulation
520	3	Housing

VII. COURSE DESCRIPTIONS

Please see the appropriate graduate program entry in this Bulletin for descriptions of the following course(s):

Subject _____
 Catalog # _____

- Business Administration**
700, 722, 731, 752, 761, 762, 763
- Criminal Justice**
540, 541
- Educational Leadership**
730, 731

Please see the Graduate Service Courses section of this Bulletin for descriptions of the following course(s):

Subject _____
 Catalog # _____

- Economics**
521, 539, 568, 603, 630, 704
- Political Science**
563, 564, 569
- Social Work**
668

Public Administration 507 *3 units (crs.)*
Administrative Law and Procedure
 The rule-making and adjudicating powers of governmental agencies. Specific topics such as rights of public employees in dismissal or suspension proceedings, rights of industries in regulatory proceedings, and open meeting laws. Judicial review of agency action. Prerequisite: Public Affairs 221 or Criminal Justice 212. 307/507

Public Administration 562 *3 units (crs.)*
Public Personnel Administration
 Personnel concepts and techniques in public organization, staffing, career systems, affirmative action, public unionism, compensation, fringe benefits, motivation, evaluation, supervisor-supervisee relations, etc. Traditional, behavioral and reform approaches in personnel administration. Prerequisite: Public Affairs 221 or Criminal Justice 212. 362/562

Public Administration 563 *3 units (crs.)*
American Bureaucracy, and Political Process
 The role of bureaucracy in the making and implementing of public policy. Special focus on strategic interactions

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between American Bureaucracy and political institutions. Critical examination of administrative accountability and responsibility, administrative ethics and law, planning and budgeting, and professionalism and bureaucratic elitism. Prerequisite: Public Affairs 221 or Criminal Justice 212. 363/563

Public Administration 564 *3 units (crs.)* **Administrative Leadership and Behavior**

Leadership criteria, sources, motivations and possibilities at different organizational levels in America; tools of leadership for promoting organizational goals; analysis of effects on societal, political and bureaucratic structures on a crosscultural basis. Prerequisite: Public Affairs 221 or Criminal Justice 212. 364/564

Public Administration 569 *3 units (crs.)*
Government and the Economy
The application in modern governmental agencies of budgeting processes, planning and organizational devices for control, supervision, and decision making. Prerequisite: Public Affairs 221 or Criminal Justice 212. 369/569

Public Administration 591 *3 units (crs.)* **Environment and Energy Management**

This course will introduce students of Public Administration to the growing fields of environmental protection and energy conservation. Students will be introduced to policy options addressing the diminishing supply of fossil fuels at the international and national as well as the state and local levels. Students will learn basic skills related to managing energy in order to develop and supervise energy conservation programs for units of local government and small organizations. Students will be expected to have completed Public Affairs 221 or Criminal Justice 212. 391/591

MASTER OF PUBLIC ADMINISTRATION

MASTER OF PUBLIC ADMINISTRATION

Master of Public Admin 711 *3 units (crs.)*

Politics, Policy, and Public Administration

Relationship of society, politics, government, and public administration to each other; socio-cultural influences on administration; administrative role in policy process; and ethical dimensions of administrative behavior.

Master of Public Admin 721 *3 units (crs.)*

Public Policy Analysis

Introduction to the study of public policy analysis, with application of the criteria of efficiency, equity, political legitimacy, feasibility of implementation, and ethics. Course incorporates interdisciplinary perspectives from economics, political science, and urban and regional planning.

Master of Public Admin 723 *3 units (crs.)*

Organization Structure and Behavior

Survey of classical and contemporary approaches to the study of organizations, with emphasis on structure, leadership, communication, conflict, and organizational change and development.

Master of Public Admin 726 *3 units (crs.)*

State and Local Government

Current issues in Wisconsin government are evaluated as a means of better understanding the complexities associated with intergovernmental relations and finding solutions to policy problems. In addition, the readings are selected to not only help the student understand the assigned topics, but also introduce them to the various state and local agencies/organizations involved in these policy matters.

Master of Public Admin 727 *3 units (crs.)*

Municipal Management

Management functions in cities, villages and towns; organization and operation of municipal services with emphasis on planning, protective services, economic development, public works, finance and selected other services; relationship between managers and elected officials and citizens; intergovernmental relations; productivity. Prerequisite: Master of Public Administration 723 or consent of instructor.

Master of Public Admin 728 *3 units (crs.)*

Social Service Policy and Administration

Management functions in social service agencies: planning, resource acquisition, organization designs, staff development, program evaluation and agency change. Political context of social service management. Effect of agency size on management. Prerequisite: Master of Public Administration 723 or consent of instructor.

Master of Public Admin 729 *3 units (crs.)*

Health Care Organization and Management

Management functions in health care organizations; organization and operation of health care services in hospitals, nursing homes and ambulatory care centers; relationship of managers and medical staff; role of state and federal governments in finance and regulation of health care organizations. Prerequisite: Master of Public Administration 723 or consent of instructor.

Master of Public Admin 732 *3 units (crs.)*

Quantitative and Qualitative Tools for Public Administration

Use of the scientific method in social research, with emphasis on problem formulation, hypothesis development, data collection, data analysis and interpretation.

Master of Public Admin 735 *2 units (crs.)*

Computer Applications in Public Administration

Application of selected computer programs to analyze issues and problems in public administration. Lecture and laboratory experience.

Master of Public Admin 737 *3 units (crs.)*

Information Resource Use in the Public and Non-Profit Sectors

Examination of information systems in public and non-profit sector organizations from organizational and perspectives. Extensive use of organizational case studies. Instruction in micro-computer and Internet applications.

Master of Public Admin 742 *3 units (crs.)*

Human Resource Management in the Public Sector

Introduction to the management of personnel and collective bargaining in the public sector. Emphasis on underlying principles and problems of public sector personnel administration and future trends in the field.

Master of Public Admin 750 *3 units (crs.)*

Strategic Planning in Public and Non-Profit Organizations

This course begins by introducing students to the evolution of several prominent planning models used by public and non-profit agencies over the past century, including comprehensive-rationality, incrementalism and advocacy planning. Specific attention is then devoted to examining theoretical issues associated with the use of a strategic planning model by public and non-profit agencies. Problems related to the implementation and evaluation of strategic plans are also discussed. All of the major theories, concepts, and methods introduced in this course will be applied either through case studies or through a class workshop with students producing and presenting a report for a real-life client. Prerequisite: Master of Public Administration 732 or consent of instructor.

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Master of Public Admin 751 *3 units (crs.)* **Program Evaluation**

This course is designed to achieve four primary learning objectives: (1) to develop proficiency with processes and methods associated with evaluation research; (2) to become familiar with major evaluation models, involving needs assessments, process studies, impact analysis, and cost-benefit analysis; (3) to acquire a more sophisticated understanding of the role of evaluation research in public and non-profit agencies; and (4) to apply the major theories, concepts and methods in developing an evaluation report through either case studies or through a workshop format with a formal report produced and presented to a real-life client. Prerequisite: MPA 732 or consent of instructor.

Master of Public Admin 752 *3 units (crs.)* **Public Budgeting and Finance**

Introduction to public budgeting systems and principles and practices of financing state and local governments. Emphasis on budget development, implications of different approaches, revenue sources and current issues in budgeting and public finance.

Master of Public Admin 753 *3 units (crs.)* **Accounting and Control in Non-Profit Organizations**

Terminology, concepts, techniques, and management implications of accounting information and reports of nonprofit and public sector organizations, from a user/manager perspective. Financial reporting principles and statement interpretation are addressed, as well as management control techniques, including cost accounting, budgeting, program and management performance evaluation.

Master of Public Admin 756 *3 units (crs.)* **Managing Economic Development**

Analysis of concepts of economic growth and development, factors influencing location of economic activity, and state and local government strategies to promote development.

Master of Public Admin 757 *3 units (crs.)* **Regional and Metropolitan Economic Development**

This course is designed to introduce students to basic concepts of regional and metropolitan development. The emphasis of the course is on the study of metropolitan regions with particular attention devoted to understanding the fundamental regional problem of the instability of sustaining economic growth while protecting environmental biodiversity. An additional emphasis will be on introducing students to governance issues associated with regionalism and intergovernmentalism in the United States with particular applications to Wisconsin.

Master of Public Admin 760 *3 units (crs.)* **Administrative Law**

Basic principles of administrative law, introduction to Federal and State Administrative Procedure Acts, role of

law in the politico-administrative system. Survey of equal opportunity/affirmative action for administrators.

Master of Public Admin 762 *3 units (crs.)* **Health Care Administration Law**

Review of basic federal and state laws affecting hospitals, health care professions, and patients. Current legal issues in health care administration are also addressed.

Master of Public Admin 763 *3 units (crs.)* **Municipal Law**

Review of federal and state laws which create and allow for local governance and rights and responsibilities of municipalities as defined by constitutional, statutory and case law. Focus on current legal issues confronting municipalities.

Master of Public Admin 771 *3 units (crs.)* **Marketing for Non-Profit Organizations**

Role and relevance of marketing in non-profit organizations. Market analysis, strategic and tactical use of the major marketing instruments of product, price, place and promotion, and applications to various non-profit organizations.

Master of Public Admin 773 *3 units (crs.)* **Health Care Policy**

This advanced seminar is designed to provide an introduction to health care policy, its foundations, fundamental concepts, and the institutions through which it works, as well as examine how health care is financed in the United States and other selected countries.

Master of Public Admin 780 *3 units (crs.)* **Capstone Seminar**

Analysis of major issues in public administration and application of theories and concepts from sub-fields to complex organizations. Designed to integrate knowledge acquired throughout the program. Prerequisite: Completion of core and elective courses or consent of instructor.

Master of Public Admin 790 *3 units (crs.)* **Field Project**

Field study addressed to a specific professional problem of interest to the student, culminating in the preparation of an appropriate summary document. The field project may take several forms such as an analysis of a current policy issue, a bibliographic essay, a complex grant proposal or a program evaluation. All projects should exhibit an understanding of public administration from both theoretical and applied perspectives, an ability to analyze problems and formulate policy alternatives, and an ability to demonstrate these capabilities through the preparation of a significant written document. Prerequisites: completion of core requirements. Pass/Fail course.

MASTER OF PUBLIC ADMINISTRATION

Master of Public Admin 796 *1-3 units (crs.)*
Independent Study

Each registration with a maximum accumulation of 6 cr. Directed reading and written reports in areas not covered by current course offerings. Open to MPA students only. Independent Study/Related Readings form must be filed at the time of registration.

Master of Public Admin 797 *3 units (crs.)*

Seminar in Current Topics in Public Administration

Current topics in one area of Public Administration are offered. Course content is expected to vary offering to offering. Prerequisites: Admitted to MPA Program.

Master of Public Admin 799 *0-0 units (crs.)*
Registration for Comprehensive Examination
Pass/Fail course.

CRIMINAL JUSTICE

Criminal Justice 540 *3 units (crs.)*

Police Administration

Organizational functions, structures, processes and behavior as they relate to law enforcement agencies (esp. local police). Particular focus is on theoretical principles as they relate to practice in complex organizations. Attention is also given to the interrelationship of police, courts and correctional facilities as administrative units. Prerequisite: consent of instructor. 340/540

Criminal Justice 541 *3 units (crs.)*

Administration of Police Operations

An analysis of the administrative problems and practices associated with the delivery of all manner of police services: crime prevention and control, conflict resolution, and general service. Operational police development, implementation, and evaluation. Prerequisite: Criminal Justice 340. 341/541

URBAN AND REGIONAL STUDIES

URBAN AND REGIONAL STUDIES

Urban & Regional Studies 500 *3 units (crs.)*

Planning

An overview of urban and regional planning including the history of planning, major types of planning techniques and theory, values of planners, and strategies for planning effectiveness. 300/500

Urban & Regional Studies 517 *3 units (crs.)*

Land Use Regulation

An overview of the purposes, theoretical and legal issues, tools, and techniques of land use planning and regulation. 317/517

Urban & Regional Studies 520 *3 units (crs.)*

Housing

An overview of urban housing including its recent history, the nature of the housing market, the impact of housing on society, government regulation and assistance, and new housing patterns. 320/520

SOCIAL WORK

Quintin Sullivan, Department Chair
Office: Clow Faculty 327
Telephone: 920-424-7180

Judith Martin, Program Coordinator
MSW Collaborative Program
UW Oshkosh and UW Green Bay
Office: UW Green Bay
Telephone: 920-465-2346

I. FACULTY

UW Oshkosh: Altepeter, Ebert, Epple, Gammon, Kissel, Shim, Staerkel, Sullivan, Wells

UW Green Bay: Gushwa, Kok, Martin, Roeder, Sallmann

II. Purpose

The University of Wisconsin Green Bay and the University of Wisconsin Oshkosh have established a Collaborative MSW Program that prepares social workers for advanced practice as facilitators, partners and leaders in planned change activities with service users and community service providers. The program's goal is to educate professionals ready to assume administrative and direct practice leadership roles within this region's increasingly diverse and transforming rural and metropolitan environments.

The program aims to prepare practitioners who can work to strengthen families through services, and policies supportive of family and community well being; who can engage in interdisciplinary learning and coordinated interprofessional practice; who can provide leadership in the community and in civic life; and who can encourage and guide the inclusion and representation of Native Americans and members of other cultures in the region.

Program graduates provide leadership in the social work field by:

- Displaying expertise in the use of skills associated with "best practice" models, particularly those that are family-focused and that serve diverse clientele;
- Taking action to improve services within direct practice or administration/management, particularly in the public and tribal practice sectors and in rural social work practice;
- Regularly utilizing research to critically analyze, improve and develop services within their areas of expertise;
- Developing and refining services through collaborative efforts with diverse clientele;
- Developing ongoing and innovative strategies for support of professional peers.

The program offers a full-time curriculum, which can be completed in two calendar years. A part-time program will be instituted in the near future, but it is not yet operational. To meet the needs of working students, most courses in the program are offered on evenings and weekends. Students can also integrate and apply their classroom learning in a sixteen-hour-per-week field experience.

III. Degree

Completion of the program will lead to the degree: Master of Social Work (MSW)

IV. Additional Admission Requirements/Information

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Admission Requirements

To be admitted to the Collaborative MSW Program, applicants must meet the following requirements:

1. Have a cumulative undergraduate GPA of 2.75, with 3.0 in the last two years of study;
2. Have an academic background in the liberal arts and have completed a minimum of 18 credits in the social sciences from among courses in at least three of the following disciplines: psychology, sociology, anthropology, economics, and political science (BSW students meet this criterion);
3. Have taken the Graduate Records Exam (GRE) within the last 5 years;
4. Through a written statement, 3 letters of reference (including one academic reference), and a relevant professional work/volunteer background, provide evidence of interest in and ability to work with social work clientele and in social work settings; documentation of breadth and depth of professional and/or volunteer experience (usually includes post-baccalaureate experience) that has prepared the applicant for advanced level practice;
5. Have completed course work in: human biology, statistics, research methods, and life span development or submit plans for completing this work prior to beginning Advanced Curriculum of the Program;
6. For advanced standing, have graduated from an accredited baccalaureate social work program within the last 8 years.

The program has a two-stage admissions process. Applicants complete a Pre-Admissions process by submitting a General Information Form, a personal statement, a Work/Volunteer Experience Form, a Campus Preference and Signature Sheet, and three letters of reference to the Collaborative Program. Applicants who are recommended for acceptance by the Collaborative Program then go on to complete additional application procedures at either the UW Green Bay or UW Oshkosh campus.

Areas of Emphasis

In addition to requiring a common foundation of courses, the Collaborative MSW Program offers students a choice of two concentrations as part of the Advanced Curriculum: Advanced Direct Practice or Administration/Management. The Advanced Direct Practice concentration is designed for students interested in providing leadership in the field in their work with and on behalf of individuals, groups and families. Work with vulnerable families who face multiple life challenges is emphasized. The Administration/Management concentration admits students who are

SOCIAL WORK

interested in providing leadership by taking on supervisory and management responsibilities, particularly in public and tribal social service settings.

Students are required to take four courses in their concentration and two elective courses relevant for their concentration area.

Location of Classes

All Social Work courses are offered at the UW Fox Valley Campus, Menasha, a central location for most students from northeastern Wisconsin. Some additional elective and interdisciplinary courses will be available on either the UW Oshkosh or UW Green Bay campuses. Please check the semester schedule of classes for specific information on course offerings.

Field Hours:

The Council on Social Work Education (CSWE) requires a minimum of 900 field hours for the entire program. We require 960 total hours: 480 hours the foundation year and 480 hours the advanced year. This works out to 16 hours a week for 15 weeks each semester. Field units (crs.) are awarded at one unit (cr.) for every four hours in the field.

Accreditation:

The program is in candidacy for accreditation with the Council on Social Work Education (CSWE).

V. Summary

A. Structure

The program is comprised of core courses and electives.

B. Academic Plans of Study

Social Work is the description for the Social Work plan of study.

C. Minimum Unit (Cr.) Requirements

1) For program applicants who do not have a BSW degree completed within the last eight years or all non-BSW students, 58 credits are required for graduation. This includes a 28-credit two-semester Foundation Curriculum (fall and spring) and a 30-credit three-semester Advanced Curriculum (fall, spring and summer).

2) Applicants who have completed a BSW degree within the last eight years receive advanced standing for all foundation requirements.

3) All students are required to take 10 credits of required advanced course work. In addition, Direct Practice students are required to take 14 credits of required course work and 6 credits of additional electives; Administration/Management students are required to take 17 credits of required course work and 3 credits of additional electives.

D. Admission to Candidacy

Students must satisfy fully the School of Graduate Studies requirements for advancement to candidacy stated in the first section of this Bulletin.

VI. Degree Requirements

Foundation Requirements: 28 credits

Core Courses:

Subject Catalog #	Units (Crs.)	Title
Soc Work		
701	3	Ethical Issues in Contemporary Social Work
702	3	Generalist Practice I
703	1	Skills Lab with Individuals, Families and Small Groups
704	3	Generalist Practice II
705	1	Skills Lab with Large Groups and Communities
706	3	Social Welfare Institutions
707	3	Human Behavior in the Social Environment
708	3	Social Welfare Policy: Contemporary Approaches
709	4	Field I: Foundations Social Work Field Practicum
710	4	Field II: Foundations Social Work Field Practicum

Advanced Requirements: 30 credits

Core Courses:

Advanced Requirements: All Students

Subject Catalog #	Units (Crs.)	Title
720	3	Practice Competence in a Diverse Community
728	3	Advanced Social Welfare Policy Analysis
731	3	Advanced Research Applications in Social Work Practice
732	1	Field Research Project

Advanced Requirements: Direct Practice Concentration

Subject Catalog #	Units (Crs.)	Title
721	3	Multi-Level Family Intervention

*See Below 3 Advanced HBSE selection

729 4 Field III: Advanced Social Work Field Practicum and Integrative Seminar

733 4 Field IV: Advanced Social Work Field Practicum and Integrative Seminar

*Soc Work 727 (3 units) Psychopathology

At UW Oshkosh:

Psych 530 (3 units) Adult Development & Aging

Psych 690 (3units) Special Topics

Women's Studies 550 (3units) Women, Race and Class

At UW Green Bay:

Educ 552 (3units) Social and Family Influences

SOCIAL WORK

Advanced Requirements:

Administration/Management Concentration

722	3	Social Work Management and Supervision in Social Services
<i>*See Below</i>	3	Advanced HBSE Requirement: Organizational Theory
<i>**See Below</i>	3	Budgeting and Finance
729	4	Field III: Advanced Social Work Field Practicum and Integrative Seminar
733	4	Field IV: Advanced Social Work Field Practicum and Integrative Seminar

*At UW Oshkosh:
MPA 723 (3units) Org. Structure & Behavior
At UW Green Bay;
Management 753 (3units) Org. Theory & Behavior

**At UW Oshkosh:
MPA 723 (3units) Org. Structure & Behavior
MPA 752 (3units) Public Budgeting & Finance
At UW Green Bay:
Management 753 (3 units) Org. Theory & Behavior
PU EN AF 615 (3units) Public & NonProfit Budgeting

Advanced Requirement: Professional Project

Students in the program meet professional project requirements by completing a research project during their final semester in the program (Social Work 732). Students develop their project proposal in the Advanced Research Applications course (Social Work 731). This field-related research project is completed when students finish their two-semester Advanced Social Work Field Practica (Social Work 729 and 733).

6 credits of electives are required in the Direct Practice Concentration and 3 credits of electives are required in the Administration/Management Concentration. Students may also take Advanced HBSE Options as electives.

Elective Courses:

Subject	Catalog #	Units (Crs.)	Title
	727	3	Psychopathology and strength-based Assessment
	735	3	Emerging Issues in Child Welfare
	795	3	Special topics
	798	1-3	Independent Study
At UW Oshkosh:			
	Soc Work 575	3	Treatment and Mistreatment of Offenders
	MPA 729	3	Health Care Org. and Management
	MPA 760	3	Administrative Law

At UW Green Bay:

Management 750	3	Team Dynamics and Problem Solving
Management 757	3	Leadership & Innovation
Management 776	3	Org. Communication and Conflict

VII. Course Descriptions

Social Work 571

3 units (crs.)

Child & Family Welfare

Examines the historical trends in services to children and their families within the framework of supportive, supplemental, and substitute services which have evolved over time as part of the service structure in child welfare. While recognizing the impact of impoverishment, changing family structures, and other aspects of pressures on contemporary parenting, attention is given to resiliency forces and practitioner approaches which encourage parenting strengths and home-based intervention options as preventive strategies in child welfare services. 371/571

Social Work 575

3 units (crs.)

Treatment and Mistreatment of Offenders

Examines the application of generalist social work practice within the criminal justice system focusing on the change agent role in working with juvenile and adult offenders in both community-based corrections and institutional settings. Prepares social workers for an understanding of correctional models and their inherent values, bio-psychosocial theories of crime causation and develops assessment and intervention skills within a generalist framework. 375/575

Social Work 643

3 units (crs.)

Family Practice in Systems Perspective

Application of family theory and current research findings to social work practice with families. Topics include role theory, communications theory, and major systems-oriented theories and techniques of family counseling and intervention. The family as a small problem-solving group. Prerequisite: Social Work 220 or consent of instructor.

Social Work 668

3 units (crs.)

Social Welfare Policy

Examination of social welfare policy development, implementation, replacement, or modification and the social worker's role in these processes. Policy analysis is framed within the profession's ethical principle governing social justice with regard to issues of poverty, unemployment, discrimination and other issues of concern to the profession. Policy is viewed within the context of generalist practice and the social worker's role as policy advocate at all levels in our society. Prerequisite: Concurrent enrollment in Social Work 451. 468/668

SOCIAL WORK

Social Work 701 *3 units (crs.)*

Ethical Issues in Contemporary Social Work

This foundation course is designed to introduce MSW students to wide-ranging ethical issues that impact practitioners in various settings. Prerequisites: Concurrent enrollment in Soc Work 704; to be taken in the second semester of foundation field.

Social Work 702 *3 units (crs.)*

Generalist Social Work Practice I

This course promotes masters' level development of skills necessary to practice social work with diverse individuals and family groups. Prerequisites: This course will be taken concurrently with Soc Work 707, Soc Work 703, and Soc Work 709.

Social Work 703 *1 unit (cr.)*

Skills Lab w Individuals, Families, and Small Groups

This skills lab introduces students to a range of skills required for effective practice with individuals, families, and small groups. Prerequisites: Concurrent registration in Soc Work 702

Social Work 704 *3 units (crs.)*

Generalist Social Work Practice II

This course promotes masters' level development of skills necessary to practice social work with diverse groups and within organizations and communities. Prerequisites: Concurrent registration with Soc Work 705.

Social Work 705 *1 unit (cr.)*

Skills Lab with Large Groups and Communication

This skills lab introduces students to a range of skills required for effective practice with various professional and community groups, with organizations, and with communities. Prerequisites: Concurrent registration in Soc Work 704.

Social Work 706 *3 units (crs.)*

Social Welfare Institutions

This course examines the origin and change of American social welfare arrangements to meet human needs. It traces the evolution of the social work profession and social welfare efforts in relation to major economic, social, and political forces defining populations at risk and the nature of social and economic justice in the U.S. This course prepares students for the study of social welfare policy that is informed by its past. Prerequisites: Students enroll in this course during their first semester in the MSW program.

Social Work 707 *3 units (crs.)*

Human Behavior in the Social Environment

Integration of theories and models examining the complexity of person/environment functioning with respect to individuals, families, small groups, organizations, and communities. Using an ecologically based approach, the biological, culturally diverse, psychological and social influences of human choices, behavior and functioning are

examined. This approach prepares the graduate student with a theoretical foundation for multi-level understanding of client systems. Prerequisites: Must be taken in the first semester of the MSW Program. This course is taken conjointly with the first Generalist Practice course (Soc Work 702) as well as their first field placement (Soc Work 709).

Social Work 708 *3 units (crs.)*

Social Welfare Policy: Contemporary Approaches

In this course, students evaluate contemporary social policies affecting poor and disenfranchised groups in the U.S. Students are introduced to the processes of policy development and policy change.

Social Work 709 *4 units (crs.)*

Field I: Foundation Social Work Field Practicum

Supervised social work practicum experience in a human service agency setting. Prerequisites: Generalist practice and skills courses must be taken concurrently with Soc Work 709, Field I, and Soc Work 710, Field II.

Social Work 710 *4 units (crs.)*

Field II: Foundation Social Work Field Practicum

Supervised social work practicum experience in a human service agency setting. Prerequisites: Generalist practice and skills courses must be taken concurrently with Soc Work 709, Field I, and Soc Work 710, Field II.

Social Work 720 *3 units (crs.)*

Practice Competence in a diverse Community

Social Work advanced practice course on working with diverse groups and communities. Prerequisites: Completion of foundation requirements OR advanced standing.

Social Work 721 *3 units (crs.)*

Multi-Level Family Intervention

Advanced social work practice techniques for direct practice students working with families of many types and in varied settings. Prerequisites: Completion of Soc Work 720 and 731; concurrent registration in Soc Work 729.

Social Work 722 *3 units (crs.)*

Social Work Management & Supervision in the Social Services

Advanced social work practice of management and supervision methods for students working in management positions at any level in social service agencies. Prerequisites: Completion of Soc Work 720 and 731; concurrent registration in Soc Work 729

Social Work 728 *3 units (crs.)*

Advanced Social Welfare Policy Analysis

This course uses an analytical framework for analyzing social welfare policy to examine particular practice concerns. Particular attention is paid to rural/urban

SOCIAL WORK

differences and to diversity issues. Prerequisites: Completion of social work foundation coursework.

Social Work 729 *4 units (crs.)*
Field III: Advanced Social Work Field Practicum & Integrative Seminar

Supervised social work practicum experience in a human service agency setting. Prerequisites: Completion of Social Work 720. Concurrent enrollment in Soc Work 721 OR Soc Work 722.

Social Work 731 *3 units (crs.)*
Advanced Research Applications in Social Work Practice

Advanced research course that prepares students to evaluate their own practice and to carry out independent research projects. Prerequisites: Completion of Foundation Curriculum; taken in semester prior to Field III.

Social Work 732 *1 unit (cr.)*
Field Research Project

Students learn how to conduct evaluation research by carrying out a project in their field unit, Field IV. Prerequisites: Concurrent registration in Social Work 733.

Social Work 733 *4 units (crs.)*
Field IV: Advanced Social Work Field Practicum + Integrative Seminar

Supervised social work practicum experience in a human service agency setting. Prerequisites: Completion of Social Work 720, 721 OR Social Work 722 and 729.

Social Work 735 *3 units (crs.)*
Emerging Issues in Child Welfare

Advanced standing elective course considering major new issues in child welfare practice, administration, funding and research. Prerequisites: Completion of foundation curriculum or consent of instructor.

Social Work 795 *3 units (crs.)*
Special Topics

This course provides students opportunity to strengthen practice skills while working with clients or in agencies, focusing on mental health concerns, addictions or violence issues. Prerequisites: For advanced standing students who have completed the foundation curriculum.

ART

COLLEGE OF LETTERS AND SCIENCE

SERVICE COURSES

Graduate courses listed below are offered by the College of Letters and Science. These courses (numbered 500-799) may count towards a graduate degree with approval by the program advisor and the School of Graduate Studies.

ART

Gail Panske, Chair
Office: Arts & Communication 328
Telephone: 920-424-0492

I. FACULTY

Donhauser, Farley, Hu, Panske, Pontynen, Spicer

Art 510 *3 units (crs.)*

Art History, Ancient Art

Topics in ancient painting, sculpture, architecture, and allied arts.

Art 511 *3 units (crs.)*

Art History, Medieval Art

Topics in medieval painting, sculpture, and allied arts.

Art 513 *3 units (crs.)*

Art History, Italian Renaissance & Mannerist Art 15th & 16th

Selected topics in Italian Renaissance painting, sculpture, architecture and allied arts.

Art 514 *3 units (crs.)*

Northern Renaissance Art

This course will explore art and culture in Northern Europe (primarily the Netherlands and Germany) between 1300 and 1700. While concentrating on the visual arts (primarily painting, sculpture and the graphic arts), the course will also include a broader investigation of the arts of the Renaissance in the relation to contemporary, literature, politics, religion, society and patronage. The course will closely examine the works of the great artists of the Renaissance period in the North--Jan van Eyck, Hieronymus Bosch, Albrecht Durer, Hans Holbein the Younger and Pieter Bruegel the elder and their contemporaries--in the context of their lives and environment. Prerequisites: Art 109, Art 110; or permission of instructor.

Art 515 *3 units (crs.)*

Art History, European Baroque and Rococo Art, Seventeenth and Eighteenth Centuries

Topics in Seventeenth and Eighteenth century painting, sculpture, architecture, and allied arts. 315/515

Art 517 *3 units (crs.)*

Art History, Art of India, China and Japan

Historical development of the indigenous and religious arts of India, China, and Japan. 317/517

Art 520 *3 units (crs.)*

Art History, European Art, Nineteenth Century

Selected topics in Nineteenth century painting, sculpture, architecture and allied arts. 320/520.

Art 521 *3 units (crs.)*

Art History, Modern

Selected topics in modern painting, sculpture, architecture and allied arts. 321/521.

Art 522 *3 units (crs.)*

Art History, Contemporary

Selected topics in contemporary painting, sculpture, architecture, and allied arts. 322/522

Art 523 *3 units (crs.)*

Art History, American Art

Selected topics in American painting, sculpture, architecture, and allied arts.

Art 548 *3 units (crs.)*

Puppetry

Puppetry: its history, theory, modern theatrical and non-theatrical applications. Practical experiences in construction and performance. 348/548 (2+2)

Art 604 *3 units (crs.)*

Advanced Problems in Drawing

Emphasis either on drawing as an independent medium for expression or as a mode of exploring formal problems common to another visual medium. This course may be repeated for credit as needed. Prerequisite: Art 304 or proficiency as determined by portfolio. 404/604.

Art 634 *3 units (crs.)*

Figure Drawing III

Continuation of students personal expression, using the human figure as a subject. Prerequisite: Art 334 or proficiency determined by portfolio. May be repeated for credit as needed. 434/634.

Art 641 *3 units (crs.)*

Watercolor III

Emphasis on the development of the students personal

style and expression in the medium of water color. This course may be repeated for credit as needed. Prerequisite: Art 341 or proficiency determined by portfolio. 441/641.

Art 645 *3 units (crs.)*
Photography III

An extended photographic project with critiques and investigation of photographic literature. This course may be repeated for credit as needed. Prerequisite: Art 345 or proficiency determined by portfolio. 445/645.

Art 647 *3 units (crs.)*
Weaving III

Individual exploration and development of woven textiles. This course may be repeated for credit as needed. Prerequisite: Art 347 or proficiency determined by portfolio. 447/647.

Art 659 *3 units (crs.)*
Lithography III

Advanced work in graphics-lithography. This course may be repeated for credit as needed. Prerequisite: Art 359 or proficiency determined by portfolio. 459/659.

Art 660 *3 units (crs.)*
Intaglio III

Advanced work in graphics-etching. This course may be repeated for credit as needed. Prerequisite: Art 360 or proficiency determined by portfolio. 460/660.

Art 661 *3 units (crs.)*
Woodcut III

Advanced work in graphics-woodcut. This course may be repeated for credit as needed. Prerequisite: Art 361 or proficiency determined by portfolio. 461/661.

Art 662 *3 units (crs.)*
Serigraphy III

Developmental continuation of the techniques and expressive potential of serigraphy. Emphasis will be placed upon individual development of artistic expression. Prerequisite: Art 362 or proficiency-determined by portfolio. May be repeated for credit as needed. 462/662.

Art 663 *3 units (crs.)*
Art Metal III

Course designed to give the student experience in advanced art metal construction, casting and metalsmithing techniques and to reinforce design and craftsmanship. Prerequisite: Art 363 or proficiency determined by portfolio. May be repeated for credit as needed. 463/663.

Art 667 *3 units (crs.)*
Sculpture III

Continued concern with design and craftsmanship. More individual direction will be provided. Prerequisite: Art 367

or proficiency determined by portfolio. May be repeated for credit as needed. 467/667.

Art 671 *3 units (crs.)*
Ceramics III

Student is expected to foster a more individual approach toward form and to develop a personal philosophy in regard to the total ceramic process, especially in the area of glaze chemistry forming methods, kiln building, firing and ceramic history. Prerequisite: Art 371 or proficiency determined by portfolio. May be repeated for credit as needed. 471/671.

Art 675 *3 units (crs.)*
Painting III

Continued development of the students personal style and expression in the medium of oil base and acrylic painting. Prerequisite: Art 375 or proficiency determined by portfolio. May be repeated for credit as needed. 475/675.

Art 701 *3 units (crs.)*
Historical and Philosophical Concepts of Art

This is designed for those students with little or no background in art. The course is an investigation of thematic, chronological, and philosophical approaches to the visual arts.

Art 734 *3 units (crs.)*
Figure Drawing

Advanced problems in figure drawing. Individual investigation of the figure as the basis for personal expression in drawing media. Prerequisite: Art 434 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 741 *3 units (crs.)*
Watercolor

Advanced problems in watercolor painting; development of compositional abilities and critical understanding. Prerequisite: Art 441 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 745 *3 units (crs.)*
Photography

Individual work in one area selected from: the history of photography; philosophical foundations for the use of photography as an art form; experimental research in the use of photo-chemical processes as an art form. Prerequisite: Art 445 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 747 *3 units (crs.)*
Weaving

Concentration in fiber techniques to develop professional competence in relation to students interest and needs. Prerequisite: Art 447 or proficiency determined by portfolio. May be repeated for credit as needed.

ART

Art 759 3 units (crs.)

Graphics, Lithography

Individual work in the planographic process towards achieving professional competence. Prerequisite: Art 459 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 760 3 units (crs.)

Graphics, Intaglio

Individual work in the etching process towards achieving professional competence. Prerequisite: Art 460 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 761 3 units (crs.)

Graphics, Woodcut

Individual work in the woodcut process towards achieving professional competence. Prerequisite: Art 461 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 762 3 units (crs.)

Graphics III, Serigraphy

Developmental continuation of the techniques and expressive potential of serigraphy. Emphasis will be placed upon individual development of artistic expression. Prerequisite: Art 462 or proficiency-determined by portfolio. May be repeated for credit as needed.

Art 763 3 units (crs.)

Art Metal

Individual work in art metal to develop professional competence in relation to students needs and interest. Prerequisite: Art 463 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 767 3 units (crs.)

Sculpture

Advanced work in sculpture stressing individual development towards professional competence. Prerequisite: Art 467 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 771 3 units (crs.)

Ceramics

Personal exploration of various forming methods and materials, kiln construction and glaze formulation, research paper all leading toward professional competence. Prerequisite: Art 471 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 775 3 units (crs.)

Painting

Advanced work stressing the painters development as a creative artist. Consideration of the relation of theory and practice. Individual criticism. Prerequisite: Art 475 or proficiency determined by portfolio. May be repeated for credit as needed.

Art 791 3 units (crs.)

Art Seminar

A seminar which will introduce the student to the areas of potential research in the arts. The seminar includes directed readings, methods of conducting research, and the preparation of thesis, seminar paper, or exhibition catalog.

Art 793 1-3 units (crs.)

Seminar in Art

Investigation into theory, art history, or the technical processes of the artist. Area covered will be listed for semester offered.

Art 795 1-6 units (crs.)

Art Thesis

Prerequisite: Thesis proposal and Advisor Approval Form must be filed with the Graduate Office. Pass/Fail course.

Art 796 1-3 units (crs.)

Independent Study

Prerequisite: Independent Study and Advisor Approval Form must be filed with the Graduate Office. Pass/Fail course.

Art 799 0-0 units (crs.)

Registration for Comprehensive Examination

Pass/Fail courses.

CHEMISTRY

Charles P. Gibson, Chairperson
Office: Halsey Science Center 432
Telephone: 920-424-1400

I. FACULTY

Gibson, Gutow, Mihalick, Paulson, Plude, Wacholtz, Xie

Chemistry 503 *3 units (crs.)*

Biochemistry I: Clinical Emphases

This course is the first semester of the two-semester sequence (Chemistry 303/503 and Chemistry 305/505) for the Professional Emphasis Chemistry Major Biochemistry option. This course replaces Chemistry 301. It serves as a terminal course for Medical Technology majors, and those of other clinically oriented programs, when taken with the Chemistry 304/504 Laboratory. Topics include: amino acids, proteins, enzyme kinetics, bioenergetics, carbohydrates, lipids, hormones, vitamins, electrolytes, and xenobiotics. Clinical correlations will be presented which emphasize: biochemistry, pathophysiology, and quantification of body fluid constituents. Prerequisite: Chemistry 221 or Biology 372, Chemistry 335, or consent of the instructor. Graduate students are required to submit an additional paper. 303/503 (Fall)

Chemistry 504 *2 units (crs.)*

Biochemistry I: Clinical Emphases Laboratory

This laboratory is required for Medical Technology majors and is recommended for those in other clinically-oriented programs (e.g., premed., prevet.). Laboratory experiences are correlated to topics presented in Chemistry 303/503. (Note: Students electing the Biochemistry option may take the Chemistry 304/504 laboratory in addition to required Chemistry 306/506 laboratory.) Techniques include aspects of spectrophotometry, electrophoresis, chromatography, immunoassays, fluorescence, and computer applications. A significant amount of writing is expected. Some of the laboratory modules utilize a cooperative learning/small group approach to problem solving reminiscent of a clinical laboratory setting. Pre(co)requisite: Chemistry 303. (Qualified Biology or Microbiology majors may take Chemistry 304/504 without taking Chemistry 303/503 with the consent of the instructor.) 304/504 (Fall)

Chemistry 505 *3 units (crs.)*

Biochemistry II: Lecture

This course is the second semester of the two-semester sequence (Chemistry 303/503 and Chemistry 305/505) for the Professional Emphasis Chemistry Major Biochemistry option. This course replaces Chemistry 302/502. Topics focus on the more chemical aspects of: proteins, enzyme kinetics and mechanisms, bioenergetics, carbohydrates, and lipid chemistry presented in Chemistry 303/503. Students (e.g., Microbiology majors) with sufficient background may enroll without taking Chemistry 303/503, with consent of the instructor. Additional topics include: nucleic acid structure, conformation, repair, and

processing, and recombinant technology; protein translation; and regulation; and regulating of gene expression. The use of computer technology is expected. Graduate students are required to submit an additional paper. Prerequisite: Chemistry 221, 335 or consent of instructor. 305/505 (Spring)

Chemistry 506 *2 units (crs.)*

Biochemistry II: Laboratory

This laboratory is required for students electing the ACS Chemistry Major Professional Emphasis Biochemistry Option. Laboratory experiences are correlated to topics presented in Chemistry 305/505. (Note: biochemistry majors may take the Chemistry 304/504 laboratory in addition to required Chemistry 305/506 laboratory.) Techniques include: spectrophotometry, electrophoresis, chromatography, nuclear magnetic resonance, and computer modeling. A significant amount of writing is expected. Some of the laboratory modules utilize a cooperative learning approach to problem solving. Pre(co)requisite: Chemistry 305 or consent of instructor. (Qualified Biology or Microbiology majors may take Chemistry 304/504 without taking Chemistry 303/503, with the consent of the instructor.) 306/506 (Spring)

Chemistry 510 *1-3 units (crs.)*

Chemistry Workshop for K-12 Teachers

This course is intended to be a workshop in chemistry for K-12. The focus will be on activities to improve the effectiveness of the classroom teacher. The course does not apply to any graduate degree program at the University of Wisconsin Oshkosh.

Chemistry 523 *3 units (crs.)*

Analytical Separations

The principles and theoretical foundations, experimental variables, and applications of solvent extraction and the primary chromatographic techniques, including: column, liquid-liquid, ion exchange, paper, thin-layer, gas-liquid and other recent modern chromatographic methods. The laboratory will involve applications of the above to demonstrate the utility of the methods. To count as an elective towards the professional Chemistry major, credit or concurrent enrollment in Chemistry 347, and a special project, are required. Prerequisite: Chemistry 221 and 335. 323/523 (2+3)

Chemistry 535 *4 units (crs.)*

Organic Chemistry II

A continuation of Chemistry 235 which includes a discussion of alcohols, phenols, ethers, carbonyl-containing compounds, amines, anilines, carbohydrates and proteins. Particular emphasis is placed on the mechanistic and theoretical aspects of the various topics covered. Infrared, nuclear magnetic resonance, and mass spectroscopies are discussed in a qualitative manner. Laboratory includes advanced synthesis work and introductory, qualitative organic analysis emphasizing modern spectral techniques. Prerequisite: Chemistry 235 with a grade of C or better. 335/535 (3+3)

CHEMISTRY

Chemistry 536 1 unit (cr.)

Advanced Organic Laboratory

A continuation of the laboratory in Chemistry 335, which includes qualitative organic analysis, advanced synthesis and/or independent special projects. Prerequisite: Chemistry 335 with a grade of C or better. 336/536 (0+3)

Chemistry 547 3 units (crs.)

Physical Chemistry I

Fundamental principles of physical chemistry. Topics include ideal and real gases, kinetic theory, thermodynamics and thermochemistry, chemical equilibria, phase equilibria, properties of solutions and surface and colloid chemistry. Prerequisite: Mathematics 172, Chemistry 221 and 235, Physics 110 (may be taken concurrently). 347/547 (3+0) (Fall)

Chemistry 548 1 unit (cr.)

Physical Chemistry Laboratory I

Laboratory experiments designed to illustrate the material presented in Chemistry 347. Prerequisite: Chemistry 347 (may be taken concurrently). 348/548 (0+3) (Fall)

Chemistry 549 3 units (crs.)

Physical Chemistry II

A continuation of Chemistry 347. Topics include: electrochemistry, quantum chemistry, elementary statistical mechanics, atomic and molecular spectra, chemical kinetics, photochemistry and transport properties of liquids and gases. Prerequisite: Chemistry 347 and Mathematics 273. 349/549 (3+0) (Spring)

Chemistry 551 1 unit (cr.)

Physical Chemistry Laboratory II

Laboratory experiments designed to illustrate the material presented in Chemistry 347 and Chemistry 349. Prerequisite: Chemistry 349 (may be taken concurrently). 351/551 (0+3) (Spring)

Chemistry 560 1-3 units (crs.)

Special Topics

A chemistry course on a topic not covered in the department's curriculum. This course may be repeated with different content. Each time it is offered, the topic will be announced in the class schedule. This course will not offer topics which are covered by existing courses. Graduate students will be required to do an extra project or paper. Prerequisites: Consent of instructor. 360/560

Chemistry 621 3 units (crs.)

Instrumental Analysis

Theory and application of instrumentation to chemical analysis. Discussion of system constraints used for measurement, instrument design, constraints, and chemical applications; electronics, spectroscopic methods including UV-visible, infrared, flame, and magnetic resonance; and electrochemical methods including potentiometry, polarography, amperometry, coulometry and modern electroanalytical procedures. Laboratory to stress instrumental determination of physical constants, methods comparison and quantitative determination system species using the above. Prerequisite: Chemistry 221 and 349. Credit may not be obtained in both Chemistry 320 and 421/621. 421/621 (2+3) (Fall)

Chemistry 635 3 units (crs.)

Interpretive Spectroscopy

The application of spectral methods to the characterization of the structure of inorganic and organic compounds will be presented. Specific topics will include infrared, Raman, ultraviolet and nuclear magnetic resonance spectroscopies and mass spectrometry. The laboratory will involve the use of these techniques to identify the structure of unknown samples. Prerequisite: Chemistry 347 (may be taken concurrently). 435/635 (2+3)

Chemistry 652 3 units (crs.)

Polymer Science

An introduction to the study of the chemistry of macromolecules including: polymerization reactions and kinetics, physical and chemical characterization methods, and the relationship between chemical and mechanical properties. Prerequisite: Chemistry 349/549. 452/652 (2+3)

Chemistry 661 3 units (crs.)

Inorganic Chemistry

Major topics are group theory; atomic and electronic structure; coordination chemistry, including comparison and discussion of current bonding theories; applicability of several types of spectroscopy to inorganic chemistry; introduction to organometallic chemistry. Prerequisite: Chemistry 335 and 349 (may be taken concurrently). 461/661 (3+0) (Fall)

Chemistry 663 1 unit (cr.)

Inorganic Laboratory

Techniques and syntheses emphasized. Includes reaction chemistry and mechanisms of main group and transition metal compounds. Preparation of coordination complexes and organometallic compounds by inert atmosphere, high temperature, non-aqueous and vacuum techniques, and their isolation and characterization. Prerequisite: Chemistry 461. 463/663 (0+3)

COMMUNICATION

Kay Neal, Chairperson
Office: Arts and Communication S106
Telephone: 920-424-4427

I. FACULTY

Benson, Hoglund, Palmeri, Thorpe

NOTE: The graduate program in Speech and Hearing Science (Communicative Disorders) is no longer available.

Communication 517 3 units (crs.) **Speech Criticism**

Classical and modern criteria of speech criticism with emphasis on the description, analysis and evaluation of speech performance. Prerequisite: Communication 111. 427/627

Communication 537 3 units (crs.) **Foundations of Speech Communication Theory**

A chronological survey of the major rhetorical treatises of Greece and Rome. A concentration on the rhetorical doctrines of Isocrates, Plato, Aristotle, Longinus, Cicero, Quintilian. Fundamental to all subsequent rhetorical theory. 337/537

Communication 539 3 units (crs.) **Sign Language ****

Introduction to basic sign language methods and their application for use with a hearing impaired population. Prerequisites: Communication 383 (Audiometry). 339/539

Communication 589 3 units (crs.) **Creative Drama**

Study of the creative processes by which children, under the guidance of an adult leader, are engaged in an improvised, non-exhibitional form of drama. 389/589

Communication 622 3 units (crs.) **History of American Public Address**

The course will consist of an analysis of congressional, religious, juridical, educational and industrial speakers and speeches. 422/622

Communication 623 3 units (crs.) **History of British Public Address**

The course will consist of an analysis of parliamentary, religious, juridical, educational and industrial speakers and speeches. 423/623

Communication 627 3 units (crs.) **Speech Criticism**

Classical and modern criteria of speech criticism with emphasis on the description, analysis and evaluation of speech performance. Prerequisite: Communication 111. 427/627

Communication 643 3 units (crs.) **Organizational Communication**

The course deals with the basic content of organizational communication: theory of communication, small groups, interpersonal communication, conflict, communication variables. Attempts to draw the link between the theoretical perspective and the pragmatic application of the topic. 443/643

Communication 663 1-3 units (crs.) **Play Production Seminar**

Focus on specialized problems in directing, design, technical theatre and stage management. May be repeated three times for up to 12 credits provided the topic varies. 463/663

Communication 703 3 units (crs.) **Aphasia and Apraxia ****

This course addresses acquired aphasia and apraxia in adults and developmental verbal apraxia. Study topics include: anatomy and physiology of the central nervous system as they relate to acquired aphasia and apraxia; etiologies of aphasia and apraxia; aphasic syndromes; the relationship between acquired aphasia and apraxia; assessment procedures and treatment strategies. Prerequisites: Graduate standing in Speech and Hearing Science and consent of instructor.

Communication 704 3 units (crs.) **Adolescent Language Disorders ****

This course examines communication development and disorders in the middle school/high school age student. Emphasis is placed on the impact of a communication disorder at this age level and therapeutic and educational assessment procedures/instruments, service delivery models, and intervention strategies. Prerequisites: majors - Communication 358/558 and Communication 354; non-majors - Communication 324/524.

Communication 705 3 units (crs.) **Phonological Disorders ****

Study of the nature of and treatment for phonological disorders in pre-school, school age, and adult populations. Prerequisites: graduate standing and Communication 356.

Communication 720 3 units (crs.) **Craniofacial/Orofacial Deformities ****

This course addresses craniofacial and orofacial deformities and their consequent communication impairments. Emphasis is on cleft lip and palate, velopharyngeal incompetency, glossectomy, and orofacial alterations secondary to head and neck cancer. Prerequisite: Graduate standing in Speech and Hearing Science.

**** - The graduate program in Speech and Hearing Science (Communicative Disorders) is no longer available.**

COMMUNICATION

Communication 721 *3 units (crs.)*
Communication Impairments Secondary to Head Injury, Dementia and Right Hemisphere Damage **
This course addresses the communication impairments secondary to head injury, dementia, and right hemisphere brain damage and their differential diagnosis from aphasia. Assessment procedures, treatment strategies, and educational considerations (head injury) are presented. Prerequisite: Graduate standing in Speech and Hearing Science.

Communication 726 *3 units (crs.)*
Feeding and Swallowing: Normal and Disordered Processes **
This course addresses the normal processes of feeding and swallowing in children and adults and the ways in which these processes become impaired. Study topics include: anatomy and physiology of normal feeding and swallowing; disorders resulting from neuromotor dysfunction and structural deformities; developmental aspects of feeding and oral motor skills; assessment tools and treatment strategies. Prerequisites: Graduate standing in Speech and Hearing Science; Communication 779 or consent of instructor.

Communication 727 *3 units (crs.)*
Pediatric Aural Rehabilitation **
Clinical principles and procedures for selecting hearing aids and assistive listening devices in children, methods and approaches to auditory training and speech reading, and issues related to audiologic habilitation/rehabilitation.

Communication 728 *3 units (crs.)*
Research Methods in Speech and Hearing Science **
A study of the role of research in speech communication, appropriate methods of research, and proper writing of a research paper.

Communication 729 *3 units (crs.)*
Genetics and Communication Disorders **
Fundamentals of embryology of the organs of communication, basic genetics including Mendelian and non-Mendelian modes of inheritance, examination of pedigrees, risk calculation, meiosis and mitosis, chromosomal abnormalities and population genetics. Procedures for genetic screening, prenatal diagnosis and genetic counseling will be presented as they relate to communicative disorders. Genetic disorders which interfere with the communication process will be described and compared.

Communication 750 *3 units (crs.)*
Stuttering: Theories and Therapies **
Study and critical evaluation of the theoretical and therapeutic approaches to the stuttering syndrome. Courses content to include identification of the syndrome, assessment, and intervention approaches for children and adults who display dysfluent speech patterns. Clinical observation required. Prerequisites: Graduate standing, Communication 255.

Communication 751 *1-3 units (crs.)*
Seminar in Speech - Children Language Disorders **
Readings in Speech Pathology in special topics. (Repeatable to a total of 12 credits). Prerequisite: Graduate standing. (1+0) (1+2) (2+2)

Communication 752 *1-3 units (crs.)*
Seminar in Speech and Hearing Science - Theories Hearing **
Readings in Speech and Hearing Science in special topics. (Repeatable to a total of 12 credits). Prerequisite: graduate standing. (1+0) (1+2) (2+2)

Communication 753 *3 units (crs.)*
Methods and Procedures in Speech and Hearing Programs **
Study of the assessment and remediation of communicative disorders in varied work settings, including schools, public and private agencies and private practice. Considers structural organization, regulations, funding, legal aspects, quality assurance, professional associations, interdisciplinary aspects. Required for Wisconsin State certification as public school speech/hearing therapist.

Communication 754 *1 unit (cr.)*
Basic Clinical Study in Audiology **
Supervised experience in the identification, assessment and management of hearing impairments in patients with hearing impairments. Students must earn 3 credits in Clinical Practice. Minimum B grade required for enrollment in next level practicum. Prerequisites: graduate standing and consent of instructor. (0+2)

Communication 755 *1 unit (cr.)*
Intermediate Clinical Study in Audiology **
Supervised experiences with speech and/or hearing impaired clientele. Student must earn 3 credits in Clinical Practice. Minimum B grade required for enrollment in next level practicum. Prerequisites: Graduate standing and consent of instructor. (0+2)

Communication 756 *1 unit (cr.)*
Advanced Clinical Study in Audiology **
Supervised experiences with speech and/or hearing impaired clientele. Student must earn 3 credits in Clinical Practice. Minimum B grade required for externship placement practicum. Prerequisites: Graduate standing and consent of instructor. (0+2)

** - The graduate program in Speech and Hearing Science (Communicative Disorders) is no longer available.

COMMUNICATION

Communication 760 *1 unit (cr.)*
Supplementary Clinical Practice **
Supervised Clinical Practice with various types of communicative disorders for Speech and Hearing graduate students wishing to accumulate practicum experiences and clock hours beyond those obtained in Communication 754, Communication 755, Communication 756. Repeatable. Credits cannot be applied toward graduation. (0+2)

Communication 763 *1-3 units (crs.)*
Externship in Audiology **
Assignments in various external Audiology settings (hospitals, clinics, private practicums, etc.) wherein the student, under supervision, provides diagnostic and/or therapeutic services data and paper. Repeatable.

Communication 764 *1 unit (cr.)*
Basic Clinical Study in Speech-Language Pathology **
Supervised experience with speech or hearing impaired clientele. Students will provide clinical services with maximal supervision. Prerequisites: Graduate standing; completion of undergraduate major in Communicative Disorders or equivalent with a B average. Minimum B grade required for enrollment in next level practicum.

Communication 766 *1 unit (cr.)*
Intermediate Clinical Study in Speech-Language Pathology **
Supervised experience with speech or hearing impaired clientele. Students are expected to treat a greater number of clients and clients with more complex impairments than in Communication 764. A moderate amount of supervision is provided. Students are expected to assume responsibility for planning therapy sessions. Prerequisite: Graduate standing; minimum B grade required for enrollment in next level practicum. Completion of Communication 764 or its equivalent.

Communication 767 *1 unit (cr.)*
Advanced Clinical Study in Speech-Language Pathology **
Supervised experience with speech or hearing impaired clientele. Students are expected to treat a variety of communication disorders and independently design an affective course of treatment. Minimum supervision is provided. Prerequisite: graduate standing; minimum B grade required for enrollment in externship placement. Completion of Communication 764 and Communication 766.

Communication 769 *1 unit (cr.)*
Special Issues in Clinical Practice - Speech-Language Pathology **
This course is designed for students who have completed the beginning, intermediate, and advanced clinical courses in speech-language pathology. It is designed to afford interested students additional clinical experience with specific populations of communicatively impaired individuals. The course will consist of directed readings by faculty as well as clinical exposure to clinic types reflecting

the student's particular area of interest. Prerequisites: Graduate standing; instructor approval; and completion of Communication 764, Communication 766, and Communication 767.

Communication 770 *3 units (crs.)*
High Risk Infant **
The high risk infant is an infant who presents a greater than normal chance of displaying developmental delay. The most frequently reported sequelae of high risk infants is an impairment in speech and language development. The developmental outcome of high risk infants/toddlers during the preschool age years will be presented. Assessment and intervention strategies emphasizing communication skills will be outlined. Parental and family concerns and models of service delivery for this population will be presented.

Communication 773 *3 units (crs.)*
Disorders of the Auditory System **
An overview of the prevalence, etiological considerations, audiologic manifestations, and medical management of hearing disorders affecting the auditory system of children and adults.

Communication 774 *3 units (crs.)*
Application of Hearing Aid Principles for Speech-Language Pathologists **
Principles of hearing aid and FM system function. Procedures for troubleshooting and maintenance of hearing aids and FM systems. Procedures for selection and evaluation of FM Systems, hearing aids and assistive listening devices in children and adults. Strategies and guidelines for optimal functioning of hearing impaired children in a classroom environment and hearing impaired adults in extended care facilities. Prerequisite: Graduate standing and consent of instructor.

Communication 775 *2-5 units (crs.)*
Externship in Speech-Language Pathology **
Placements are arranged for students in various off-campus speech-language pathology settings (e.g., hospital, clinic, private practice). Requirements for the student include planning and implementing diagnostic and/or intervention procedures, data collection and analysis, and report writing. Additional responsibilities (e.g., participation in staff meetings, outside readings) may be required by the on-site supervising speech-language pathologist. Enrollment in this course is repeatable up to a total of five credits. Coordinator permission needed for enrollment.

Communication 778 *1-3 units (crs.)*
Diagnostic Theory and Procedures in Speech-Language Pathology **
Study of theories and practices relating to diagnosis of speech and language disorders of children and adults.

** - *The graduate program in Speech and Hearing Science (Communicative Disorders) is no longer available.*

COMMUNICATION

Communication 779 3 units (crs.)

Neurogenic Motor Disorders **

This course addresses the types and characteristics of motor speech disorder secondary to neurologic dysfunction together with their assessment and treatment. Topics include: neuromotor systems subserving speech/voice mechanisms; etiologies and types of dysarthrias; characteristics of cerebral palsy and its relationship to dysarthria; augmentative/ alternative communication systems. Prerequisites: Graduate standing in Speech and Hearing Science and consent of instructor.

Communication 780 3 units (crs.)

Advanced Child Language Disorders **

Study of theories and practices of description, assessment, remediation and academic implications of language disorders in preschool, grade school and adolescent children.

Communication 781 1-3 units (crs.)

Voice Disorders **

This course addresses the voice disorders seen in children and adults. Study topics include: anatomy and physiology of the vocal mechanism; developmental aspects of the vocal mechanism; voice and aging; dysphonias resulting from neurogenic, structural (laryngectomy), hyperfunctional and/or psychogenic etiologies; assessment procedures and treatment strategies. Prerequisites: Graduate standing in Speech and Hearing Science; Communication 356 or equivalent.

Communication 782 4 units (crs.)

Fundamentals of Hearing Aids **

Theory of hearing aid function and acoustics of hearing aid-ear canal coupling systems. Principles and procedures for selection and evaluation of hearing aid systems. Principles and procedures for modification of hearing aid system. Procedures for troubleshooting hearing aids. Selection and evaluation of assistive listening devices. (3+2)

Communication 783 3 units (crs.)

Electrophysiologic Evaluation of the Auditory and Vestibular System **

The course deals with neurophysiological assessment of the auditory system including Immittance, Brain Stem Evoked Response, Otoacoustic Emissions and Electronystagmography.

Communication 784 3 units (crs.)

Pediatric Audiology **

An in-depth study of behavioral and neurophysiological assessment of the peripheral and central auditory systems in infants and children.

Communication 785 3 units (crs.)

Industrial Audiology **

Study of short and long term effects of noise exposure on hearing acuity, damage risk criteria standards, and hearing conservation measures.

Communication 786 1-3 units (crs.)

Seminar in Theories of Hearing **

The study of theories of hearing and their application to neurophysiological aspects of the auditory system.

Communication 788 1-3 units (crs.)

Seminar in Anatomy and Physiology **

The anatomy of the temporal bone and larynx with discussion of their functions. Students will prepare human specimens.

Communication 789 4 units (crs.)

Advanced Hear Aids **

Principles of signal processing for state-of-the-art hearing aid function. Circuit analysis of input and output compression. Procedures for selection and evaluation of non-linear and programmable AMP digital hearing aids. Principles and procedures for real-ear evaluation of hearing aid function. (3+2)

Communication 795 1-6 units (crs.)

Speech Thesis

Each registration with maximum accumulation of 6 cr. Registration for thesis credit for students in M.S. Speech and Hearing Science. Prerequisite: Thesis Proposal and Advisor Approval Form must be filed with the Graduate Office.

Communication 796 1-3 units (crs.)

Independent Study in Speech

Each registration with maximum accumulation of 6 cr. Individualized study for advanced students in M.S. Speech and Hearing Science. Prerequisite: Independent Study Topic and Instructor Approval Form must be filed at or prior to registration.

Communication 799 0-0 units (crs.)

Registration for Comprehensive Examination **

Required registration for M.S. Speech and Hearing Science, in their final term. Pass/Fail course

** - The graduate program in Speech and Hearing Science (Communicative Disorders) is no longer available.

COMPUTER SCIENCE

Peter Worland, Chairperson
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I. FACULTY

Briscoe, Georgiev, Huen, Naps, Perrie, Worland, Yackel

Computer Science 571 *3 units (crs.)* **Computer Graphics**

An introduction to the mathematics, data structures, and algorithms used to create both 2D and 3D graphical output. 2D topics include viewing transformation, clipping, scan conversion, geometric transformations, hierarchical modeling and animation. 3D topics include projections, viewing systems, back face culling, polygon clipping, wireframe images, visible surface algorithms, Phong reflection model, Gouraud and Phong shading techniques, color dithering, color quantization. Ray tracing and Bezier patches. Prerequisite: Computer Science 271 with a grade of C or better and Mathematics 171 (or equivalent) with a grade of C or better. 371/571

Computer Science 591 *3 units (crs.)*

Data Communication and Computer Networks

An introductory course which covers the basic concepts in data communication and computer networks. Topics covered will include the nature of data communication, characteristics of computer networks, the ISO-OSI network protocol layers, error detection and correction codes, and network performance considerations. Prerequisite: Mathematics 122, Computer Science 251 and 271, each with a grade of C or better. 391/591

Computer Science 680 *3 units (crs.)*

Special Topics in Advanced Computer Science

A topic of current interest in computer science will be investigated by faculty and qualified students. In addition to lectures by faculty, the students will be responsible for research and presentation of selected aspects of the topic. The course may be repeated for credit if the topic is different and the student has the consent of department. Graduate students will be required to do an extra programming project or paper. Prerequisite: Computer Science 271 with a grade of C or better (for undergraduates only). 480/680

ECONOMICS

ECONOMICS

Nancy J. Burnett, Chairperson
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Telephone: 920-424-1441

I. FACULTY

Burnett, Grunloh, Gunderson, Haley, Hussain, Johnson,
Kovzik, McGee, Robson, Van Scyoc

Economics 521 *3 units (crs.)*

Labor Economics

Analysis of the economy's labor resource. Major topics include labor markets, economic security arrangements, the labor movement, and collective bargaining. Prerequisite: Economics 206, 208 or consent of instructor. 321/521

Economics 539 *3 units (crs.)*

Urban and Regional Economics and Policy

Location theory of economic activities; economics of urban places and regions; analysis of urban-regional problems and policies. Prerequisite: Economics 206 or 208, and Economics 207, or consent of instructor. 339/539

Economics 568 *3 units (crs.)*

Health Care Economics

A study of the economic structure and problems of health care in the United States. Emphasis on the delivery and pricing of health care and the development of programs to deal with the present 'Health Care Crisis.' Prerequisite: Economics 206, 208 or consent of instructor. 368/568

Economics 603 *3 units (crs.)*

Public Sector Economics

Economics of federal, state and local governments; analysis of the effects of expenditures, taxes and subsidies; intergovernmental fiscal relations; efficiency and decision-making in the public sector. Prerequisite: Economics 206 or 208 and Economics 207 with a grade of C or above or consent of instructor. 403/603

Economics 637 *1-3 units (crs.)*

Economic Education Workshop

A review of micro and macro economic principles and their application to current issues taught in part through the use of teaching strategies and curriculum materials developed for elementary and secondary teachers. Participants will develop learning outcome objectives, curriculum plans, and evaluation procedures appropriate for teaching economics at their grade level. 437/637

Economics 671 *3 units (crs.)*

Introduction to Mathematical Economics

The application of mathematical tools to economics with emphasis on the description and use of the tools; optimization under both certainty and uncertainty, decision making, model building and estimation. Prerequisite: Economics 206 or 208 and Economics 207 with a grade of C or better. 471/671

Economics 673 *3 units (crs.)*

Econometric Methods

An introduction to the statistical regression techniques widely used by researchers in Economics and Business Finance. Single and multiple regression of time-series and cross sectional data. Prerequisite: Economics 206 or 208 and Economics 207 or 209, Economics 210 with grade of C or better. 473/673

Economics 704 *1-3 units (crs.)*

Basic Economic Theory

An intense theoretical analysis of the market economy for graduate students. The course is composed of two segments: microeconomics of the market system, consumer theory, theory of the firm, market structure, and distribution theory; and macroeconomics of national income accounts, business cycles, monetary and fiscal policy, and international trade.

Economics 757 *1-3 units (crs.)*

Special Topics in Economic Education

This course examines specific topics of interest of faculty and K-12 teachers who are teaching economics in their classroom. The course may be repeated for credit only if the content is different. Each time it is offered, the topic will be announced and identified in informational materials. Prerequisite: Economics 637 or equivalent or consent of instructor.

GEOGRAPHY

Kazimierz Zaniewski, Chairperson
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I. FACULTY

Bowen, Burayidi, Coulibaly, Cross, Johnson, Zaniewski

Geography 516 *3 units (crs.)*

Ethnic Landscapes of America (ES)

An overview of the cultural landscapes which have shaped the United States. Particular emphasis will be placed upon the contributions of Native Americans and a variety of ethnic minority populations, examining the spatial distributions of these groups and their unique traditions in shaping their landscapes and contrasting their landscapes with that of the Anglo-Saxon majority. Prerequisite: One of the following courses: Geography 102, Geography 111, History 201, History 202. 316/516

Geography 538 *3 units (crs.)*

Russian Realm

A topical analysis of the countries of the former Soviet Union emphasizing the country's physical environment, agricultural and industrial activities, population, language, and political organization. Prerequisite: Geography 102. 338/538

Geography 553 *3 units (crs.)*

Subsaharan Africa

An analysis of the distribution and interrelation of the physical and cultural characteristics of Subsaharan Africa. Includes the study of the development, present conditions, and problems of particular regions and countries. Prerequisite: Geography 102. 353/553

Geography 563 *3 units (crs.)*

Biogeography

Examines the role and nature of biophysical processes and their significance to the spatial and temporal patterns at various scales. Topics include the investigating functional relationships between climate, soils, and vegetation, as well as introducing approaches to land systems analysis focussing upon ecosystems and other land system interactions. Prerequisite: Geography 121 or Biology and Microbiology 349. 363/563

Geography 571 *4 units (crs.)*

Cartography

An introduction to mapping: Historical development of mapping, map design, construction and lettering, topographic map analysis, representation of landforms, map projection and theory, coordinate systems, legal descriptions, techniques of data representation on base maps, and elements of map reproduction. 371/571 (3+2)

Geography 577 *3 units (crs.)*

Population and Environment

Examination of the relationship between population and environment, particularly the importance of demographic change in shaping the environment, forces that influence this relationship, theoretical perspectives used in the analysis of population-environment relationship, and how population dynamics affect various aspects of environmental change. The topics are studied from historical and global perspectives with comparisons of population-environmental change. The topics are studied from historical and global perspectives with comparisons of population-environmental links in various parts of the world and those in the United States. Prerequisites: Geography 102, 111 or 213; or Environmental Studies 211; or consent of instructor.

Geography 585 *3 units (crs.)*

Quantitative Methods in Geography and Environmental Sciences

Methods of gathering and analyzing data for the solution of geographic, regional planning and environmental problems. Emphasizes the application of spatial statistical techniques to a wide variety of geographical and environmental problems. Prerequisite: Mathematics 201 or Mathematics 301 with a grade of C or better. 385/585

Geography 591 *3 units (crs.)*

Computer Cartography

Application of microcomputer technology to the art and science of cartography. Lectures and labs emphasize thematic mapping, such as choropleth, dot, isarithmic and surface mapping; graphing; digital atlas production and multimedia oriented cartography (map animation). Prerequisite: Geography 371. 391/591 (2+2)

Geography 614 *3 units (crs.)*

Natural Resource Management

Examines techniques for the biophysical and socio-economic analysis of natural environments. The course will emphasize the variety of perspectives from which environmental management policies and modeling tools can be developed. Prerequisite: Geography 314. 414/614

Geography 619 *3 units (crs.)*

Natural Hazards and Disaster Planning

Examination of various atmospheric and geologic events which threaten human activities. The physical characteristics of the threats, human perceptions of the threats, and various hazard mitigation measures (including structural adjustments, land use planning, and evacuation preparations) will be studied. Prerequisite: 8 credits of Physical Geography or Geology. 419/619

Geography 651 *3 units (crs.)*

Advanced Topics in Human Geography

This course examines a specific topic in human geography of interest to faculty and students. The course may be repeated for credit only if the content is different. Each time it is offered, the topic will be announced in the

GEOGRAPHY

timetable. Prerequisites: Geography 102, Geography 111 and consent of instructor. 451/651

Geography 661 *3 units (crs.)*

Advanced Topics in Physical Geography

This course examines a specific topic in physical geography of interest to faculty and students. The course may be repeated for credit only if the content is different. Each time it is offered the topic will be announced in the timetable. Prerequisites: Geography 121, Geography 122 and consent of instructor. 461/661

Geography 671 *3 units (crs.)*

Geographic Information Systems

Introduction to Geographic Information Systems (GIS) and the utilization of spatial data for solving geographic problems. Both theoretical concepts of GIS technology and practical applications of GIS will be studied. Prerequisites: Geography 371 and either three (3) credits computer science or Geography 391. 471/671 (2+2)

Geography 672 *3 units (crs.)*

Advanced Geographic Information Systems

Continues the exploration of geographic systems beyond the material and topics covered in the introductory course. Topics include introductory level algorithm development, applications survey and readings, and student initiated GIS project design and execution. Prerequisite: Geography 471 or Geography 671. 472/672 (2+2)

GEOLOGY

GEOLOGY

William N. Mode, Chairperson
Office: Harrington 215
Telephone: 920-424-4460

I. FACULTY

Hiatt, Hudak, Lehrmann, Mode, Muldoon, Paulsen,
Wenner

Geology 506 *1 unit (cr.)*

X-Ray Mineralogy

Principles of X-ray diffraction and their application to mineral studies using powder methods. Prerequisite: Geology 205. 306/506 (0+2) (Fall-odd years)

Geology 507 *3 units (crs.)*

Optical Mineralogy

Theory and practice of mineral identification using the petrographic microscope. Prerequisite: Geology 206. 307/507 (2+3) (Fall-even years)

Geology 508 *3 units (crs.)*

Petrology

The character and origin of igneous and metamorphic rocks. Laboratory examination of thin sections of igneous and metamorphic rocks with a petrographic microscope. Prerequisite: Geology 307. 308/508 (2+3) (Spring-odd years)

Geology 511 *3 units (crs.)*

Stratigraphy and Basin Analysis

Application of stratigraphic concepts to the study of basin evolution and the genesis and architecture of sedimentary rock successions. Discussion of the tectonic evolution of basins, principles of stratigraphic correlation, interpretation of terrestrial and marine depositional systems. Laboratory experiments with outcrop event stratigraphy, stratigraphic modeling, and hydrocarbon systems. Laboratory experiments with outcrop sample suites, core and subsurface geophysical data sets. Field trips to describe and interpret local sedimentary rock succession. Prerequisite: Geology 206. 311/511 (2+2) (Spring-even years) (a writing emphasis course)

Geology 514 *3 units (crs.)*

Sedimentology

Analysis and interpretation of sediments and sedimentary rocks. Prerequisite: Geology 206. 314/514 (2+3) (Fall)

Geology 515 *1 unit (cr.)*

Sedimentary Petrology

Description, classification and interpretation of sedimentary rocks in hand specimen and thin section. Prerequisites: Geology 314. 315/515 (0+3) (Spring-odd years)

Geology 522 *3 units (crs.)*

Mineral Deposits

Principles that govern the accumulation of the metallic ores. Consideration of the geology of individual ore deposits. Field trips to several mining areas in the Lake Superior region may be required. Prerequisite: Geology 206. (3+0) 322/522 (Spring-even years)

Geology 526 *3 units (crs.)*

Geophysics & Geotectonics

Application of principles of physics to the study of the earth. Discussion of plate tectonics theory, and nature and distribution of regional scale tectonic features of the earth, such as mountain belts. Laboratory use of certain geophysical instruments, field trips, and problems involving reduction and interpretation of geophysical data. Prerequisites: Mathematics 108, Physics and Astronomy 110 or 108, Geology 102 or 110 or 150. Strongly recommended: Geology 331. 326/526 (2+3) (Spring-even years)

Geology 528 *3 units (crs.)*

Oceanography

Basic phenomena and conditions of the oceans, the development of the science of oceanography, the structure of the ocean basins, chemistry and physics of sea water, circulation of oceans, life in the sea and the deposits on the floor of the sea. Prerequisite: Eight units (crs) of lab science. 328/528 (Spring)

Geology 531 *3 units (crs.)*

Structural Geology & Tectonics

Introduction to principles of rock deformation, description and interpretation of geologic structures, and geotectonic processes. Laboratory exercises using methods for structural analysis. Field trip required. Prerequisites: Geology 102, 110 or 150, Mathematics 104 or 108. Strongly recommended: Geology 206, (2+2) (Spring)

Geology 535 *3 units (crs.)*

Glacial Geology

The origin, movement, and decay of glaciers; landforms developed by glaciers; the glacial succession and associated environmental changes; and the economic aspects of glaciation. One field trip required. Prerequisite: Geology 102 or Geology 110 or Geology 150. 335/535 (2 + 2) (Fall-odd years)

Geology 555 *3 units (crs.)*

Geology of Wisconsin

The Precambrian, Paleozoic and Pleistocene history of Wisconsin and surrounding area, emphasizing the nature and chronology of geological processes which have formed the rocks. Field trips to selected areas illustrate a variety of geological features. Prerequisite: Consent of instructor. 355/555 (As scheduled)

GEOLOGY

Geology 560 *1-3 units (crs.)* **Spring Field Trip**

Formal classroom study of an area of geologic interest followed by field study of the area. Study areas change from year to year, but have included the Florida reef tract, coastal North Carolina, the Catskills, the Grand Canyon, the Guadalupe Mountains, Big Bend National Park, the Gulf Coast, and central Coahuila, Mexico. A final examination follows the trip. May be taken for credit more than once. Special sections may be arranged to accommodate students with differing backgrounds in geology. Prerequisite: Consent of instructor. Contact instructor for information regarding special course fees. (1+2) (Spring)

Geology 565 *3 units (crs.)* **Physical Hydrogeology**

This course explores various aspects of the water cycle. Major topics include evaporation, precipitation, surface water hydrology, occurrence of soil moisture and groundwater, properties of aquifers, principles of groundwater flow, groundwater flow to wells, and the geologic settings of groundwater supplies. Laboratory exercises will familiarize students with sources of hydrologic data and with mathematical and graphical methods of analyzing those data to solve applied problems. Prerequisites: Geology 102, 110, or 150; Mathematics 108; or consent of instructor. (2+2) (Fall-odd years)

Geology 566 *3 units (crs.)* **Chemical Hydrogeology**

This course provides the background necessary to address groundwater contamination problems. Major topics include 1) the chemistry of natural waters and the important reactions affecting groundwater chemistry, 2) an introduction to the physical and chemical processes affecting solute transport, 3) the characteristics of common groundwater contaminants, and 4) methods of site characterizations and remediation. Laboratory sessions will be a mix of case studies, demonstrations, and exercises that will familiarize students with sources of hydrogeologic and hydrogeochemical data and with mathematical and graphical methods of analyzing those data to solved applied problems. Prerequisites: Geology 365/565 and Chemistry 106. 366/566 (2+2) (Spring-even years)

Geology 570 *2 units (crs.)* **Field Methods in Hydrogeology I**

This field course is designed to provide students with the range of field skills needed by the practicing hydrogeologist to characterize subsurface geology and aquifer properties. Topics to be covered include drilling methods, geophysical techniques, well installation, determination of groundwater flow direction, and aquifer testing. The course includes both a lecture component and an extensive field component. For each topic there will be an introductory lecture followed by a field exercise designed to give students experience with data collection and analysis. Field exercises will make use of the wells located on the University of Wisconsin Oshkosh campus; however, there

will also be field trips to off-campus locations some of which may require overnight stays. Prerequisites: Physical Hydrogeology (365/565) or consent of instructor. (Spring Interim-even years)

Geology 571 *1 unit (cr.)* **Field Methods in Hydrogeology II**

This field course is designed to provide students with the range of field skills needed by the practicing hydrogeologist. Topics to be covered include collection of water samples, characterization of natural water quality, and methods of characterizing the presence and extent of groundwater contamination. The course includes both a lecture component and an extensive field component. For each topic there will be an introductory lecture followed by a field exercise designed to give students experience with data collection and analysis. Field exercises will make use of the wells located on the University of Wisconsin Oshkosh campus; however, there will also be field trips to off-campus locations some of which may require overnight stays. Prerequisites: Chemical Hydrogeology (Geology 366/566) or consent of instructor. (Spring Interim-even years)

Geology 598 *1-3 units (crs.)* **Geology Workshop**

A workshop on special topics of interest to teachers. This course may be repeated for credit with different topics. Prerequisite: consent of instructor. The course credit does not apply to any graduate degree program at the University of Wisconsin Oshkosh. (As scheduled)

Geology 599 *3 units (crs.)* **Geology of Wisconsin - Field Course**

A multi-institutional, team-taught field trip throughout Wisconsin. The trip will provide an opportunity to study some of the exposures on which the geological history of Wisconsin has been interpreted. Undergraduates will take three exams: graduates will take the exams and do small mapping projects. Prerequisite: Geology 206 and consent of instructor. See instructor for special course fees. (0+6) (As scheduled)

Geology 660 *1-3 units (crs.)* **Topics in Geology**

The study of selected topics in geology. Topics may be of current interest or may expand on material covered in other courses. The topic will be announced in the timetable when the course is offered. The course may be repeated for credit only if the content is different. Prerequisites: Geology 206, consent of instructor, and a GPA in geology of 3.0 or higher. (3+0) (As scheduled)

HISTORY

HISTORY

Franca Barricelli, Chairperson
Office: Clow Faculty 325
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I. FACULTY

Barricelli, Earns, Kapelusz-Poppi, Kercher, Lowenstein,
Mouton, Rivers, Rutz

History 790

Special Topics

Selected topics in history.

3 units (crs.)

History 796

Independent Study

As defined in conjunction with instructor. Each registration with maximum accumulation of 6 credits. See independent study under Academic Policies for general course description, general prerequisites, and proper contract form requirements. Major in History.

1-3 units (crs.)

INTERDISCIPLINARY STUDIES

INTERDISCIPLINARY STUDIES

Office: COLS Dean's Office, N/E 101
Telephone: 920-424-1210

There is no formal Interdisciplinary Studies graduate program at this time. For information about the Workshop for Pre-College Teachers, contact the Science Outreach office at 920-424-0287. For information about the gerontology courses, contact the Social Work department at 920-424-1419.

Interdisciplinary Studies 501 *1-3 units (crs.)* **Workshop for Pre College Teachers**

This course will introduce participants to the relationship between science, mathematics, technology, and society. It will be taught as a series of independent modules, each intended to reinforce the idea that science literacy is critical to being able to assess current social issues. Possible topics will include future energy needs, debunking food advertisements, and evolution, creationism, and the selection of textbooks for classroom use. Participants will be expected to share ideas and design lesson plans in addition to meeting more traditional evaluation criteria. 301/501 (1+3)(+0+2)

Interdisciplinary Studies 566 *1-3 units (crs.)* **Service Learning Independent Study**

In this course students will engage in academically relevant service activities in the community under the supervision of an individual at the site and a member of the faculty or academic staff. Students will volunteer for a certain number of hours per week depending upon the number of credits they will receive. Students will also write reflective papers that connect their service experiences with relevant readings and insights from specific academic disciplines. Ideally students will coordinate this course with another course, but this is not required. Additional work is required for graduate credit. Prerequisite: Consent of instructor. Note: The general prerequisites for Independent Study/ Related Readings are waived for this course.

Interdisciplinary Studies 567 *1-3 units (crs.)* **Service Learning Independent Study**

In this course students will engage in academically relevant service activities in the community under the supervision of an individual at the site and a member of the faculty or academic staff. Students will volunteer for a certain number of hours per week depending upon the number of credits they will receive. Students will also write reflective papers that connect their service experiences with relevant readings and insights from specific academic disciplines. Ideally students will coordinate this course with another course, but this is not required. Additional work is required for graduate credit. Prerequisite: Consent of instructor. Note: The general prerequisites for Independent Study/ Related Readings are waived for this course. Pass/Fail course.

Interdisciplinary Studies 625 *3 units (crs.)*
Aging: Dimensions and Processes
Examination of the processes of aging in a variety of contexts. The social, cultural, biological, psychological, economic, political, and educational aspects of aging will be discussed with a view to developing a theoretical framework for understanding issues that affect the elderly. 425/625

Interdisciplinary Studies 626 *3 units (crs.)*
Aging: Needs, Services and Issues
Needs of the Aging. Issues related to the development and delivery of a variety of services for meeting the needs of the aging. 426/626

Interdisciplinary Studies 715 *3 units (crs.)*
Content Exploration in the Social Sciences
A graduate seminar relating to new research and content in the area of the Social Sciences (Economics, Geography, History, Political Science, Psychology, and Sociology). The theme of the course will vary frequently but will focus on current research, trends, problems and discoveries in these areas. The course may be taken repeatedly with different subtopics upon approval of Department Chair or Graduate Program Coordinator (as appropriate). Prerequisites: Minimum of 6 credits in one of the Social Science disciplines.

Interdisciplinary Studies 760 *3 units (crs.)*
Aging Policy
A graduate, seminar-type course designed to require limited on-campus activity. Will examine the contemporary societal values concerning the aging; relevant historical influences; current public policy; and roles played by administrative, legislative, and advocate organizations. Special emphasis on learning a framework for the study of public policy.

INTERNATIONAL STUDIES

Kenneth J. Grieb, Coordinator
Office: Polk 59
Telephone: 920-424-1291

I. FACULTY

Grieb

International Studies 508 *3 units (crs.)*
Revolution and Development

Analysis of socio-cultural diversity, economic underdevelopment, and political instability as problems in nation-building. Formulation of strategies to promote national integration and development. Case studies and role playing. Prerequisites: International Studies 205 and two courses from Economics 206, Economics 207 and Political Science 115, and at least 9 units (crs.) of upper division (300 or 400 level) courses from International Studies Course List 2, or consent of instructor. 308/508

International Studies 541 *3 units (crs.)*

Multinational Corporations in the International System

A study of the role of multinational corporations in the modern world economy, their operating methods, and the effect of these corporations on home and host countries. Particular emphasis will be placed on the role of such companies in the development process in the Third World, employing case studies and role playing to provide practical experiences. Prerequisites: Two courses from International Studies 205, Economics 206, 207 or Political Science 115, or consent of instructor. 341/541

International Studies 599 *1-3 units (crs.)*

Russian/East European Travel Seminar

Analysis of the culture and political, economic, and social institutions of Russia and/or its former republics and Eastern Bloc countries. Course includes two-week study tour to selected cities in Russia and/or former Soviet Republics and/or Eastern Europe. Prerequisites: Consent of instructor. Graduate standing and consent of appropriate Graduate Program Coordinator required for graduate credit. 399/599

MUSIC

MUSIC

Andrea Gullickson, Chairperson
Office: Arts and Communication N206
Telephone: 920-424-4224

I. FACULTY

Andrews, Atwell, Borgerding, Bahcall, Chaudoir, Chapman, Cowley, Fournier, Gainacopulos, Gullickson, Hassel, Hoffmeister, Isaacson, Liske, Matos, McWilliams, Watanabe

Music 549 *2 units (crs.)*

Early Music Ensemble

A small ensemble of medieval and Renaissance instruments and voices performing music of these periods; open to all University students who qualify by audition. 349/549

Music 605 *2-4 units (crs.)*

Topics in Music History

Studies in selected topics in style, genre, aesthetics, and cultural contexts from the history of Western music. Prerequisite: Music 207.

Music 611 *1 unit (cr.)*

University Opera Theatre

A study of opera materials and methods of production, culminating in an actual production of scenes or an opera each semester. Open to all University students who qualify by audition. Prerequisite: Junior standing. 311/611

Music 621 *1 unit (cr.)*

University Wind Ensemble

Open to all students on campus who qualify through audition. The ensemble gives a minimum of one concert performance each semester. Prerequisite: Junior standing. 321/621

Music 631 *1 unit (cr.)*

University Choir

Open to all students on campus who qualify through audition. The ensemble gives a minimum of one concert performance each semester. Prerequisite: Junior standing. 331/631

Music 633 *1 unit (cr.)*

Chamber Choir

An ensemble for performance of chamber choral literature. Open to all University students who qualify by audition. 333/633

Music 641 *1 unit (cr.)*

University Symphony

Open to all students on campus who qualify through audition. The group gives a minimum of one concert performance each semester. Prerequisite: Junior standing. 341/641

Music 676 *2 units (crs.)*

Piano Literature

A survey of piano literature required of all BM piano majors, and an elective for all music majors. Prerequisite: Music 205 and 207. 476/676

Music 677 *2 units (crs.)*

Piano Literature

A survey of piano literature required of all BM piano majors, and an elective for all music majors. Prerequisite: Music 205 and 207. 477/677

Music 685 *2 units (crs.)*

Vocal Pedagogy

Basic principles of vocal pedagogy for the voice emphasis student. Course includes a study of historical and contemporary concepts of vocal instruction; study of anatomy, structure, and terminology of the vocal instrument; vocal health; and practical application of methodology within the context of private and classroom vocal instruction. Required for Bachelor of Music-Vocal Performance majors and Bachelor of Music Education-Choral majors. Prerequisite: Music 381 status or consent of instructor. 485/685

Music 701 *3 units (crs.)*

Music in Contemporary Culture

Selected masterpieces representing the various cultures which are part of our musical heritage. (A foundation course, not open to students with 12 or more undergraduate credits in music.)

Music 746 *1-2 units (crs.)*

Advanced Applied Music

Individual instruction at the graduate level is offered to qualified students on the following instruments: Brass, Keyboard, Percussion, Strings, Voice, Woodwinds.

Music 777 *2 units (crs.)*

Advanced Percussion Section Methods

Advanced Percussion Methods will update the music educator in performance and ensemble pedagogical techniques for the percussion section in band, orchestra, and percussion ensemble settings. Advanced performance problems such as found in the music of the Wisconsin School Music Association (WSMA) Festival list, in representative middle and high school performance repertoire, and those expressed by the students based on their teaching experience will be explored. Prerequisite: Degree in music education/music, instrumental music certification. Instrumental music teaching experience is strongly recommended.

Music 796 *1-3 units (crs.)*

Independent Study in Music

Individualized study for advanced students in the MA Humanities with specialization in Music. Prerequisite: Independent Study Topic and Instructor Approval Form must be filed at or prior to registration. 1-3 cr. with maximum accumulation of 6 cr.

PHILOSOPHY

John R. Burr, Chairperson
Office: Polk 68
Telephone: 920-424-7312

I. FACULTY

Burr, Carlin, Cordero, Gilboa, Herzberg, Kyburg, Missner

Philosophy 531 *3 units (crs.)*

American Philosophy

A philosophical scrutiny of the development and cogency of some major American philosophies from the beginning of the twentieth century to the present. The interrelationships of these philosophies with American social and cultural life also will be examined. Prerequisite: Consent of instructor. 331/531

PHYSICAL EDUCATION AND HEALTH PROMOTION

PHYSICAL EDUCATION AND HEALTH PROMOTION

Dan Schmidt, Chairperson
Office: Kolf 125
Telephone: 920-424-1231

I. FACULTY

Gruememann, Hardt, Schmidt, Strough, Tipps, Weber

Physical Education 573 *3 units (crs.)* **Adapted Physical Education**

Adaptation of physical education activities based on the needs of students with disabilities. Attention to legislation, placement options and methods of teaching individuals with a variety of disabilities. Prerequisites: Phys Ed 348 and 375. 423/623 (3+1)

Physical Education 574 *2 units (crs.)* **Assessment and Prescription Techniques in Adapted Physical Education**

Theory and practice in assessment, prescription and programming for individuals with disabilities. Prerequisite: Phys Ed 373. 374/574

Physical Education 575 *2 units (crs.)* **Lifespan Motor Development**

Study of lifespan motor development from infancy through adulthood, including information on delayed development, psychological factors and the normal pattern of motor skill acquisition. Co-requisite: Phys Ed 348. 375/575 (2+0)

Physical Education 576 *2 units (crs.)* **Sports for Individuals With Disabilities**

Contemporary sports opportunities for individuals with disabilities, with application to teaching and transition planning. Prerequisite: Phys Ed 373

Physical Education 580 *2 units (crs.)* **Adapted Aquatics**

A course designed to provide the student with various alternatives in teaching techniques for beginning swimmers and the exceptional student. 380/580 (2+2)

Physical Education 622 *3 units (crs.)* **Physical Education for Individuals with Developmental Disabilities**

Class content considers research, instructional programs and techniques in physical education for developmentally disabled individuals, such as the mentally retarded, learning disabled, and emotionally (behaviorally) disordered. Prerequisite: Phys Ed 373

Physical Education 624 *3 units (crs.)* **Physical Education for Individuals with Chronic and Permanent Physical Disability**

Class content considers research, instructional programs and techniques in physical education for individuals with chronic and permanent physical disabilities based on indicators, limitations, and needs. Prerequisite: Phys Ed 373

Physical Education 682 *3 units (crs.)* **Practicum in Physical Education for Special Education**

Supervised field experience within programs of physical education for special education students. It must be taken in conjunction with Special Education 482/682 designed for special education teachers seeking an emphasis (track) and/or licensure for teaching physical education to special education students. 482/682

Physical Education 710 *3 units (crs.)* **Philosophical Basis for Physical Education**

Designed to promote understanding of the various philosophical bases for Physical Education. Philosophical concepts of physical education as a basis for the development of a personal philosophy which can be applied to public school experiences. Prerequisite: A previous course in the history and philosophy of physical education.

Physical Education 720 *3 units (crs.)* **Curriculum Planning in Physical Education**

Concepts, procedures and practices of curriculum planning as they apply to curriculum building in public school physical education.

Physical Education 730 *3 units (crs.)* **The Physiological Basis of the Conditioning Process**

Concepts selected from fields of physiology, kinesiology, psychology and sociology as they relate to physical education. Prerequisites: Previous coursework in kinesiology, physiology and anatomy.

Physical Education 735 *3 units (crs.)* **Comparative Physical Education**

Examination, comparison and analysis of dominant characteristics and development in physical education and sport in various countries of the world. Prerequisite: Physical Education minor.

Physical Education 750 *3 units (crs.)* **Current Perspectives in Physical Education and Sports**

Opportunities for advanced research and study of current issues in physical education and sport. Prerequisite: Physical Education minor.

PHYSICAL EDUCATION AND HEALTH PROMOTION

Physical Education 760 *3 units (crs.)*
Organization and Administration of Athletics and Physical Education
Philosophy and methodology of organizing and administering an efficient program of physical education and athletics within the total school curriculum. Policies and procedures necessary to carry out the program. Prerequisite: Physical Education minor.

Physical Education 770 *3 units (crs.)*
Assessing Human Behavior in Physical Education
Basic framework for using measurement techniques in physical education. Assessment as a functional part of teaching method in all domains of learning. Prerequisite: Physical Education minor

POLITICAL SCIENCE

POLITICAL SCIENCE

James Simmons, Chairperson
Office: Clow Faculty 415
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I. FACULTY

Ameringer, Bickford, Gruberg, Khan, King, Liu, Maher,
Siemers, Simmons,

Political Science 610

3 units (crs.)

Comparative Political Analysis

Theories and typology of political systems; analysis of comparable and unique structures and functions in Western, non-Western, modern and transitional political systems; selected cross cultural studies of parties, interest groups, ideologies, and institutions. Prerequisites: 9 credits in political science, or consent of instructor.
410/610

SOCIOLOGY

SOCIOLOGY

Gerard J. Grzyb, Chairperson
Office: Swart 317
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I. FACULTY

Grzyb, Martin, Remender, Smith, Stark, Wells

Sociology 513 *3 units (crs.)*
Rural Sociology
Groups and institutions in rural society. Changing relationships between country, town, and city in contemporary society. Prerequisite: Sociology 101. 313/513

Sociology 521 *3 units (crs.)*
Social Psychology
The relationship of the individual to others, social groups, and society. The development of personality and the self. Motivation, attitudes, communication, prejudice, and leadership. Prerequisite: Sociology 101. 321/521

Sociology 537 *3 units (crs.)*
Work, Industry, and Occupation
Social organization of work including history and variety of work experiences, relationship to other social institutions, impact of technology and megacorporations, discrimination, unemployment, future of work. 337/537

Sociology 539 *3 units (crs.)*
Sociology of the Family
The family as a social institution, variations in the family in different cultures and in different social levels and subcultures. Biological, economic, and social functions of the family. Effects of social change on the modern family. Prerequisite: Sociology 101 or consent of instructor. 339/539

Sociology 553 *3 units (crs.)*
Juvenile Delinquency
Varieties and extent of delinquency. Causal explanation and research findings. Programs for treatment of delinquents and prevention of delinquency. Prerequisite: Sociology 101. 353/553

Sociology 589 *3 units (crs.)*
Sociology of Education
Includes a consideration of formal and non-formal education. Social factors that influence what is learned. The process of learning in interaction with others is considered. Prerequisite: Sociology 101. 389/589

WOMEN'S STUDIES

WOMEN'S STUDIES

Helen M. Bannon, Director
Office: Arts/Communication 314
Telephone: 920-424-0892

I. FACULTY

Bannan, Cannon, Dingleline, Heider, Landry, Maguire,
Newson-Horst, Roberts, Shaffer

Women's Studies 550 *3 units (crs.)*

Women, Race and Class (ES)

Explores how women's lives are shaped by the intersections of the major socially-constructed systems of differentiation and power: race, class, gender and sexual orientation. Examines how women of color have shaped feminist thought and how all of us can participate together in feminist and anti-racism work. Prerequisite: Women's Studies 201 or consent of instructor.

Women's Studies 566 *1-3 units (crs.)*

Service Learning Field Study

In this course, students will apply their Women's Studies education in service activities in the community related to women's issues, under the supervision of an individual at the site and a member of the faculty or academic staff. Students will volunteer for a certain number of hours per week depending upon the number of credits they will receive. Students will also write reflective papers that connect their service experiences with relevant readings. Additional work is required for graduate credit. Prerequisites: Consent of the instructor and 6 hours of Women's Studies course credit. (NOTE: The general prerequisites for Independent Study/Related Readings are waived for this course.)

Women's Studies 595 *3 units (crs.)*

Special Topics

A course on a topic not normally covered in the curriculum. Each time it is offered, the topic will be announced in the timetable. May be repeated with different content.

NOTES

COLLEGE OF NURSING

NURSING

Rosemary K. Smith, Program Coordinator
Office: Nursing/Education 148E
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Website: www.uwosh.edu/con/Programs/Masters
E-mail: congrad@uwosh.edu

I. FACULTY

Berry, Brands, Chappy, DeDee, Huebscher, Hurlbut, Jambunathan, Knox, Lapp, Marnocha, Moss, Pope, Smith, Stewart, Udilis, Van Dongen, Wurzbach, Zachman

II. PURPOSE

The graduate program prepares professional nurses for advanced practice in primary health care as Family Nurse Practitioners & Adult Nurse Practitioners. It emphasizes theory, research, and clinical application in primary health care delivery. Students are prepared for doctoral study.

III. DEGREE

Completion of the program will lead to the degree: Master's of Science in Nursing (MSN).

IV. ADDITIONAL ADMISSIONS REQUIREMENTS/INFORMATION

In addition to the requirements of the School of Graduate Studies specified in the first section of this Bulletin, the Program has established the following policies and procedures for admission:

Grade Point Average

A grade point average of 3.00 in undergraduate studies is required.

Interview

Qualified applicants may be contacted to arrange for an interview.

Goal Statement

Applicant must submit a written statement of career goals and reason(s) for pursuing graduate study in this major. (Approximately 250 words).

Licensure/Certification

Applicants must hold licensure as a registered nurse in Wisconsin. Professional nursing practice experience is recommended.

References

Applicants must provide three reference letters from professional and/or work-related sources. At least one of the references should address the cognitive and writing ability of the applicant.

Undergraduate Course Work

Applicants must have earned a B or higher in a 3-unit (cr.) introductory statistics course including both descriptive and inferential statistics within 5 years of admission. Program applicants for advanced practice roles also must have earned a grade of B or higher in an acceptable health assessment course within 2 years of admission.

Undergraduate Major

The baccalaureate degree must have been earned from a National League for Nursing Accredited Commission (NLNAC) or Commission on Collegiate Nursing Education (CCNE) accredited baccalaureate program. Individual consideration may be given for graduates from non-accredited nursing programs if the institution is also regionally accredited.

Computer Competency

Students are expected to have experience with a word processing program, e-mail transmittal and retrieval (including attachments), and accessing the World Wide Web. Currently, the College of Nursing is using MS Office. Short courses are available locally through school and computer stores. Each student, once admitted, is given a campus e-mail account and 24-hour computer access is available on campus. Students with their own ISP accounts must apprise the graduate nursing program of any changes to the e-mail address. All official communication from the graduate nursing program to currently enrolled students is sent via e-mail.

Health and CPR Requirements and Caregiver Background Checks

Before starting clinical rotations, students must meet the health and CPR requirements of the College. Contact the graduate nursing office for a list of requirements. Caregiver background check area reviewed per Wisconsin State Statute.

V. SUMMARY

A. Structure

The program is comprised of courses that contribute to the primary health nursing specialty. The program requirements must be completed within a five-year period. The five-year period starts with the first course taken that counts toward the degree regardless of date of admission to the program

B. Academic Plans of Study

The following are the descriptions for the Nursing plan(s) of study:

Nursing - Family Nurse Practitioner

Nursing - Adult Health and Illness

GAP - Family Nurse Practitioner

C. Minimum Unit (Cr.) Requirements

The minimum unit (cr.) requirements for the Family Nurse Practitioner emphasis is 48 units (crs.); for the Adult Health and Illness emphasis, 40 units (crs.). The graduate program curriculum undergoes continuous quality improvement and therefore is in a dynamic state. Contact the graduate program office for information regarding specific minimum unit (cr.) requirements.

D. Admission to Candidacy

Students must satisfy the School of Graduate Studies requirements for advancement to candidacy stated in the first section of this Bulletin. In addition, they must have an interview with their academic advisor or chairperson. Students are required to identify a topic for their culminating project.

E. Audit/Guest Student/Special Student Policy

No audit allowed for Graduate Clinical Courses. Very limited audit status is allowed in Graduate Theory Courses for those students who have earned the Master of Science in Nursing (MSN) degree. For eligible students, audit status is open on a space available basis and with permission of the Graduate Program Director and the course professor. Guest students (i.e., admitted to a graduate program at another institution) will be allowed to enroll for Graduate Theory Courses. Permission must be solicited by written request to the Graduate Program Director and documentation of full standing admission must be provided. Permission will be granted on a space available basis. Credits earned while a guest student are intended for transfer credit. Should students be subsequently admitted into the UW Oshkosh graduate program, the 5 year completion time limit begins with the first course applicable to the MSN degree. Special Student classification will generally not be allowed. Exceptions may occur with graduate nursing courses taken off campus or with course offerings made available via distance learning technology.

VI. DEGREE REQUIREMENTS

Graduate Core Courses (14 credits):

Subject

Catalog #	Units (crs.)	Title
Nursing		
701	3	Research in Nursing
702	2	Health Care Systems Policy and Politics
703	2	Health Promotion in Advanced Practice Nursing
708	2	Primary Health Care Ethics
719	2	Theoretical Foundations of APN
793	3	Clinical Paper
	OR	
795	3	Nursing Thesis

APN Core Courses (11credits):

(For Advanced Practice Nursing Roles)

Nursing

700	3	Advanced Health Assessment
704	3	Pathophysiology for the Advanced Practice Nurse
709	3	Pharmacotherapeutics for the Advanced Practice Nurse
730	2	Clinical Practice Management

Specialty Core Courses

1. Family Nurse Practitioner Emphasis

Nursing

707	2	Epidemiology
716	2	Clinical Management I
717	3	Clinical Management II
718	3	Clinical Management III
722	2	Diversity Practicum

720	1	Pediatric Seminar for APN (Elective)
726	2	FNP Practicum I
727	4	FNP Practicum II
728	4	FNP Practicum III

2. Adult Health and Illness Emphasis

Nursing

754	2	Advanced Practice Nursing I
755	4	Advanced Practice Nursing II
756	4	Advanced Practice Nursing III
764	2	Adult Clinical Management and Pharmacology I
765	2	Adult Clinical Management and Pharmacology II
766	2	Adult Clinical Management and Pharmacology III

Electives

Students are expected to consult with the Program Director and/or their Academic Advisor in selecting elective courses.

Other Requirements

Completion of a culminating project: clinical paper or thesis. Oral defense of thesis is required.

Comments

Applicants for the practicums will be accommodated as class size limitations permit, with special consideration given to those who are from undeserved areas or intend to be employed in undeserved areas.

Progression requirements include the policy that a grade of B or higher must be earned in the nursing courses. Course offerings are dependent on adequate course enrollment.

GRADUATE ACHIEVEMENT PROGRAM (GAP)

PRIMARY HEALTH CARE GRADUATE ACHIEVEMENT PROGRAM (GAP)

The Graduate Achievement Program (GAP) in Primary Health Care Nursing is designed for persons who already have a master's degree in Nursing but wish to add a different area of nursing specialization. GAP applicants will be accommodated as class size limitations permit. A minimum of 31 credits are required.

Admission Requirements

1. Master's degree in Nursing from a National League for Nursing Accredited Commission (NLNAC) or Commission on Collegiate Nursing Education (CCNE) accredited program. Individual consideration may be given to graduates of graduate nursing programs that were not accredited at the time of graduation.

2. Current licensure as a registered nurse in Wisconsin.

3. Applicants must provide three letters of reference from professional and/or work related sources.

4. Nursing practice experience recommended.

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5. A personal interview
 6. An acceptable health assessment course or equivalent in the past 2 years, receiving a B or higher grade or validated use of all health assessment skills. [Written exam (pass rate 85%) and performance exam to validate correct use of health history and physical exam skills. Written and demonstration exam is provided each May with a fee.]

7. For the Skill Enhancement GAP option, ANCC certification as a Pediatric Nurse Practitioner or Adult Nurse Practitioner is required. Other certification boards may be acceptable and will be considered on an individual basis.

FNP GAP Courses, Skill Expansion Option (31 Credits)

Subject

Catalog #	Units (crs.)	Title
Nursing		
700	3	Advanced Health Assessment
703	2	Health Promotion in APN
704	3	Pathophysiology for the APN
707	2	Epidemiology
709	3	Pharmacotherapeutics for the APN
716	2	Clinical Mgmt. & Pharmacology I
717	3	Clinical Mgmt. & Pharmacology II
718	3	Clinical Mgmt. & Pharmacology III
726	2	FNP Practicum I (Clinical)
727	4	FNP Practicum II (Clinical)
728	4	FNP Practicum III (Clinical)

NP Skill Expansion Option

Nursing 731, 732, 733 and 734

Program Requirements:

Family Nurse Practitioner GAP

Skill Expansion Option: Designed for master's prepared nurses and administrators, educators and clinical nurse specialists and is based on the Family Nurse Practitioner curriculum. Credit for comparable care courses will be evaluated individually. Contact the Graduate Nursing Office for current information.

Skill Enhancement Option: Two tracks are available to assist Adult Nurse Practitioners (would take the Young Family track) to acquire competency in caring for families, and Pediatric Nurse Practitioners (who would take the Mature Family track).

Subject

Catalog #	Units (crs.)	Title
Nursing		
Mature Family Track (12 credits in track; other GAP credits required.)		
731	6	Primary Health Care for the Mature Family I
732	6	Primary Health Care for the Mature Family II
Young Family Track (14 credits in track; other GAP credits required.)		
733	6	Primary Health Care for the Young Family I

734 6 Primary Health care for the Young Family II

Certification Requirements

Graduates of the Family Nurse Practitioner curriculum meet the eligibility requirements of the American Nurses Credentialing Center for Certification as FNPs. The pharmacotherapeutics content covered in the APN core partially meets the curriculum criteria for Wisconsin Advanced Practice Nurse Prescriber eligibility.

The NAC Program is a 10 credit, two summer session (one per summer for two years) certificate program meant to augment intervention options. The purpose of the NAC program is to educate Master's prepared registered nurses in NAC therapies. NAC therapies can complement conventional treatments and/or provide alternative methods for health concerns, as well as providing for the integration of natural therapies into a plan of care.

Natural Alternative Complementary Health Care Certificate Program

Subject

Catalog #	Units (crs.)	Title
Nursing		
770	1	Introduction to Natural Alternative Complementary Health Care
771	2	Alternative Health Care Systems
772	2	Mind Body Spirit Interventions
773	1	Biologic Based Therapies
774	1	Manipulative and Body Based Methods
775	1	Energy Therapies
776	2	NAC Therapies Field Project & Seminar

VII. COURSE DESCRIPTIONS

Nursing 605

3 units (crs.)

Health Assessment

Identification of health status of the individual at all ages through history, interview, physical examination; recognition of differences in physiological function and psychosocial behavior; assessment of developmental stages of the individual and relationship to family unit; exploration of collaborative role development by nurse and physician in primary health care delivery.

Nursing 700

3 units (crs.)

Advanced Health Assessment

This course builds on basic health assessment with emphasis on the decision-making processes to differentiate normal from abnormal health status. Data collection methods include comprehensive and problem-focused history and physical examination assessments; health risk appraisal, developmental assessment; family and social assessment; advanced physical assessment skills and common diagnostic procedures. Clinical experience includes laboratory practice and health assessment and promotion application in primary health care settings. (2+1)

Nursing 701 3 units (crs.)
Research in Nursing
The course emphasizes the skills needed to conduct and analyze research in primary health care. Critical analysis, utilization, implementation, and communication of quantitative and qualitative research in nursing are discussed. Prerequisite: Nursing 711 or Nursing 719 and 3 units (crs.) in an undergraduate statistics course.

Nursing 702 2 units (crs.)
Health Care Systems Policy and Politics
In this course students develop their ability to recognize, analyze and articulate health care policy within a primary health care framework. The focus is on the social, cultural, political, technological, ethical and economic dynamics impacting health policy from a global and organizational perspective.

Nursing 703 2 units (crs.)
Health Promotion in Advanced Practice Nursing
This course will analyze interdisciplinary models of health promotion. International, national and state priorities for health promotion and intervention strategies with selected population groups will be examined. The role of the advanced practice nurse in comprehensive planning for health promotion will be incorporated.

Nursing 704 3 units (crs.)
Pathophysiology for the Advanced Practice Nurse
This course will critically examine the physiological and pathophysiological reaction of the body to alterations in biological processes throughout the life span. Focus will be on the knowledge required by the advanced practice nurse to diagnose actual and potential health problems. A conceptual approach will be used to analyze the metabolic, infectious, immunologic, degenerative and neoplastic alterations at the cellular and organ levels.

Nursing 705 2 units (crs.)
Research in Nursing - Methods
This course identifies problems relevant to primary health care nursing through acquisition of increased understanding of the research process. Students discuss critical analysis, utilization, implementation, and communication of research in primary health care settings. The course emphasizes the development of skills necessary to conduct and analyze nursing research.

Nursing 706 2 units (crs.)
Research in Nursing - Design
In this course, students develop methodological plans for the study of problems relevant to primary health care nursing within a theoretical and scientific framework. Students discuss qualitative and quantitative research design. Students explore issues related to diversity in nursing research. Students acquire the skills needed to plan, initiate, and analyze nursing research studies. Students are required to design an acceptable research proposal. Prerequisite: Nursing 705 or consent of the instructor.

Nursing 707 2 units (crs.)
Epidemiology
This course prepares students to use concepts and methods in the study of disease etiology and in the planning and evaluation of health services. The course emphasizes the interpretation of indices for community health, morbidity and mortality rates, sensitivity and specificity of screening and diagnostic measures, and risk factor analysis. Students become acquainted with population-based approaches to the analysis of health data.

Nursing 708 2 units (crs.)
Primary Health Care Ethics
Perspectives on the analysis of moral dilemmas in primary health care nursing practice. Application of bioethical principles to primary health care nursing dilemmas. Differentiation among methods of dilemma resolution (principlism, casuistry, etc.) in primary health care nursing practice. Incorporation of the analysis of emerging moral dilemmas for advanced practice nurses (genetic testing, on-line health care records, etc.). Prerequisite: Nursing 726 or 754.

Nursing 709 3 units (crs.)
Pharmacotherapeutics for the Advanced Practice Nurse
This course is a comprehensive study of the pharmacokinetics and pharmacodynamics of drugs used in the promotion and maintenance of health across all physiologic systems throughout the life span. Emphasis is on the role of the advanced practice nurse in the pharmacotherapeutic management of patients in primary health care. Prerequisite: Nursing 704 (2+0)

Nursing 710 2 units (crs.)
Theoretical Basic for Family Nursing
This course provides the theoretical foundations for advanced practice in family nursing. Students analyze the theoretical and empirical bases for understanding families in various cultural and developmental context. Students examine selected theoretical frameworks for understanding families and family health and compare them in terms of their utility for nursing practice and research. Students examine universal family processes of attachment and care giving across cultural contexts. Students investigate current theories of family stress and crises as well as the impact of selected situational and developmental crises of family health and development. Students address the link between the state of family science, nursing research, and advanced practice in family nursing.

Nursing 711 2 units (crs.)
Theory in Nursing
In this course students examine perspectives on the analysis and critique of models and theories developed by nurse theorists within the context of the nursing metaparadigm, as well as theories from other disciplines. Students apply theories and models to primary health care

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and discuss implications for nursing research, practice, education, and administration.

Nursing 716 *2 units (crs.)*

Clinical Management and Pharmacology I

This is the first of three sequential courses on clinical management that builds on a health promotion/disease prevention framework for a holistic approach to primary health care. Students expand their knowledge base of physiology and pathophysiology. The course emphasizes critical thinking process to establish clinical judgement. Students discuss appropriate natural/alternative and pharmacological therapies, diagnostic and educative management strategies, and outcome criteria for commonly encountered conditions of the respiratory, gastrointestinal, and reproductive systems seen by Family Nurse Practitioners in primary health care. Prerequisites: Nursing 700, 703 and 704

Nursing 717 *3 units (crs.)*

Clinical Management and Pharmacology II

This is the second of three sequential courses on clinical management for the family nurse practitioner that continues a holistic approach to advanced primary health care acknowledging age, gender, sexuality, cultural heritage, family and community needs. Students continue to expand their knowledge of physiology and pathophysiology. The course emphasizes the critical thinking process to establish a clinical judgement from possible differential diagnoses. Students discuss natural/alternative health care and pharmacotherapeutics, as well as diagnostic and educative management strategies, and outcome criteria appropriate for the commonly encountered conditions of the cardiovascular, genitourinary, musculoskeletal, integumentary, and hematological systems seen by Family Nurse Practitioners in primary health care. Prerequisites: Nursing 716 and 726. Corequisite: Nursing 727.

Nursing 718 *3 units (crs.)*

Clinical Management and Pharmacology III

This is the third of three sequential courses on clinical management for the family nurse practitioner that continues a holistic approach to advanced primary health care acknowledging age, gender, sexuality, cultural heritage, family and community needs. Students continue to expand their knowledge of physiology and pathophysiology and their critical thinking processes. Students discuss natural/alternative health care and pharmacotherapeutics, as well as diagnostic and educative management strategies and outcome criteria appropriate for clients with commonly encountered acute and chronic conditions of the endocrine, psychological, and neurological systems; ophthalmology, otology, pain management; basic urgent care management; and other selected topics. Prerequisites: Nursing 717 and 727. Corequisite: Nursing 728.

Nursing 719 *3 units (crs.)*

Theoretical Foundations of Advanced Practice Nursing

In this course students examine models and theories developed by nurse theorist within the context of the

nursing metaparadigm as well as theories from other disciplines. It provides the theoretical foundations for advanced practice family nursing within a cultural and developmental context. Students discuss the application of theories and models to primary health care nursing research and practice.

Nursing 720 *1 unit (cr.)*

Pediatric Seminar for Advanced Practice Nurses

This elective pediatric seminar focuses on the advanced practice nurse role with child-rearing families and pediatric conditions and issues. The course provides a review of growth and development and anticipatory guidance, an update on immunization requirements, and management of common acute and stable chronic pediatric health problems. Management includes routine advanced practice care including natural, alternative, and complementary therapies and pharmacological treatments. Prerequisite: Nursing 716

Nursing 722 *2 units (crs.)*

Diversity Practicum

The second clinical practicum with adjunct faculty in a primary care setting to gain skill in working with individuals, families, or communities from a diverse cultural/ethnic background. Prerequisite: Nursing 726.

Nursing 726 *2 units (crs.)*

Family Nurse Practitioner Practicum I

This course provides the initial clinical preceptorship in a primary care setting. Focus is on practicing health assessment skills and establishing therapeutic relationships with clients and collegial relationship with other providers. Prerequisites: Nursing 700 and 704. Pass/Fail course.

Nursing 727 *4 units (crs.)*

Family Nurse Practitioner Practicum II

This is the second clinical preceptorship course in a family practice primary care setting. Students focus on developing skills in health assessment, health promotion, and collaborative health care management. Prerequisite: Nursing 709.

Nursing 728 *4 units (crs.)*

Family Nurse Practitioner Practicum III

This is the final clinical preceptorship in a family practice primary health care setting. The course focuses on greater responsibility and accountability in managing care of clients of all ages as well as family groups. Collaborative management of acute and chronic problems for the complex client/family with multi-system problems are presented. Community/Epidemiology health issues are addressed collaboratively with longer-term planning, research application, practice evaluation and consultation in a variety of settings.

Nursing 730 *2 units (crs.)*

Clinical Practice Management

This course synthesizes the practitioner, administrator, educator, researcher, and consultant role components inherent in managing clinical practice in primary care settings. Management functions of planning, organizing, directing/influencing, and evaluating the delivery of primary care services will be discussed. Prerequisite: Nursing 702

Nursing 731 *6 units (crs.)*

Primary Health Care for the Mature Family I

Focus is on health maintenance and disease management regarding germane to the mature family (families with late adolescent, older, or no children). Contains content regarding health assessment, diagnosis and management of risk factors and illnesses commonly experienced by mature families. Clinical practice arranged by the student with faculty input. Prerequisite: Admission to the MSN program.

Nursing 732 *6 units (crs.)*

Primary Health Care for the Mature Family II

Focus in on disease management of less common and more complex issues germane to the mature family. Contains content regarding collaboration with specialists and other members of the interdisciplinary team. Prerequisite: Nursing 731.

Nursing 733 *6 units (crs.)*

Primary Health Care for the Young Family I

Focus is on health maintenance and disease management regarding issues germane to the young family (childbearing, child rearing, or child anticipating families). Contains content regarding health assessment, diagnosis and management of risk factors and illnesses commonly experienced by young families. Clinical practice arranged by the student with faculty input. Prerequisite: Admission to MSN program.

Nursing 734 *6 units (crs.)*

Primary Health Care for the Young Family II

Focus is on disease management of less common and more complex health issues germane to the young family. Contains content regarding collaboration with specialists and other members of the interdisciplinary team. Clinical practice arranged by the student with faculty input. Prerequisite: Nursing 733.

Nursing 754 *2 units (crs.)*

Advanced Practice Nursing Practicum I

This course provides the initial clinical preceptorship in an adult advanced practice nursing setting. Focus is on practicing health assessment skills, establishing therapeutic relationships with clients and collegial relationships with other health professionals. Prerequisite: Nursing 700. Corequisites: Nursing 709 and 764.

Nursing 755 *4 units (crs.)*

Advanced Practice Nursing Practicum II

This is the second clinical preceptorship course in an adult advanced practice nursing setting. Students continue refinement of health assessment skills. Students engage in health promotion and collaborative health care management for adult clients. Prerequisites: Nursing 709 and 764. Corequisite: Nursing 765.

Nursing 756 *4 units (crs.)*

Advanced Practice Nursing Practicum III

This is the final clinical preceptorship course in an adult advanced practice nursing setting. The course focuses on greater responsibility and accountability in managing care of adult clients. Students engage in collaborative management of acute and chronic problems for the complex client including multi-system conditions. Prerequisites: Nursing 755 and 765. Corequisite: Nursing 766.

Nursing 764 *2 units (crs.)*

Adult Clinical Management and Pharmacology I

This is the first of three sequential courses on the clinical management that builds on a health promotion/disease prevention framework for a holistic approach to advanced nursing with adults. Students expand their knowledge of physiology and pathophysiology. The course emphasizes the critical thinking process to establish clinical judgment. Students discuss natural/alternative and pharmacological therapies, diagnostic and educative management strategies, and outcome criteria for adult conditions of the respiratory, gastrointestinal, and reproductive systems. Prerequisites: Nursing 700, 703, and 704. Corequisites: Nursing 709 and 754

Nursing 765 *2 units (crs.)*

Adult Clinical Management and Pharmacology II

This is the second of three sequential courses on clinical management for the adult advanced practice nurse that continues a holistic approach acknowledging age, gender, sexuality, cultural heritage, family and community needs. Students continue to expand their knowledge of physiology and pathophysiology. The course emphasizes the critical thinking process to establish clinical judgment from possible differential diagnosis. Students discuss natural/alternative and pharmacological therapies, diagnostic and educative management strategies, and outcome criteria for adult conditions of the cardiovascular, genitourinary, musculoskeletal, integumentary and hematological systems. Prerequisites: Nursing 709, 754 and 764. Corequisite: Nursing 755.

Nursing 766 *2 units (crs.)*

Adult Clinical Management and Pharmacology III

This is the third of three sequential courses on clinical management for the adult advanced practice nurse that continues a holistic approach acknowledging age, gender, sexuality, cultural heritage, family and community needs. Students continue to expand their knowledge of physiology and pathophysiology. The course emphasizes the critical thinking process to establish clinical judgment from possible differential diagnosis. Students discuss natural/alternative and pharmacological therapies, diagnostic and educative management strategies, and

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outcome criteria for adult conditions of the endocrine, psychological and neurological systems; ophthalmology, otology, pain management, basic urgent care management and other selected topics. Prerequisites: Nursing 755 and 765. Corequisite: Nursing 756.

Nursing 770 *1 unit (cr.)*
Introduction to Natural Alternative Complementary (NAC) Health Care

The Introduction to NAC Care module provides an overview of the history, theory, philosophy, and ethics of NAC. There is also a brief description and review of holistic nursing principles.

Nursing 771 *2 units (crs.)*
Alternative Health Care Systems

The Alternative Health Care Systems module provides an overview of health care systems outside the conventional western allopathic system. Basic principles of health care are provided. Examples to be used include, but are not limited to: Homeopathy, Naturopathy, Ayurveda, Native American Medicine, and Traditional Chinese Medicine. Prerequisite: Nursing 770

Nursing 772 *2 units (crs.)*
Mind Body Spirit Interventions

The Mind Spirit Interventions module provides an overview of techniques and processes that can affect mind body spirit function and symptoms. Several of the following modalities will be covered including affirmation, bibliotherapy, biofeedback, breathing techniques, centering, hypnosis, imagery/visualization, meditation, prayer, relaxation, and therapies that use creative outlets such as art, music, dance, or writing. Prerequisite: Nursing 770 (or Co-requisite)

Nursing 773 *1 unit (cr.)*
Biologic Based Therapies

The Biologic Based Therapies module provides an overview of vitamins, herbs, aromatherapy and other nutritional supplements such as shark cartilage, melatonin, DHEA, amino acids and other nutrients. Prerequisite: Nursing 770 (or Co-requisite)

Nursing 774 *1 unit (cr.)*
Manipulative and Body Based Methods

Manipulative and body-based methods module provides an overview of massage modalities and basic principles of chiropractic and osteopathy. Prerequisite: Nursing 770, (or Co-requisite)

Nursing 775 *1 unit (cr.)*
Energy Therapies

The energy therapies module provides an overview of biofield and bioelectromagnetic therapies: Biofield therapies are intended to affect energy fields that surround and penetrate the human body and environment. The existence of such fields has not yet been scientifically proven. Some forms of energy therapy manipulate

biofields by applying pressure and/or manipulating the body by placing the hands in, or through, these fields. Examples include qi gong, Reiki, Healing Touch and therapeutic Touch. Bioelectromagnetic-based therapies involve the unconventional use of electromagnetic fields, such as pulsed fields, magnetic fields, or alternative current or direct current fields. Light and color therapy are also included in this area. Prerequisite: Nursing 770, (or Co-requisite)

Nursing 776 *2 units (crs.)*
NAC Therapies Field Project & Seminar

The NAC Therapies Field Project & Seminar is a culminating project synthesizing the NAC theory content. The course includes group seminars for "putting together" the year-long program, as well as discussion and completion of a clinical project, research project, integrated review of literature or other approved project in a NAC topic area. A final paper in the form of a publishable article is the expected outcome. Prerequisites: Nursing 770, 771, 772, 773, 774, and 775.

Nursing 793 *1-3 units (crs.)*
Clinical Paper

A culminating experience option in the masters program. Prerequisite: Clinical Paper Topic and Reader Approval Form must be filed with the School of Graduate Studies. Pass/Fail course.

Nursing 795 *1-6 units (crs.)*
Nursing Thesis

Each registration with a maximum accumulation of 6 cr. A culminating experience option in the masters program. Prerequisite: Thesis Proposal and Advisor Approval Form must be filed with the School of Graduate Studies. Pass/Fail course.

Nursing 796 *1-3 units (crs.)*
Independent Study

Each registration with maximum accumulation of 6 cr. Individualized study in area of interest with the direction of a faculty member. Open to masters program students who submit Independent Study Topic and Instructor Approval Form at or prior to registration.

Nursing 797 *1-3 units (crs.)*
Seminar on Current Topics in Primary Health Care Nursing

Current topics in Primary Health Care Nursing are offered. Course content is expected to differ from offering to offering. Prerequisites: Admitted to MSN Program and consent of instructor. Pass/Fail course.

Nursing 799 *0-0 units (crs.)*
Registration for Comprehensive Examination

Pass/Fail course.