### Accounting

**ACCT 6200 - Managerial Control**
- Credits: 3.00
- Lecture: 3.00
- College: School of Business Admin
- Department: Business Administration-Grad
- A study of the concepts of analysis and interpretation of financial data as a basis for business decisions. (3-0-3)
- Prerequisites: ACCT 2102 Minimum Grade: C or ACT 327 Minimum Grade: C

**ACCT 6390 - Accounting Internship-Graduate**
- Credits: 3.00
- Lecture: 3.00
- College: School of Business Admin
- Department: Accounting
- Professional accounting experience with public accounting firm business, or other organization while under the supervision of a partner, manager, or other officer of the sponsoring organization. (3-0-3)

### Biology

**BIOL 6750 - Special Problems in Biology**
- Credits: 3.00
- Lecture: 3.00
- College: College of Arts and Sciences
- Department: Biology Department
- Individual work providing the student an opportunity to follow a specific program of study under the direction of a qualified instructor of his or her choice. Must be prearranged with advisor, department chair and instructor. (3-0-3)
- Prerequisites: BIOL 2108 or BIOL 2108H

### Business Administration

**BUSA 6025 - Business Internship**
- Credits: 3.00
- Lecture: 3.00
- College: School of Business Admin
- Department: Business Administration-Grad
- Practical experience gained by "employment" in the workplace and in the accomplishment of one or more special projects pertinent to the activities of the sponsoring agency or organization. Graduate students will assume leadership roles in this course and will receive assignments based on their areas of expertise. (3-0-3)

**BUSA 6045 - Graduate Course in Free Enterp**
- Credits: 3.00
- Lecture:
- College: School of Business Admin
- Department: Business Administration-Grad
- This course is designed to inform, instruct, and enlighten students about the free enterprise system. Students should gain, through an APPLIED approach, an appreciation of a myriad of business concepts vital in today's business environment including, but not limited to: market research, new product development, advertising and sales promotion, salesmanship, management, and accounting/financial principles. (3-0-3)

**BUSA 6046 - Graduate Course in Free Enter**
- Credits: 3.00
- Lecture:
- College: School of Business Admin
- Department: Business Administration-Grad
- A continuation of BUSA 6045, the course is designed to advance students' leadership and managerial skills through analysis and completion of projects, preparation of an annual report, and successful completion of regional and national competition. Graduate Students will assume leadership roles in this course, and will receive assignment based on their areas of experience. (3-0-3)
- Prerequisites: BUSA 6045 Minimum Grade: B
BUSA 6100 - History and Philosophy of Mgmt  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Business Admin  
**Department:** Business Administration-Grad  
A review of the history of the development of the philosophy and practice of managing people in organizations and organized activity. Emphasis is upon independent research and in-depth discussions of results of case studies and projects. (3-0-3)  

BUSA 6110 - Business Ethics  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Business Admin  
**Department:** Business Administration-Grad  
This course is designed to examine the relationship between ethical theory and business decision making. The goal is an integration of ethics and social responsibility into real-world business situations. (3-0-3)  

BUSA 6120 - Marketing Management  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Business Admin  
**Department:** Business Administration-Grad  
This is an integrative course designed to demonstrate the complexity and multidimensional nature of marketing decisions. The course will focus on marketing policy and strategy from a manager's perspective. (3-0-3)  
**Prerequisites:**  
(MKTG 3800 Minimum Grade: C or MKT 320 Minimum Grade: C) or (BUSA 5800 Minimum Grade: C or MKT 520 Minimum Grade: C) and (MGNT 3600 Minimum Grade: C or MGT 312 Minimum Grade: C) or (BUSA 5600 Minimum Grade: C or BUS 512 Minimum Grade: C)  

BUSA 6130 - Production and Operation Mgt  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Business Admin  
**Department:** Business Administration-Grad  
This course focuses on methods for designing and improving productive systems. Focus will be placed on the value added transformation of input to output and the creation of products and services. Students utilize and develop critical and strategic thinking skills in order to analyze current concepts and developments in the field of operations management. (3-0-3)  
**Prerequisites:**  
(BUSA 3050 Minimum Grade: C or MTH 204 Minimum Grade: C) and (MGNT 3600 Minimum Grade: C or MGT 312 Minimum Grade: C)  

BUSA 6140 - Adv Business Finance  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Business Admin  
**Department:** Business Administration-Grad  
A seminar focusing on selected issues in contemporary corporate finance and the current business environment. Topics will vary but will likely include issues related to international finance, management of working capital, financial distress, and mergers and acquisitions. (3-0-3)  
**Prerequisites:**  
(BUSA 3150 Minimum Grade: C or BUS 330 Minimum Grade: C) or (BUSA 5150 Minimum Grade: C or BUS 530 Minimum Grade: C) or (FIN 330 Minimum Grade: C)  

BUSA 6150 - Human Resource Management  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Business Admin  
**Department:** Business Administration-Grad  
This course provides a comprehensive overview of the field of human resource management with emphasis on management responsibilities regarding the organization's human resources. (3-0-3)  
**Prerequisites:**  
MGNT 3600 Minimum Grade: C or MGT 312 Minimum Grade: C or MGNT 3600H Minimum Grade: C
BUSA 6150S - Hum Res Mgmt - Study Abroad
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Study-Abroad - This course provides a comprehensive overview of the field of human resource management with emphasis on management responsibilities regarding the organization's human resources. (3-0-3)

BUSA 6160 - Managerial Economics
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Practical analysis of business fluctuations as a major factor in forecasting business activity on a general level as well as for the individual firm. The importance of forecasting in the business organization is included along with consideration of macro-economic forces which affect forecasts and various methods of analysis for determination of cyclical factors and other methods of preparing and documenting forecasts. (3-0-3)
Prerequisites:
BUSA 3050 Minimum Grade: C or MATH 2204 Minimum Grade: C or MTH 204 Minimum Grade: C

BUSA 6170 - Quantitative MGNT-Graduate
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
An introduction to quantitative decision making techniques to problems of business. It includes material on Decision Analysis, Linear Programming, Inventory Management and Project Scheduling, Stochastic Models as well as some advanced statistical topics like Regression, ANOVA, Quality Analysis, and Non Parametric Tests. (3-0-3)
Prerequisites:
BUSA 3050 Minimum Grade: C or MATH 2204 Minimum Grade: C or MATH 204 Minimum Grade: C

BUSA 6180 - Internat'l Business Practices
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
A course designed to focus on five aspects of the cross-border environment: exchange rates and international capital markets, trading patterns and regimes, regulatory content, and political content. (3-0-3)

BUSA 6180S - Int'l Bus Pract - Study Abroad
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Study-Abroad - A course designed to focus on five aspects of the cross-border environment: exchange rates and international capital markets, trading patterns and regimes, regulatory content, and political content. (3-0-3)

BUSA 6405 - Honors Course in Free Entrprrse
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
This course is designed to inform, instruct, and enlighten students about the free enterprise system. Students should gain, through an APPLIED approach, an appreciation of a myriad of business concepts vital in today's business environment including, but not limited to: market research, new product development, advertising and sales promotion, salesmanship, management, and accounting/financial principles.

BUSA 6530 - Seminar in Internat'l Issues
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Current topics of international concern are covered from a business and societal perspective. Analysis of stakeholder reactions in international issues will be a focus of this course. (3-0-3)

BUSA 6540 - Organizational Leadership
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Leadership theory is explored as it relates to management in organizations. Students analyze specific aspects of leadership and organizational behavior and use this analysis to connect theory to application. (3-0-3)
Prerequisites:
(MGNT 3600 Minimum Grade: C or MGT 312 Minimum Grade: C) or (BUSA 5600 Minimum Grade: C or BUS 512 Minimum Grade: C)

BUSA 6550 - Entrepreneurship
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Students are provided an opportunity to learn how to manage a newly-organized or acquired small business. Major emphasis is placed on design, integration and operation of all aspects of a small business. Extensive use is made of experiential exercise. (3-0-3)
Prerequisites:
(MGNT 3600 Minimum Grade: C or MGT 312 Minimum Grade: C) or (BUSA 5600 Minimum Grade: C or BUS 512 Minimum Grade: C)

BUSA 6570 - Labor Management Relations
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
Focuses on understanding the process through which employers and unions negotiate, constraints on both groups, and the shared responsibility for administering negotiated contracts. Analysis of problems in the process and procedures for minimizing these problems will be explored. (3-0-3)

BUSA 6600 - Strategic Management
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
A study of business strategy and strategic planning in relation to company resources, the environment, and changes which may bring opportunities or threats. An opportunity to apply one's skills through strategic cases analysis and through the management of a manufacturing firm in a computer-simulated business situation. Intended to culminate the entering graduate student's background for entry into graduate business study. This course is offered on the graduate level but may not be applied to graduate business degree requirements.
Prerequisites:
(MKTG 3800 Minimum Grade: C or MKT 320 Minimum Grade: C) or (BUSA 5800 Minimum Grade: C or BUS 520 Minimum Grade: C)

BUSA 6615 - International Business Exper
Credits: 3.00
Lecture: 3.00
College: School of Business Admin
Department: Business Administration-Grad
A study of how business is conducted in foreign countries and how culture impacts business decisions. Emphasis will be placed on relations between the U.S. and a selected country, with an end-of-semester trip to visit businesses in the country studied. Minimum GPA of 3.5 required. (3-0-3)
Prerequisites:
(MGNT 3600 Minimum Grade: C or MGT 312 Minimum Grade: C)

Information Technology
CIS 5310 - Decision Support Systems
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course concentrates in the use of computer systems to help and assist in the decision making process. It will start with analyzing the process of making a decision and the role of a decision maker. This course examines a set of information systems which support decision makers: individual and group decision support systems, expert systems, and neural networks. It discusses the development, implementation, and application of these systems. To understand how DSS are built, several areas and tools of modeling and artificial intelligence will be considered. (3-0-3)

CIS 6420 - Data Mining
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course is aimed at preparing students with a comprehensive look at the concepts and techniques needed to discover new knowledge from business data. It includes several methods of data mining, provides in-depth coverage of essential data mining topics including OLAP and data warehousing, data processing, concept description, association rules, classification and prediction, and analysis.(3-0-3)
Prerequisites:
CSCI 4400 Minimum Grade: C

CIS 6720 - Distributed Web Applications
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course will demonstrate a new approach in the distributed web applications field, cloud computing. The first part of the course is devoted to main concepts of cloud computing. In the second part, students will learn contemporary models for development of distributed web applications. The last part is devoted to practical work in a could computing environment. (3-0-3)
Prerequisites:
CSCI 1302

CIS 6800 - Human-Comp Interact-Intf Des
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course will discuss interface design between the user and computer, user capabilities and limitations; designing systems for people, evaluation and testing of systems; usability engineering, and ergonomics. At the center of the course is the development of a hands-on semester project that will help students learn about various stages of an effective design process. (3-0-3)

CIS 6900 - Special Problems in CIS
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course provides students with an opportunity to study and explore current computer information systems topics not covered in any other course. Students will also have the opportunity to design and implement software systems for business environments and to expand on projects from previous classes. (3-0-3)
CSCI 5120 - Topics in Information Security
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
Complete examination of the issues and problems in providing security for information processing systems, security goals and vulnerabilities, encryption and decryption, secure general purpose operating systems and applications, network security, Digital Signatures and Public Key Cryptosystems, security protocols, etc. (3-0-3)
Prerequisites:
CSCI 2920 Minimum Grade: C

CSCI 6220 - Distributed Operating Systems
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course will cover taxonomy of distributed systems and distributed operating systems. Topics will include mutual exclusion, atomic transaction, deadlock handling, threads, processor allocation, scheduling, distributed file systems, distributed shared memory, and system programming issues in distributed systems. (3-0-3)
Prerequisites:
CSCI 4200

CSCI 6230 - Internet Architect-Protocols
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course deals with the principles and issues underlying the provision of wide area connectivity through the interconnection of autonomous networks. Detailed discussion of the problems and solution techniques that arise in internetworking. Emphasis will be placed on the Internet architecture and protocols. (3-0-3)
Prerequisites:
CSCI 4210

CSCI 6320 - Adv Software Engineering
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course expands on and goes beyond concepts learned in the undergraduate level software engineering course. Its goal is to arm students with a professional level knowledgebase sufficient for architecting, managing, and implementing all aspects of current software engineering practices. Along with providing advanced fundamentals, this course discusses and critiques published peer-reviewed white papers related to various aspects of the software engineering discipline. Real-world scenarios and commercial practices are analyzed and exercised during a term project. (3-0-3)
Prerequisites:
CSCI 4300

CSCI 6410 - Adv Database Design
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course will discuss emerging advanced database technology to prepare the students with currently practiced database tools in the industry. Students will do comparative study of different database systems. The course will also discuss design, development, and implementation strategies involving databases, database security, and database administration. (3-0-3)
Prerequisites:
CSCI 4400
CSCI 6821 - Adv Computer Graphics
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course is an exposition of the techniques needed to generate and render three-dimensional computer images. It will provide a theoretical understanding of these techniques together with the programming expertise required to implement them. Two-dimensional graphics will be reviewed in detail. Homogeneous (4-coordinate) representation of three-dimensional points and vectors are presented with matrix transformations for orthographic and perspective projection. (3-0-3)
Prerequisites:
CSCI 4820

CSCI 6900 - Special Problems in CS
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Computer Science
This course provides students with an opportunity to study and explore current computer science topics not covered in any other course. Students will also have an opportunity to design and implement software systems for business environments and to expand on projects from previous classes. (3-0-3)

CSCI 6930 - Internship
Credits: 3.00
Lecture:
College: School of Comp and Mathematics
Department: Computer Science
The Internship gives students an opportunity to apply and extend the theoretical knowledge acquired in the classroom to a practical experience. Topics for the internship projects should be based on the graduate curriculum. (0-12-3)

CSCI 7900 - Thesis
Credits: 3.00
Lecture:
College: School of Comp and Mathematics
Department: Computer Science
With the approval of his/her major professor, a candidate for the MS degree may take 6 credit hours of thesis. (6-0-6)

Teacher Certification

EDCF 5700 - Internship in P-12
Credits: 6.00
Lecture:
College: School of Education
Department: Education
An internship with emphasis on planning, selecting, preparing, and evaluating instructional materials in P-12 teaching fields and developing needs assessment for the classroom teacher to prepare for Georgia Teacher Observation Assessment (GTOI) or system assessment. Cannot be used to satisfy degree requirements.
Prerequisites: Application filed with Director of Clinical Experiences one full semester in advance; permission of instructor; at least 15 semester hours of credit at Georgia Southwestern State University. (0-15-6)

EDCF 5800 - Internship in P-12
Credits: 6.00
Lecture:
College: School of Education
Department: Education
An internship with emphasis placed on curriculum planning, methodology, and evaluating instructional materials in P-12 teaching fields. Cannot be used to satisfy degree requirements. (0-15-6)
Prerequisites:
(EDCF 5700)

Early Childhood Education
EDEC 6100 - Adv Study of EC Lang Arts
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
An intensive study of methods, materials and experiences in the language arts as the basis for emotional, social and mental growth by young children, evaluation of materials and procedures for teaching the language skills necessary for success in school. (3-0-3)

EDEC 6120 - Children's Literature for EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
An advanced study of various genre of books for children. Emphasis is placed on identifying the various roles quality literature plays in the educational programs for children. Pedagogical implications are incorporated. (3-0-3)

EDEC 6220 - Readings in EC Education
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course provides a forum for professionals to explore general topics, issues, and current research related to Early Childhood Education. (3-0-3)

EDEC 6225 - Adv Rdgs in EC Education
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
This course provides a forum for professionals to explore a specific topic of interest related to Early Childhood Education. In addition, students produce a review of literature related to a selected topic. (3-0-3)

EDEC 6400 - Adv Study of EC Science
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A course which focuses on teaching strategies that promote equity in Science and Technology. It incorporates innovative instructional strategies, science content, educational technology and classroom management. The participants apply their understandings by adapting, implementing and evaluating equitable teaching strategies in their classrooms. (3-0-3)

EDEC 6500 - Adv Study EC Social Studies
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A study of recent developments in Early Childhood Social Studies with emphasis on current theory and experimentation in curriculum and teaching practices. (3-0-3)

EDEC 6600 - Teaching of EC Mathematics I
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
Activity oriented course that models student centered, discovery approaches to teaching the basic mathematics skills that are based on the NCTM Standards. Major focus will be placed on creating and maintaining a classroom management style that promotes a "safe" classroom environment and fosters the development of personal responsibility. Alternatives will be offered for teaching, assessing and grading student growth in mathematical thinking and mathematical power. (3-0-3)
EDEC 6610 - Teaching of EC Mathematics II
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A continuation of EDEC 6600, with learning experiences focused on topics in number patterns, geometry, and general problem solving. Emphasis will be placed on teaching practices that promote development of life-long learning skills and on alternative assessment/grading practices. (3-0-3)

EDEC 6700 - The Arts in Early Childhood
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
This course investigates elements of art and principles of design that support children's artistic development. Various two- and three- dimensional art processes are explored in relation to how they can be used to support children's affective and academic development across curricular areas. (3-0-3)

EDEC 7020 - Special Problems in EC Edu
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A study of problems related to specific curriculum and certification areas in the Early Childhood program. Emphasis is placed upon special projects and independent study. May be repeated for credit in a different curriculum area (3-0-3)

EDEC 7050 - Theoretical Frameworks in EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
This course provides a comprehensive and in-depth study of theories that provide a foundation for understanding young children in grades P-5. The impact of growth and development for planning appropriate and equitable educational programs is studied. The course also explores how various theories underlie teaching decisions and practices in early childhood programs. (3-0-3)

EDEC 7250 - EC Instructional Strategies
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
This course is designed to enhance candidate's knowledge of content, its organization, and its relationships. Candidates are provided strategies and techniques for conveying subject(s) to learners in ways that recognize individual differences using multiple methods to enhance learning. Equitable treatment of learners in an active learning environment is stressed. (3-0-3)

EDEC 7350 - EC Curr & Instructional Strat
Credits: 3.00
Lecture: 
College: School of Education
Department: Early Childhood Education
This course is designed to enhance candidate's knowledge of content, its organization and its relationships with an emphasis on curriculum. Emphasis is placed on strategies to improve student learning, working with other professionals on curriculum development as well as expanding candidates' repertoire of instructional skills. (3-0-3)

EDEC 7420 - EC Directed Study-Field Projec
Credits: 3.00
Lecture: 1.00
College: School of Education
Department: Early Childhood Education
A research-oriented study or project selected according to interests or needs of students. (1-0-3)
EDEC 7500 - Assessment of Lrng in ECE
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
The course provides an in-depth study of appropriate strategies for assessing student learning and development. In addition, candidates learn how to use assessment results to adjust practices to fit the needs of learners. The role of assessment in student-based decisions making as well as guidelines for construction, selection, and interpretation of assessment tools and results are included. Issues and trends related to assessment and accountability are emphasized especially in relation to standardized testing. (3-0-3)

EDEC 7550 - Issues and Trends in EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
The course examines issues, trends, and problems in early childhood education. Information sources for research, including print and media resources, will be included. Content will include conceptualizing, completing, and presenting an extensive literature review for a research project to enhance professional writing and presentation skills. (3-0-3)

EDEC 7750 - Assessment in EC Ed
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
The course provides an in-depth study of appropriate strategies for assessing the learning of young children. Assessment instruments and procedures for examining development in the cognitive, physical, and social domains are included. The course will also explore issues related to standardized testing in relation to the importance of testing in early childhood education. (3-0-3)

EDEC 7800 - Role of Collaboration in EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
This course is designed to acquaint and expand the knowledge of teachers in early childhood education with a variety of innovative programs in existence involving parents as partners in education. The history of parental involvement, research, leadership development, benefits to children, parents, school, and community, as well as strategies for promoting parent involvement, are emphasized. (3-0-3)

EDEC 7900 - Curriculum Strategies
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
The course provides a study of Early Childhood Education with emphasis on curriculum decision-making, and curriculum content. Procedures for planning, implementing, and evaluating curriculum appropriate for the young learner is presented. (3-0-3)

EDEC 7960 - M.Ed. Practicum I in EC
Credits: 3.00
Lecture:
College: School of Education
Department: Early Childhood Education
This course is designed to allow candidates in the field to integrate theory and practice by enabling them to test, within the school environment, appropriate teaching-learning programs and practices. (0-2-3)

EDEC 7970 - M.Ed. Practicum II in EC
Credits: 3.00
Lecture:
College: School of Education
Department: Early Childhood Education
This course is designed to allow candidates in the field to integrate theory and practice by enabling them to test, within the school environment, appropriate testing-learning programs and practices. Candidates may elect to extend previous practicum experiences with approval from the instructor. (0-2-3)

EDEC 7980 - M.Ed. Seminar in EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
This course is designed to enhance candidate's experiences in practicum. Results from practicum experiences will be reported, and a variety of topics selected for study will be considered. (3-0-3)

EDEC 8000 - Adv Grad Seminar EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
Public policy, issues, and concerns as well as futuristic issues in Early Childhood Education will be presented for consideration in the open forum. (3-0-3)

EDEC 8080 - EC Edu in Modern Society
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A study of contemporary Early Childhood Education with emphasis upon political and sociological elements, program development, and leaders in the field. (3-0-3)

EDEC 8100 - Measurement-Evaluation in EC
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
Investigation and practical application of measurement techniques and instruments used in the evaluation of the growth of young children. (3-0-3)

EDEC 8120 - Qualitative Research
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A course designed to expand students' understanding of educational research methodology. The course will explore currently accepted qualitative research methods and appropriate interpretations. Students will design a qualitative research proposal for implementation in their classroom. (3-0-3)

EDEC 8380 - Language Development-Reading
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
A study of productive and receptive language development and processes with implications for planning and implementing appropriate language curriculum for children in grades P-5. (3-0-3)

EDEC 8400 - Strat for Teaching E C Science
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Early Childhood Education
Planning, implementation, and evaluation of early grades science programs will be emphasized. The class will be conducted in a seminar format with class activities built on the science programs of the students' schools. (3-0-3)
EDEC 8480 - Admn-Supv of EC Program
  Credits: 3.00  
  Lecture: 3.00  
  College: School of Education  
  Department: Early Childhood Education  
  A course designed to support the development of teacher leaders in Early Childhood Education. Emphasis is placed on developing leadership skills in the areas of mentoring and supervising pre-service and new teachers, participating in site-based management, and providing leadership in areas of education accountability in Early Childhood Education. (3-0-3)

EDEC 8500 - Strat for Teaching EC Soc Stud
  Credits: 3.00  
  Lecture: 3.00  
  College: School of Education  
  Department: Early Childhood Education  
  A course designed to lead advanced students in the examination of instructional strategies, content material, and evaluation techniques applicable to Early Childhood social studies. Attention will focus on both cognitive and affective learning. (3-0-3)

EDEC 8600 - Adv Strat for EC Mathematics
  Credits: 3.00  
  Lecture: 3.00  
  College: School of Education  
  Department: Early Childhood Education  
  Advanced study of issues and techniques that are critical to effective Mathematics teaching and learning. Focused attention on diagnostic, instructional, and assessment techniques that involve self monitoring and self assessment. (3-0-3)

EDEC 8770 - Trends-Issues in EC Edu Tech
  Credits: 3.00  
  Lecture: 3.00  
  College: School of Education  
  Department: Early Childhood Education  
  An examination of Early Childhood Education as a dynamic field influencing and influenced by various political, social, and educational trends and issues. Emphasis is placed on examining contemporary issues and trends in relation to current education literature. (3-0-3)

EDEC 8780 - Practicum in EC Education
  Credits: 3.00  
  Lecture:  
  College: School of Education  
  Department: Early Childhood Education  
  A course designed to allow the student in the field to integrate theory and practice by enabling the student to test within the school environment appropriate teaching- learning programs. (0-6-3)

EDEC 8800 - Readings in E C Education
  Credits: 3.00  
  Lecture: 3.00  
  College: School of Education  
  Department: Early Childhood Education  
  A course in selected readings on Early Childhood Education. (3-0-3)

EDEC 8860 - EdS Practicum I in EC
  Credits: 3.00  
  Lecture:  
  College: School of Education  
  Department: Early Childhood Education  
  This course provides candidates with school-based teacher leadership experiences in grades P-5. The practicum provides an opportunity for candidates to integrate theory and practice by enabling them to test knowledge and skills in the areas of curriculum, instruction, leadership, staff development, and school and community relations. Candidates will make decisions that test their judgments and use the knowledge to improve student learning. (0-2-3)
EDEC 8870 - EdS Practicum II in EC  
**Credits:** 3.00  
**Lecture:**  
**College:** School of Education  
**Department:** Early Childhood Education  
This course provides candidates with school-based teacher leadership experiences in grades P-5. The practicum provides an opportunity for candidates to integrate theory and practice by enabling them to test knowledge and skills in the areas of curriculum, instruction, leadership, staff development, and school and community relations. Candidates will make decision that test their judgments and use the knowledge to improve student learning. (0-2-3)  

EDEC 8880 - EdS Seminar in EC  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Education  
**Department:** Early Childhood Education  
This course is designed to enhance candidate's experiences in practicum. Results from practicum experiences will be reported, and a variety of topics selected for study will be considered. (3-0-3)  

**General Content Education Trac**  

EDGC 7050 - GC Theoret Frameworks/Analysis  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Education  
**Department:** Education  
This course provides a comprehensive and in-depth study of theories that provide a foundation for understanding children in general content classes. The impact of growth and development for planning appropriate and equitable educational programs is studied. The course also explores how various theories underlie teaching decisions and practices in programs for children in general content classes, grades 4-12. (3-0-3)  

EDGC 7250 - GC Instructional Strategies  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Education  
**Department:** Education  
This course is designed to enhance candidate's knowledge of content, its organization, and its relationships. Candidates are provided strategies and techniques for conveying subject(s) to learners in ways that recognize individual differences using multiple methods to enhance learning. Equitable treatment of learners in an active learning environment is stressed. (3-0-3)  

EDGC 7550 - GC Issues and Trends  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** School of Education  
**Department:** Education  
This course examines issues, trends, and problems in education. Information sources for research, including print and media resources, will be included. Content will include conceptualizing, completing, and presenting an extensive literature review for a research project to enhance professional writing and presentation skills. (3-0-3)  

EDGC 7960 - M.Ed. Practicum I in GC  
**Credits:** 3.00  
**Lecture:**  
**College:** School of Education  
**Department:** Education  
This course is designed to allow candidates in the field to integrate theory and practice by enabling them to test, within the school environment, appropriate teaching-learning programs and practices. (0-2-3)  

EDGC 7970 - M.Ed. Practicum II in GC  
**Credits:** 3.00  
**Lecture:**  
**College:** School of Education  
**Department:** Education
This course is designed to allow candidates in the field to integrate theory and practice by enabling them to test, within the school environment, appropriate teaching-learning programs and practices. Candidates may elect to extend previously practicum experiences with approval from the instructor. (0-2-3)

**EDGC 7980 - M.Ed. Seminar in GC**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Education
- **Department:** Education
This course is designed to enhance candidate's experiences in practicum. Results from practicum experiences will be reported, and a variety of topics selected for study will be considered. (3-0-3)

**EDGC 8860 - EdS Practicum I in GC**
- **Credits:** 3.00
- **Lecture:**
- **College:** School of Education
- **Department:** Education
This course provides candidates with school-based teacher leadership experiences in content-based classrooms. The practicum provides an opportunity for candidates to integrate theory and practice by enabling them to test knowledge and skills in the areas of curriculum, instruction, leadership, staff development, and school and community relations. Candidates will make decisions that test their judgments and use the knowledge to improve student learning. (0-2-3)

**EDGC 8870 - EdS Practicum II in GC**
- **Credits:** 3.00
- **Lecture:**
- **College:** School of Education
- **Department:** Education
This course provides candidates with school-based teacher leadership experiences in content-based classrooms. The practicum provides an opportunity for candidates to integrate theory and practice by enabling them to test knowledge and skills in the areas of curriculum, instruction, leadership, staff development, and school and community relations. Candidates will make decisions that test their judgments and use the knowledge to improve student learning. (0-2-3)

**EDGC 8880 - EdS Seminar in General Content**
- **Credits:** 3.00
- **Lecture:**
- **College:** School of Education
- **Department:** Education
This course is designed to enhance candidate's experiences in practicum. Results from practicum experiences will be reported, and a variety of topics selected for study will be considered. (3-0-3)

**Middle Grades Education**

**EDMG 6100 - Adv Strat of MG Lang Arts**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Education
- **Department:** Middle Grades Education
This course focuses on current research related to middle grades language arts as well as instructional approaches and materials used to teach language arts (3-0-3)

**EDMG 6120 - Children's Lit for the M G**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Education
- **Department:** Middle Grades Education
An advanced study of the works of fine authors and illustrators, new and old, as well as the broad spectrum of contemporary and traditional young adult literature. A practical and explicit overview of ways in which teachers (4-8) can evaluate and select books and involve students in literature, with specific suggestions for goals and techniques. Exploration of adolescent preferences and aesthetic responses to visual aspects of their books. Emphasis is on the importance of extending literature throughout the school curriculum. (3-0-3)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture</th>
<th>College</th>
<th>Department</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDMG 6220</td>
<td>Readings in MG Lang Arts</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Middle Grades Education</td>
<td>This course provides a forum for professionals to explore general topics, issues, and current research related to Middle Grades Language Arts. (3-0-3)</td>
</tr>
<tr>
<td>EDMG 6225</td>
<td>Adv Rdgs in MG Lang Arts</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Education</td>
<td>This course provides a forum for professionals to explore a specific topic of interest related to Middle Grades Language Arts. In addition, students produce a review of literature related to selected topic. (3-0-3)</td>
</tr>
<tr>
<td>EDMG 6400</td>
<td>Adv Study of MG Science</td>
<td>3.00</td>
<td>2.00</td>
<td>School of Education</td>
<td>Middle Grades Education</td>
<td>A course which focuses on teaching strategies that promote equity in science and technology. It incorporates innovative instructional strategies, science content, educational technology and classroom management. The participants apply their understandings by adapting, implementing and evaluating equitable teaching strategies in their classrooms. (3-0-3)</td>
</tr>
<tr>
<td>EDMG 6450</td>
<td>Science Workshop for MG Teache</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Middle Grades Education</td>
<td>A workshop for updating the knowledge and skills of Middle Grades science teachers. Included are uses of technology in science instruction encompassing computers, software, and other media; laboratory activities; and the examination of commercial science programs. (3-0-3)</td>
</tr>
<tr>
<td>EDMG 6500</td>
<td>Adv Study of MG Soc Studies</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Middle Grades Education</td>
<td>A study of recent developments in Middle Grades social studies with emphasis on current theory and experimentation in curriculum and teaching practices. (3-0-3)</td>
</tr>
<tr>
<td>EDMG 6600</td>
<td>Teaching of M G Mathematics I</td>
<td>3.00</td>
<td>2.00</td>
<td>School of Education</td>
<td>Middle Grades Education</td>
<td>Activity oriented course that models student centered, discovery approaches to teaching topics in problem solving, set theory, number theory, probability, and introductory geometry based on the NCTM Principles and Standards. &quot;Best teaching practices&quot; for mathematics instruction at the middle school level will be researched and analyzed. Also, alternatives will be offered for teaching and assessing student growth in mathematical thinking and mathematical power. (2-2-3)</td>
</tr>
<tr>
<td>EDMG 6610</td>
<td>Teaching of M G Mathematics II</td>
<td>3.00</td>
<td>2.00</td>
<td>School of Education</td>
<td>Middle Grades Education</td>
<td>A continuation of EDMG 6600, with learning experiences focused on topics in statistics, measurement, and geometry. Emphasis will be placed on research into best practices that promote the development of life-long learning skills and on alternative assessment/grading practices for mathematics instruction in the middle grades. (2-2-3)</td>
</tr>
</tbody>
</table>
EDMG 6650 - Investigations of Math Art

Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Middle Grades Education  
A course designed to provide teachers with classroom tested ideas that will allow students to experience aesthetics in mathematics. By investigating patterns and geometric transformations students will create vivid and interesting posters and models to decorate any classroom grades 4-8, and at the same time learn how mathematical structures themselves are elegant and beautiful. (3-0-3)

EDMG 6700 - The Arts in Middle Grades

Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Middle Grades Education  
An advanced study of the role of the expressive arts in the development of young children with recommended practices in qualitative curriculum planning, together with laboratory projects that identify problems in Middle Grades arts, including philosophical, motivational and evaluative aspects. (3-0-3)

EDMG 7020 - Special Problems in M G

Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Middle Grades Education  
An investigation into problems and issues related to middle school teaching and middle grades curricula. Special readings and field experiences required. (3-0-3)

EDMG 7420 - MG Directed Study-Field Projec

Credits: 3.00  
Lecture: 1.00  
College: School of Education  
Department: Middle Grades Education  
A research-oriented study or project selected according to interests or needs of student. (1-0-3)

EDMG 7550 - Issues and Trends in MG

Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Middle Grades Education  
The course is a study of the issues and trends related to teaching language arts in a middle grades setting. Topics may include but are not limited to curriculum, assessment, teaching diverse student populations, and effective instruction.

EDMG 7700 - M G Growth-Development

Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Middle Grades Education  
A study of the human growth and development focusing on developmental characteristics and nature and needs of young adolescents. Field experience required. (3-0-3)

EDMG 7800 - Parent Family School Collabora

Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Middle Grades Education  
A course designed to acquaint and expand the knowledge of teachers in the field of education with a variety of innovative programs in existence involving parents as partners in education. The history of parental involvement, the benefits to children, parents, school, and the community as well as research and leadership training in parental involvement are emphasized. Specific programs in early childhood, middle grades and secondary fields will be examined. (3-0-3)
EDMG 7900 - M G Curr Planning-Trends
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
A study of the content and methodology of Middle Grades school curriculum. Emphasis is placed on trends in modern curriculum development focusing upon such issues as the nature of the pupil, the nature of learning, function and aims of the middle school, influence of society, and evaluation and revision of the middle school curriculum. (3-0-3)

EDMG 8020 - Org Adm-Supervision of MG Ed
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
Problems of organization, administration and supervision of the middle schools with emphasis on proper staff utilization, instruction and evaluation procedures and approaches to the problem of influencing staff members in relation to efficiency. (3-0-3)

EDMG 8300 - The Adolescent Learner
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
An advanced growth and development course covering the historical, biological, sociological and moral realities of today's teenagers. Emphasis will be placed on how to deal more effectively with adolescents in the school, home and community. (3-0-3)

EDMG 8380 - Lang Development-Reading
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
A course designed to examine the development and operation of an effective language arts program in the Middle Grades. Attention will be given to the four language arts areas of speaking, listening, reading and writing. (3-0-3)

EDMG 8400 - Strategies for Teach Science
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
A course which focuses on thematic and science, technology and society (STS) approaches to the curriculum. The participants take part in, review, and evaluate units from innovative curriculum projects and apply their understandings by adapting, implementing and evaluating a unit in their classroom. (3-0-3)

EDMG 8500 - Strat for Teaching Soc Studies
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
A course designed to lead advanced students in the examination of instructional strategies, content material, and evaluation techniques applicable to Middle Grades social studies. Attention will focus on both cognitive and affective learning. (3-0-3)

EDMG 8600 - Adv Strat for Teaching MG Math
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Middle Grades Education
Advanced study of issues and techniques that are critical to effective mathematics teaching and learning. Focused attention on diagnostic, instructional and assessment techniques that involve self monitoring and self assessment. Students will participate in a mathematics institute as they work with children in a closely supervised teaching situation in order that they might practice and improve their own teaching. (3-0-3)
EDRG 6200 - The Teaching of Reading
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Reading
An advanced study of instructional techniques and materials for the teaching of reading from preschool through grade twelve. Emphasis is given to the extension of reading competencies, word recognition and comprehension strategies required for success in content areas, and integrated literature-based reading programs, as well as the instructional implications of the psycholinguistic theory. (3-0-3)

EDRG 6210 - Diag-Corr of Reading Diffiuc
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Reading
Advance study designed for the teaching of reading from preschool through grade twelve in identification, diagnosis and remediation of reading difficulties. Emphasis is on diagnostic-prescriptive reading instruction through mastery of varied diagnostic instruments, instructional procedures, and materials appropriate for use with readers requiring remediation. (3-0-3)

EDRG 6230 - Trends-Prac in Teach Reading
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Reading
A critical analysis of new programs, materials and methods, and developments in reading instruction. Emphasis is given to innovative reading programs as well as to current trends and issues in the teaching of reading. (3-0-3)

EDRG 6240 - Spec Prob in Reading Education
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Reading
A seminar for reading majors only which provides students with an opportunity to study and explore reading topics from selections in the education and psychology libraries which are of individual interest and which strengthen a particular area in the student's program or background. (3-0-3)

EDRG 6250 - Org-Sup of the Reading Prog
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Reading
An analysis of the organization of reading programs P-12, and an investigation of varied supervision techniques. Focus is on the design, management and evaluation of reading programs at the classroom, school and district levels. Particular attention is given to the techniques of assessing needs, settling goals and objectives; determining program resource requirements; coordinating, organizing and monitoring program development and implementation activities; and designing program evaluation strategies. For Reading majors only. (3-0-3)

EDRG 6280 - Tch of Reading in Content Fiel
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Reading
Designed to offer all content area teachers detailed and practical explanations of reading and study strategies needed by students to acquire and use new information. Instruction is built on research-based techniques for teaching these strategies in a broad range of disciplines. Emphasis is on helping students become more efficient, effective readers of content materials and facilitating their learning of the subject matter content. Designed for Middle Grades and secondary teachers and for reading majors. (3-0-3)
### Secondary Education

**EDSC 7020 - Special Problems Secondary Edu**
- Credits: 3.00
- Lecture: 3.00
- College: School of Education
- Department: Secondary Education
A study of problems related to specific curriculum areas in the secondary program. Emphasis is placed upon special projects and independent study. (3-0-3)

**EDSC 7420 - SEC Directed - Field Proj**
- Credits: 3.00
- Lecture: 1.00
- College: School of Education
- Department: Secondary Education
A research-oriented study or project selected according to interests or needs of student. (1-0-3)

### Special Education

**EDSP 6000 - Special Problems in Special Ed**
- Credits: 1.00 TO 3.00
- Lecture: 1.00 TO 3.00
- College: School of Education
- Department: Special Education
A study of problems related to curriculum and instruction in Special Education. Recent trends in the education of exceptional individuals. Emphasis is placed upon special projects and independent study. May be repeated for credit. (1-0-1 or 2-0-2 or 3-0-3)

**EDSP 6110 - Charact of Ind with Intell Dis**
- Credits: 3.00
- Lecture: 3.00
- College: School of Education
- Department: Special Education
Study of the nature and characteristics of individuals with intellectual disabilities, classification, etiology and incidence, psychological and biological aspects, sociological aspects, learning and education. Field experience required. (3-0-3)

**EDSP 6120 - Curr-Meth Intellec Disabilit**
- Credits: 3.00
- Lecture: 3.00
- College: School of Education
- Department: Special Education
Study of curriculum construction, classroom organization and collaboration with others and to ancillary and community services. Field experience required. (3-3-3)

**EDSP 6150 - Practicum Intellect Disabiliti**
- Credits: 3.00
- Lecture:
- College: School of Education
- Department: Special Education
Supervised teaching and participation in an approved instructional setting with individuals with intellectual disabilities. Seminar is required. May be repeated for credit. (0-15-3)
EDSP 6230 - Curr-Prog Dev for Gifted Edu
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
An in-depth study of curriculum construction and program development for gifted and talented students P-12. Field experience required. (3-1-3)

EDSP 6250 - Practic in Gifted Edu I II III
Credits: 3.00
Lecture:
College: School of Education
Department: Special Education
Supervised teaching and participation in an approved instructional setting with gifted students. Seminar required. May be repeated for credit. Field experience required. (0-15-3)

EDSP 6310 - Charac of Ind with Learn Dis
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
Study of the nature of learning disabilities with emphasis on definitions, causes, characteristics and needs of individuals with learning disabilities. Field experience required. (3-2-3)

EDSP 6320 - Mat-Meth Learning Disabilities
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
Study of curriculum construction, resources, diagnosis, remediation practices and working with families of individuals with learning disabilities. Field experience required. (3-2-3)

EDSP 6330 - Ind of Instr Diag Pres Teachin
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
Analysis of the remediation process with emphasis on the diagnostic prescriptive approach as used with individuals with difficulty in learning. Includes the use of assessment instruments and Individualized Education Plans. (3-0-3)

EDSP 6350 - Practicum in Learning Disabili
Credits: 3.00
Lecture:
College: School of Education
Department: Special Education
Supervised teaching and participation in an approved instructional setting with learning disabled individuals. May be repeated for credit. (0-15-3)

EDSP 6410 - Charac of Ind with Beh Disord
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
An in-depth study of the definition, identification and characteristics of students with emotional or behavioral disorders as well as philosophical bases for treatment. Field experience required. (3-2-3)

EDSP 6420 - Mat-Meth for Teach Beh Dis
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
Planning and implementing educational programs for individuals with behavior disorders and emotional disturbances. Emphasizes intervention techniques and behavior management. Methods, materials and curriculum for regular education and self-contained settings. Field experience required. (3-2-3)

EDSP 6450 - Practicum in Beh-Emo Dis
Credits: 3.00
Lecture:
College: School of Education
Department: Special Education
Supervised teaching and participation in an approved instructional setting with behavior disordered-emotionally disturbed individuals. Seminar required. May be repeated for credit. (0-15-3)

EDSP 6550 - Practicum in Mild Disabilities
Credits: 3.00
Lecture:
College: School of Education
Department: Special Education
Supervised teaching and participation in an approved instructional setting with individuals having mild disabilities. Seminar required. May be repeated for credit. (0-15-3)

EDSP 7000 - Special Topics in Special Ed
Credits: 1.00 TO 3.00
Lecture: 1.00 TO 3.00
College: School of Education
Department: Special Education
Special Topics in Special Education on selected issues, problems and literature. May be repeated for credit. (1-0-1 or 2-0-2 or 3-0-3)

EDSP 7050 - SPED Theoret Frmworks/Analysis
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
This course provides a comprehensive and in-depth study of theories that provide a foundation for understanding children with special needs. The impact of growth and development for planning appropriate and equitable educational programs is studied. The course also explores how various theories underlie teaching decisions and practices in special education programs.

EDSP 7080 - Leg Eth-Prof Aspects of SpEd
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
A study of litigation, legislation, ethical and moral issues and the codes of professional conduct in the field of special education. (3-0-3)

EDSP 7250 - SPED Instructional Strategies
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
This course is designed to enhance candidate’s knowledge of content, its organization, and its relationships. Candidates are provided strategies and techniques for conveying subject(s) to learners in ways that recognize individual differences using multiple methods to enhance learning. Equitable treatment of learners in an active learning environment is stressed. (3-0-3)

EDSP 7420 - Sp Ed Dir St - Field Proj
Credits: 3.00
Lecture: 1.00
College: School of Education
Department: Special Education
A research-oriented study or project selected according to interests or needs of student. (1-0-3)
EDSP 7510 - Psychoedu Evaluation-Assessm
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
Study of assessment techniques and procedures for use with exceptional individuals. Experience in administration and reporting formal and informal diagnostic and prescriptive techniques. (3-0-3)

EDSP 7550 - SPED Issues and Trends
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
This course examines issues, trends, and problems in education. Information sources for research, including print and media resources, will be included. Content will include conceptualizing, completing, and presenting an extensive literature review for a research project to enhance professional writing and presentation skills. (3-0-3)

EDSP 7960 - M.Ed. Practicum I in SPED
Credits: 3.00
Lecture: 
College: School of Education
Department: Special Education
This course is designed to allow candidates in the field to integrate theory and practice by enabling them to test, within the school environment, appropriate teaching-learning programs and practices. (0-30-3)

EDSP 7970 - M.Ed. Practicum II in SPED
Credits: 3.00
Lecture: 
College: School of Education
Department: Special Education
This course is designed to allow candidates in the field to integrate theory and practice by enabling them to test, within the school environment, appropriate teaching-learning programs and practices. Candidates may elect to extend previous practicum experiences with approval from the instructor. (0-30-3)

EDSP 7980 - M.Ed. Seminar in Special Ed
Credits: 3.00
Lecture: 
College: School of Education
Department: Special Education
This course is designed to enhance candidate's experiences in practicum. Results from practicum experiences will be reported, and a variety of topics selected for study will be considered. (3-0-3)

EDSP 7990 - Sem Readings-Research Sp Edu
Credits: 3.00
Lecture: 
College: School of Education
Department: Special Education
Current research and topics in Special Education. May be repeated for credit. (3-0-3)

EDSP 8860 - EdS Practicum I in Special Ed
Credits: 3.00
Lecture: 
College: School of Education
Department: Special Education
This course provides candidates with school-based teacher leadership experiences in special education. The practicum provides an opportunity for candidates to integrate theory and practice by enabling them to test knowledge and skills in the areas of curriculum, instruction, leadership, staff development, and school and community relations. Candidates will make decisions that test their judgments and use the knowledge to improve student learning. (0-2-3)
EDSP 8870 - EdS Practicum II in Special Ed
Credits: 3.00
Lecture: 
College: School of Education
Department: Special Education
This course provides candidates with school-based teacher leadership experiences in special education. The practicum provides an opportunity for candidates to integrate theory and practice by enabling them to test knowledge and skills in the areas of curriculum, instruction, leadership, staff development, and school and community relations. Candidates will make decisions that test their judgments and use the knowledge to improve student learning. (0-2-3)

EDSP 8880 - EdS Seminar in Sp Ed
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Special Education
This course is designed to enhance candidate's experiences in practicum. Results from practicum experiences will be reported, and a variety of topics selected for study will be considered. (3-0-3)

Education - General

EDUC 7010 - Foundations of Public Educatio
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
A study of the historical philosophical, socio-cultural, legal, political, economic, and technological foundations of American Education. (3-0-3)

EDUC 7020 - Special Problems in Education
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
A study of problems related to specific curriculum and certification areas. Emphasis is placed upon special projects and independent study. May be repeated for credit in a different curriculum area. (3-0-3)

EDUC 7040 - The Teacher and The Law
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
A study of the legal ramifications of decisions in the school and a study of ethical practices of educators. Case studies and case law are analyzed. (3-0-3)

EDUC 7060 - Third World Ed-Social St Semin
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This is a seminar course intended to introduce graduate students in education and allied fields to the origin and development of the educational systems in the "Third World". Students will study the geographical, cultural, and political legacy of five hundred years of European imperialism and its impact on Third World countries. Lastly the course will focus on the nature of the educational system in selected Third World countries and conduct a comparison of those systems with the educational system in the United States. (3-0-3)

EDUC 7070 - Comp App for Curr-Classroom
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
To provide teachers with an understanding of the capabilities, uses and limitations of computers, related technology and software as instructional, management and personal tools. (3-0-3)
EDUC 7080 - Intro to Stat in Health-PE
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Health & Human Performance
A course designed to introduce basic statistical concepts and their application to Health and Physical Education research problems. Topics include issues related to descriptive and inferential statistics. (3-0-3)

EDUC 7100 - Computer Based Instruct Media
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
A course focused on presentation and multimedia authoring programs for personal computers. The intent is to give the teachers the ability to create and integrate computer presentations in their daily instruction. A prior knowledge of personal computers is necessary. (3-0-3).

EDUC 7110 - Edu Computing-Lang Develop
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
A course designed to provide in-service teachers with an understanding of major theories of language development and the use of computers and computer software in the development of language and in the development of communication skills. Emphasis is given to written communication, to communication through Hypermedia software and to Internet communication. (3-0-3)

EDUC 7150 - Assess-Man of Classroom Prob
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
A study of appropriate techniques of classroom management and discipline relating to student behavior, learning and motivation. (3-0-3)

EDUC 7300 - Learning Dynamics
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course focuses on learning variations that exist in classrooms and how teachers address student diversity to achieve expected outcomes. Emphasis is placed on learning dynamics that include, among others, differentiation, gender, culture, and socioeconomic status. (3-0-3)

EDUC 7400 - Introduction to Ed Research
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course provides an introduction to educational research. Candidates learn to make sense of methods and techniques used in the critical analysis of education concepts so that they may be good consumers of educational research. Candidates apply these skills so that they can think systematically about their practice and improve student learning.

EDUC 7420 - EDUC Directed Study-Field Proj
Credits: 3.00
Lecture: 1.00
College: School of Education
Department: Education
A research-oriented study or project selected according to interests or needs of student. (1-0-3)
EDUC 7500 - Assessment and Learning  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education  
The course provides an in-depth study of appropriate strategies for assessing student learning and development in the cognitive, physical, and social domains. In addition, candidates learn how to use assessment results to adjust practices to fit the needs of learners as individuals and members of learning communities. The role of assessment in student-based decision making as well as guidelines for the construction, selection, and interpretation of assessment results is included. Issues and trends related to assessment and accountability are emphasized especially in relation to standardized testing. (3-0-3)

EDUC 7510 - Edu Measurement-Evaluation  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education  
Study of formal and informal tests and measurements and their role in student-based decisions regarding eligibility for programs, classification, and instructional delivery. Includes test construction, selection, interpretation, and criteria for administration. (3-0-3)

EDUC 7520 - Cultural/Ling Differences  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education  
This course focuses on the cultural and linguistic diversity P-12 students. Candidates will examine how culture, language, and other forms of diversity affect student performance in schools. Specific emphasis will be placed on funds of knowledge and culturally-relevant forms of pedagogy.

EDUC 7600 - Technology and Learning  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education  
The course provides instruction in planning, selecting, producing, utilizing, and evaluating non-print materials. Emphasis is placed on how to use technology to enhance instruction and to assure diverse instructional strategies are used to teach for understanding. (3-0-3)

EDUC 7610 - Education Policy & School Eval  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education  
This course provides an introduction to educational policy. Candidates will learn about and analyze the policy landscape as well as evaluate policy implications for schools. Specific emphasis is placed on school evaluation.

EDUC 7700 - Growth and Development  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education  
A study of human growth and development from conception through aging with special readings. Field experience required. (3-0-3)

EDUC 7800 - Collaboration & Professionalis  
Credits: 3.00  
Lecture: 3.00  
College: School of Education  
Department: Education
This course emphasizes the need for teachers to collaborate with others, both professional colleagues and parents or guardians, to improve student learning. Research-supported benefits to children, parents, school, and community are emphasized. Additional content includes strategies for building partnerships to enhance student learning and for developing professionalism and working collaboratively to solve educational problems within the school context. (3-0-3)

EDUC 7900 - Curriculum Foundations/Applica

Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education

This course is designed to enhance candidate's knowledge of content, its organization and its relationships with an emphasis on curriculum. Emphasis is placed on strategies to improve student learning, working with other professionals on curriculum development as well as expanding candidates' repertoire of instructional skills. (3-0-3)

EDUC 8010 - Philosophy of Education

Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education

An in-depth investigation of the alternatives of philosophical approaches to education and the relevance to education decision making. (3-0-3)

EDUC 8110 - Adv Research Methods

Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education

A study of advanced research methodology and applied research. Problem solving, measurement, experimental design consideration and report presentation. (3-0-3)

EDUC 8120 - Qualitative Research

Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education

This course is designed to enhance candidate's knowledge of non-traditional qualitative research practices. Candidates will explore a variety of qualitative strategies and methods appropriate for use in classrooms and other educational settings. Additional emphasis is on the interpretation of results and how those can be used to improve practices. (3-0-3)

EDUC 8220 - Field-Based Edu Research

Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education

This course provides candidates an in-depth study of action research. Candidates will explore the process involved in conducting field-based research and will give special attention to determining uses for results. The use of research results in improving practice and increasing student achievement will be emphasized. (3-0-3)

EDUC 8320 - Leading Teachers and Change

Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education

This course is designed to provide candidates with knowledge and skills that support their supervision and mentoring of pre-service and novice teachers, participation in site-based management, and inclusion in other teacher-leader situations. Candidates will gain insights in how to assist others in adjusting their practices, using knowledge to promote learning, working collaboratively in learning communities to support pupil learning, and accessing community resources to encourage increased achievement. (3-0-3)
EDUC 8420 - Supv Instruct to Enhance Lrng
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course is designed for candidates to develop skills for enhancing supervision of others for the purpose of managing and monitoring pupil learning. Candidates will develop knowledge of strategies and techniques that promote articulating goals for pupils, learning in group settings, enhancing the engagement of pupils during the learning experiences, using a variety of methods to promote learning, and assessing pupil progress to support further learning. (3-0-3)

EDUC 8520 - Promoting Learning-Diverse Cli
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course is designed to address the needs of pupils and learning in a diverse society. Topics of the course include applying knowledge of the development and learning needs of pupils, adjusting practices to meet the needs of learners, and promoting equitable treatment of pupils. Candidates will develop skills that will allow them to provide assistance to other school personnel to enhance student learning. (3-0-3)

EDUC 8620 - Curric/Assessment to Link Lrng
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course is designed to provide candidates knowledge of how content is organized and linked to learning. In addition, candidates will develop knowledge of how to generate multiple paths to knowledge and how to convey knowledge and skills to pupils. Emphasis will be placed on how that knowledge can be used in the teacher-leader role to support pupil learning. (3-0-3)

EDUC 8720 - Legal Aspects in Education
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Education
This course includes content related to the legal ramifications of decisions in the schools. Among the topics considered are decisions relating to the education of all students including those with special needs, various regulations concerning accountability and student learning, and school effectiveness. (3-0-3)

English

ENGL 5010 - Intro to Literacy Studies
Credits: 3.00
Lecture: 3.00
College: College of Arts and Sciences
Department: English and Foreign Languages
This course provides first-year graduate students with an overview of significant historical and rhetorical texts which have informed educational standards of literacy and subsequent educational policies and practices since the mid-19th century. (3-0-3)

ENGL 5215 - Comp and Critical Literacy
Credits: 3.00
Lecture: 3.00
College: College of Arts and Sciences
Department: English and Foreign Languages
This course emphasizes the various methods of critical discourse as a basis for individual writing and for the teaching of writing. The course also includes a study of research focusing on critical literacies in writing and the teaching of writing. Recommended for students who are interested in writing and/or in the teaching of writing. Prerequisite: Graduate Admission. (3-0-3)
ENGL 5225 - Comp and Digital Literacy  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** College of Arts and Sciences  
**Department:** English and Foreign Languages  
This course is a survey of the history and theories of rhetoric, an introduction to research in composition, and a study of approaches to composition with emphasis on digital literacies. Prerequisite: Graduate Admission (3-0-3)

ENGL 6270 - Sem in the Hist of Amer Engl  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** College of Arts and Sciences  
**Department:** English and Foreign Languages  
The course investigates the origins and development of American English from the 18th century to the present. Particular attention is paid to the development of regional varieties of American English, such as Southern American and Black American English, and nativist or official language movements, as well as the development of the variety of American English taught in educational systems. (3-0-3)  
**Prerequisites:**  
ENGL 5010 Minimum Grade: C

ENGL 6300 - Sem Technologies of Literacy  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** College of Arts and Sciences  
**Department:** English and Foreign Languages  
The course investigates the origins and development of the technologies associated with reading and writing, including oral performance texts, handmade texts, printed texts, and digital texts. The course also investigates how the medium of a text influences the nature of its meaning, as well as the educational technologies by which literacies are taught, transmitted, and preserved. (3-0-3)  
**Prerequisites:**  
ENGL 5010 Minimum Grade: C

ENGL 6310 - 21st Cent Digital Literacies  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** College of Arts and Sciences  
**Department:** English and Foreign Languages  
Drawing on scholarly work in the digital humanities and critical new media studies, this course investigates new and emerging literacies and their impact on education, business, and literature as well as the way media technologies change the way social power is distributed across race, class, gender, geographies, cultures, and traditional forms of authority like the state. In addition to learning to think critically about the affordances and limitations these technologies entail, students will, with help of the instructor, develop a professional online presence such as a working website where they will share their work for the semester. Prerequisite: ENGL 5010. (3-0-3)  
**Prerequisites:**  
ENGL 5010 Minimum Grade: C

ENGL 6320 - Critical Literacy and Lit  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** College of Arts and Sciences  
**Department:** English and Foreign Languages  
This course emphasizes a study of the cultural/historical developments of literature and literacy. Additionally the course will examine how codes of power are reflected in texts of specific historical and cultural time periods. Prerequisites: Graduate admission. (3-0-3)

ENGL 6340 - Women and Literacy  
**Credits:** 3.00  
**Lecture:** 3.00  
**College:** College of Arts and Sciences  
**Department:** English and Foreign Languages  
This course will examine the codes of power inherent in traditional standards of literacy and the ways that those standards impact the lives of women. Prerequisites: Graduate admissions or permission of the graduate director.
ENGL 6350 - Cultural Studies in Rhetoric  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: English and Foreign Languages  
This course emphasizes the socio-cultural trends which have shaped competing rhetorical theories and the application of such theories for the purpose of critically examining and assigning value to cultural artifacts. Prerequisites: Graduate admission. (3-0-3)

ENGL 6430 - Visual Interpretation of Lit  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: English and Foreign Languages  
Students will analyze ways that literature has been reinterpreted to visual media. Visual translations may include but are not limited to film, hypertext, graphic novels, art work, illustrations, and edition covers. (3-0-3)

ENGL 6450 - Literacy and Disability  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: English and Foreign Languages  
A survey of the intersection of literacy studies, composition studies, and disability studies. (3-0-3)

ENGL 6950 - Sp Prob Crit Lit Soc Justice  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: English and Foreign Languages  
A course to study issues in writing and/or the teaching of composition K-16 with specific emphasis on the impact of critical literacies and social justice. (3-0-3)  
Prerequisites:  
ENGL 5215 Minimum Grade: C and ENGL 5225 Minimum Grade: C

ENGL 7000 - Qualitative Research  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: English and Foreign Languages  
This course is designed to develop the student as discriminating consumer of research and a knowledgeable practitioner of qualitative research. The student will be introduced to the major genres of research (experimental, ethnographic, descriptive, historical, naturalistic) and the components of a research study. Prerequisite: Graduate admission (3-0-3)

ENGL 7100 - Master Thesis/Portfolio Option  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: English and Foreign Languages  
This course is an independent research project. A student may choose the Master's Thesis Option in which he or she investigates an area or problem relating to critical literacy. A student may choose the Portfolio Option and create a portfolio as the capstone project for their degrees. The portfolio should consist of at least three artifacts from the student's program of study, accompanied by an essay which links the artifacts into coherent whole and which shows the student's mastery of critical literacy. Prerequisites: Satisfactory completion of all coursework and a passing score on the comprehensive exam. (3-0-3)

Geology

GEOL 5111 - Special Problems Earth Science  
Credits: 3.00  
Lecture: 3.00  
College: College of Arts and Sciences  
Department: Geology and Physics Dept.
A graduate-level course to provide the graduate student with an opportunity to follow a specific program of study in the earth sciences under the direction of an instructor of the student’s choice. (3-0-3)

**GEOL 6121 - Earth Science for Teachers**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** College of Arts and Sciences
- **Department:** Geology and Physics Dept.

A physical geology course designed for middle and secondary science teachers. An integrated lab and lecture format will provide a better understanding of geologic processes and proficiency in distinguishing and classifying common earth materials. The course will also allow the participants to develop new classroom techniques and assemble useful resource materials. (3-0-3)

**Mathematics**

**MATH 5000 - Algebra for Middle Grades**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Comp and Mathematics
- **Department:** Mathematics Department

This is the first course in the Middle Grades Mathematics Initiative. Students will become proficient in algebra content prescribed by GPS guidelines. Appropriate technology and manipulatives will be incorporated in the course. (3-0-3)

**MATH 5001 - Geometry for Middle Grades**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Comp and Mathematics
- **Department:** Mathematics Department

This is the second course in the Middle Grades Mathematics Initiative. Students will become proficient in geometry content prescribed by GPS guidelines. Appropriate technology and manipulatives will be incorporated in the course. (3-0-3)

**MATH 5002 - Number Theory for Mid Grades**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Comp and Mathematics
- **Department:** Mathematics Department

This course teaches students concepts in Number Theory and discrete probability appropriate for middle grades classroom with emphasis on problem solving, active learning, and appropriate technology, including calculators, electronic resources, and manipulatives. (3-0-3)

**MATH 5003 - Statistics for Middle Grades**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Comp and Mathematics
- **Department:** Mathematics Department

Introduces teachers to concepts, manipulatives, and technology appropriate for teaching probability and statistics in the middle grades classroom. Emphasizes the use of real world data. (3-0-3)

**MATH 6619 - Computational Geometry**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Comp and Mathematics
- **Department:** Mathematics Department

This course is designed to give graduate students a working knowledge of algorithms for solving geometric problems on a computer. Topics include polygonal triangulation and partitioning, convex hulls, Voronoi diagrams & arrangements, search and intersection algorithms, motion planning, robustness, and randomized algorithms. (3-0-3)

**MATH 6640 - Partial Differential Equations**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Comp and Mathematics
- **Department:** Mathematics Department
This course introduces graduate students to those elements of partial differential equations that play a central role in science, geometry, analysis and computational modeling. (3-0-3)

MATH 6675 - Spec Probs in Mathematics
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
Individual work providing students with the opportunity to follow a specific program of study under the direction of a qualified instructor. (3-0-3)

MATH 7710 - Foundations of Algebra
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
The course offers graduate students a comprehensive overview of algebraic theories and structures including number theory, theory of equations and number fields, as they relate to the teaching of secondary mathematics. (3-0-3)

MATH 7711 - Foundations of Statistics
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
This course is designed to give graduate students a rigorous overview of probability & statistics. (3-0-3)

MATH 7712 - Foundations of Geometry
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
A study of Euclidean axiomatic geometry, betweenness, congruence, parallelism, axiomatic systems, & non-Euclidean geometries. (3-0-3)

MATH 7713 - Foundations of Analysis
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
This course is designed to give graduate students a rigorous overview of the subject, as a prerequisite to teaching the subject. (3-0-3)

MATH 7715 - Algebraic Geometry I
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
This course introduces students to modern computational algebraic geometry using algorithms of Buchberger and Hironaka. Topics include affine varieties, Groebner bases, elimination theory, nullstellensatz, applications to robotics and automatic geometric theorem proving. (3-0-3)

MATH 7790 - History and Philosophy of Math
Credits: 3.00
Lecture: 3.00
College: School of Comp and Mathematics
Department: Mathematics Department
Graduate-level survey with emphasis on topical and thematic research, and their use in teaching mathematics. Permission of instructor and graduate standing required. Offered every fall semester. (3-0-3)
Prerequisites:
MATH 2221 or MTH 210

Nursing
NURS 6100 - Prin Lead&Mgt HealthCare Org

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing

Transitioning from novice to expert in the role of a nursing leader is explored in this course. Content includes theoretical foundations of effective leadership which will enable the student to function effectively in a leadership role in various settings. The management of human, fiscal and physical health care resources will be emphasized. (3-0-3) Pre or Co requisite(s): NURS 5100; NURS 5200.

Prerequisites:
NURS 5100 Minimum Grade: C and NURS 5200 Minimum Grade: C

NURS 6104 - Theory Graduate Nsg Practice

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing

This course prepares nurses to transition into new roles and advanced nursing practice by exploring a wide range of theories from nursing and other sciences. Students will understand the role of knowledge development in advancing a discipline. Students will critique, analyze, and evaluate selected nursing, educational and leadership theories and incorporate these theories into their advanced nursing practice roles. (3-0-3) Prerequisites:
Admission to Graduate Nursing Program or Senior Standing in BSN Program with 3.00 GPA. Corequisites: None.

NURS 6105 - Research Evidence-Based Nsg Pr

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing

This course builds upon undergraduate statistics and research courses and will focus on the relationship between nursing theory, research, and practice for evidence-based practice. This course will focus on issues such as the identification of practice and system problems, evaluation of research studies and systematic reviews, development and implementation of evidence-based practice guidelines, use of evidence-based guidelines, use of evidence-based practice to improve outcomes for individuals and groups of patients as well as health care systems, and differentiation of evidence-based and value-based approaches to practice. Students are expected to integrate an evidence-based approach into their practice. (3-0-3) Prerequisites:
Admission to Graduate Nursing Program or Senior Standing in BSN Program with 3.00 GPA. Corequisites: None.

NURS 6106 - Advanced Pharmacology

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing

This course focuses on an increasing knowledge base of advance practice nurses in Pharmacology and Pharmacotherapeutics. Emphasis is placed on common acute and chronic health problems. Case studies are discussed, along with pharmacological management. (3-0-3). Prerequisites: Admission to Graduate Nursing Program or Senior Standing in BSN program with 3.00 GPA. Corequisites: None.

NURS 6107 - Advanced Pathophysiology

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing

This course focuses on developing advanced knowledge of physiological and pathophysiological concepts related to human response to illness. The student will apply these concepts across the lifespan to support clinical decision making by the advanced practice nurse. Emphasis will be placed on important pathophysiological concepts needed to support the goals of Healthy People 2020 to improve clients' quality of life and reduce health disparities. (3-0-3) Prerequisites: Admission to Graduate Nursing Program or Senior Standing in BSN Program with 3.00 GPA. Corequisites: None.
NURS 6108 - Advanced Health Assessment

Credits: 3.00
Lecture: 2.00
College: School of Nursing
Department: Nursing
This course in health assessment expands the nurse's knowledge of cognitive processes and psychomotor skills needed for comprehensive assessment of clients across the life span. The advanced practice nurse will use these techniques and processes to gather comprehensive physical, psychosocial, and cultural assessment data relevant to common health problems. This course consists of didactic, clinical and lab experiences. (2-3-5)
Prerequisites: Admission to Graduate Nursing Program or Senior Standing in BSN Program with 3.00 GPA. Corequisites: None.

NURS 6109 - Information Tech. Health Care

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course examines the implications of the use of health care technology in the workplace as it impacts the areas of advanced clinical practice, nursing administration, and nursing education. Consideration is also given to ethical principles guiding the use of health care technology, and to the organizational and financial issues associated with legislation and public organizational policies. This course provides hands-on experience with a certified EHR that accentuates the opportunity for students to assess the potential of such systems to provide decision support and to improve patient outcomes. (3-0-3) Pre or Co-requisites: Admission to Graduate Nursing Program.

NURS 6110 - Principles of Educ in Nurs

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course focuses on the theoretical foundations of teaching, learning innovations, and the multifaceted role of a nurse educator in multiple settings. Expectations of a leader in nursing education are explored. (3-0-3) Pre or Co requisite(s): NURS 5100; NURS 5200.
Prerequisites:
NURS 5100 Minimum Grade: C and NURS 5200 Minimum Grade: C

NURS 6119 - Information Tech. Health Care

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course examines the implications of the use of health care technology in the workplace as it impacts the areas of advanced clinical practice, nursing administration, and nursing education. Consideration is also given to ethical principles guiding the use of health care technology, and to the organizational and financial issues associated with legislation and public organizational policies. This course provides hands-on experience with a certified EHR that accentuates the opportunity for students to assess the potential of such systems to provide decision support and to improve patient outcomes. (3-0-3) Pre or Co-requisites; Admission to Graduate Nursing Program.

NURS 6210 - Mgt Human Resources Hlth Care

Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course will provide the knowledge needed for the nurse leader/manager to be competent in healthcare human resource management. This course will focus on recruitment, selection, and training issues and also on how human resource management needs to be integrated into the strategic planning of the organization. Legal, ethical, and labor issues will be discussed, as well as health and safety issues, and the regional, national and global influences on human resource planning and management. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program. Corequisites: None.
NURS 6220 - Effective Teach/Learn Strategy
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course is an overview of a variety of learning and instructional strategies to assist in the implementation of teaching plans. General principles and methodologies related to learning and instruction are integrated into face-to-face and technology enhanced techniques. (3-0-3) Prerequisite: NURS 6110. Corequisite: None.
Prerequisites:
NURS 6110 Minimum Grade: C

NURS 6230 - Health Care Delivery Systems
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course is designed for the nurse leader/manager to develop an understanding of the complex regulatory environment in health care delivery systems and the interrelatedness of performance and quality improvement. Also, the framework for understanding the role and contributions of nurse leaders/managers within healthcare systems will be explored. Issues such as public reporting, pay for performance, measurements of patient satisfaction, and other emerging and timely topics will be addressed. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program. Co-requisites: None.

NURS 6240 - Health Care Finance
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course will examine the economic and financial issues that are unique to organizations in health care delivery. It will include an understanding of accounting principles, financial analysis and decision making tools needed for nurse leaders. Also included are the principles of economics and the role of accounting and finance on the financial decision making of healthcare managers and executives. In addition, reimbursement issues will be discussed, as will the current and future considerations of paying for health care. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program. Co-requisites: None.

NURS 6300 - Trans into Leadership Role
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This clinically based course operationalizes the theoretical principles and norms studied in previous courses. The student will have the opportunity to apply the concepts of leadership within a selected specialty area. (0-9-3) Prerequisites: NURS 5400; NURS 6000; NURS 6020. Corequisites: None.
Prerequisites:
NURS 5400 Minimum Grade: C and NURS 6000 Minimum Grade: C and NURS 6020 Minimum Grade: C

NURS 6330 - Evaluation of Learning
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course will provide methods of assessing learning outcomes for individuals and groups in academic and clinical settings. Emphasis is placed on theoretical reflections and empirical methods used to evaluate educational programs, institutions, personnel, and students. (3-0-3) Prerequisite: NURS 6110. Corequisites: None.
Prerequisites:
NURS 6110 Minimum Grade: C

NURS 6400 - Transition into Leadership Rol
Credits: 3.00
Lecture: 0.00
College: School of Nursing
Department: Nursing
This clinically-based course operationalizes the theoretical principles and norms of leadership and management studied in previous nursing leadership courses. The student will have the opportunity to apply the concepts of leadership within a selected specialty area. (0-9-3) Pre or Co-requisites: NURS 6100, NURS 6200, NURS 6400, NURS 6410.

**NURS 6440 - Curriculum Development**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Nursing
- **Department:** Nursing

This course examines the principles, philosophies, and theories used in curriculum development. Graduate students will define, design, and analyze a selected curriculum model. (3-0-3) Prerequisite: NURS 6110.

**Corequisite:** None.

**Prerequisites:**
- NURS 6110 Minimum Grade: C

**NURS 6550 - Trans into Nurse Educator Role**
- **Credits:** 3.00
- **Lecture:**
- **College:** School of Nursing
- **Department:** Nursing

This clinically based course provides the opportunity for students to operationalize the theoretical principles and concepts studied in previous courses. Students will have the opportunity to assume the role of educator within a selected specialty area. (0-9-3) Prerequisites: NURS 5300; NURS 5400; NURS 5500; NURS 6220; NURS 6330; NURS 6440. Corequisites: None.

**Prerequisites:**
- NURS 5300 Minimum Grade: C and NURS 5400 Minimum Grade: C and NURS 5500 Minimum Grade: C and NURS 6220 Minimum Grade: C and NURS 6330 Minimum Grade: C and NURS 6440 Minimum Grade: C

**NURS 6720 - Applied Statistics Data Mining**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Nursing
- **Department:** Nursing

Emphasizes the application of statistical and analytical procedures used in health care and nursing research. This project-based course provides a review of fundamentals of inferential statistics and also offers an introductory study of data modeling, data retrieval and data mining. Emphasis is placed on the use of PC-based tools for conducting analyses of clinical data. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program or to the Graduate Certificate Program. Co-requisites: None.

**NURS 6730 - Process Improvement Healthcare**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Nursing
- **Department:** Nursing

This "hands on", project-based course provides a discussion of recent developments in the management of quality and process improvement in the healthcare industry. Topics include: an overview of healthcare quality leadership requirements, teambuilding and project management quality management; quality and process improvement initiatives; methodologies for continuous process improvement; and emerging trends in healthcare quality management. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program or to the Graduate Certificate Program. Co-requisites: None.

**NURS 6740 - Health Info Exch Stand Models**
- **Credits:** 3.00
- **Lecture:** 3.00
- **College:** School of Nursing
- **Department:** Nursing

This course provides students with a general introduction to the data standards necessary to achieve interoperability within and among complex healthcare organizations. Emphasis is placed on the nature, role and services provided by Health Information Organizations (HIOs) including Regional HIOs. Additional study of the strengths and weaknesses of the Centralized, Federated, and Hybrid models used for HIE. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program or to the Graduate Certificate Program. Corequisites: None.
NURS 6750 - Health Systems Project Mgmt
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This project-based course is designed to help students develop skills in facilitating strategic planning and management of complex projects in health care organizations. Learning activities will focus on managing the successful implementation of EHRs, including action planning, strategy implementation, evaluation of the planning process, budgeting, change management, assessment of organizational culture and behavior, scope creep, managing expectations, balancing competing priorities, and compliance reporting. Fundamental principles of project management such as planning, scheduling, resource allocation, and tracking are applied to a healthcare information system project. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program or to the Graduate Certificate Program. Co-requisites: None.

NURS 6760 - Clinical Decision Support Syst
Credits: 3.00
Lecture: 3.00
College: School of Nursing
Department: Nursing
This course provides an overview of clinical decision support systems and provides the student with a "hands-on" experience in three approaches: diagnostic decision support tools, alerts and reminders, and decision trees. In addition, methods for critiquing decision support tools for validity and utility for nursing practice are examined. (3-0-3) Prerequisites: Admission to the Graduate Nursing Program or to the Graduate Certificate Program.

NURS 6800 - Independent Study (opt)
Credits: 1.00 TO 2.00
Lecture: 0.00
College: School of Nursing
Department: Nursing
An independent study allows the graduate nursing student to explore, extend and enrich content introduced in courses in the MSN program. Students may elect to use these hours on a topic related to their area of focus or on a topic or method related to their proposed MSN theses or project. 1-2 variable hours. Prerequisites: None Co-requisites: None.

NURS 6880 - Transition to Informatics Role
Credits: 3.00
Lecture: 0.00
College: School of Nursing
Department: Nursing
This clinically based course provides the opportunity for students to operationalize the theoretical principles and concepts studied in previous Informatics courses. Students will have the opportunity to assume the role of Nurse Informaticist within a selected application area. An on-site project is required for this course. (0-9-3) Prerequisites: NURS 6720, NURS 6730, NURS 6740, NURS 6750, NURS 6760. Co-requisites: None.

NURS 6999 - Focused Project/Thesis Nursing
Credits: 3.00
Lecture:
College: School of Nursing
Department: Nursing
The main focus of this course will be a faculty-guided project/thesis that addresses a significant problem or issue within the nursing profession. Students will choose a problem that is of concern to nurse educators or one of concern to nurse leaders, appropriate for their declared track. The project is a research-based project that synthesizes knowledge and information from previous courses to develop, implement and evaluate the project. The thesis is a result of the research process utilizing primary or secondary data analysis and supports the synthesis of knowledge and information from previous courses. Students will be expected to provide an oral defense of the project/thesis. Students choosing to complete course requirements through a paper presentation will also be expected to complete a comprehensive exam. (0-9-3) Pre or Co requisites: NURS 6300 or NURS 6550
Prerequisites:
NURS 6300 Minimum Grade: C or NURS 6550 Minimum Grade: C

Health & Physical Education
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
<th>Lecture</th>
<th>College</th>
<th>Department</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>PHEG 6000</td>
<td>Problems-Trends in Hea-PE</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>A study of the current pertinent problems and trends an instructor may expect to encounter when teaching health. (3-0-3)</td>
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<tr>
<td>PHEG 6010</td>
<td>Physiology of Exercise</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>Lectures and readings in current literature to provide reasonable depth in selected areas of physiology as applied to activity and health. (3-1-3)</td>
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<tr>
<td>PHEG 6020</td>
<td>Preventive Care Ath and Injury</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>Analysis of common athletic injuries, conditioning, and safety practices. (3-0-3)</td>
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<tr>
<td>PHEG 6030</td>
<td>Foundations of Health-PE</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>A study of the history, philosophy, concepts, and scientific foundations of health and physical education. (3-0-3)</td>
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<tr>
<td>PHEG 6050</td>
<td>Elementary Physical Education</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>A study of current trends and developments in activity programs for elementary school physical education. (3-2-3)</td>
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<tr>
<td>PHEG 7010</td>
<td>Org-Adm of Health-PE</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>Basic principles and procedures for the effective organization, administration, and supervision of health and physical education programs. (3-0-3)</td>
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<tr>
<td>PHEG 7020</td>
<td>Meas-Eval of Health-PE</td>
<td>3.00</td>
<td></td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>The selection, application, and evaluation of certain existing tests and measures appropriate in health and physical education. (3-0-3)</td>
</tr>
<tr>
<td>PHEG 7030</td>
<td>School Health Program</td>
<td>3.00</td>
<td>3.00</td>
<td>School of Education</td>
<td>Health &amp; Human Performance</td>
<td>Principles, procedures, materials, and methods of school health education. (3-0-3)</td>
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</table>
PHEG 7040 - Current Const Health-PE
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Health & Human Performance
Deals with the principles, problems, and procedures in the development of the physical education and health education curriculum in public schools. (3-0-3)

PHEG 7050 - Adap-Corr PE
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Health & Human Performance
Emphasis upon the acquisition of specific information about the causes, nature, and psychological implications of the various handicapping disabilities, and to translate medical findings in terms of needed physical activities. (3-0-3)

PHEG 7060 - Motor Learning
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Health & Human Performance
Presents research and theory of learning, performance, and related factors as applied to gross motor skills. Intended for teachers, coaches, and those concerned with human performance in motor activity. (3-0-3)

PHEG 7070 - Readings in Health
Credits: 3.00
Lecture: 3.00
College: School of Education
Department: Health & Human Performance
Deals with current research in the field of health designed to help guide and inform the nonprofessional health consumer. (3-0-3)

Theater

THEA 5545 - Performance Literacy
Credits: 3.00
Lecture: 3.00
College: College of Arts and Sciences
Department: Theater, Comm, & Media Arts
Advanced studies of the theatrical and cinematic languages that are transforming the nature of the modern world. (3-0-3)