



OFFICE OF THE REGISTRAR

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Memo To: Academic Council
From: UMR Campus Curriculum Committee Meeting
RE: December 6, 2005 & January 3, 2006 meetings

The UMR Campus Curricula Committee recommends to the Academic Council that the curriculum changes and degree proposals on the following DC forms be approved.

Approved DC forms:

DC 0171, College of Arts and Sciences, Multiculturalism & Diversity, approved effective Fall 2006. A proposal to create a new minor under The College of Arts and Sciences called Multiculturalism & Diversity.

DC 0173, College of Arts and Sciences, Biological Sciences, approved effective Fall 2006. A proposal to modify the current curriculum for the BA and BS in Biological Sciences by adding a required course Bio Sci 111.

DC 0174, School of Engineering, Systems Engineering, approved effective Fall 2006. A proposal to create a new Ph.D. in Systems Engineering.

DC 0175, SM&IS, Business Administration, approved effective Spring 2006. A proposal to change the name of the Business and Management System minor to Business. Also, change the requirements by removing Bus 230, adding Psych 50 and Bus 240, and only one of Econ 121 or Econ 122 are required.

DC 0176, SM&IS, Business Administration, approved effective Spring 2006. A proposal to create a new minor in Marketing

DC 0177, SM&IS, Business Administration, approved effective Spring 2006. A proposal to create a new minor called Pre MBA.

DC 0178, College of Arts and Sciences, Biological Sciences, Computer Science, Math and Statistics, approved effective Fall 2006. A proposal to create a new Master of Science in Bioinformatics (with thesis and non-thesis options).

DC 0179, SM&IS, Business Administration, approved effective Spring 2006. A proposal to create four new emphasis areas: E-Commerce, Finance, Human-Computer Interaction (HCI), and Marketing and also delete the Business Administration emphasis area. Approved effective Fall 2006 a proposal to modify the existing Enterprise Resource Planning emphasis by removing IST 346 and replace with IST 349/Bus 316.



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DC 0180, SM&IS, Business Administration, approved effective Spring 2006.
A proposal to modify the current curriculum for the BS in Business and Management Systems by removing IST 286 and replacing it with IST 346.

DC 0181, College of Arts & Sciences, Technical Communication, approved effective Fall 2006.

A proposal to change the requirements for the MS in Technical Communication.

The UMR Campus Curricula Committee recommends to the Academic Council that the course changes on the following CC forms be approved.

Approved CC forms:

CC 6063, English 353, Early Nineteenth Century Poetry. The following changes are approved effective Spring 2006.

Course Title – Proposed: British Romantic Literature

Catalog Description – Proposed: A study of the prose and poetry of the British Romantic period, 1775 to 1832.

CC 6064, English 355, Later Nineteenth Century Poetry. The following changes are approved effective Spring 2006.

Course Title – Proposed: Victorian Literature

Catalog Description – Proposed: A study of British prose and poetry from 1832 to 1900.

CC 6072, Bio Sci 118, Plant Biology. The following change is approved effective Fall 2006.

Prerequisite – Present: Bio 100

Proposed: Bio 110 or Bio 111

CC 6073, Bio Sci 241, Human Anatomy. The following change is approved effective Fall 2006.

Prerequisites – Present: Bio 110

Proposed: Bio 110 or Bio 111

CC 6074, Bio Sci 328, Nutritional and Medical Properties of Plants. The following change is approved effective Fall 2006.

Prerequisites – Present: Bio 110 and Bio 211

Proposed: Bio 110 or Bio 111; and Bio 211

CC 6075, Bio Sci 342, Exercise Physiology. The following change is approved effective Fall 2006.

Prerequisites – Present: Bio 110

Proposed: Bio 110 or Bio 111



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CC 6076, Bio Sci 352, Biological Effects of Radiation. The following change is approved effective Fall 2006.

Prerequisites – Present: Bio 110 and Chem 3
Proposed: Bio 110 or Bio 111; and Chem 3

CC 6077, Bio Sci 391, General Virology. The following change is approved effective Fall 2006.

Prerequisites – Present: Bio 110, 211, 221, Chem 1, 3, 221
Proposed: Bio 110 or 111; Bio 211, 221, Chem 1, 3, 221

CC 6078, Speech 265, Leadership Communication. The following change is approved effective Spring 2006.

Prerequisites – Present: S&M 150, 181
Proposed: S&M 181, 250

CC 6079, Ceramic Engineering 445, Instructional Education for Graduate Students. Course deletion approved effective Spring 2006.

CC 6080, Ceramic Engineering 444, Instructional Education for Graduate Students. Course deletion approved effective Spring 2006.

CC 6081, Psychology 220, Psychology of Sensation & Perception. The following changes are approved effective Spring 2006.

Course Number – Proposed: 340

Course Title – Proposed: Sensation & Perception

Catalog Description – Proposed: An in-depth examination of the human senses, with special emphasis on vision and hearing. Topics include the anatomy and physiology of the eye and ear, neural transduction, the organization and interpretation of sensory signals by the brain, selective attention, and the neural basis of the perception of color, form, space, depth, motion, music, and language.

CC 6082, Psychology 330, Neuroscience. The following change has been approved effective Spring 2006.

Catalog Description – Proposed: The neurophysiological bases of behavior and cognition are examined. Topics covered include neuroanatomy, neurophysiology, neurotransmission, neuropharmacology, vision, hearing and language, motivated behavior (e.g. eating, drinking, and sexual behavior), learning and memory, cognition and consciousness, and neurologic/psychiatric disorders.

CC 6084, Chemical Engineering 120, Chemical Engineering Material Balances. The following changes are approved effective Spring 2006.

Course Title – Proposed: Chemical Engineering Material & Energy Balances

Catalog Description – Proposed: The application of mathematics, physics and chemistry to industrial chemical processes. The use of equations of state, chemical reaction stoichiometry, and the conservation of mass and energy to solve chemical engineering problems.

CC 6085, Chemical Engineering 145, Chemical Process Materials. The following changes are approved effective Spring 2006.

Catalog Description – Proposed: Fundamentals of the chemistry of materials.

Classification, properties, selection, and processing of engineering materials.

Introduction to polymers, electronic materials, biomaterials, and nanomaterials.

Prerequisites – Present: Math 15, Physics 23; preceded or accompanied by Chem 221

Proposed: Math 15 (21), Physics 23

CC 6086, Chemical Engineering 231, Chemical Engineering Fluid Flow. The following changes are approved effective Spring 2006.

Catalog Description – Proposed: Mass, energy, and momentum balance concepts in fluid flow are studied to provide a basis for study of flow measurement, fluid behavior, turbulent flow, dimensional analysis of fluid flows, and the study of some practical flow processes such as: filtration, fluidization, compressible flow, pipe networks.

Prerequisites – Present: Ch Eng 120 and Math 204, Physics 23

Proposed: Ch Eng 120, Math 204, Physics 23

CC 6087, Chemical Engineering 281, Chemical Engineering Reactor Design. The following changes are approved effective Spring 2006.

Catalog Description – Proposed: The study of chemical reaction kinetics and their application to the design and operation of chemical and catalytic reactors.

Prerequisites – Present: Ch Eng 223 or Chem Eng 263; preceded or accompanied by Chem Eng 247

Proposed: Ch Eng 237 or Chem Eng 263

CC 6088, Electrical Engineering 385, Patent Law. Course deletion approved effective Spring 2006. Co-listed courses in Chem Eng, Civ Eng, and Eng Mgt are not being deleted.

CC 6089, Engineering Management 460, Advanced Topics in Simulation Modeling. New course approved effective Spring 2006.

Catalog Description: Design and analysis of distributed systems using discrete-event simulations and synchronization of distributed models. Design and implementation of finite state automata and simulation models as control execution systems.

Functioning of real-time, agent-based, and multipass simulations.

Credit Hours: 3 hour lecture

Prerequisites: Emgt 356 or Graduate Standing



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CC 6090, Mining Engineering 315, Advanced Mine Health and Safety. New course approved effective Spring 2006.

Catalog Description: A detailed study of health and safety principles, practices, analyses, regulations, issues and technology in the mining industry.

Credit Hours: 3 hour lecture

Prerequisites: Min Eng 151

CC 6091, Chemistry 432, Bioinorganic Chemistry. New course approved effective Fall 2006.

Catalog Description: Metallobiomolecules, including metalloenzymes and other metalloproteins; oxygen carriers; iron transport and other iron proteins; copper proteins; cancer agents and cures; nitrogenfixation, etc.

Credit Hours: 3 hour Lecture

Prerequisites: Chem 331

CC 6092, Business 240, Basic Marketing. The following change is approved effective Spring 2006.

Prerequisites – Present: Bus 110, Econ 121 or 122, and English 65

Proposed: Psych 50; Econ 121 or 122; and English 60, 65, or 160

CC 6094, Electrical Engineering 352, Photovoltaic Systems Engineering. New course approved effective Fall 2006.

Catalog Description: Physics and characteristics of photovoltaic (solar) cell technologies, electronic control of alternative energy sources, site selection, array design, energy storage methods, electrical code compliance, stand-alone systems, grid-intertie systems, legal and economic.

Credit Hours: 3 hour Lecture

Prerequisites: Senior or graduate standing in Science or Engineering

CC 6095, IDE 490, Research. New course approved effective Spring 2006.

Catalog Description: Investigations of an advanced nature leading to the preparation of a thesis or dissertation.

Credit Hours: 0-6

Prerequisites: Consent of instructor

CC 6096, Architectural Engineering 205, Illumination for Buildings. The following changes are approved effective Spring 2006.

Course Title – Proposed: Building Electrical and Lighting Systems

Catalog Description – Proposed: Design and specifications for interior and exterior building electrical and illumination systems, including electrical and lighting loads, branch circuits, grounding and switching. Work includes study of applicable NFPA 70 (NEC) and related building codes.



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CC 6097, Chemical Engineering 425, IDE 425, Civil Engineering 485, Environmental Engineering 485, Electrical Engineering 481, Computer Engineering 481, Philosophy of Scientific Research. New course approved effective Fall 2006.

Catalog Description: Organization and planning of research. Introduction to the philosophy and management of scientific research, particularly issues related to ethics, plagiarism, ownership of intellectual properties, research techniques, technical presentations and time management. The course will address these issues by integrating with case studies.

Credit Hours: 3 hour Lecture

Prerequisites: None

CC 6098, Biological Sciences 454, Advanced Freshwater Ecology. New course approved effective Fall 2006.

Catalog Description: The ecology of streams, lakes, and wetlands. The course will cover the physical and chemical characteristics of freshwater environments, the diversity of life in freshwaters, biogeochemical processes, and threats to freshwater systems. Research proposal and additional readings required for graduate credit.

Credit Hours: 3 hour Lecture

Prerequisites: Graduate Student Standing

CC 6099, Biological Sciences 354, Freshwater Ecology. New course approved effective Fall 2006.

Course Description: The ecology of streams, lakes, and wetlands. The course will cover the physical and chemical characteristics of freshwater environments, the diversity of life in freshwaters, biogeochemical processes, and threats to freshwater systems.

Credit Hours: 3 hour Lecture

Prerequisites: Bio Sci 251

CC 7000, Metallurgical Engineering 307, Metals Casting. The following changes are approved effective Fall 2006.

Catalog Description – Proposed: An advanced course in the materials and methods used in modern metals casting processes. Application of metallurgical principles to the casting of metals. Design of castings and metals casting mold features using commercial casting process simulation software.

Credit Hours – Present: 2 hour lecture

Proposed: 3 hour lecture

CC 7003, Geology 372, Geological Field Studies. The following change has been approved effective Spring 2006.



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Catalog Description – Proposed: Intensive field study of selected regions of geological interest. This course is built around a week to ten-day long field trip to be held over spring break or after final exams at the end of the semester. Students are expected to bear the expense of the field trip. Repeatable for credit.

CC 7004, Nuclear Engineering 221, Reactor Fluid Mechanics. The following change is approved effective Fall 2006.

Prerequisites – Present: Math 204, IDE 110

Proposed: Math 204, Junior standing

CC 7007, Computer Engineering 367, Electrical Engineering 367, Computational Intelligence. New course approved effective Fall 2006.

Catalog Description: Introduction to Computational Intelligence, Artificial Neural Networks, Evolutionary Computing, Swarm Intelligence, Fuzzy Systems, and Hybrid Systems. Evolutionary Computing would be briefly introduced in order to utilize their techniques to train ANNs.

Credit Hours: 3 hour lecture

Prerequisites: Statistics 217

CC 7008, Computer Engineering 342, Real-Time Digital Signal Processing. The following changes are approved effective Fall 2006.

Catalog Description – Proposed: Introduction to the use of programmable DSP chips.

Includes real-time data acquisition, signal generation, interrupt-driven programs, high-level language, and assembly level routines. Applications to real-time systems are also presented.

Credit Hours – Present: 3 hour lecture

Proposed: Lecture: 2 Lab: 1 Total: 3

CC 7009, Electrical Engineering 347, Computer Engineering 347, Machine Vision. The following change has been approved effective Fall 2006.

Co-listing: Computer Engineering 347

CC 7010, Civil Engineering 248, Architectural Engineering 248, Fundamentals of Contracts and Construction Engineering. The following change is approved effective Fall 2006.

Prerequisites – Present: Junior Standing

Proposed: Senior Standing

CC 7011, Civil Engineering 262, Environmental Engineering 262, Biological Fundamentals of Environmental Engineering. The following change is approved effective Spring 2007.

Prerequisites – Present: Bio 211 and preceded or accompanied by Civ/Env En 261

Proposed: Bio 110 and preceded or accompanied by Civ/Env En 261



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CC 7012, Business 341, Marketing Strategy. New course approved effective Fall 2006.
Catalog Description: Identification and analysis of strategic managerial marketing issues.
Integration of marketing concepts through theoretical overview and practical analysis, including extensive use of simulation.
Credit Hours: 3 hour lecture
Prerequisites: Bus 240 or Eng Mg 251

CC 7013, Mining Engineering 408, Ore Reserve Analysis and Geostatistics. The following changes are approved effective Fall 2006.
Course Number – Proposed: 312
Prerequisites – Present: Mi Eng 270
Proposed: Math 22, Math 204, Stat 213

CC 7021, Computer Engineering 347, Machine Vision. New course approved effective Fall 2006.
Catalog Description: Image information, image filtering, template matching, histogram transformations, edge detection, boundary detection, region growing and pattern recognition. Complementary laboratory exercises are required.
Credit Hours: 3 hour lecture
Prerequisites: Elec Eng 267
Co-listing: Elec Eng 347

For the information of the Academic Council, the following EC forms have been submitted by the University departments for an experimental course that will be offered in the near future.

Approved EC forms:

EC 1728, Physics 301, Chaos, Fractals, and Non-Linear Dynamics, approved effective Spring 2006.

Course Description: An introduction into nonlinear dynamics, deterministic chaos, and fractals. Topics covered are phase plane analysis, iterated maps, routes to chaos,

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Lyapunov exponents, strange attractors and pattern formation. Applications include chaotic vibrations, population dynamics, chemical oscillations and lasers.

Credit Hours: 3 hour lecture

Prerequisites: Math 204; Phys 24, Phys 25

EC 1731, Engineering Management 401, Global Project Management, approved effective Spring 2006.

Course Description: In depth and advanced topics in project management including project management methodologies, strategic planning for excellence, project portfolio management, integrated processes, culture, and behavioral excellence; normally includes a hands-on group project.

Credit Hours: 3 hour Lecture

Prerequisites: Emgt 361

EC 1732, Math 301, Economics 301, Financial Mathematics, approved effective Spring 2006.

Course Description: The course objective is to provide an understanding of the fundamental concepts of financial mathematics and their application to calculating present and accumulating value for streams of cashflow. Topics include pricing, assets-liability management, capital budgeting, valuing cash flow.

Credit Hours: 3 hour lecture

Prerequisites: Math 15 or Math 21; Econ 221, Econ 222; Econ 250 or Econ 321; Stat 211 or Stat 213 or Stat 215 or Stat 217 or Stat 343

EC 1733, Metallurgical Engineering 301, Principles for Materials by Design, approved effective Spring 2006.

Course Description: The course will introduce the basics of microstructural principles that can be used to design advanced materials. This course will help students learn about the basic principles and microstructural design approaches. It will also introduce the benefits of 'systems' approach in materials design:
Processing_Microstructure_Properties_Performance.

Credit Hours: 2 hour lecture

Prerequisites: Senior Standing, Met 217 or equivalent

EC 1734, Biological Sciences 301, Functional Genomics and Proteomics, approved effective Fall 2006.

Course Description: This course is to introduce new methodologies of functional genomics and proteomics, and applications of these new methodologies. Recent research results will be examined in the course. Student presentations are required.

Credit Hours: 3 hour lecture

Prerequisites: Bio Sci 211, Chemistry 361, Bio Sci 331



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EC 1735, Biological Sciences 401, Advanced Functional Genomics and Proteomics, approved effective Fall 2006.

Course Description: This course is to introduce new methodologies of functional genomics and proteomics, and applications of these new methodologies. Recent research results will be examined in the course. Graduate students will be challenged to improve these methodologies. Student presentations are required.

Credit Hours: 3 hour lecture

Prerequisites: Bio Sci 211, Chemistry 361, Bio Sci 331

EC 1736, Aerospace Engineering 401, Thermo-Fluid Dynamics of Advanced Aero-Propulsion Systems, approved effective Spring 2006.

Course Description: This course will provide technically intensive descriptions and analysis of conventional, non-conventional, and advanced aerospace propulsion systems and propulsion system performance from the standpoint of fundamental thermodynamics and fluid/gas dynamics.

Credit Hours: 3 hour lecture

Prerequisites: AE 335 or ME 325

EC 1737, Mechanical Engineering 301, Applied Anisotropic Linear Elasticity, approved effective Fall 2006.

Course Description: This course will introduce modern developments in anisotropic linear elasticity. The emphasis will be on calculation and problem-solving, rather than on purely theoretical considerations.

Credit Hours: 3 hour lecture

Prerequisites: IDE 110, and basic knowledge of Matrix Algebra

EC 1738, Civil Engineering 401, Physico-Chemical Phenomena in Soils, approved effective Spring 2006.

Course Description: Soil mineralogy, especially for clays, soil formation, deposits, and composition are included. Soil water effects, clay-water-electrolyte interactions, soil fabric and structures, stresses, non-saturated soil mechanics, volume change behavior, predicting vertical rise, conduction and electro chemical effects are covered.

Credit Hours: 3 hour lecture

Prerequisites: CE 315

EC 1739, Computer Engineering 401, Electrical Engineering 401, Intelligent Telecommunication Network Modeling, approved effective Spring 2006.

Course Description: Modeling is a critical part of the design of modern telecommunication networks and routing protocols. There is an emerging need to incorporate techniques from computational intelligence into this process. This course explores their application and interactions.

Credit Hours: 3 hour lecture



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Prerequisites: EE 267, 268, 243, 368

EC 1740, Civil Engineering 301, International Senior Design, approved effective Spring 2006.

Course Description: A multi-disciplinary (CE, ArchE, Env E) engineering design course focused on sustainable design and technology transfer to developing countries. Course includes elements of traditional capstone design classes. Experiential learning through field work is a major component of the class. Can be used to substitute for ArchE/CivE 298.

Credit Hours: 3 hour lecture

Prerequisites: Senior standing, final semester, Instructor approval

EC 1741, Civil Engineering 401, Retrofit of Monuments and Base Isolation, approved effective Spring 2006.

Course Description: Design of masonry structures and monuments from historical documents. Structural elements (floors, roofs, vaults and masonry piers) in historical constructions. Rehabilitation of structural elements with traditional techniques. Principles of base isolation design. Design of rubber bearings. Base isolation for retrofitting with examples.

Credit Hours: 3 hour lecture

Prerequisites: CE/ArchE 217 and Graduate standing

EC 1742, System Engineering 401, System Engineering Management, approved effective Spring 2006.

Course Description: This course covers modern methods of effective management of complex systems, and systems of systems. Effective team building and integrated product and process development in a diverse and global work environment is the central theme of the course. Topics to be covered include leadership, quality tools and associated philosophy, concurrent engineering, communication and performance evaluation.

Credit Hours: 3 hour lecture

Prerequisites: Graduate Standing

EC 1743, System Engineering 401, Complex Engineering Systems Project Management, approved effective Spring 2006.

Course Description: Explores issues related to planning, scheduling, and controlling complex engineering projects. Issues specific to distributed project planning and control, development of Systems Engineering Management Plan, Integrated Master Schedule and Integrated Master Plan, and monitoring technical performance, schedule and risk will be discussed.

Credit Hours: 3 hour lecture

Prerequisites: Graduate Standing



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EC 1744, System Engineering 401, Economic Analysis of Systems Engineering Projects, approved effective Spring 2006.

Course Description: Economic evaluation of complex engineering system alternatives using engineering economic analysis; quantitative techniques for evaluating non-monetary consequences; life cycle costing, formal treatment of risk, uncertainty, and project cost monitoring.

Credit Hours: 3 hour lecture

Prerequisites: Graduate Standing

EC 1745, Biological Sciences 401, Advanced Toxicology, approved effective Spring 2007.

Course Description: A study of natural and man-made toxicants, various possible routes of exposure, absorption, distribution, biotransformation, specific target sites, and mechanisms involved in elicitation of toxic effects, as well as detoxification and excretion. Independent research projects and primary literature readings required.

Credit Hours: 3 hour lecture

Prerequisites: Graduate standing

EC 1747, Biological Sciences 401, Computer Science 401, Advanced Bioinformatics, approved effective Spring 2007.

Course Description: The course will include advanced topics in Bioinformatics, including application development, mathematical basis for computational methods, and choice of algorithm based on nature of data. Topics covered in lectures, literature discussions, and independent research projects include: sequence alignment, HMMs, gene finding, matrix building, and phylogenetic reconstruction.

Credit Hours: 3 hour lecture

Prerequisites: Bio Sci 311 or CS 311

EC 1748, Biological Sciences 301, Environmental Microbiology Laboratory, approved effective Fall 2006.

Course Description: This course will be offered as a companion laboratory for both the undergraduate- and the graduate- level Environmental Microbiology courses. The isolation and characterization of pertinent microorganisms will be carried out as well as DNA extraction and characterization of unculturable microorganisms. In addition, methods for detecting and quantifying water-borne pathogens will be exercised.

Credit Hours: 1 hour lab

Prerequisite: Bio Sci 221

EC 1749, Biological Sciences 301, Environmental Microbiology, approved effective Fall 2006.

Course Description: Topics to be explored include but are not limited to microbial growth and metabolic kinetics, life in extreme environments, biogeochemical cycling,



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bioremediation, control of water-borne pathogens. This course differs from bio Sci 451 in that this is an upper-level undergraduate course and no NSF-style research proposal and presentation is required.

Credit Hours: 3 hour lecture

Prerequisites: Bio Sci 221

EC 1750, Technical Communication 301, Proposal Writing, approved effective Fall 2006.

Course Description: A focus on the proposal as a fundamental aspect of corporate, government and academic institutions, with emphasis on the conventions and rhetorical elements of the proposal genre.

Credit Hours: 3 hour lecture

Prerequisites: English 65

EC 1751, Biological Sciences 201, Genetics: Decoding your genes, approved effective Fall 2007.

Course Description: We will explore the questions: What are genes? How do our genes affect our health? How are genes inherited? What are the societal implications of genetic knowledge? What is the Human Genome Project and what can we learn from it? (Does not fulfill requirement of Biology majors)

Credit Hours: 3 hour lecture

Prerequisites: None

EC 1753, Business 301, International Business, approved effective Fall 2006.

Course Description: This survey course will deal with business concepts, analytical processes and philosophical bases for international business operations. Emphasis is on environmental dynamics, multinational business organizations, cultural and economic constraints, unique international business practices and international operations, strategy and policy.

Credit Hours: 3 hour lecture

Prerequisites: Bus 240; Bus 110 or Bus 280

EC 1754, Nuclear Engineering 201, Applied Mathematics in Nuclear Engineering I, approved effective Fall 2006.

Course Description: Application of ordinary differential equations in the solution of nuclear engineering problems. Bessel functions, integral methods and transformations will be covered.

Credit Hours: 3 hour lecture

Prerequisites: Math 22

EC 1755, Nuclear Engineering 301, Applied Mathematics in Nuclear Engineering II, approved effective Fall 2006.



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Course Description: Application of ordinary and partial differential equations in the solution of nuclear engineering problems, particularly with the neutron kinetics equations. Bessel's equation and special functions, eigenvalue problems, Green's function, integral methods and transformations.

Credit Hours: 3 hour lecture

Prerequisites: NE 303

EC 1756, IST 401, Essentials of Data Warehousing, approved effective Summer 2006.

Course Description: This course presents the topic of data warehousing and the value to the organization. It takes the student from the database platform to structuring a data warehouse environment. Focus is placed on simplicity and addressing the user community needs.

Credit Hours: 3 hour lecture

Prerequisites: IST 223 or CS 304 or equivalent relational database experience

EC 1757, IST 401, Social Informatics, approved effective Fall 2006.

Course Description: The course examines the social-psychological impact of socially oriented new media technologies. The class will focus on recent innovations, integrating these approaches into class interaction and student projects.

Credit Hours: 3 hour lecture

Prerequisites: None

EC 1758, IST 401, Essentials of Data Warehousing, approved effective Fall 2006.

Course Description: This course presents the topic of data warehousing and the value to the organization. It takes the student from the database platform to structuring a data warehouse environment. Focus is placed on simplicity and addressing the user community needs.

Credit Hours: 3 hour lecture

Prerequisites: IST 223 or CS 304 or equivalent relational database experience

EC 1759, Finance 101, Personal Finance I, approved effective Spring 2006.

Course Description: This course gives you the fundamental knowledge to be a better manager of your own finances. Learn to make informed decisions to invest wisely, save money on taxes, use credit wisely and plan for future expenses.

Credit Hours: 1 hour lecture

Prerequisites: None

EC 1760, Finance 101, Personal Finance II, approved effective Fall 2006.

Course Description: Student will learn the advantages and disadvantages of investment types. They will identify and use sources of reliable information, assess risk, diversify, and develop long-term strategies to achieve financial goals.

Credit Hours: 1 hour lecture

Prerequisites: None



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EC 1763, Geology 301, Stable Isotope Geology, approved effective Spring 2006.

Course Description: Introduction to the basic principles of stable isotope geochemistry.

Study of the production, distribution, and use of naturally occurring and anthropogenically introduced stable isotopes in the earth's near surface environment with applications to hydrology, biogeochemistry and global change. Credit will not be given for both Geo 301 and Geo 401.

Credit Hours: 3 hour lecture

Prerequisites: Chem 1, Geo 275

EC 1764, Geology 401, Advanced Stable Isotope Geology, approved effective Spring 2006.

Course Description: Introduction to the basic principles of stable isotope geochemistry.

Study of the production, distribution, and use of naturally occurring and anthropogenically introduced stable isotopes in the earth's near surface environment with applications to hydrology, biogeochemistry and global change. Students do a class project and a class presentation. Credit will not be given for both Geo 301 and Geo 401.

Credit Hours: 3 hour lecture

Prerequisites: Geo 275

EC 1773, Nuclear Engineering 301, Nonproliferation Issues for Weapons of Mass Destruction, approved effective Spring 2006.

Course Description: Nonproliferation and impact on technology and world events.

Credit Hours: 3 hour lecture

Prerequisites: junior/senior standing

J. Keith Nisbett, Chair
UMR Campus Curricula Committee