General Education Committee Report #2016-17-7: New General Education Courses.

University of Rhode Island Faculty Senate
The attached BILL titled, General Education Committee Report #2016-17-7: New General Education Courses, was adopted by vote of the Faculty Senate on April 20, 2017.

The Bill is effective on the date of signature below.

W. Michael Sullivan  
Chairperson of the Faculty Senate  
April 20, 2017
At the April 6, 2017 meeting of the General Education Committee and by electronic communication, the following matters were considered and are now presented to the Faculty Senate.

**SECTION I**

**Informational Matters**

**COLLEGE OF ARTS AND SCIENCES:**

**AST 108, Introductory Astronomy: Stars and Galaxies**
(4 crs.) Celestial sphere, constellations. Constitution of sun, stars, nebulae, and galaxies. Planetarium used freely for lectures and demonstrations. (Lec. 3, Lab. 1/Online) (A1)

**AST 118, Introductory Astronomy: The Solar System**
(4 crs.) Celestial sphere, Earth, formation of and motions and characteristics of objects in solar system, the Sun, exoplanets, and search for extraterrestrial life. Planetarium used for lectures and demonstrations. (Lec. 3, Lab. 1/Online) (A1)

**HIS 310, History of Europe: 1815-1914**
(3 crs.) Major political, economic, and intellectual developments in Europe from the defeat of Napoleon I to the outbreak of World War I; emphasis on the Revolutions of 1848, unification of Italy and Germany, impact of the Industrial Revolution, nationalism and imperialism, background of World War I. (Lec. 3) Pre: sophomore standing or permission of instructor. (B4) (B1)

**HIS 311, History of Europe Since 1914**
(3 crs.) Detailed study of developments from 1914 to present: wars, postwar adjustments, communist and fascist ideologies, history of individual states, and social and intellectual trends. (Lec. 3) Pre: sophomore standing or permission of instructor. (B4) (B1)

**HIS 495, Seminar in History**
(3 crs.) Development of skills in historical research and writing and in the critical analysis of historical works. Topics vary. (Seminar) Pre: completion of HIS 401 or 441 or 481, with the same instructor, or permission of the department. This course is required of undergraduate history majors. May be repeated for credit with different topic with permission of instructor. Not for graduate credit. (D1) (B4)

**COLLEGE OF ENGINEERING:**

**CVE 323, Humanitarian Engineering**
(3 crs.) Focuses on creating awareness about the challenges that under-served communities are facing locally and globally and how to solve them using appropriate and sustainable technologies. (Lec. 3) Pre: (EGR 106 and MTH 243) or permission of instructor. (A1) (C1)
ELE 480, Capstone Design I  
(3 crs.) Application of engineering skills; teams focus on the design and communication of solutions to problems with real-world constraints (may include aspects of other engineering disciplines). First of a two-course sequence. (Lec. 2, Lab. 3) Pre: (ELE 205 or 208) and ELE 313 and ((338 and 339) or 342) and ((at least a 2.0 (C) average in 212, 313, and 338)) and permission on instructor. Not for graduate credit. (D1)

ISE 402, Industrial and Systems Engineering Capstone Design II  
(3 crs.) 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. (Lec. 2, Lab. 3) Pre: ISE 401 or permission of instructor. Not for graduate credit. (D1)

MCE 402, Mechanical Engineering Capstone Design II  
(3 crs.) 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. (Lec. 2, Lab. 3) Pre: Pre: MCE 401. Must be taken in the semester following MCE 401. Not for graduate credit. (D1)

COLLEGE OF ENVIRONMENT AND LIFE SCIENCES:

BIO 396, Biology and Society  
(3 crs.) A seminar course dealing with the impact of biological discoveries on societal questions and with the social influences that affect biological discovery. Discussion of original papers, magazines, newspaper articles, and books about various discoveries. (Seminar) Pre: junior or senior standing in Biological Sciences (BS), Biology (BA), or Marine Biology (BS), or permission of instructor. (D1) (B4)

EEC 352G, Economics of Small-Scale Renewable Energy Systems  
(3 crs.) Provides tools to evaluate opportunities and challenges in the transformation from fossil fuels to renewable energy at the scale of individual buildings and other small scale energy systems. (Lec. 3) Pre: EEC 105 or ECN 201 or permission of instructor. (A2) (GC)

COLLEGE OF HEALTH SCIENCES:

CMD 493G, Cultural and Linguistic Diversity in Communicative Disorders  
(3 crs.) Application of concepts and information from the study of cultural and linguistic diversity to issues involving communicative incompetence and disorder. (Lec. 3) Pre: CMD 274 or 375. (C3) (GC)

SECTION II  
Senate Approval Needed

COLLEGE OF ARTS AND SCIENCES:

AAF 239, Leadership in The African Diaspora  
(3 crs.) Critically poses the question: How has leadership informed the African Diaspora and shaped the dynamics of culture with the African Diaspora? (Lec. 3) (A2)

COLLEGE OF ENGINEERING:

(3 crs.) Focuses on inter-linkages between sustainable water practices, energy production and needs to ensure public health, and designing engineering systems to meet such demands in a changing global environment. (Lec. 3) Pre: MCE 354 or CHE 347 or permission of instructor. (A1) (C2) (GC)
COLLEGE OF ENVIRONMENT AND LIFE SCIENCES:

BIO 181G, The Information Age: From Politics to Medicine
(3 crs.) How big data affects our society, from advertising to politics to medicine. (Lec 3) Not for major credit for B.S. Biological Sciences or B.A. Biology. (A1) (GC)

CMB 260G, Sequencing Our Genomes: From Ancestry to Disease
(3 crs.) Course to educate students across disciplines about modern genomic approaches that have revolutionized many aspects of human lives. (Lec. 3) (A1) (B4) (GC)

SAF 400G, Reimagining Food Systems Through Agroecology
(3 crs.) Critical exploration of all facets of local to global food systems through lectures, readings, field trips, and hands-on learning. Culminates in an interdisciplinary assessment of a local community food system. (Lec. 3) Pre: junior standing. Not for graduate credit. (D1) (GC)

GRADUATE SCHOOL OF OCEANOGRAPHY:

OCG 108G, Living by the Ocean
(3 crs.) About 44 percent of the world’s population lives within 150 kilometers of the sea. It is important for us to understand some great challenges that we are facing related to the ocean. This course will cover topics including but not limited to natural hazards, pollution, and ocean conservation. (Lec. 3) (D1) (GC)

OCG 350, Oceanographic Data Integration I
(3 crs.) Collection of oceanographic and biological data during on-the-water field experience in RI coastal waters. Students work in teams to analyze data and build simple food web models, coding in Python or Matlab. (Lec. 2, Lab. 1) Pre: 100-level calculus, or equivalent, or concurrent enrollment in OCG 350. Preference given to students having taken OCG 150 and OCG 250 in the PODS program, or permission of instructor. (D1) (B3)

OCG 351, Oceanographic Data Integration II
(3 crs.) Introduction to the basics of conceptual, analog and numerical modeling and simulation of oceanographic data at different spatial and temporal scales. (Lec. 2, Lab. 1) Pre: OCG 350 or permission of the instructor. (D1) (B3)

HONORS PROGRAM:

HPR 230G, Honors Colloquium in STEM
(3-4 crs.) May be repeated for a maximum of 8 credits. (Lec. 2-3, Rec. 1-2) Pre: GPA of 3.40 or better and one completed Honors course or permission of the director of the Honors Program. (A1) (GC)

HPR 233, Honors Colloquium in STEM and Information Literacy
(3-4 crs.) May be repeated for a maximum of 8 credits. (Lec. 2-3, Rec. 1-2) Pre: GPA of 3.40 or better and one completed Honors course, or permission of the director of the Honors Program. (A1) (B4)

HPR 344, Honors Seminar in Arts & Design and Writing
(3-4 crs.) Honors seminar in arts and design and writing. (Seminar) Pre: 3.40 GPA or better or permission of the director of the Honors Program. (A4) (B1)