ICC Consent Calendar for 10/30/18 University Senate Meeting

18-099 BIOLOGY: Environmental Biology Suspend Concentration
The Department of Biological Sciences is revising all of the majors and concentrations offered in the department. In the current group of concentrations of the Biology major, Environmental Biology considerably overlaps in course content with Ecology and Biodiversity. When asked by students, faculty in the department have a hard time recommending one of these concentrations to a student with particular career aspirations. As part of the curricular revision process the Ecology and Biodiversity concentration is being renamed as the Ecology concentration and the course structure of the concentration can provide the intellectual training and background for students who chose either of these two concentrations in their old forms. There were no unique courses in the Environmental Biology concentration, so its elimination will not alter the course offerings of the department. Thus, current Environmental Biology students should be able to complete their degrees without problems. Several courses from outside the department were restricted electives in the Environmental Biology concentration, but are not explicitly mentioned in the course list for the new Ecology concentration. These courses include ESM 360 Intro to Environmental Planning Methods, REC 330 Adventure Theory & Practice, SOC 320 Environmental Sociology, and WLDF 460 Conservation Biology. However, the Ecology concentration in addition to the major requirements and listed restricted electives requires students to take "Three additional upper division courses, totaling at least 7 units, chosen with your advisor, and focused on developing your skills as an ecology." The outside department courses in the Environmental Biology concentration could be used to satisfy this requirement of the new Ecology concentration.

18-094 BIOLOGY: Cellular/Molecular Biology Concentration Program Change
Add PHYX 118 (1 unit) as an option for PHYX 107 (4). Change upper division from 9 required courses plus Senior Thesis or Directed Study to 5 required courses and 12 units from a list which includes the Senior Thesis or Directed Study.

18-097 BIOLOGY: Ecology Concentration Program Change
Ecology and Biodiversity is changing its name to Ecology to better reflect the content. Add PHYX 107 (4) as an option for PHYX 118 (1) as some graduate schools prefer the material covered by PHYX 107. Since BIOL 410 has been discontinued [18-114], students will take BIOL 350 [18-123] and a lab—either BIOL 440: Molecular Genetics Lab [18-116] or BIOL 450: Cell Biology Lab [18-125]. Reduce restricted electives from 6 units (two courses) to 3 units (one course). Provide total unit count of 7 for the upper division electives chosen with advisor. Reduces concentration from 81 units to 75 as minimum.

18-104 BIOLOGY: General Biology Program Change
Add PHYX 107 (4) as an option for PHYX 118 (1) as some graduate schools prefer the material covered by PHYX 107. BIOL 410: Cell Biology, (4 units) [18-114], part of a list of restricted electives, is being replaced by BIO 350 Cell Biology (3 units) [18-123]. Reduce upper division units, taken in consultation with advisor, from 15 to 12.

18-105 BIOLOGY: Marine Biology Concentration Program Change
BIOL 410: Cell Biology, (4 units), part of a list of restricted electives, is being replaced by BIO 350 Cell Biology [3 units- 18-123]. Add PHYX 107 (4) as an option for PHYX 118 (1) as some graduate schools prefer the material covered by PHYX 107. NOTE: when DCG is double counted, the concentration meets the 120 unit requirement.

18-106 BIOLOGY: Microbiology Concentration
Add PHYX 107 (4) as an option for PHYX 118 (1) as some graduate schools prefer the material covered by PHYX 107. The concentration previously had 10 required upper division courses. In order to streamline the concentration and help with time to graduation, the concentration has reduced the required courses to 7 and created a list of options from which students must take 6 units. The change shifts the concentration from 68-82 units down to 64-75 units.

18-107 BIOLOGY: Science Education Concentration Program Change
Make the following changes to bring the concentration closer to compliance with the CTCC approved subject matter standards: Upper Division—Remove BIOL 412, 433, 433D, and 440 {6 units total] from the required upper division and add BIOL 350 Cell Biology [18-123], BIOL 448 Biogeography [18-124], and BIOL 499 Directed Study {7 units}. The increase of one unit helps the program meet the requirements of CTCC better and should not adversely impact resources due to the small size of concentration and reduction in lab time.

18-108 Botany Program Change
Add PHYX 107 (4) as an option for PHYX 118 (1) as some graduate schools prefer the material covered by PHYX 107. Increase number and variety of options in restricted electives lists to speed time to graduation and group lists into Botanical Diversity (take 3 of 5); Plant Structure/Development/Evolution (take one of 3); Life Science (take 1 of long list).

18-109 Zoology Program Change
Add PHYX 107 (4) as an option for PHYX 118 (1) as some graduate schools prefer the material covered by PHYX 107. Add Cell Biology lecture course [18-123] and remove previous microbiology requirements (which are placed in upper division elective options). Upper division restricted electives are divided into Invertebrate Diversity, Vertebrate Diversity, and Animal Structure and Function, with students required to take one course in each category. Additionally, there will be a list of life science courses from which students must take two courses totaling at least 5 units. Changes will speed time to graduation by eliminating bottlenecks and increasing choices and allow students to better tailor their major to their career path.

18-111 Principles of Biology [BIOL 105] Course Change Form
Change enforced pre-requisites from CHEM 107 or CHEM 110 (C) with a grade of C- or higher to CHEM 107 or CHEM 109 with a grade of C- or higher. These reflect a change in the introductory sequence order to BOT 105>BIOL 105>ZOOL 110. By changing the BIOL 105 prereq from a

concurrent enrollment in CHEM 110 to completion of CHEM 109, some students may be able to take BIOL 105 a semester sooner.

18-112 Introductory Zoology [ZOOL 110] Course Change Form
Change no pre-requisite to BIOL 105 as a prerequisite. These reflect a change in the introductory sequence order to BOT 105>BIOL 105>ZOOL 110. In the past, non-success rates for ZOOL 210 (with a prerq of BIOL 105) were less than half the non-success rates of ZOOL 110 without a pre-req. Since 210 has been eliminated due to budget cuts, it was decided to add the BIOL pre-req to improve the success rates of ZOOL 110.

18-113 Genetics [BIOL 340] Course Change Form
Change C class from 3 units C-4 lecture and 1 unit C-7 lab to 3 units C-2 lecture (lab will be a separate course). Change required pre-req from BIOL 105, STAT 108 or STAT 109; all with grades of C- or higher to BIOL 105, [STAT 108 or STAT 109 or CHEM 341]; all with grades of C- or higher; and BIOL 340L (C) [18-121]. By separating the lecture and lab, students will have the opportunity to retake only one section (lab or lecture, likely the less expensive latter) of this course if they fail—course is a high fail rate course. CHEM 341 is added to the pre-req list so Biochemistry students can get into the course without have to take a STAT course which is not required in their major. Sufficient statistics to succeed in BIOL 340 are present in CHEM 341.

18-114 Cell Biology [BIOL 410] Course Change Form
Suspend course as it is being replaced by BIOL 350: Cell Biology, a lecture only course, [18-123] and BIOL 450 (Cell Biology Laboratory), a lab only course. By splitting the lab component off and not requiring it of all students depending on major/concentration, costs will be reduced.

18-115 General Bacteriology [BIOL 412] Course Change Form
Change title to General Microbiology and description to “Natural history and importance of bacteria, archaea, and viruses. Structure, growth, metabolism, genetics, taxonomy, diversity, pathogenesis, and applied aspects of microorganisms.” Changes better reflect course content.

18-116 Genetics Lab [BIOL 440] Course Change Form
Change title to Molecular Genetics Lab in order to differentiate it from the new 340L: Genetics Lab [18-121].

18-117 Stem Cell Biology [BIOL 544] Course Change Form
Change required pre-requisites from BIOL 410 with a grade of C- or higher; strongly rec: BIOL 440 and ZOOL 476 to BIOL 350, BIOL 450 with a grade of C- or higher. Rec: BIOL 440, ZOOL 476, (CHEM 438 or CHEM 434).

18-118 Advanced Behavioral Neuroscience [PSYC 325] Course Change Form
Change required pre-req from (PSYC 242 and PSYC 321) or ZOOL 310 or BIOL 410 to (PSYC 242 and PSYC 321) or ZOOL 310 or BIOL 350 since BIOL 410 is being replaced by BIOL 350 in the Biology Department.

18-119 Advanced Behavioral Neuroscience [ZOOL 325] Course Change Form
Change required pre-req from (PSYC 242 and PSYC 321) or ZOOL 310 or BIOL 410 to (PSYC 242 and PSYC 321) or ZOOL 310 or BIOL 350 since BIOL 410 is being replaced by BIOL 350 [18-123] in the Biology Department.

18-120 Principles of Animal Development [ZOOL 476] Course Change Form
Change required pre-reqs from BIOL 340 and ZOOL 110 to BIOL 350 and ZOOL 110. BIOL 350 Cell Biology [18-123] is being added as a pre-req because developmental biology requires knowledge in cell biology prior to learning the mechanisms underlying developmental events [BIOL 350 has BIOL 340 as pre-req].

18-121 Genetics Laboratory [BIOL 340L] NEW Course Proposal
C-16 one unit Genetics Laboratory with required pre-reqs of BIOL 105, [STAT 108 or STAT 109 or CHEM 341]; all with grades of C- or higher; and BIOL 340 (C). Course is not repeatable. Course description: "Theories, concepts and practice of modern molecular genetics laboratory research. Discussion of primary literature and current events." Course will affect major and emphasis. Offer 2 sections per semester. Existing BIOL 340 is a combined lecture and laboratory course, which, when students fail the course, requires students to retake the whole thing including the expensive lab. By splitting the course into BIOL 340, lecture only, and BIOL 340L, lab only, if students pass one course (generally the lab) they can simply take the part they did not pass. As statistics suggest students will likely pass the lab (an expensive course) and need to retake the lecture (not expensive), this change will not only improve student time to graduation but also likely reduce resource use and cost.

18-123 Cell Biology [BIOL 350] New Course Proposal
A three unit C-1 lecture course which will serve as a pre-requisite for BIOL 544 and PSYC/ZOOL 325 [18-118, 18-119]. Course has pre-requisites of BIOL 340 and [PHYX 106 or PHYX 109] and course description of "Study of the structure and function of cells with emphases in biochemistry, molecular biology, and physiology, and methods used to address relevant-questions in the field." The course [along with a separate lab component—BIOL 450 [18-125] is replacing BIOL 410 [suspended 18-114]. One section per semester. This separates the lab (an expensive part of the course) from the lecture, which is increased to 3 times a week. It will speed graduation by allowing students who fail one part to only take it over again and save the department money by requiring less labs. It will also allow certain majors to add the lecture part which they did not want to do when the lab was included.

18-124 Biogeography [BIOL 448] New Course Proposal
This three unit C-5 seminar course has a pre-req of BIOL 330 and a description reading "Past/present geographic distribution of animal and plant groups. Emphasis on vertebrate animals and vascular plants." GEOG 302: Global Ecology and Biogeography is similar, but the GEOG faculty voiced no objections. This course is designed for the Science Education concentration and will aid with moving to a CCTC accredited program. It will also be used on a list of restricted electives for several other majors/concentrations. As this course is an undergraduate version of a graduate course [BIOL 548], the course may be cross-listed. For

additional work to separate the graduate and undergraduate versions, graduate students are expected to lead a discussion on Book Chapter Readings and write a paper on *Theoretical Concepts in Biogeography*.

18-125 Cell Biology Lab [BIOL 450] New Course Proposal
This C-16, two unit lab is part of the replacement for BIOL 410, which combined lab and lecture and created added expense for the department and a bottle neck for students when they failed one part of it. By separating the lecture [BIOL 350: 18-123] and the lab, the department saves money and improves student time to graduation. BIOL 350 (with a grade of C- or higher) is a pre-req for this course whose description reads "Experiments in modern and classical cellular and molecular biology, cellular physiology, and biochemistry of cells using cell culture models." Two sections of the course will be offered each semester.

17-062 PHIL 307: Philosophy of Law (New Course Proposal)
UD GE in Area C and D. This course has been previously taught as a special topics course and is approved as an elective for the Criminology and Justice Studies Major. The course has the support of Joice Chang, the prelaw advisor, and Joshua Meisel of Sociology and Criminology and Justice Studies. The appropriate MAP and catalog copy have been submitted (it is being added to a list of prescribed electives for PHIL).