Graduate Curriculum
Approved by Graduate Council
2007 – 2008

September 18, 2007
1. Proposal from the Department of Bilingual Education to replace the comprehensive examination requirement with a capstone course. Also change modifier of 600 Assessment from Comprehensive Examination to Capstone Course.

2. Proposal from Department of English to change ENGL 508 from repeatable once for credit to repeatable twice for credit.

October 16, 2007
1. Proposal from the Department of Mathematics:
   a. Change credit hours for MATH 490G from 3 to 4.
   b. Change the catalog description for MATHED 598 from graded to P/F; from 2 credits to variable credit; and semester offered from SU to F/S.
   c. Change the MATHED program requirements; change required MATH credits for the High School Option from 8 to 6; remove the education course elective requirement.

2. Proposal from the Department of English:
   Delete English 569 Portfolio for Rhetoric and Composition from the catalog and course offerings and adopt the university-wide 592 Portfolio in its place.

November 6, 2007
1. Proposals from the Department of Kinesiology:
   a. Create new course KINES 531 Physical Activity and Aging and dual-list with KINES 430.
   b. Remove the G designation from the following courses:
      KINES 330G Exercise Physiology
      KINES 331G Laboratory for Exercise Physiology
      KINES 365G Social Psychology of Sport and Exercise
      KINES 370G Biomechanics
      KINES 371G Laboratory for Biomechanics
      KINES 375G Human Growth and Motor Learning
      KINES 376G Laboratory for Human Growth and Motor Learning

2. Proposals from the Department of Counselor Education:
   b. Change credit designation of COUN 527 Applied Research from 2 credits to 1 credit.
   c. Add COUN 592 Portfolio to degree requirements for the Master of Arts in Counseling.

3. Proposal from the Department of Biology:
   a. Change semester offered for BIOL 420G Immunology to Fall (F).
   b. Create BIOL 550 Scientific Writing for Biomedical Sciences.
   c. Create BIOL 547 Forensic Biology.

December 4, 2007
1. Proposal from the Department of Public Policy and Administration
   a. Cross-list the following courses:
      PUBADM 520 Introduction to Community and Regional Planning
      PUBADM 522 Planning: Process and Practice
      PUBADM 525 Planning and Zoning
b. Create 19 new courses in Community and Regional Planning
   CRP 500 History and Theory of Planning
   CRP 502 Economic Applications to Community and Regional Planning
   CRP 503 Plan Making and Implementation
   CRP 504 Introduction to Policy Information – Geographic Information Systems (GIS)
   CRP 505 Community Data
   CRP 510 GIS Applications and Visualization Techniques in Planning
   CRP 511 Qualitative Methods
   CRP 512 Quantitative Methods
   CRP 520 Introduction to Land Use and Transportation Problems and Policy
   CRP 521 Economics of Transportation Planning
   CRP 530 State, Regional and Community Economic Development
   CRP 531 Public/Private and Mixed Enterprises Planning
   CRP 532 Real Estate Development
   CRP 533 Public Finance for Planners
   CRP 534 Downtown Revitalization
   CRP 540 Housing Policy and Community Development
   CRP 541 Community Design and Site Planning
   CRP 551 Sustainable Development
   CRP 561 Legal Frameworks

c. Create a new graduate degree program: Master of Community and Regional Planning.

2. Proposal from the Department of Computer Science to make the following revisions:
   COMPSCI 510 Databases – Change course description and prerequisites
   COMPSCI 525 Network Protocols and Programming – Change title and course description
   COMPSCI 530 Parallel Computing – Change course description, credits and prerequisite
   COMPSCI 550 Programming Language Translation – Change prerequisites
   COMPSCI 552 Operating Systems – Change prerequisites
   COMPSCI 571 Software Engineering – Change prerequisites
   COMPSCI 572 Object-Oriented Design Patterns – Change prerequisites

3. Proposal from the Department of Civil Engineering
   a. Create new course CE 536 Hydraulics
      Renumber CE 527 (GEOS 526) Aqueous Geochemistry to CE 526 (GEOS 526)
   b. Change grading for CE 600 Assessment to Pass/Fail.

4. Proposal from the Department of Educational Technology
   a. (Pages 1-22) Course Changes:
      EDTECH 504 Theoretical Foundations of Educational Technology – Create new course.
      EDTECH 512 Online Course Design – Create new course.
      EDTECH 513 Multimedia – Create new course.
      EDTECH 521 Online Teaching in the K-12 Environment – Create new course.
      EDTECH 522 Online Teaching for Adult Learners – Create new course.
      EDTECH 523 Advanced Online Teaching – Create new course.
      EDTECH 531 Teaching and Learning in Virtual Worlds – Create new course.
      EDTECH 532 Educational Games and Simulations – Create new course.
      EDTECH 542 Technology-Supported Project-Based Learning – Create new course.
      EDTECH 551 Technical and Grant Writing – Create new course.
      EDTECH 552 Operating Systems and Networks – Create new course.
      EDTECH 561 Research in Educational Technology – Create new course.
      EDTECH 571 Introduction to Educational Technology – Change course number to EDTECH 501,
      change course description, and semester offered.
      EDTECH 572 Instructional Design for Educators – Change course number and title to EDTECH 503
      Instructional Design, change course description, and semester offered.
      EDTECH 574 Instructional Software Development and Courseware Design – Change course number
      and title to EDTECH 511 Interactive Courseware Development, change course description,
      semesters offered, change from core to elective, add prerequisite.
EDTECH 575 Integrating Technology into the Classroom – Change course number and title to EDTECH 541 Integrating Technology into the Classroom Curriculum; change course description, semesters offered, change from core to elective, delete prerequisite.

EDTECH 576 Evaluation for Educational Technologists – Change course number to EDTECH 505, change course description, semester offered, add prerequisite.

EDTECH 577 Instructional Message Design – Change course number to EDTECH 506, change course description.

b. (Page 7 & 23) Add EDTECH 504 Theoretical Foundations of Educational Technology and Portfolio to the requirements of the Master of Educational Technology program and delete Comprehensive Examination from the requirements of the Master of Educational Technology program.

c. (Page 7 & 22) Add EDTECH 504 Theoretical Foundations of Educational Technology and EDTECH 561 Research in Educational Technology to the requirements of the Master of Science in Educational Technology program.

d/e.(Page 24) Change requirements and create two areas of emphasis (K-12 and Adult Learner) in the Graduate Certificate in Online Teaching.

f. (Page 25) Remove EDTECH 574 and 583 from requirements of Graduate Certificate in School Technology Coordination.

g. (Page 26) Graduate Certificate in Technology Integration Specialist – Change title; remove EDTECH 580 Selected Topics Technology in the Content Area and EDTECH 583 Selected Topics Multimedia from requirements; add EDTECH 502 The Internet for Educators to requirements.

January 15, 2008

1. Proposal from the Department of Public Policy and Administration
   a. Create a new degree program, Doctor of Philosophy in Public Policy and Administration
   b. Create 17 new PUBADM courses:
      PUBADM 506 Qualitative Analysis and Methodology
      PUBADM 507 Intermediate Quantitative Analysis and Methodology
      PUBADM 508 Survey Research
      PUBADM 509 Public Policy Analysis
      PUBADM 510 Program Evaluation
      PUBADM 512 Information Technology and Public Policy
      PUBADM 513 Economics of Public Policy
      PUBADM 514 Introduction to Nonprofit Management and Collaboration
      PUBADM 515 Policy Implementation and Practice
      PUBADM 544 Energy in the West
      PUBADM 545 Energy Policy
      PUBADM 601 Philosophy of Social Inquiry
      PUBADM 602 Philosophical and Practical Foundations of Democratic Governance
      PUBADM 603 Administration and the Study of Public Policy
      PUBADM 604 Advanced Techniques in Policy Research
      PUBADM 605 Seminar in Environmental Policy and Administration
      PUBADM 606 Seminar in State and Local Government Policy and Administration

2. Proposal from the Department of Mathematics to:
   a. Change the program requirements for the MS in Mathematics by increasing the core from 6 to 7 credits and decreasing the elective credits from 24-25 to 23-24 credits.
   b. Delete the following courses:
      MATH 513 Differentiable Manifolds
      MATH 516 Functional Analysis
      MATH 534 Dynamical Systems
      MATH 567 Numerical Methods for Ordinary Differential Equations
      MATH 568 Numerical Methods for Partial Differential Equations
   c. Make minor changes to existing courses:
      MATH 502 Logic and Set Theory
      MATH 507 Computational Number Theory
      MATH 509 Foundations of Public Key Cryptology
      MATH 511 Introduction to Topology
February 5, 2008
1. Proposal from the Department of Public Policy and Administration, Dispute Resolution Program to create new courses:
   DISPUT 575 Conflict Analysis
   DISPUT 565 Conflict Management in Environment, Natural Resource and Energy Policy

2. Proposal from the Department of Nursing to change the prerequisites for the following courses:
   NURS 502 Foundations of Knowledge and Theory for Advanced Nursing
   NURS 504 (MHLTHSCI 504) Health Care Economics, Financing and Delivery
   NURS 508 Advanced Research and Scholarly Inquiry for Nurses
   NURS 509 Advanced Research and Scholarly Inquiry for Nursing Laboratory
   NURS 520 Professional Role Development for Advanced Nursing in Population Health
   NURS 522 Concepts of Population Health

February 19, 2008
1. Proposal from the Department Instructional and Performance Technology:
   a. Delete courses IPT 520, 524, and 572.
   b. Create new course IPT 575.
   c. Change semester offered for IPT 510, 523, 529, 531, 540, 564, 571, 583, 584.
   d. Change co/prerequisite of IPT 537.
   e. Change semester offered and catalog description of IPT 536.
   f. Change course title and catalog description of IPT 535 and 563.
   g. Change semester offered and c/prerequisites of IPT 551.
   h. Change semester offered and catalog description and co/prerequisites for IPT 525, 530, 538, 550 and 560.
   i. Change semester offered and course number and co/prerequisites of IPT 585.

March 4, 2008
1. Proposal from the Department of Public Policy and Administration (Master of Public Administration program):
   a. Change name and course description of PUBADM 511 Decision Techniques for Public Administrators
   b. Delete PUBADM 521 Intergovernmental Relations
   c. Delete PUBADM 531 Labor Relations in the Public Sector
   d. Create and add PUBADM 532 Grantsmanship
   e. Change course description of PUBADM 560 State and Local Government Policy and Administration

March 18, 2008
1. Proposal from the Department of Chemistry and Biochemistry to create a new program:
   Master of Science in Chemistry.
2. Proposal from the **Department of Chemistry and Biochemistry** to delete existing courses from catalog:
   - CHEM 411G Analytical Chemistry
   - CHEM 431G Biochemistry I
   - CHEM 432G Biochemistry Laboratory
   - CHEM 433G Biochemistry II
   - CHEM 440G Spectrometric Identification
   - CHEM 441G Spectrometric Identification Laboratory
   - CHEM 443G Advanced Chemical Preparation Laboratory
   - CHEM 515 Nuclear and Radiochemistry

3. Proposal from the **Department of Chemistry and Biochemistry**:
   a. Change title, description, semesters offered, credits and pre-reqs for CHEM 500 History of Chemistry.
   b. Change title, description, semesters offered and pre-reqs for:
      - CHEM 508 Introduction to Polymer Chemistry to Synthetic Organic Chemistry
      - CHEM 509 Chemistry of life Processes to Introduction to Polymer Chemistry
   c. Change semesters offered and pre-reqs for:
      - CHEM 510 Organic Polymer Synthesis
      - CHEM 521 Quantum Chemistry
      - CHEM 522 Spectroscopy
      - CHEM 523 Chemical Kinetics
      - CHEM 560 Introduction to NMR Spectroscopy
      - CHEM 561 Introduction to Molecular Modeling and Computational Chemistry
   d. Change pre-reqs for CHEM 511
   e. Create the following courses:
      - CHEM 507 Physical Organic Chemistry
      - CHEM 540 Spectrometric Identification
      - CHEM 551 Bioinorganic Chemistry
      - CHEM 552 Organometallic Chemistry
      - BCHM 510 Advanced Protein Chemistry
      - BCHM 511 Nucleic Acid Metabolism
      - BCHM 512 Intermediary Metabolism
      - BCHM 513 Advanced Enzymology

2. Proposal from the **Department of Instructional & Performance Technology** to create a Graduate Certificate in E-Learning and Performance Support Solutions.

**April 1, 2008**

1. Proposal from the **Department of Biology** to renumber certain BIOL, ZOOL, and BOT courses:
   a. Change current 400G courses to 500 level course numbers
   b. Change current 500 level course numbers to 600 level course numbers

2. Proposal from the **Department of English** to delete Master of Arts in English, English Education program and create a Master of Arts in Teaching English Language Arts.

3. Proposal from the **Department of Materials Science and Engineering** to create new courses:
   - MSE 501 Survey of Materials Science
   - MSE 518 Phase Transformations and Kinetics
   - MSE 521 Introduction to Electron Microscopy
   - MSE 522 Advanced Transmission Electron Microscopy

4. Proposal from the **Department of Public Policy and Administration** to change course descriptions:
   - PUBADM 500 Administration in the Public Sector
   - PUBADM 503 Research Methods in Public Administration
5. Proposal from the **Department of Public Policy and Administration**, Community and Regional Planning program:
   a. Remove PUBADM 521 Intergovernmental Relations from degree requirements
   b. Add PUBADM 524 Introduction to Policy Formation: Geographic Information Systems (GIS) to degree requirements.

   **April 15, 2008**

1. Proposal from the **Department of Instructional & Performance Technology*** to:
   a. Create a new graduate certificate in Workplace E-Learning and Performance Support
   b. Create a new course IPT 511 Synchronous E-Learning in the Workplace

   *Secretary’s note:* Graduate Council considered a proposal for a Graduate Certificate in E-Learning and Performance Support Solutions on March 18, 2008 and voted for approval pending revisions by the department. On March 26, 2008 Donald Stepich, Chair of the Department of Instructional & Performance Technology requested that the proposal be tabled since department curriculum committee was not in agreement with the revisions requested by the Council. For consideration today is an alternate proposal that includes a certificate title change and accommodates the concerns of the Graduate Council and the department curriculum committee.

2. Discussion concerning students already in master’s program who have completed all requirements for a certificate program. Current Graduate College procedure does not allow for automatic award of certificate. Students must apply to certificate program; and since 2/3 of new coursework must be completed after admission to the certificate program, students must take another course to be substituted for one already completed.

   **May 6, 2008**

1. Proposal from the **Department of Materials Science and Engineering** (tabled to be considered Fall08):
   Create MSE 528 Interfaces and Dislocation Behavior
   Change course title and catalog description of MSE 508 Solid State Thermodynamics and Kinetics

2. Proposal from the **Department of Curriculum, Instruction and Foundational Studies** to change the requirements in the Master of Education in Educational Leadership by replacing ED-CIFS 591 Project with ED-CIFS 600 Assessment [Capstone Course].

3. Proposal from the **Department of Counselor Education** to change the title of COUN 504 Measurement and Evaluation in School Counseling.

4. Proposal from the **Department of Special Education & Early Childhood Studies** to create new courses:
   ED-ECS 503 Assessment for K-3 Program Planning
   ED-ECS 506 Infants and Toddlers in Natural Environments: ECE/ECSE
   ED-ECS 507 Assessment for Birth to Five Program Planning: ECE/ECSE
   ED-ECS 508 Preschool Curriculum: ECE/ECSE
   ED-ECS 516 Social Studies, Science, and Math Curricula and Instruction
   ED-ECS 562 Teaching Experience in Primary Grades: ECE/ECSE
   ED-ECS 563 Teaching Experience in Preschool Programs: ECE/ECSE
   ED-ECS 564 Teaching Experience in Natural Environments, Birth to Three

5. Proposals from the **Department of Kinesiology**:
   a. Change KINES 403G to KINES 503 Head and Neck Anatomy.
   b. Add KINES 598 Graduate Seminar to the Core Requirements for the Master of Science in Exercise and Sport Studies program.
   c. Create new program Master of Kinesiology.
6. Proposals from the **Department of Social Work** to make changes in the following existing courses:
   a. SOCWRK 502 History and Philosophy of Social Work – title and course description
   b. SOCWRK 503 General Methods I: Small Systems (Micro) – title, course description, prereq/coreq
   c. SOCWRK 504 Social Work Practice Skills – title, course description, semester offered, credit, prereq/coreq
   d. SOCWRK 505 Social Policy Analysis – title, course description, and prerequisite
   e. SOCWRK 506 Individuals and Families: Policy and Legislation – title, description, and semester offered
   f. SOCWRK 515 General Methods II: Larger Systems (Macro) – title, description, prereq/coreq
   g. SOCWRK 530 Foundation Research – title, course description, and credit designation
   h. SOCWRK 532 Research II: Evaluation – title, course description, and prerequisites
   i. SOCWRK 550 Advanced Interventions I: Comparative Theories
Create new course
j. SOCWRK 531 Foundation of Research II

**End of curriculum approved in 2007-2008 academic year**