

## UNIVERSITY OF RHODE ISLAND FACULTY SENATE

APRIL 16, 2015

### Faculty Senate Curricular Affairs Committee Five Hundred and Twenty-Third Report

At the March 23, 2015 meeting of the Curricular Affairs Committee and by electronic communication, the following matters were considered and are now presented to the Faculty Senate.

#### SECTION I Informational Matters

#### COURSE CHANGES

##### A. College of Arts and Sciences:

###### Change title and method of instruction:

###### **GER 113, Intensive Intermediate German I (4 crs.)**

(4 crs.) Practice in listening and speaking. Development of basic reading and writing skills. Review of grammatical structure. Students enrolling in this course should have taken GER 112 or equivalent. (Lec. 3, Rec.1) (FC) [D]

###### **GER 114, Intermediate German II (4 crs.)**

Practice in listening and speaking. Development of basic reading and writing skills. Review of grammatical structure. Students enrolling in this course should have taken GER 113 or equivalent. (Lec. 3, Rec.1) (FC) [D]

##### B. College of Engineering:

###### Change prerequisite:

###### **CVE 465, Analysis and Design of Concrete Structures (3 crs.)**

Current criteria and practice for design of reinforced and prestressed concrete structures. Elastic and ultimate strength analysis of beams, slabs, columns, and frames. Comprehensive design problems. (Lec. 3) Pre: CVE 354 or permission of instructor.

###### Course deletion:

###### **ELE 325, Electrical Power Distribution Systems**

**SECTION II**  
**Curricular Matters Which Require Confirmation by the**  
**Faculty Senate**

**NEW COURSES**

**A. College of Arts and Sciences:**

**HIS 164, Global Environmental History (3 crs.)**

This course provides a history of human interactions with the natural world from prehistoric times to the present. (Lec. 3)

**WRT 332 Technical Writing (3 crs.)**

Communication strategies for technical fields and for professional/general audiences. (Lec. 3) Competence in basic skills required. (ECw)

**B. College of Environment and Life Sciences:**

**MAF 380 Environmental Injustice (3 crs.)**

This course examines environmental issues through a social justice lens. Looking at historical and global contexts, topics for the course may include pollution, population control, sustainability, and ecocide. (Lec. 3)

**MIC 320, Introduction to Computational Biology (3 crs.)**

Introduction to the current topics of computational biology. Students will obtain hands-on experiences in navigating biological databases and analyzing biological data. (Lec. 3) Pre: MIC 201 or MIC 211.

**PLS 312, Fruit Culture Practicum (2 crs.)**

Hands-on propagation, grafting, pruning, fertilization, pest management and sustainable culture of various fruit plants (apple, pear, peach, blueberry, bramble, grape, strawberry). (Practicum 2) Pre: PLS 150.

**C. College of Engineering:**

**BME 363, Biomedical Instrumentation Design Laboratory (1 cr.)**

Hands-on applications of electronics, embedded and handheld devices to biomedical instrumentation systems including electrocardiogram, photoplethysmogram, motion sensor, and electronic stethoscope. (Lab. 3) Pre: concurrent enrollment in BME 362 or permission of instructor.

**D. College of Human Science and Services:**

**HLT 490 Literature-Based Research Independent Study (1-3 crs.)**

With faculty approval, students can select to complete a research-based independent study. (Independent Study) Pre: HLT 200 and HLT 450 and permission of director.

**HLT 491 Experiential Learning Independent Study (1-3 crs.)**

With faculty approval, students can select to complete an experiential learning independent study. (Independent Study) Pre: HLT 200 and HLT 450 and permission of director.

**E. College of Pharmacy:**

**BPS 250, Prof. Development and Careers in Pharmaceutical Science (1 cr.)**

Seminar discussions for the purpose of developing understanding of the fields of study, potential careers within the broad area of Pharmaceutical Sciences and fostering career and employment readiness skills. (Seminar 1) Pre: Sophomore standing in BPS program or permission of instructor.

**BPS 401, Pharmaceutical Pharmacology I (3 crs.)**

Mechanisms underlying both the therapeutic and toxic actions of currently available drugs including Autonomic and Central Nervous system agents and Cardiovascular system agents. First of 2-semester sequence. (Lec. 3) Pre: BS Pharmaceutical Sciences major, and BIO121, BIO 242 and BCH 311 or 311H.

**BPS 402, Pharmaceutical Pharmacology II (3 crs.)**

Mechanisms underlying both the therapeutic and toxic actions of most currently available drugs including Cholinergic nervous system, Eicosanoids, Bronchodilators, Endocrine hormones, Antibiotics/ antifungal/ antivirals, Cancer chemotherapy, Anticoagulants, Dyslipidemia. Second of 2-semester sequence. (Lec. 3) Pre: BS Pharmaceutical Sciences major and BPS 401.

**COURSE CHANGES**

**A. College of Business:**

**Change title and description**

**BUS 467, Customer Analytics (3 crs.)**

Frameworks and quantitative approaches for implementing strategic customer relationship management, customer-based marketing metrics, essential database marketing tools, supplier/ customer selection and targeting. (Lec. 3) Pre: BUS365 or 365H.

**B. College of Engineering:**

**Change course number, description, and prerequisite:**

**BME 362, Biomedical Instrumentation Design (3 crs.)**

Fundamentals of diagnostic and therapeutic devices, engineering standards, and regulations for medical devices; basic electronics, safety, noise rejection, and

biomedical signal processing; design of embedded and handheld systems. (Lec. 3)  
Pre: (BME 360 and BME 361) or permission of instructor.

**Change credits, description, and prerequisite:**

**BME 484, Biomedical Engineering Capstone Design I (3 crs.)**

Applications of engineering skills; team projects in biomedical areas such as neuroengineering, assistive technology, cardiopulmonary measurements, medical imaging, and modeling of physiological systems. First of a two-course sequence. (Lec. 2, Lab. 3) Pre: (BME 207 and 362) or permission of instructor. Not for graduate credit.

**C. College of Nursing:**

**Change description, prerequisites, and method of instruction:**

**NUR 253, Nursing Research (3 crs.)**

Introduces the principles of scientific inquiry; including identification of various ways of analytical thinking common to problem solving and critical thinking in nursing. (Lec. 3/Online) Pre: NUR 203 and STA 220 or PSY 200. Online version for the Online RN to BS program only: Pre: NUR 247, STA 220 (may be taken concurrently).

**Change title, description, prerequisites, and method of instruction:**

**NUR 443, Community/ Public Health Nursing (3 crs.)**

Analysis of concepts related to public health and the nursing care of clients in the home and the community with emphasis on vulnerable and high-risk populations. (Lec. 3/Online) Pre: Credit or concurrent enrollment in NUR 433, 434 and 444. Online version for the Online RN to BS program only. Pre: NUR 247 and NUR 253.

**NUR 444, Practicum in Nursing of Vulnerable Populations in the Home and Community (3 crs.)**

Application of the nursing process in community with emphasis on vulnerable and high-risk populations. In-depth analysis of a selected population, including utilization of epidemiological and public health principles. (Lab. 9/Online) Pre: Credit or concurrent enrollment in NUR 433, 434, 443. Online version for the Online RN to BS program only: Pre: NUR 443 (may be taken concurrently)

## CURRICULUM CHANGES

### A. College of Arts and Sciences:

#### 1) Proposed Change to B.A. in Chinese:

To improve the clarity of the major requirements, we are deleting the sentence “Students must also complete one additional 400–level Chinese course” and are replacing it with “At least six CHN credits must be at the 400 level.”

Existing Catalog description:

Students selecting the Chinese major are required to complete at least 30 credits (maximum 45) in Chinese, not including CHN 101, 102, 111 or equivalent.

Students must complete six credits in Chinese literature and civilization, at least three of which must be taken at the 400 level. **Students must also complete one additional 400-level Chinese course.**

Proposed Catalog description:

Students selecting the Chinese major are required to complete at least 30 credits (maximum 45) in Chinese, not including CHN 101, 102, 111 or equivalent.

Students must complete six credits in Chinese literature and civilization, at least three of which must be taken at the 400 level. **At least 6 CHN credits must be at the 400 level.**

### B. College of Engineering:

#### 1) Propose the following changes to the Bachelor of Science in Biomedical Engineering: (See Appendix A)

1. Add the new course BME 466 Biomaterials (3 credits, senior II)

2. Update the junior year courses:

a. Move BME 360 and 361, Biomeasurement and its Lab, to junior I.

b. Change the existing course BME 462 Biomedical Instrumentation Design to BME 362 (3 cr., junior II).

c. Add a new BME 363 Biomedical Instrumentation Design Laboratory (1 cr., junior II) to pair with BME 362.

This junior year sequence of two lecture-lab courses provides a broader spectrum of engineering skills leading to the senior-year capstone design courses.

3. Increase BME 484 Capstone Design I credits from 2 to 3. Currently the BME capstone design sequence (BME 464 and 465) has a total credit count of 4, which is lower than that of other engineering programs (typically 6 credits). The increase of BME 484 from 2 to 3 credits will provide the needed contact hours for the multitude of activities in the fall semester:

As proposed the major will consist of 34 credits in the major, 68-69 supporting credits, and 21 additional credits for a total of 123-124 credits.

**2) Proposed change to Bachelor of Science in Computer Engineering: (See Appendix B)**

The course ELE 208 Introduction to Computer Systems has recently been changed, increasing the number of credits from 2 to 3. As this course is required for the degree in Computer Engineering, the total number of program credits increases by 1 (from 120-123 to 121-124).

Some rearrangement of the course sequencing is also necessary to balance student workload and faculty availability.

**3) Proposed change to Bachelor of Science in Electrical Engineering: (See Appendix C)**

The Electrical Engineering major includes 4 courses (12-16 credits) of professional electives; rules are provided for which courses can count as these electives. The change is to drop two courses, BME 462 Biomedical Instrumentation Design and MTH 215 Linear Algebra, from the list.

## **ORGANIZATIONAL CHANGES**

**A) Academic Health Collaborative: (See Appendix D)**

- 1) Formation of the Academic Health Collaborative with three colleges:**  
Health Sciences, Nursing, and Pharmacy; Institute for Integrated Health and Innovation; and an Office of Shared Services
- 2) Create a College of Health Sciences**
- 3) Transfer following departments/program to the College of Health Sciences:**  
Communicative Disorders  
Human Development and Family Studies  
Kinesiology  
Nutrition and Food Science  
Physical Therapy  
Psychology  
Health Studies Program
- 4) Create Institute for Integrated Health and Innovation**
- 5) Create an Office of Shared Services**