The attached BILL titled, Curricular Report No. 2017-18-7 from the Graduate Council to the Faculty Senate, was adopted by vote of the Faculty Senate on March 22, 2018.

The Bill is effective on the date of signature below.

Mark Conley  
Chairperson of the Faculty Senate  
March 22, 2018
SECTION I
Informational Matters

400 level: Course changes undergraduate courses for graduate credit:

**College of Environmental and Life Sciences**
**EEC 432 Environmental & Resource Economics and Policy**
New Description: Economic analysis of policies that address environmental and natural resource problems using problem-based learning. Topics include pollution control, economic incentives and resource use, focusing on data analysis and communication skills. (D1) (B4)

**NRS 450G Soil, Land Use, and the Environment**
New title, new course description, and new prerequisite.
Old title: Soil Conservation and Land Use
New Description: Application of soils and landscape level data to address land use issues and environmental problems such as waste management, storm-water runoff, water quality, sustainability, restoration, and reclamation in urbanizing environments. Prerequisites: NRS 212 or permission of instructor, and concurrent enrollment in NRS 452G.

**College of Environmental and Life Sciences**
**BIO 422X Biology of sharks and their relatives**
Description: A rigorous treatment of the biology of sharks, skates and rays including their classification, evolutionary history, physiology and ecology.
Prerequisites: Bio 101, Bio 102 and junior standing or permission of the instructor.

**College of Arts & Sciences**
**CSC 461 Machine Learning**
Description: “Broad introduction to fundamental concepts in machine learning. Survey of traditional and newly developed learning algorithms, as well as their application to real-world problems. Prerequisites: CSC 310 and MTH 215.
Computer Science majors must take as CSC 461. Data Science majors must take as DSP 461.

**STA 441 Introduction to Multivariate Statistical Learning**
Description: Multivariate data organization and visualization, multinomial and multivariate normal distribution, tests of hypotheses on mean vectors, multivariate regression and classification, principal component analysis, clustering, cross-validation and bootstrapping. Prerequisites: MTH 215; and STA 409, or STA 411, or STA 412; or permission of instructor.
500 level: Course Changes

College of Arts and Sciences

**LSC 530**  
Children’s Materials and Services  
New title and description: An introduction to children’s literature and digital materials. Learn about authors, genres, formats selection tools, and evaluation criteria. Create and engage in programming and services that support children’s multi-literacy development. (Lec. 3)

**LSC 531**  
Young Adult Materials and Services  
New title and description: An introduction to Young Adult literature and digital materials. Learn about authors, genres, formats, selection tools, and evaluation criteria. Create and engage in programming and services that support teen’s multi-literacy development. (Lec. 3)

College of Environmental and Life Sciences

**AFS 500**  
Diseases of Aquatic Organisms  
New title, description, and prerequisite: “Lec: (3 crs) Application of ecology and evolution to the advanced study of diseases affecting aquatic organisms. Prerequisite: AFS 300, graduate standing, or permission of instructor.

**AFS 501**  
Seminar  
New Description: Preparation and presentation of scientific papers on selected subjects in aquaculture and fisheries (seminar).

**AFS 502**  
Seminar  
New description: Preparation and presentation of scientific papers on selected subjects in aquaculture and fisheries (seminar).

**AFS 516**  
Early Life History of Aquatic Resource Animals  
Course deletion.

**AFS 599**  
Master’s Thesis Research  
Course deletion.

College of Health Sciences

**NFS 582**  
Internship in Advanced Medical Nutrition Therapy  
Course deletion.
SECTION II
Curricular Matters Which Require Confirmation
By the Faculty Senate

500 level: New Courses

College of Arts and Sciences
LSC 511 Critical Disability Approaches in LIS
Description: Introduction to critical disability studies, disability rights in the US,
Policy, culture, social justice, activism & intersectional approaches in the library,
differently-abled use, users & Professionals in the library. (Online 3)

LSC 512 Immigrant & Migrant Information Contexts & Practices
Description: Studies immigrant and migrant information histories, uses, behaviors,
encounters, and social justice approaches in information institutes in the US.
Addresses linguistic, cultural, religious practices, race and literacy in information
institutes. (Online 3)

LSC 513 Social Justice in Children’s and Young Adult Literature
Description: Select, evaluate and analyze social justice and injustice in children’s &
young adult literature. Includes: power, racism, diversity, violence, publishing
trends, authorship, illustrations, & ideology & library programming. (Online 3)

MTH 518 Matrix Analysis and Applications
Description: Topics in matrix analysis with applications – similarity and
eigenvalues; Hermitian and normal matrices; canonical forms; norms; least square,
eigenvalue localizations; singular value decomposition; definite matrices. (Lec. 3)

College of Engineering
Electrical, Computer and Biomedical Engineering
ELE 598 Non-thesis Master’s Project
Description: Culminating project for non-thesis Master of Science students in
Electrical Engineering. Small scale engineering projects drawn from industrial and
academic research and development environments. Prerequisite: Open to ELE non-
thesis MS students in good standing after successfully completing 14 credits of ELE
graduate courses. Permission of instructor. Not for undergraduate credit. (Ind.
Study 3)

MCE 586 Adaptive Control for Robotic Systems
Description: Classical adaptive control theory, including Lyapunov stability,
parameter identification, model reference adaptive control, adaptive pole
placement, robust adaptive control, and their applications in robotic manipulators
and autonomous mobile robots. Prerequisites: MCE 566 or ELE 502, or permission
of instructor. (Lec. 3)