

May 5, 2010

**Faculty Senate Curricular Affairs Committee  
Four Hundred Seventy-Ninth Report**

At the April 26, 2010 meeting of the Curricular Affairs Committee and by electronic communication through May 5, 2010, the following matters were considered and are now presented to the Faculty Senate.

SECTION I

Informational Matters

A. College of Arts and Sciences

1. Department of Chemistry

CHANGE: Prerequisite for the following courses:

- 1) CHM 112 to Pre: 101 with a grade of C- or better."
- 2) CHM 124 to "Pre: 101 with grade of C- or better or 103 with grade of C- or better. Not open to chemistry or chemical engineering majors."
- 3) CHM 192 to "Pre: 101 and 102 with grade of C- or better or 191 with grade of C- or better, chemistry major. Not open to students with credit in 112."
- 4) CHM 212 to "Pre: 112 and 114 with grade of C- or better or 192 with grade of C- or better."
- 5) CHM 227 to "Pre: 112 with grade of C- or better or 192 with grade of C- or better."
- 6) CHM 228 to "Pre: 227 with grade of C- or better."
- 7) CHM 291 to "Pre: 192 with grade of C- or better, chemistry major. Not open to students with credit in 227."
- 8) CHM 292 to "Pre: 291 with grade of C- or better, chemistry major. Not open to students with credit in 228."

2. Department of Mathematics

CHANGE: Description for MTH 244 by replacing "Basic" at the beginning of the third sentence with "Basics" and prerequisite to "Pre: 142."

B. College of Human Science and Services

Department of Human Development and Family Studies

CHANGE: Prerequisite for HDF 290 to "Pre: permission of instructor."

C. College of Pharmacy

Department of Biomedical and Pharmaceutical Science

CHANGE: Description for BPS 201 by replacing "...open to all students except pharmacy majors" with "...open to all students except health science and related majors".

D. Service Learning

CHANGE: Listing for Service Learning Courses by deleting AAF 380; CPL 510, 523; EDC 424, 429; HDF 380, 381, 560, 562, 583, 584; HSS 140, 141, 530; MUS 119; NUR 534; NFS 395; PSC 485, 487; PSY 442 and adding HDF 203, 301; PHP 340; WMS 300

E. Online Courses

The CAC reviewed the online versions of the following courses and notified Enrollment Services that they may be scheduled beginning in the Summer 2010.

MTH 106 Mathematics of Social Choice & Finance (Dobrushkin)  
PSC 300 Challenge of Nuclear Arms (Johnson)

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SECTION II

Curricular Matters which Require Confirmation by the Faculty Senate

A. College of Arts and Sciences

1. Department of Mathematics

CHANGE: Title, credits, description, method of instruction and prerequisite for MTH 208 as follows:

**MTH 208 Numeracy for Teachers (4)**

Conceptual understanding supporting mathematical ideas presented in current, standards-based elementary mathematics education. An in-depth look at problem solving, number systems, functions, relations, and geometry. This course is appropriate for elementary teachers and teachers in non-STEM fields. (Lec. 3, Rec. 1) A placement test is recommended. Not for major credit in mathematics.

2. Department of Music and Department of Theater

ADD: Music Voice Performance Minor for Theater Majors effective fall 2010:

MUSIC VOICE PERFORMANCE MINOR FOR THEATER MAJORS: This option is to give students who are theatre majors the opportunity for more concentrated and focused study in voice and other areas of music. Theatre students who wish to declare this minor option must earn credit for MUS 111 (3), or MUS 120 (2) and MUS 121 (2); a music history course selected from MUS 101, 106, 221, 322, 408, 430, 431, 433, 434 (3); MUS 300 for one semester (1). Additionally, students must earn a minimum of eight credits in voice over four semesters (MUS 110A (2), 110A (2), 210A (2), 210A (2)), and three semesters in MUS 395 (audition required) (1), MUS 293 (1), or MUS 485 (1), with MUS 485 being limited to one semester. Students must pass an audition in voice prior to registration for applied study in voice. The minimum number of credits required for this option is 18.

This minor requires that the student pass an audition in voice, which means that the prospective student has had previous vocal study and experience, and performs at a more advanced level.

### 3. Writing and Rhetoric Program

\*a. CHANGE: Status of Writing and Rhetoric Program to Department of Writing and Rhetoric

b. CHANGE: Credits, description and prerequisite for WRT 235 as follows:

#### **WRT 235 Writing in Electronic Environments (4)**

Examine, investigate, and practice digital writing. May include web design, blogs, wikis, social networking technologies, presentation software, and construction of a digital portfolio. Requires out-of-class technology practice. (Seminar 3, Practicum 2/Online)

### B. College of Engineering

#### 1. Department of Chemical Engineering and Department of Mechanical, Industrial and Systems Engineering

ADD: Minor in Nuclear Engineering:

MINOR IN NUCLEAR ENGINEERING is comprised of 18 credits of which 12 credits are taken from a group of 4 required courses and the remaining 6 credits are overlapped with the senior capstone design experience in a nuclear related project or alternatively taken from supporting courses. The course requirements for the Undergraduate Nuclear Engineering Minor are as follows.

*Required courses* (12 credits): MCE 471/ (or CHE 471) Nuclear Reactor Engineering, MCE 472 (or CHE 472) Power Plant Design and Safety Analysis, MCE 473 (or CHE 473) Nuclear Fuel Cycle, MCE 474 (or CHE 474) Reactor Thermal Hydraulics. *Supporting courses*: MCE 475 (or CHE 475) Nuclear Measurements, MCE 401, 402 Capstone Project (Nuclear related)

The four courses that are on the required list were selected to ensure that students who participate in this minor acquire a body of knowledge in the fundamentals of nuclear engineering. This body of knowledge is valuable to any student who pursues a career in nuclear power, and additionally allows students to then proceed to taking the more advanced courses or pursue a graduate nuclear engineering degree at another institution. The required courses ensure that all graduates of the nuclear engineering minor obtain a minimum body of knowledge in nuclear engineering that would allow them to apply their specialized field of engineering knowledge to nuclear-related applications such as nuclear plant and site construction, nuclear power plant operations and engineering, nuclear safety and radioactivity. The required courses also ensure that all graduates will have a strong foundation in the safety aspects of both nuclear radioactivity and power plant engineering and operations along with background knowledge of nuclear medicine, homeland security (detectors), and advanced reactor materials

\*May require action by the Board of Governors for Higher Education.

2. Department of Civil and Environmental Engineering

ADD: **CVE 340 Geomatics (3)**

Technologies to obtain measurement data using level, transit, EDM, total station, and GPS instrument. Data collection, sorting, storage, analysis, and presentation of data for civil engineering purposes. Practical surveying experiences. (Lec. 2, Lab. 3) Pre: MTH 141 and permission of instructor.

3. Department of Mechanical, Industrial and Systems Engineering:

CHANGE: Requirements for the BS in Industrial and Systems Engineering for the class entering in fall 2010 as follows:

- 1) Change two course senior design sequence of ISE 451,452 to a three course sequence of 451 (textbook based) and 401,402 (more project centered).
- 2) Change recommended semesters for general education, professional, and free elective, and reduce extra general education courses no longer needed
- 3) Reduce total credits to graduate from 125 to 122.

C. Graduate School of Oceanography

ADD: **OCG 200 Weather for Daily Living (3)**

to the observations, theories and forecasts of weather phenomena that influence daily living. Learn the vocabulary and specifics of weather, put these facts together to understand key weather principles and then apply those principles to decision making. (Lec. 3, Lab 2)

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SECTION III

Joint Report of the Curricular Affairs Committee and Graduate Council  
on 400-level Courses

A. Informational Matters

1. College of Arts and Sciences

Department of Chemistry

CHANGE: Prerequisite for the following courses:

- a) CHM 427 to “Pre: 226 and 228 with grade of C- or better or 292 with grade of C- or better.”
- b) CHM 431 to “Pre: 112 and 114 with grade of C- or better or 192 with grade of C- or better and MTH 142 with grade of C- or better and PHY 112 or 204.”
- c) CHM 432 to “Pre: 431 with grade of C- or better.”

2. College of Engineering

Department of Chemical Engineering

CHANGE: Title, description and prerequisite for CHE 464:

**CHE 464 Chemical Kinetics and Reactor Design (3)**

Mole balances in batch and continuous chemical reactors; reaction rate fundamentals; isothermal and non-isothermal chemical reactors. (Lec. 3)  
Pre: 313 or permission of instructor

B. Curricular Matters Which Require Confirmation by the Faculty Senate

1. \*College of Arts and Sciences

Writing and Rhetoric

CHANGE: Credits, description and method of instruction for WRT 495:

**WRT 495 Composing Electronic Portfolios (4)**

Capstone for WRT majors. Create a substantive and reflective digital collection of representative writings for academic and career-centered audiences. Requires a public showcase and out-of-class technology practice. (Seminar 3, Studio 2) Not for graduate credit.

2. College of Engineering

a. Department of Electrical, Computer and Biomedical Engineering

ADD: **ELE 470 Mobile Computing (3)**

Application of modern mobile computing platforms, user interface, software application development, hardware interface; view controllers; data interaction; application distribution (Lec. 2, Lab 3).

b. \*Department of Mechanical, Industrial and Systems Engineering

ADD: The following new courses:

a) **ISE 401 Industrial & Systems Engineering Capstone Design 1 (3)**

Application of engineering skills using a team-based approach. Design process methodology and communication of solutions to real-world engineering problems. First of a two course sequence. (Lecture 2, Lab 3)  
Not for graduate credit.

b) **ISE 402 Industrial & Systems Engineering Capstone Design 2 (3)**

Application of engineering skills using a team-based approach. Design process methodology and communication of solutions to real-world engineering problems. Second of a two course sequence. (Lecture 2, Lab 3). Not for graduate credit.

3. \*College of Human Science and Services

Department of Education

CHANGE: Credits for EDC 479 to "1-3" and add "topics include Literacy-Based Early Childhood Education Curriculum" to the description.

4. \*College of Pharmacy

Department of Pharmacy Practice

ADD: **PHP 405 Epidemiology in Health Care (4)**

Basic principles of epidemiology as they apply to health care delivery, research and activities; emphasizing the practical application of epidemiological knowledge to literature evaluation. (Lec. 4) Pre: STA 307, PSY 300 or PHP 305. Not for graduate credit

\*No action by the Graduate Council. Not for graduate credit.