The attached BILL titled, Curricular Report No. 2017-18-9 from the Graduate Council to the Faculty Senate, was adopted by vote of the Faculty Senate on April 19, 2018.

The Bill is effective on the date of signature below.

Mark Conley  
Chairperson of the Faculty Senate  

April 19, 2018
Graduate Curricular Report # 9
April 2018

SECTION I
Informational Matters

400 level course changes undergraduate courses for graduate credit:

Feinstein College of Education and Professional Studies:
Education:

EDC 478  Problems in Education
Change in prerequisites to Permission of Director.

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College of Environmental and Life Sciences:
Fisheries, Animal, Veterinary Sciences:

AFS 415  Fisheries Ecology
Change in title, description and prerequisites
New description: Ecological characteristics of fishes and shellfishes in capture fisheries worldwide. Relationship between aspects of fishing, habitats, and community structure along with assessment methods. Prerequisites: AFS 215 and MTH 131 or MTH 141; concurrent registration in 416.

AFS 416  Fisheries Ecology Laboratory
Change in title and description.
New description: Practices and techniques of fisheries ecology. Field exercises in local model estuary and coastal zone on sampling methods, enumerating and documenting collections, measuring and reporting environmental attributes, estimating population parameters.

Geosciences:

GEO 450  Introduction to Sedimentary Geology
Change in prerequisites to: GEO 210 and GEO 320, or permission of instructor

College of Health Sciences:
Human Development and Family Studies:

HDF 420  Early language and literacy development
Change in prerequisite to: HDF 200 and either HDF 202 or PSY 301; or admission into the Early Childhood Education Teacher Certification Program; or permission of instructor.
400 level new undergraduate courses for graduate credit:

College of Arts and Sciences:
Mathematics:

MTH 481  **Introduction to Optimization**

Computer Science and Statistics:

CSF/CSC 462  **Secure Programming**
This class will present the basic topics in computer security and their relation to secure programming. Security models, threats, design principles and secure coding practices will be discussed. We will also look at programming language features and semantics to evaluate whether they help or hurt the ability to write secure programs. Prerequisite: CSC 212 ((Lec. 3, online 1)

CSC 493  **Computer Science Topics with Programming**
Advanced topics of current interest in computer science where course involves substantial programming projects. May be used to fulfill major programming elective requirement. Prerequisite: Permission of instructor (Lec. 1-4; Lab. 0-1)

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

CMB 426  **Structural Biochemistry**
Introduction to the theoretical foundations underlying protein and nucleic acid structure and experimental methods for three-dimensional structure determination. (lec. 3) Prerequisite: CMB 311 or permission of instructor

College of Engineering:
Electrical Engineering:

ELE/MCE/OCE 456  **Foundations of Robotics**
The course provides the theoretical background to formulate and address problems in robotics. Its objective is to give a basic understanding of robot kinematics, sensing, actuation, localization, control, and planning. (Lec. 3) Pre: PHY 204 senior standing, or permission of instructor.
500/600 level course changes:

College of Arts and Sciences:
Library Sciences:

LSC 520 School Library Media Services
Change: Creation of online version of existing course
Prepare school librarians to meet RIPS and AASL roles: teacher, information specialist, instructional partner, administrator and leader. Emphasize teaching AASL standards integrated with Common Core Standards. Includes 60 hour filed experience (Lec. 2 prac 1/online 2, prac 1)

LSC 596 School Library Media Seminar
Change: title, credits, prerequisites, methods of instruction
Culminating class for candidates to demonstrate mastery of Professional Teaching and ALA/AASL Standards including five roles: teacher, information specialist, instructional partner, administrator and leader. (Sem 3/Online 3) Prerequisites: Concurrent enrollment or credit in LSC 598. LSC 520 with a B or better and 21 hours of library science with a B average or permission of the instructor.

SECTION II
Curricular Matters Which Require Confirmation
By the Faculty Senate

500/600 level new courses:

College of Arts and Sciences:
Library and Information Studies:

LSC 598 Supervised Internship/Practicum: School Library Media
Twelve-week directed field experience in two school library medial programs. Candidates demonstrate mastery of Teaching and ALA/AASL standards including five roles: teacher, information specialist, instructional partner, administrator, and leader. (Practicum 6) Prerequisites: Concurrent enrollment or credit in LSC 596. LSC 520 with a B or better and 21 hours of library science with a B average or permission of the instructor.

Mathematics:

MTH 581 Optimization Methods
Linear and nonlinear optimization emphasizing problem formulation, methodologies, and underlying mathematical structures. Topics covered: linear programming, simplex method, duality, sensitivity; constrained and unconstrained optimization; line search and Newton methods. Prerequisites: MTH 215 and MTH 243 or permission of instructor. (Lec. 3)
College of Environmental and Life Sciences:
Marine Affairs:

MAF 500 Social Studies of Science
Applies social science tools to the study of the practice of science (including ecology and marine science) as cultural phenomena. Prerequisite: Graduate student standing (Sem. 3)

Natural Resource Science:

EVS 510x Field Practicum Coastal Resilience and Management
This field practicum course is designed to expose students to the science, management, and policy challenges of achieving resilient coastal environments and communities in the face of a changing climate. (Practicum 3) Prerequisite: Permission of instructor.

College of Health Sciences:
Nutrition:

NFS 550/650 Epidemiology of Nutrition and Chronic Disease
This course explores population research in the area of diet and chronic disease. Students will learn basic epidemiologic methods, analysis, and interpretation. (Lec. 3) Prerequisites: Graduate standing or permission of the instructor. Students may take only NFS 550 or NFS 650 for program credit.