

Minutes

Campus Curricula Committee Meeting

September 2, 2008 Meeting

3:00 p.m. Room 117 Fulton Hall

Approval of May 6 & August 14, 2008 minutes.

Shannon Fogg, Lance Gentry, Richard Hall, Angie Huffman, Irina Ivliyeva, Keith Nisbett, and Jennifer Thorpe attended the meeting.

Review of submitted DC forms:

DC 0299, Civil Engineering, effective Fall 2008. A proposal to modify the current curriculum for the BS in Civil Engineering by replacing Engineering Management 207 with Engineering Management 137.

Review of submitted CC forms:

CC 7453, Geological Engineering 110, Principles of Geological Engineering. The following changes have been approved effective Spring 2009.

Catalog Description – Proposed: Introduce GE students to the GE program. Topics include career paths, professional development, licensure, life long learning, engineering ethics, societal issues, engineering law, international engineering, and GE program outcomes and objectives. Discussion of the teaching and research interests of the faculty.

Prerequisites – Proposed: Sophomore standing in the GE program

CC 7454, Geophysics 336, Geological Engineering 336, Geophysical Field Methods. The following changes have been approved effective Spring 2009.

Catalog Description – Proposed: Imaging of selected subsurface features and engineering structures using various geophysical tools. Special emphasis is placed on ground penetrating radar and surface wave techniques. One field trip at student expense required.

Prerequisites – Present: Geophysics 285

Proposed: Junior level standing or higher

CC 7455, Civil Engineering 366, Environmental Engineering 366, Architectural Engineering 366, Indoor air pollution. New course approved effective Spring 2009.

Catalog Description: By developing a practical understanding of indoor air pollution sources, physics, chemistry and consequences, students will learn how radon, cigarette smoke, VOCs from furnishings, and so forth affect indoor air quality and apply engineering analysis to specify ventilation rates, choose furnishings and minimize occupant exposure to pollutants.

Credit Hours: 3 hour lecture

Prerequisites: CE 261 or ME 371 or Graduate Status

CC 7456, Civil Engineering 348, Architectural Engineering 348, Green Engineering: Analysis of Constructed Facilities. New course approved effective Spring 2009.

Catalog Description: Environmentally sound design and construction practices. Includes design issues, material selection and site issues that can reduce the impact on the environment caused by the construction process. LEED certification covered in depth.

Credit Hours: 3 hour lecture

Prerequisites: CE 248 or Arch Eng 248; and Junior Standing

CC 7457, History 357, History of the West. The following changes are approved effective Spring 2009.

Course Title – Proposed: History of the American West

Catalog Description – Proposed: This class examines the American settlement of the Trans-Mississippi West. Areas to be considered include cattle, mining, exploring, women, and Native Americans. Traditional and contemporary views of the American West will be analyzed.

CC 7458, Environmental Engineering 261. New course approved effective Spring 2009.

Catalog Description: Course discusses fundamental chemical, physical, and biological principles in environmental engineering and science. Topics include environmental phenomena, aquatic pollution and control, solid waste management, air pollution and control, radiological health, and water and wastewater treatment systems.

Credit Hours: 2 hour lecture, 1 hour lab, Total: 3

Prerequisites: None

Co-listing: Civil Engineering 261

CC 7459, Petroleum Engineering 302, Offshore Petroleum Technology. The following change is approved effective Spring 2009.

Prerequisites – Present: PE 131

Proposed: PE 241

CC 7460, Petroleum Engineering 132, Petroleum Production Lab. Course deletion approved effective Spring 2009.

CC 7461, Petroleum Engineering 320, Fundamentals of Petroleum Simulation. The following change is approved effective Spring 2009.

Prerequisites – Present: Math 204

Proposed: Pet Eng 241

CC 7462, Petroleum Engineering 308, Applied Reservoir Simulation. The following changes are approved effective Spring 2009.

Catalog Description – Proposed: Simulation of actual reservoir problems using both field and individual well models to determine well spacing, production effects of secondary and enhanced recovery processes, future rate predictions and recovery, coning effects, relative permeability adjustments and other history matching techniques.

Prerequisites – Present: Co-requisite: PE 257

Proposed: PE 320

CC 7463, Petroleum Engineering 406, Advanced Reservoir Simulation. The following changes are approved effective Spring 2009.

Course Number – Proposed: 408

Course Title – Proposed: Advanced Applied Reservoir Simulation

Catalog Description – Proposed: Advanced simulation of actual reservoir problems using both field and individual well models to determine well spacing, production effects of secondary and enhanced recovery processes, future rate predictions and recovery, coning effects, relative permeability adjustments and other history matching techniques.

Prerequisites – Present: PE 308

Proposed: PE 320

CC 7464, Marketing 350, New Product Development. New course approved effective Spring 2009.

Catalog Description: Major emphasis is given to the concept of customer focus, with coverage of techniques for obtaining customer needs, measuring customer satisfaction, developing products and services to satisfy customers, and maximizing the benefits of customer feedback. Students will work through a new product development project as a team with emphasis on marketing aspects.

Credit Hours: 3 hour lecture

Prerequisites: Mkt 311 or Mkt 307 or Eng Mgt 251

CC 7465, Marketing 450, Advanced New Product Development. New course approved effective Spring 2009.

Catalog Description: Major emphasis is given to the concept of customer focus, with coverage of techniques for obtaining customer needs, measuring customer satisfaction, developing products and services to satisfy customers, and maximizing the benefits of customer feedback. Each student will complete an individual new product development project through all steps.

Credit Hours: 3 hour lecture

Prerequisites: Mkt 311 or Mkt 307 or Eng Mgt 251

CC 7466, Business 307, Marketing and Strategy Essentials. New course approved effective Spring 2009.

Catalog Description: This course is an introduction to the essentials of marketing and strategy for running a business. It is designed for students planning to enter the MBA program who need this area and for non-business students who want some business background. Credit in this course can not be applied to any major or minor in business, IST, or economics.

Credit Hours: 1.5 hour lecture

Prerequisites: Bachelor Degree

CC 7467, Metallurgical Engineering 303, New Developments in Chemical Metallurgy. The following changes are approved effective Spring 2009.

Course Title – Proposed: Developments in Refining and Materials Recycling

Credit Hours – Present: 1-3 hour lecture

Proposed: 2 hour lecture

Prerequisites – Present: Met Eng 203

Proposed: Ceramic Engineering 259

CC 7468, History 330, European Migrations and Nationalism Formation. New course approved effective Spring 2009.

Catalog Description: Analyzes migration patterns into, out of, and within Europe in context of global population movements from Roman Empire through the present. Students will learn to analyze and synthesize factors involved in these movements and correlations to personal and national identity formations.

Credit Hours: 3 hour lecture

Prerequisites: History 112

CC 7469, Finance 260, Investments I. New course approved effective Spring 2009.

Catalog Description: This is an introductory course in investments. The objective is to introduce students to the fundamental elements of investment analysis. At the conclusion students should independently understand the basic valuation of the firm.

Credit Hours: 3 hour lecture

Prerequisites: Finance 250

CC 7470, Economics 211, Introduction to Economic Statistics. The following changes are approved effective Spring 2009.

Course Title – Proposed: Economic and Business Applications

Catalog Description – Proposed: Introduction and application of basic econometric and statistical techniques to solve real business and economics problems. Practical, hands-on use of excel and SPSS will be introduced in the course.

Prerequisites – Present: Econ 121 or 122, Math 4 or higher and Stat 115 or Stat 211

Proposed: Econ 121 or 122; Math 4 or higher; Stat 115 or 211 or 213 or 215 or 217 or 343.

CC 7472, Business 493, Oral Examination. New course approved effective Fall 2008.

Catalog Description: After completion of all other requirements, oral examinations for on-campus M.B.A./Ph.D. students may be processed during intersession. Off-campus M.B.A. students must be enrolled in oral examination and must have paid an oral examination fee at the time defense/oral examination (oral/written). All other students must enroll for credit commensurate with uses.

Credit Hours: 0

Prerequisites: None

Review of submitted EC forms:

EC 2070, Civil Engineering 401, Advanced Traffic Flow Theory, approved effective Spring 2009.

Course Description: This course will cover advanced theories of traffic flow, traffic flow characteristics, statistical distributions of traffic flow parameters, traffic stream models, car following models, continuum follow models, shock wave analysis, queuing analysis, traffic flow models for intersections, network flow models and control, traffic simulation.

Credit Hours: 3 hour lecture

Prerequisites: Preceded or accompanied by CE 353, knowledge of statistics, graduate standing

EC 2071, Russian 301, Business Russian, approved effective Spring 2009.

Course Description: The course addresses practical reading, speaking, listening, and writing strategies for conducting business in Russian-speaking countries. Students will improve their knowledge of contemporary Russian culture and business etiquette. Readings, and discussions are in Russian. Lab work is required weekly.

Credit Hours: 2 hour lecture, 1 hour lab, Total: 3

Prerequisites: Russian 80

EC 2072, Russian 301, Russian Phonetics and Intonation, approved effective Fall 2009.

Course Description: Class systematizes students' knowledge of Russian phonetics, improves their pronunciation, develops transcription skills, facilitates comprehension of Russian speech at moderate and fast tempos. Special attention is given to the interaction of Russian intonation and syntax. Lab work is required weekly.

Credit Hours: 2 hour lecture, 1 hour lab, Total: 3

Prerequisites: Russian 80

EC 2076, Theatre 101, Stagecraft, approved effective Spring 2009.

Course Description: This course is a hands-on lab class in technical theatre. Some of the topics covered include theatre carpentry, technical direction, theatre electrics, props artistry, and stage management. This class will focus on current technologies used in theatres worldwide.

Credit Hours: 2 hour lecture, 1 hour lab, Total: 3

Prerequisites: None

EC 2077, Electrical Engineering 401, Power Converter Modeling and Design, approved effective Spring 2009.

Course Description: Students will learn electrical, magnetic, and thermal modeling techniques for switching power converters that are applicable to both simulation and analysis. Students will then learn a generic framework to design optimal converters using these models.

Credit Hours: 3 hour lecture

Prerequisites: EE 353 or equivalent

EC 2078, Chemistry 401, Polymer Synthesis, approved effective Spring 2009.

Course Description: The organic synthetic methods of monomer and polymer synthesis will be explored. Mechanistic and structural components will be discussed. Modern methods for polymer synthesis as well as current industrial methods will be discussed. Linear, branched, graft, dendritic, nano-technology and macromers will be topics of discussion.

Credit Hours: 3 hour lecture

Prerequisite: Chem 381 and Chem 321 or equivalent

EC 2079, Computer Science 401, Heterogeneous and Mobile Databases, approved effective Spring 2009.

Course Description: This course extensively discusses multi-database systems (MDBS) and mobile data access systems (MDAS), moreover it will study traditional distributed database issues within the frame work of MDBSs and MDASs.

Credit Hours: 3 hour lecture

Prerequisites: CS 304

EC 2081, Engineering Management 401, Human Systems Integration, approved effective Spring 2009.

Course Description: This course considers Human System Integration (HIS) in a variety of applications including systems acquisition and training, HIS tools, techniques, and procedures.

Credit Hours: 3 hour lecture

Prerequisites: Emgt 311 or Psych 311

EC 2082, Computer Science 301, Introduction to High Performance Computer Architecture, approved effective Fall 2009.

Course Description: This course overviews the High Performance architecture of computing systems, and practices various hardware/architectural and software/algorithmic means that enhance performance. Both uni-processor and concurrent systems will be investigated. Different computational models are studied and linked to commercial systems.

Credit Hours: 3 hour lecture

Prerequisites: CS 235 and Cp Eng 213

EC 2083, History 301, The Reformation, approved effective Spring 2009.

Course Description: This course will cover the sixteenth-century Reformation, its background, and impact. It will explore the social, cultural, and political aspects of the movement that created Protestant Christianity and, hence, modern Western religious pluralism.

Credit Hours: 3 hour lecture

Prerequisites: Hist 111 or Hist 112

EC 2084, Business 401, Applied Business Project, approved effective Spring 2009.

Course Description: The course ties business theory to real-world company problems in a team competitive environment. Companies submit problems that require analysis of market feasibility and introduction planning for a new product or service. The project provides the students an opportunity to apply this cross-functional approach to a real project.

Credit Hours: 3 hour lecture

Prerequisites: Bus 421, Bus 422, Bus 423, Bus 424, and Bus 425

EC 2086, Mining Engineering 301, Mineral Processing II, effective Fall 2009. **Tabled**

EC 2087, Mining Engineering 301, Mineral processing II, effective Fall 2009. **Tabled**

EC 2091, Engineering Management 301, Personal and Corporate Leadership, approved effective Spring 2009.

Course Description: This course is an examination of modern theories of personal and corporate leadership, with particular emphasis on success of organizations in industry, government and education. (Note: If you take this course, you cannot take Emgt 375.)

Credit Hours: 1 hour lecture

Prerequisites: Senior or graduate standing

EC 2092, Engineering Management 301, Quality Management Tools, approved effective Spring 2009.

Course Description: The course will cover the quality analysis methods and processes for engineers in industry. (Note: If you take this course, you cannot take Emgt 375.)

Credit Hours: 1 hour lecture

Prerequisites: Senior or graduate standing

EC 2093, Engineering Management 301, Quality Management Philosophy, approved effective Spring 2009.

Course Description: The course will cover an overview of the underlying philosophy, principles and concepts related to quality management. (Note: If you take this course, you cannot take Emgt 375.)

Credit Hours: 1 hour lecture

Prerequisites: Senior or graduate standing

EC 2095, English 301, Creative Nonfiction Workshop, approved effective Spring 2009.

Course Description: An advanced writing course for students interested in publishing essays that combine formal complexity with artful prose, research, insight, and/or personal experience. Students will learn creative nonfiction techniques and compose essays for public critique in workshops.

Credit Hours: 3 hour lecture

Prerequisites: English 20 and a semester of college literature

EC 2096, Mining Engineering 401, Research Methods, approved effective Spring 2009.

Course Description: This course introduces the foundations, dimensions, and methods for designing and investigating research problems. The course will focus on fundamental and applied research constitutions, research design methods, critical literature review, experimental design methods, dissertation composition and write-up, originality and contributions, intellectual property.

Credit Hours: 3 hour lecture

Prerequisites: None

Review of Tabled Items:

CC 7441, Business 345, New Product Development, effective Spring 2009. **Withdrawn by department.**

Items Still Tabled:

CC 5946 – CC 5959 tabled pending approval of the new BS degree in BioEngineering by UM and CBHE.

CC 7452, Finance 437, Financial Mathematics II, effective Fall 2008. **Tabled**

EC 2058, IST 401, Math 401, Object-Oriented Financial Software, effective Spring 2009. **Tabled**

The meeting adjourned at 4:50 p.m. The next meeting will be Tuesday October 7, 2008 @ 3:00 p.m. in 117 Fulton Hall.

J. Keith Nisbett, Chair
Missouri S&T Campus Curricula Committee