

Graduate Council Report
September 5, 2013

New Course Requests

ECEN 775. Stochastic Systems. (3-0). Credit 3. This course will cover the principles of stochastic systems, including performance evaluation, estimation, control, scheduling, identification and adaptation, as well as Electric and Computer Engineering applications. It will include applications in communication networks and control. Prerequisite(s): Math 411; approval of instructor and graduate classification.

ECEN 777. Photonics: Fiber and Integrated Optics (3-3). Credit 4. Optical power and spectral measurements of singlemode and multimode optical fibers, hands-on arc fusion splicing, lasers, amplifiers, interferometers, photodetectors, integrated optics, fiber-optics, fiber-optic devices, optical modulators. Prerequisite(s): Equivalent of ECEN 322 and 370 or approval of instructor.

ECON 614. The Economics of Microfinance (3-3). Credit 3. Analysis of recent research in financial markets in developing countries with a primary emphasis on microfinance; micro-asymmetries involved in lending; financial impact studies; the macro-economic literature on financial development and growth. Prerequisite(s): ECON 607 or equivalent; graduate major in the Department of Economics' master's program or approval of director of master's program.

ECON 668. Decisions Under Risk and Uncertainty (3-0). Credit 3. The mean-variance and expected utility decision models; the use of risk models in asset valuation, financial decision-making, and economic analysis; portfolio choice, insurance demand, saving, investment and consumption decisions. Prerequisite(s): ECON 607 or equivalent; enrolled in the Department of Economics' master's program or approval of director of the master's program.

ENGR 677. Science, Technology, Engineering and Mathematics (STEM) Teaching Professional Development (1-0). Credit 1. Center for Teaching Excellence (CTE) consultation and faculty mentoring in STEM teaching; course topic and syllabus design; learning outcomes and assessment; teaching methodology; reflection on teaching philosophy; reflection on teaching as research; must be taken on satisfactory/unsatisfactory basis. Cross-listed with GEOS 677 and SCEN 677. Prerequisite(s): Graduate classification and approval of instructor.

GEOS 677. Science, Technology, Engineering and Mathematics (STEM) Teaching Professional Development (1-0). Credit 1. Center for Teaching Excellence (CTE) consultation and faculty mentoring in STEM teaching; course topic and syllabus design; learning outcomes and assessment; teaching methodology; reflection on teaching philosophy; reflection on teaching as research; must be taken on satisfactory/unsatisfactory basis. Cross-listed with ENGR 677 and SCEN 677. Prerequisite(s): Graduate classification and approval of instructor.

HORT 619. Plant-Associated Microorganisms (3-0). Credit 3. Basic concepts and current topics in plant-microbe interactions including the diversity of plant-associated microorganisms; the plant as a microbial environment; endophytes; microbial roles in plant nutrition and fitness; uses of microorganisms for

improved plant health and sustainable agriculture; microbial roles in food safety and future challenges; discussion of current literature. Cross listed with PLPA 619 and MEPS 619. Prerequisite(s): Basic plant biology or plant ecology is recommended; microbiology is helpful, but not required.

MEPS 619. Plant-Associated Microorganisms (3-0). Credit 3. Basic concepts and current topics in plant-microbe interactions including the diversity of plant-associated microorganisms; the plant as a microbial environment; endophytes; microbial roles in plant nutrition and fitness; uses of microorganisms for improved plant health and sustainable agriculture; microbial roles in food safety and future challenges; discussion of current literature. Cross listed with HORT 619 and MEPS 619. Prerequisite(s): Basic plant biology or plant ecology is recommended; microbiology is helpful, but not required.

PLPA 619. Plant-Associated Microorganisms (3-0). Credit 3. Basic concepts and current topics in plant-microbe interactions including the diversity of plant-associated microorganisms; the plant as a microbial environment; endophytes; microbial roles in plant nutrition and fitness; uses of microorganisms for improved plant health and sustainable agriculture; microbial roles in food safety and future challenges; discussion of current literature. Cross listed with HORT 619 and MEPS 619. Prerequisite(s): Basic plant biology or plant ecology is recommended; microbiology is helpful, but not required.

SCEN 677. Science, Technology, Engineering and Mathematics (STEM) Teaching Professional Development (1-0). Credit 1. Center for Teaching Excellence (CTE) consultation and faculty mentoring in STEM teaching; course topic and syllabus design; learning outcomes and assessment; teaching methodology; reflection on teaching philosophy; reflection on teaching as research; must be taken on satisfactory/unsatisfactory basis. Cross-listed with GEOS 677 and ENGR 677. Prerequisite(s): Graduate classification and approval of instructor.

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Course Change Requests

ESSM 651: Geographic Information Systems

PREREQUISITE(S):

FROM: GEOG 398 and RENR 444 or approval of Instructor.

TO: Graduate classification.

COURSE TITLE AND CATALOG DESCRIPTION:

FROM: Geographic Information Systems. (2-2) Credit 3. Design, planning and implementation of geographic information systems; computer hardware and software evaluation; practical experience in data entry, analysis and update of spatial and characteristic data; linkages of GIS and artificial intelligence; use of maps and remotely sensed data as data inputs. Prerequisites: GEOG 398 and RENR 444 or approval of instructor.

TO: Geographic Information System for Resource Management. (2-2) Credit 3. Geographic Information System (GIS) approach to the integration of spatial and attribute data to study the capture, analysis, manipulation and portrayal of natural resource data; examination of data types/formats, as well as the integration of GIS with remote sensing and Global Positioning System; laboratory includes extensive use of GIS applications to conduct analyses of topics in natural resources. Prerequisites: Graduate classification.

BOTN 685: Directed Studies

WITHDRAWAL:

REASON: We have eliminated all graduate programs in botany and zoology, and these degrees have been deleted by the Coordinating Board. We no longer offer any of the courses associated with these graduate degrees.

BOTN 691: Research

WITHDRAWAL:

REASON: We have eliminated all graduate programs in botany and zoology, and these degrees have been deleted by the Coordinating Board. We no longer offer any of the courses associated with these graduate degrees.

ZOOL 681: Seminar

WITHDRAWAL:

REASON: We have eliminated all graduate programs in botany and zoology, and these degrees have been deleted by the Coordinating Board. We no longer offer any of the courses associated with these graduate degrees.

ZOOL 685: Directed Studies

WITHDRAWAL:

REASON: We have eliminated all graduate programs in botany and zoology, and these degrees have been deleted by the Coordinating Board. We no longer offer any of the courses associated with these graduate degrees.

ZOOL 691: Research

WITHDRAWAL:

REASON: We have eliminated all graduate programs in botany and zoology, and these degrees have been deleted by the Coordinating Board. We no longer offer any of the courses associated with these graduate degrees.

ENGL 688: Introduction to Comparative Literature

WITHDRAWAL:

REASON: Graduate faculty no longer teach this course; it does not fulfill any degree distribution requirements.

MSEN 602: Advanced Materials Science and Engineering

PREREQUISITE(S):

FROM: Undergraduate quantum mechanics or approval of instructor

TO: MSEN 604, undergraduate quantum mechanics course, or approval of instructor

POLS 603: Quantitative Political Analysis II

CREDIT HOURS:

FROM: Lecture: 2, Lab: 2, SCH: 4

TO: Lecture: 3, Lab: 0, SCH: 3

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Special Consideration Item

The College of Agriculture and Life Science is proposing a doctoral degree in Ecology and Evolutionary Biology (EBB).