THE
UNIVERSITY
OF RHODE ISLAND
FACULTY SENATE OFFICE

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UNIVERSITY OF RHODE ISLAND FACULTY SENATE
April 19, 2018

Faculty Senate Curricular Affairs Committee
Five Hundred and Forty-eighth Report

At the March 26, 2018 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

TEMPORARY COURSES:

COLLEGE OF HEALTH SCIENCES:
HDF 482X, Senior Field Experiences II in Community Agencies
(1-6 crs.) Senior Field Experience II in Community Agencies. Additional senior field experience for majors with internship placement hours beyond the 6 credits associated with HDF 480, Senior Field Experiences in Community Agencies. Service learning. (Practicum) Pre: Concurrent enrollment in HDF 480 and HDF 481.

COLLEGE OF THE ENVIRONMENT AND LIFE SCIENCES:
PLS 321X, Sustainable Grain Production
(4 crs.) Study of cereal, pseudocereal, and pulse crops commonly grown in the United States. Focuses on organic and agroecological systems of production appropriate for home gardeners and small-scale commercial farmers. Explores cultural uses of grains and associated end-use technologies. (Lec. 3, Lab. 1) Pre: PLS 132G or PLS 150 or BIO 102 or permission of instructor.

ONLINE SECTIONS:

COLLEGE OF ARTS AND SCIENCES:
GER 101, Beginning German I
(3 crs.) Fundamentals of grammar and pronunciation; exercises in reading, writing, and conversation. (Lec. 3/Online) Pre: no prior German is required. Will not count toward the language requirement if the student has studied German for more than one year within the last six years. (A3) (C2)

GER 102, Beginning German II
(3 crs.) Continuation of GER 101. Students enrolling in this course should have taken GER 101 or equivalent. (Lec. 3/Online) (A3) (C2)

GER 111, Intensive Beginning German I
(4 crs.) Study of the fundamentals of German with special emphasis on listening and speaking skills. (Lec. 3, Rec. 1/Online) Not for major credit in German. (A3) (C2)

GER 112, Intensive Beginning German II
(4 crs.) Study of the fundamentals of German with special emphasis on listening and speaking skills. Students enrolling in this course should have taken GER 111 or equivalent. (Lec. 3, Rec. 1/Online) Not for major credit in German. (A3) (C2)

SECTION II
Curricular Matters Which Require Confirmation by the Faculty Senate

NEW COURSES:

COLLEGE OF ARTS AND SCIENCES:

APG 477, Internship
(3 crs.) Supervised professional experience with a relevant agency or organization. Activities and expectations to be determined between site supervisor and intern and approved by a faculty advisor, prior to registration. Not for graduate credit. S/U only.

STA 305, Introduction to Statistical Computing with R
(4 crs.) Introduction to statistical computing using R. This course will have two components. In the first part of the course you will learn how to write efficient and transparent programs in R. In the second part of the course, you will learn about packages and functions that are used for statistical analyses, techniques for managing data, and using graphs to visually data. (Lec. 3, Rec. 1) Pre: ((MTH 103 or MTH 111 or MTH 131 or MTH 141) and STA220 or STA 307 or STA 308 or STA 409) or permission of the instructor.

COLLEGE OF ENVIRONMENT AND LIFE SCIENCES:

ENT/BIO/NRS 388, Biology of Bees and Pollination Ecology
(3 crs.) Learn the biology, behavior and pollination services of bees. Learn how to identify bees to family level. Understand the basics of honeybee management. Learn various types of pollination. (Lec. 3) Pre: BIO 101 and 102, or permission of instructor.

PLS 321, Sustainable Grain Production
(4 crs.) Study of cereal, pseudocereal, and pulse crops commonly grown in the United States. Focuses on organic and agroecological systems of production appropriate for home gardeners and small-scale commercial farmers. Explores cultural uses of grains and associated end-use technologies. (Lec. 3, Lab. 1) Pre: PLS 132G or PLS 150 or BIO 102 or permission of instructor.

COLLEGE OF PHARMACY:

BPS 306, Essential Pharmacokinetic Concepts
(2 crs.) Designed for students who are interested in careers in the pharmaceutical industry but who do not wish to become specialists in pharmacokinetics. (Lec. 2) Pre: Third-year standing in the Bachelor of Pharmaceutical Science Program or permission of instructor

BPS 315, Pharmaceutics II
(4 crs.) Students will learn the physicochemical properties of drug molecules and excipients as well as formulation, manufacturing, and quality control of sterile and non-sterile solid, semi-solid, liquid and specialty dosage forms. (Lec. 4) Pre: open to Pharmaceutical Science Students, Chemical Engineering students in the pharmaceutical track, or other students with permission of the instructor.

COURSE CHANGES:

COLLEGE OF ARTS AND SCIENCES:
Change title and description:
ART 204, Graphic Design I
(3 crs.) Introduction to the creative process and fundamental elements and principles of design. Project-based assignments promote creative thinking and problem solving using industry-standard tools to critically engage with contemporary design issues.(Studio 6)

ART 304, Graphic Design II
(3 crs.) Approach of project design situations faced by professional studio agencies in an educational context. Current visual communication issues are solved through extensive research and the application of learned concepts and skills. (Studio 6) May be repeated for up to 9 credits with permission of instructor, doing increasingly independent work. Pre: ART 204.

Change description and prerequisites:
CSC 320, Social Issues in Computing
(4 crs.) Discussion of the social and ethical issues created by the use of computers. The problems that computers solve and those that they produce. Ethics and responsibilities of computer and data professionals. (Lec. 4) Pre: CSC 201 or 211.

COLLEGE OF ENGINEERING:
Change course numbers and prerequisites:
CHE 213 (313), Chemical Engineering Thermodynamics I
(3 crs.) Applications of the first, second, and third laws of thermodynamics involving thermophysics, thermochemistry, energy balances, combustion, power cycles, refrigeration and properties of pure fluids. (Lec. 2, Lab. 3) Pre: C- or better in CHE 212 and MTH 243 or concurrent enrollment in MTH 243, or permission of instructor.

CHE 445 (345), Chemical Engineering Laboratory
(2 crs.) Quantitative studies illustrating chemical engineering principles. Emphasis on report writing and the interpretation of experimental data. (Lab. 6) Pre: CHE 348 or permission of instructor. Not for graduate credit.

CHE 446 (346), Chemical Engineering Laboratory
(2 crs.) Quantitative studies illustrating chemical engineering principles. Emphasis on report writing and the interpretation of experimental data. (Lab. 6) Pre: CHE 348 or permission of instructor. Not for graduate credit.

Change prerequisites:
CHE 272, Introduction To Chemical Engineering Calculations
(3 crs.) Introduction to the use of computers and numerical methods, including numerical solution of differential equations as applied to chemical and biological engineering. (Lec. 3) Pre: C- or better in CHE 212 and credit or concurrent enrollment in MTH 243, or permission of instructor.

CHE 314, Chemical Engineering Thermodynamics II
(3 crs.) Continuation of CHE 313 with applications to thermodynamics of mixtures, phase and chemical equilibria. (Lec. 2, Lab. 3) Pre: C- or better in CHE 213, or permission of instructor.

CHE 364, Chemical Kinetics and Reactor Design
(3 crs.) Mole balances in batch and continuous chemical reactors; reaction rate fundamentals; isothermal and non-isothermal chemical reactors. (Lec. 3) Pre: C- or better in CHE 212 and credit in CHE -or permission of instructor.

CHE 452, Plant Design and Economics II
(3 crs.) Elements of plant and process design integrating the principles learned in previous courses. Emphasis is on optimum economic design and the writing of reports. (Lec. 1, Lab. 6) Pre: CHE 364, 425, 449 (349), and 451 (351), or permission of instructor. (D1) (C2)

CHE 491, Special Problems
(1-6 crs.) Advanced work under the supervision of a faculty member arranged to suit the individual requirements of the student. (Independent Study) Pre: permission of instructor. CHE 491 or 492 may be repeated for a maximum of 12 credits, of which a total of 6 credits can be applied to professional electives. Not for graduate credit in chemical engineering.

CHE 492, Special Problems
(1-6 crs.) Advanced work under the supervision of a faculty member arranged to suit the individual requirements of the student. (Independent Study) Pre: permission of instructor. CHE 491 or 492 may be repeated for a maximum of 12 credits, of which a total of 6 credits can be applied to professional electives. Not for graduate credit in chemical engineering.

COLLEGE OF ENVIRONMENT AND LIFE SCIENCES:
Change credits, description, and prerequisite:
BIO 201, General Animal Physiology
(4 crs.) The study of animal physiology (respiration, bioenergetics, locomotion, circulation, osmoregulation, hormones, nervous system, sensory organs, reproduction, immune function) with a consideration of environmental challenges and evolutionary adaptations. (Lec. 3, Lab. 1) Pre: BIO 101/103 and 102/104, and CHM 101, or permission of instructor.

Change credit distribution and prerequisite:
BIO 354, Invertebrate Zoology
(4 crs.) Study of the origin and evolutionary relationship of the invertebrate animals. Emphasis on marine forms. Laboratory sessions include comparative study of selected examples and field trips to local environments. (Lec. 3, Lab. 1) Pre: BIO 101 and 102, and 103 and 104.

COLLEGE OF HEALTH SCIENCES:
Change course title:
HDF 413, Advanced Facilitation and Consulting Skills
(3 crs.) Examines experiential education, organizational development, facilitation techniques, and ethical issues of peer leadership. Elective for leadership minors. (Lec. 3) Pre: permission of instructor and HDF 190 or HDF 290. Not for graduate credit.

Change prerequisites:
HDF 305, Family Engagement in Early Childhood Settings
(3 crs.) Examination of the professional behaviors for establishing and maintaining positive, ongoing, effective reciprocal relationships with diverse families in various early childhood settings. (Lec. 3) Pre: HDF 230 or acceptance into the Early Childhood Education Teacher Certification Program.

HONORS PROGRAM:
Change credits:
HPR 224G, Honors Colloquium in Soc. Science and Civic Knowledge
(3-4 crs.) HPR Honors Colloquia may be repeated for a maximum of 6-8 credits. Topics include: Trekonomics: Life and Economics in a Post-Scarcity World. (Lec. 3-4) Pre: GPA of 3.4 or above and one completed honors course, or permission of the director of the honors program. (A2) (C1) (GC)

COLLEGE OF PHARMACY:
Change title and description:
BPS 445, Natural Products Drugs
(3 crs.) Discovery, development, biosynthesis and general fundamental properties of natural product drugs. (Lec. 3)
Pre: CHM 228; CMB 201 or equivalent.

PROGRAM PROPOSALS

COLLEGE OF ARTS AND SCIENCES:

Communication Studies Department:
Creation of a Minor in Sports Media and Communication: (see Appendix A)
According to the new academic plan, a critical area of development is innovation in the curriculum with the objective of enhancing student success. One approach for achieving this goal includes creating innovative, interdisciplinary, academic programs and collaborations. This program will help fulfill the academic vision of URI and the Harrington School of Communication and Media, and satisfy the incredible demand from students for a program of study in sports communication.

This interdisciplinary minor in Sports Media and Communication exposes students to historical, critical, analytical, practical, and professional approaches to sports media and communication. Students who complete the program understand how to critically and effectively evaluate, analyze, and produce sports media and communication products using a variety of technologies and media, from their voice for broadcasting to social media platforms for advertising. With a focus on the interdisciplinary nature of the sports media and communication industry, students will complete a wide variety of courses that will all develop and harness their skills and help launch their sports media and communication career. In order to bridge academic instruction with the professional world, students are expected to complete an internship or experiential learning opportunity on or off campus. Many of these internships can be had on campus and have already been developed. Students will also have ample opportunities to meet with distinguished alumni working in the sports industry as broadcasters, anchors, advertisers, public relations specialists, announcers, film producers, and more.

Students will be advised to take the general education pre-requirements for the included courses, and in particular COM 100. Students are required to complete 18 hours of coursework, at least three credits must be from an internship in Com 477, FLM 477 or JOR 345.

Computer Science and Statistics Department:
Creation of a Minor in Web Programming: (see Appendix B)
This minor in Web Programming is a response to a strong need in the state and beyond for graduates with computing skills. Computer Science majors will fulfill many of those positions, but there is also a need for graduates in other majors to obtain specific programming skills to bring to their desired occupations. We have been working with CommerceRI to develop this minor to meet the specific needs of employers. And they have helped to recruit students in applicable majors to begin taking the courses required for this minor.
Course requirements:
20 credits: CSC 106 (4), CSC 201 (4), CSC 271 (4), CSC 372 (4), CSC 399 (4).

BA – Film Studies Major: (see Appendix C)
Add FLM 214 and FLM 220 as options for students.
FLM 214 is an elective critical studies course for the Film/Media major/minor, and a General Education course covering both Integrate & Apply and Write Effectively. This will be the first part of a two-course sequence (with FLM 215, History of Television II), which can be taken on its own or as part of the sequence. This course will allow students to understand the history of television as it relates to American history, culture, politics, technology, business, and art, and to see, through the lens of television programming, how the medium has created and reflected

individual and national identities, and shaped new ways to consider what television is, how it is made, who watches it, and how it is consumed.

FLM 220 will provide a much needed intermediary course in the Film/Media production curriculum between FLM 110: Introduction to Film/Media Technology and FLM 351: Topics in Film/Media Production. Currently, the step between FLM 110 and FLM 351 is too large, and students are often not prepared for 300-level production work. This course will provide flexibility through topics to keep up with both technology and equipment changes. Students will be able to augment and/or strengthen their capacities in film/media techniques, technology and software for specific use in film/media related projects and in preparation for work in the industry. FLM 220 will provide depth in students' knowledge-base of production aesthetics and techniques and will enhance their knowledge in preparation for more challenging production courses.

Philosophy Department:
BA in Philosophy: (see Appendix D)
The Department of Philosophy offers a Bachelor of Arts degree. The degree requires 33-48 credits in the major. Among those credits, majors must take: a course in logic (PHL 101); a course (PHL 205) targeting philosophical skills (e.g., close reading, analysis of philosophical argumentation); a course in ethics (PHL 212 or 314); two history courses (Ancient Philosophy (PHL 321) and Modern Philosophy: Descartes to Kant (PHL 323); at least one course from PHL 341 (Introduction to Metaphysics), PHL 342 (Knowledge, Belief and Truth), and PHL 452 (Philosophy of Science); and one course from PHL 204 (Human Nature), PHL 318 (Power/Justice: Contemporary Critical Philosophies), PHL 324 (Recent European Philosophy) or PHL 346 (Existential Problems in Human Life). In addition to these requirements, majors must take a capstone course (PHL 490, Senior Seminar in Philosophy).

At a department meeting we decided to delete PHL 204 as an option from the PHL 204, 318, 324, 346 group. (It will still be offered as an elective.) The reasons for this are: 1. None of our other groups from which a student must choose a course had more than 3 courses, so it is simpler and more consistent, 2. Removing 204 from this group might help boost enrollments in these other 300 level courses which we also deem more important within the major, and also, 3. We think there is some potential subject overlap between 204 and 346 and of the two, we think it better to have our majors take the more rigorous 346.

PHL 204 would also be removed from the department's curriculum sheet and academic map

COLLEGE OF BUSINESS:

Creation of an Undergraduate Certificate in Innovation and Entrepreneurship: (see Appendix E)
The program is a four course, 12 credit undergraduate certificate in innovation and entrepreneurship that will not only can stand alone, but can also provide a coherent structure for existing URI courses and allow scaffolding of content-specific entrepreneurship courses by URI colleges specific to their minors in entrepreneurship. As such, this proposal fills a gap at URI for programming in entrepreneurship and innovation that serves the CBA as well as other majors across the campus. The courses and sequencing have been carefully developed so as minimize barriers of entry and completion including prerequisites, and to supplement and also complement existing curricula. We have sought and received letters of support for our course development, and verbal support for this initiative from colleges at URI including CELS, ENGR, Nursing, and Arts and Sciences.

The COB undergraduate certificate in Innovation and Entrepreneurship will not require any new classes or FTEs. It is based on a strong offering of existing classes offered by the COB. The classes can accommodate students from any major. Courses will emphasize the application of entrepreneurship, innovation, and management concepts to ventures with an emphasis on experiential and project-based learning in the classroom and in the business community internal and external to URI.

The learning goals of this program are for students completing this program to be able to:

1. Demonstrate an understanding of the role of innovation and entrepreneurship in creating wealth and social value.
2. Identify and execute viable entrepreneurial opportunities.
3. Demonstrate an ability to work collaboratively in entrepreneurial contexts.

Creation of an Innovation and Entrepreneurship major in the Bachelor of Science in Business Administration Degree program: (see Appendix F)

The mission of the Innovation and Entrepreneurship major is to educate and train students in the origination of business ideas, and the development and growth of new and existing ventures. The program explores the entrepreneurial personality, the creation of ideas and the process of bringing the idea to market, issues of venture valuation, investing and financing as well as issues connected with how to grow ventures.

This major will provide the Rhode Island community, as well as our national and international populations, an educational opportunity to develop a broad and deep skillset in innovation, entrepreneurship and connected topics relevant to start ups and existing ventures. The proposed major satisfies strategic themes of the URI Academic Strategic Plan, 2016-2021, including providing the opportunity to engage in creative tasks, expand research opportunities, and develop a foundation for student success beyond their academic pursuits. This major will also provide the opportunity for URI to establish its niche and be competitive in attracting a robust community of students, alumni and scholars. The major satisfies perceived student interest, for developing their own ventures or joining and growing an innovative venture will contribute skill sets that prepare our graduates to “take a job” or “make a job”.

Students will learn, apply classic and deeply immerse in classic and cutting edge business theories and practices in:

- Innovation - novel and creative ways to create value through new products or services, new business models or new processes,
- Entrepreneurship (new business ideation and creation, including intrapreneurship and social ventures),
- New venture growth (including social ventures).

Courses and activities will emphasize the application of entrepreneurship, innovation, and management concepts to ventures with an emphasis on experiential and project-based learning1 in the classroom and in the business community internal and external to URI.

The learning goals of this program are for students completing this program to be able to:

1. Demonstrate an understanding of the role of innovation and entrepreneurship in creating wealth and social value.
2. Identify, analyze, evaluate and execute viable entrepreneurial opportunities.
3. Demonstrate an ability to work collaboratively in entrepreneurial contexts.
4. Critically evaluate and apply innovation and small business development strategies in new and existing ventures.

The major consists of eight existing courses, and is described in detail in section E of this proposal. It will not require additional faculty or courses. It is anticipated that over time, the College of Business Administration and other colleges and disciplines will develop additional courses as we foster interest in innovation and entrepreneurship courses. We already have engaged in conversations with faculty in CELS who are pursuing entrepreneurial courses appropriate for CELS majors (e.g., SAF 401X: Entrepreneurship in Local Economy and Food Systems).

COLLEGE OF ENGINEERING:

BS in Chemical Engineering: (see Appendix G)

The Chemical Engineering program is proposing the following changes in the B.S. degree requirements:

- Add NUE 391 and 392 as professional elective options for all Chemical Engineering Tracks.
- Maximum of 6 credits in CHE 491 and 492 can be used to satisfy “professional elective requirements”

•In Traditional Track, create a science elective option to replace the professional elective option as an automatic substitution for CHM 432. The science elective course options are CMB 311, 352, 421, 464; BIO 341; CHM 427, 521; PHY 430.
•In Pharmaceutical track, Replace BPS 303 and 305 (total of 4 credits) with BPS 315 (4 credits) (pending approval of BPS 315 as a new course).

BS in Electrical Engineering: (see Appendix H)
Currently, the curriculum allows professional electives to be drawn from a list; this change adds a new course in robotics, ELE/MCE/OCE 456, to the list. The catalog language change appears in the second footnote.

BS in Industrial and Systems Engineering: (see Appendix I)
The Industrial and Systems Engineering program is proposing several changes in the B.S. degree requirements. They are summarized as follows:
1) ISE 220 – remove from curriculum
2) ISE 261G – add to curriculum
3) replace PHL 212 (ethics) with EGR 316G (engineering ethics)
4) Delete one "General Education" slot from Senior year, as newly required courses covering general education outcomes means less of these courses students will need to find on their own
5) replace MCE 263, CVE 220, and ELE 220 with a "technical elective" that allows students to choose two of the three courses that were previously all required
6) shift a professional elective from senior year, spring semester into spring of junior year so that students can be encouraged to enroll in electives that are only offered every other year
7) Change total credit count from 121-124 to 120
8) Renumber footnotes and add a footnote explaining the new technical elective

New Concentration in Naval Science and Technology for all BS degrees in Engineering: (see Appendix J)
Request approval for a new Concentration in Naval Science and Technology, a subplan that will be allowed for all engineering degrees. As detailed below, the 9 credit concentration includes 3 credits of a new seminar course in Naval Science and Technology (1 credit taken three times) and 6 credits of special problem research and/or senior capstone design in an area related to Naval Science and Technology. It is anticipated that these activities will contribute to the growth of a vibrant technical community and will lead to enhanced partnerships so that we can maintain the concentration into the future. Our regional partners are expected to provide continued support in the form of seminar speakers and funding for undergraduate research and senior design projects.

COLLEGE OF ENVIRONMENT AND LIFE SCIENCES:

Fisheries, Animal and Veterinary Science Department:
BS - Animal Science and Technology major: (see Appendix K)
We are not proposing a new program but rather are proposing to modify the options available to our students. Currently, this major has three options available to students: Pre-veterinary, Animal Science and Animal Management. One of the primary differences between our three curriculum options is the suite of basic science courses that are required, with the Pre-veterinary option being the most rigorous and Animal Management being the least rigorous.

The Pre-veterinary option has the least flexibility of the three options and this is necessary and dictated by the course prerequisites needed to apply to the various Colleges of Veterinary Medicine located domestically and abroad. In this proposal, although we have made a few minor adjustments to reflect the current course prerequisites for DVM programs, this option remains largely unchanged.

Option sheet update:

1. Replace STA 307 or 308 or 409 with STA 308. Veterinary colleges require an introductory statistics class and some of our students have run into conflicts with vet colleges admissions recognizing any other course than the one named Introductory Statistics.
2. Replace requirement for WRT 106 with WRT 104 or 106 and replace requirement for WRT 332 with WRT 332 or 334. Both of these changes will provide greater flexibility (see attached letter of support from Dr. Jeremiah Dyehouse, Dept Chair, Writing and Rhetoric).

Over the past year, the Animal and Veterinary Science faculty have been reviewing the two remaining options available to our majors: Animal Management and Animal Science with the goal of consolidating these two options into one Animal Science option in order to reduce redundancy between the options and provide greater coursework flexibility to students to enable them to tailor their training and coursework to their desired career path. Additionally, we have developed an extensive advising sheet with approved courses suggested for various focus areas.

BS - Aquaculture and Fisheries Sciences major: (see Appendix L)
Changes requested: Change the number of credits required to graduate from 130 to 120 (see below for a breakdown of credits required in each category).
Rationale:
The proposed program is a revision of the Aquaculture and Fisheries Science (previously known as Aquaculture and Fishery Technology, name change approved by CAC on 2/26/18) undergraduate major. This update to the program is needed to:
1) Provide a better fit with the current status and future directions of the field;
2) Accommodate for changes in personnel in FAVS due to retirements and new hires;
3) Better serve the demographics and needs of our students;
4) Accommodate for changes in the General Education program;
4) Facilitate a decrease in time to graduation by providing more flexibility in the curriculum while maintaining rigor; and
5) Facilitate students' ability to graduate with minors and double majors by better alignment with relevant programs.
The revised program:
a) Provides students with a strong foundation in the basic sciences and the specialized knowledge and skills needed to succeed in both professional and academic careers in Aquaculture and Fisheries. This includes an understanding of the importance of physical (geology, hydrology, oceanography), natural (from molecules to ecosystems), and social (cultural, economic, policy, diversity, equity) factors.
b) Illustrates the experiential learning focus of the program (see curriculum map highlighting all the courses that include laboratories, plus the requirement for at least 3 credits of internship or independent project).
c) Fulfills all the requirements needed for the Professional Certification by the American Fisheries Society (see supporting materials and https://fisheries.org/membership/afs-certification/)
d) Seamlessly integrates with a newly proposed Graduate Certificate in Aquaculture and Fisheries at the University of Rhode Island (proposal to be submitted soon).

Department of Environmental and Natural Resource Economics:
BS - Environmental and Natural Resource Economics major: (see Appendix M)
Change 1:
Currently, we have two degree options: Option 1, Green Markets and Sustainability (GMS, 87% of ENRE majors), and Option 2, Environmental Economics and Management (EEM, 13% of ENRE majors).

For Degree Option 1, Green Markets and Sustainability (GMS) we propose to:
1. Add a lower bound on the MTH requirement to make pre-calculus the minimum required (MTH 103 or 111 or BUS 111) and retain MTH 131 (Calc. I) as strongly recommended.
2. Add statistics as a formal requirement:
STA 307, 308, 409 or BUS 210 required

3. Add EEC 440: Cost-Benefit Analysis as a required course in the core concentration.

For Degree Option 2, Environmental Economics and Management (EEM) we propose to:
1. Add intermediate micro (ECN 323 or ECN 328) as a core concentration requirement.
2. Add EEC 440: Cost-Benefit Analysis as a core concentration requirement.

Change 2:
The Department of Biological Sciences informed our Department Chair recently that BIO 105 will not be offered starting Fall 2018. We propose to remove the course from our degree option 1 (GMS) curriculum sheets.

Change 3:
The Department of Chemistry informed our Department Chair that CHM 100 would not be offered. We propose to remove the course from our degree option 1 (GMS) curriculum sheets.

Department of Natural Resources Science:
BS – Wildlife Conservation Biology: (see Appendix N)
1) Change: Correct a math calculation errors in the minimum number of concentration credits from 23 down to 22 credits, and alter language for the total number of credits needed in concentration and supporting electives.
Rationale: A math error in prior catalogs (i.e., 2014-2016) inadvertently listed NRS 407 as a 4 credit course (it is a 3-credit course). Therefore we need to correct this error, as a student could potential take all needed concentration courses and accumulate only 22 credits. We suggest changing the wording in the catalog to state that a student must take "at least 22 credits" of concentration courses. We also suggest altering the wording for supporting electives to state that a student must take "at least 24 credits" of supporting electives. Thus, by default a student must take at least 46 credits of concentration and supporting electives with this change. These changes reflect similar language to the Environmental Science and Management major.
2) Change: Allow student to take either CHM 103/105 or CHM 101/102.
Rationale: We want Wildlife and Conservation Biology majors to take CHM 103/105 and CHM 124/126. Some students, however take CHM 102/102 before meeting with an advisor or when transferring in. Because the CHM department allows students to take either CHM 103/105 or CHM 101/102 as a prerequisite for CHM 124/126, this change will satisfy the CHM department guidelines and match current guidelines for Environmental Science and Management majors. We propose to list this change in the catalog, but not on our checksheet in maximize the number of students taking CHM 103/105. This change will mean that a curriculum modification will not be necessary for students who take CHM 101/102.
3) Change: Delete the minimum grade requirement of C or better for NRS 223 to transfer from University College to CELS.
Rationale: Although listed in the current catalog, this change was never approved by Faculty Senate, thus is an error. Also in addition, not all students have taken NRS 223 by the time they have completed 30 credits, therefore this in an unnecessary roadblock to transfer from UC to CELS. The NRS faculty do feel it is important to retain a minimum grade for other introductory courses (i.e., intro BIOs and NRS 100).

COLLEGE OF HEALTH SCIENCES:

BS in Health Studies: (see Appendix O)
We would like to add additional classes to the specializations. Health studies majors select one of 3 specializations and take 6 classes within their selected specialization. The large number of majors is making it difficult for majors to sign up for the required number of classes. The proposed additional classes would serve Health Studies majors very well.
We proposed adding the following communication classes (per approval of Dr. McClure – see letter):
- COM 361: Intercultural Communication (to be added to the Health Promotion, and Global and Environmental Health list of approved specialization classes)
- COM 461: Managing Cultural Differences in Organizations (to be added to the Global and Environmental Health specialization list of approved specialization classes)

- COM 462: Communication and Global Society (to be added to Global and Environmental Health list of approved specialization classes)

COLLEGE OF PHARMACY:

Bachelors of Science in Pharmaceutical Sciences: (see Appendix P)

Update minimum criteria for acceptance into degree-granting college for BS Pharmaceutical Sciences degree. Catalog copy updates to the BS in Pharmaceutical Sciences section.