New Course Request:

**MSEN 605.** Field Theories in Materials Science. (3-0). Credit 3. Field theory concepts to understand and quantify a wide range of material behaviors, including, transportable quantities; development of constitutive relations; linear response theory and Maxwell’s equations; deformation and motion of a continuum, Brownian motion, self-assembly and patterning within reaction-diffusion formulations, thermal and ion/charge transport, acoustic waves in solids, Fourier’s equations. Prerequisite(s): Basic courses in materials science; graduate classification

**MSEN 617.** Crystallography and Crystal Structure Determination. (3-0). Credit 3. Symmetry operations in point group and space group; reciprocal lattice and kinematical diffraction theory; crystal structure determination by X-ray diffraction and transmission electron microscopy (TEM). Prerequisite(s): Knowledge of calculus and vector algebra; graduate classification

**NUEN 608.** Fast Spectrum Systems and Applications. (3-0). Credit 3. Design and analysis of nuclear systems and nuclear fuel cycles; data, methods, tools for advanced nuclear system modeling; systems analysis; sustainable development of nuclear energy, fast spectrum systems; partitioning & transmutation; hybrid systems; Advanced Fuel cycle program; Generation IV fast reactors; design aspects of Advanced Fast Reactors- neutronics, heat removal, safety, materials, systems. Prerequisite(s): Graduate classification or approval of instructor

**OCNG 661.** Advanced Oceanographic Data Analysis and Communication. (3-0). Credit 3. Project design and planning for oceanographers; oceanographic data organization and analysis; synthesis and interpretation of data analysis; technical report writing and presentation. Prerequisite(s): OCNG 603, OCNG 604, OCNG 608, and OCNG 657, or permission of the instructor

**SCSC 640.** Intellectual Property in Plant Sciences. (3-0). Credit 3. This course introduces major foci of intellectual property (IP) impacting plant sciences, including; 1) traditional vs. emerging knowledge economics, 2) government statues and treaties, 3) forms of IP, and 4) IP asset identification, valuation, capture, and deployment towards understanding best practices for IP strategy development and IP portfolio management.

**SPED 636.** Meta-Analysis in Single-case Research. (3-0). Credit 3. Steps of conducting a meta-analysis of single-case research studies. Prerequisite(s): Doctoral classification; approval of instructor.
Course Change Requests:

**EDAD 605: The Secondary School Principalship**

**COURSE TITLE AND DESCRIPTION**

FROM:
Course Title: The Secondary School Principalship
Course Description: Role of principal in the organization of junior and senior high schools; preparation for instructional management, program planning, evaluation and scheduling

TO:
Course Title: School Principalship
Course Description: Role of the principle in organization and administration of prekindergarten through grade 12 schools; management of instruction, education program planning, legal situations, evaluation, scheduling, and programs.

**ESSM 636: Range and Forest Watershed Management**

**COURSE TITLE AND DESCRIPTION**

FROM:
Course Title: Range Forest Watershed Management
Course Description: Management of range and forest watersheds; influence of range and forest practices on runoff, interception, infiltration, erosion and water quality; current literature and research advances.

TO:
Course Title: Wildland Watershed Management
Course Description: Elements of watershed management and principles and practices of wildland management for protection, maintenance and improvement of water resources values; current literature and research advances.

**HORT 605: Internet Applications for Horticulture**

WITHDRAWAL

Reason: Course is no longer offered.

**OCNG 657: Data Methods and Graphical Representation in Oceanography**

**COURSE DESCRIPTION and PREREQUISITE**

FROM: Provide the basic tools and techniques to process, analysis, and visualize oceanographic data sets; multi-disciplinary approach; real-world applications to physical, biological, chemical, and geological oceanographic data; basic instruction in the MATLAB programming language. Prerequisite(s): Knowledge of vector calculus and basic statistics

TO: Application of advanced statistical, quantitative, and computational methods to oceanographic observational data; methodologies emphasized include spectral analysis and representations of time series data, optimal interpolation of irregular data fields, analysis of multiple variables using Empirical
Orthogonal Functions, and scientific interpretation of statistical quantities. Prerequisite(s): OCNG 655 or equivalent or permission of instructor

**VIBS 670: Basic Environmental Toxicology**

**COURSE TITLE and DESCRIPTION:**

**FROM:**
Course Title: Basic Environmental Toxicology  
Course Description: Introduction to general principles of toxicology; test methods, target organs, toxicity of major classes of toxins/toxicants, and risk assessment for engineers and other non-toxicologists; risk assessment methodology.

**TO:**
Course Title: Environmental Toxicology  
Course Description: Toxic effects of drugs and chemicals on major mammalian organ systems and ecological receptors; general principles of toxicokinetics and toxicodynamics; case studies of toxic effects of environmental exposures
Graduate Council Report
August 6th, 2015

Curriculum Change Requests:

MS in Maritime Administration and Logistics (3-2) Program

DEGREE PROGRAM CHANGE: Add MARA 493 and MARA 491 as a directed elective at the undergraduate level
Graduate Council Report
August 6th, 2015

Special Consideration Items:

Master of Science in Public Health
  Closure of Low Producing Programs

Master of Science in Management
  Proposed Change in CIP Code