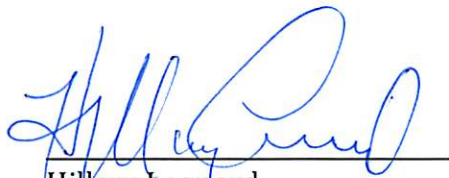


Serial Number #18-19-16A

The attached BILL titled, Curricular Report No. 2018-19-7 from the Graduate Council to the Faculty Senate (courses) was adopted by vote of the Faculty Senate on February 21, 2019.

The Bill is effective on the date of signature below.



Hillary Leonard  
Chairperson of the Faculty Senate

February 21, 2019

**Graduate Curricular Report # 2018-19-7  
February 2019**

**SECTION I  
Informational Matters**

**400-level course changes – undergraduate courses for graduate credit:**

**College of Arts and Sciences  
Computer Science and Statistics**

**CSC 411          Computer Organization**

Change in prerequisite to: "CSC 212 and student must be admitted to a degree-granting college."

**CSC 412          Operating Systems and Networks**

Change in prerequisite to: "CSC 212 and student must be admitted to a degree-granting college."

**CSC 415          Introduction to Parallel Computing**

Change in prerequisite to: "CSC 411 or ELE 305, and student must be admitted to a degree-granting college. In alternate years."

**CSC 436          Database Management Systems**

Change in prerequisite to: "CSC 212 and student must be admitted to a degree-granting college."

**CSC 440          Design and Analysis of Algorithms**

Change in prerequisite to: "CSC 212 and (CSC 340 or MTH/CSC 447) and student must be admitted to a degree-granting college."

**CSC 445          Models of Computation**

Change in prerequisite to: "CSC 340 or CSC/MTH447 and student must be admitted to a degree-granting college. In alternate years."

**CSC/CSF 462   Secure Programming**

Change in prerequisite to: "CSC 305"

**CSC 481          Artificial Intelligence**

Change in prerequisite to: "CSC 212 and student must be admitted to a degree-granting college."

**Philosophy**

**PHL 451          Symbolic Logic**

Cross list with CSC 451

Change in prerequisite to: "Any one of the PHL 101 CSC 340, CSC/MTH 447, or MTH 180, or permission of instructor"

## **500-level course changes:**

### **College of Arts & Sciences Computer Science and Statistics**

#### **CSC 550      Computer Algebra**

Change in prerequisite to: "CSC 440. In alternate years or permission of instructor."

### **College of Environmental and Life Sciences Geosciences**

#### **GEO 562      Aqueous Geochemistry**

New title: Biogeochemical Cycles

New Description: "Introduction to processes controlling water chemistry in low-temperature environments in the context of global biogeochemical cycles, including weathering, ion exchange, acid-bas chemistry, redox, mineral equilibria, isotopes, and modeling."

### **College of Engineering Chemical Engineering**

#### **CHE 570      Research Methods in Chemical Engineering**

Cross list with EGR 570

Change title to "Research Methods in Engineering"

New Description: "Provide experience, practice, and knowledge in engineering research methodology, including defining a research problem, writing a research paper, giving presentations, finding relevant literature, applying scientific knowledge in practice, ethics, professionalism."

### **College of Health Sciences Human Development and Family Studies**

#### **HDF 565      Family Therapy Practicum**

New description, method of instruction, and prerequisites:

"Preparation for and practice of couple and family therapy. Live supervision, student-presented case material, and review of recordings of actual counseling sessions. Prerequisite: Admission to CFT program or permission of instructor. May be repeated for a maximum of 18 credits. (Practicum 3)"

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

**400-level New Course Proposal – undergraduate courses for graduate credit:**

**College of Environmental and Life Sciences**  
**Natural Resource Science**

**NRS 442      Environmental Crisis Communication**

Course description: “Effective communication requires strategy, clarity, and an audience-centric approach. Using case studies, this course will explore crisis communication theory and practice through the lens of recent environmental disasters. (Lec. 3)”

**500-level New Course Proposals**

**College of Arts and Sciences**  
**Library and Information Sciences**

**LSC 536      Media Smart Libraries**

Course description: Students explore current trends in digital, media, and other literacies to learn how libraries can provide learning opportunities to advance the knowledge and competencies of users of all ages. (Online 3)

**College of Environmental and Life Sciences**  
**Cell and Molecular Biology**

**Marine Affairs**

**MAF 531      Environmental Justice**

Course description: “Exploration of how race, class, gender, nationality, and ethnicity shape environmental inequalities. Topics include occupational health hazards, environmental social movements, public health concerns, and contested use of natural resources. Prerequisite: Graduate standing or instructor permission (Seminar 3)”

**College of Business**

**MAC 511      Data Analytics for Accounting**

Course description: “Introduces data analytics process and various applications of data analytics in accounting. Emphasis on hands-on learning experience on varied analytical tools using real-world data. Prerequisite: Graduate standing in accounting or permission of MS. in accounting director. (Online 3)”

**College of Engineering**  
**Electrical, Computer, and Biomedical Engineering**

**ELE 588 Optimization for Machine Learning Applications**

Course description: "Introducing advances in optimization theory and algorithms for rapidly growing applications in machine learning such as linear regression, support vector machines, deep learning, and reinforcement learning. Prerequisite: Graduate standing, ELE 509 or equivalent, a thorough understanding of calculus, linear algebra, probability, and knowledge of computer programming, or permission of instructor (Lec. 4)"

**Feinstein College of Education and Professional Studies**  
**School of Education**

**EDC 526 Applied Linguistics for TESOL/BDL**

Course description: "EDC 526 provides opportunities for teachers of English Learners to develop their understanding of the English language system (phonology, morphology, syntax, semantics, orthography, spelling, and pragmatics), and how differences between English and other languages affect L2 language acquisition, literacy, and metalinguistic awareness. Prerequisite: Acceptance into a Master's program in the School of Education or permission of instructor. (Online 3)."

**College of Pharmacy**

**PHC/CHE/OCG 579 Special Topics on Emerging Contaminants**

Course description: "Introduction to emerging contaminants such as PFASs, focusing on their chemistry, detection, epidemiology, human health, metabolism, and remediation, as well as interdisciplinary collaboration, research translation, community engagement, and professional development. Prerequisite: Graduate standing (Lec. 2)"

2/21/19 - Removed per the request of the Graduate School, will be presented at the March meeting.  
Notice of Change

**College of Engineering**  
**Department of Electrical, Computer, and Biomedical Engineering**

Change in requirements for Electrical Engineering graduate program:

- 1. All full-time MS and PhD students must enroll in ELE 601 Graduate Seminar every semester that it is offered.
- 1. Eliminate "significant independent research" course and "substantial paper" requirements for non-thesis MS students who take the comprehensive examinations.