

## **Proposal to revise the BA in Biology curriculum.**

Dr. Sarah Milton, Dr. John Nambu, Dr. Xing-Hai Zhang, Dr. Colin Hughes

### **Motivations, changes made, and justifications.**

**Overview of problems with current curriculum.** Descriptions of the curriculum requirements for the BA in Biology are out of date in light of the recent changes to the BS curriculum. The BS curriculum was revised to provide students more flexibility, and to produce a definitive, up to date, list of requirements. The same flexibility and accuracy needs to be added to the BA curriculum as well. Without these changes the BA will remain more proscriptive than the BS.

### **Problems, proposed changes, and justifications.**

- 1.** New courses are being taught that are not listed in the existing curriculum. We have added all missing classes. Justification: this will make the options available to undergraduates obvious.
- 2.** The current curriculum provides little flexibility for students. We proposed moving Evolution into the core curriculum, and making the biology section of the core identical with that in the BS; it is currently more proscriptive than the BS. We propose requiring students to take 3 out of 4 core Biology classes (the others are Ecology, Molecular and Cellular Biology, and Genetics). Justification: this provides flexibility to students; people with molecular-level interests may choose to skip Ecology for example, if that is not interesting to them, while more holistic thinkers might choose to skip Molecular and Cell Biology. Students would be able to take all 4 classes if they so choose, with the fourth class counting for elective credit.
- 3.** Since Tier 2 classes are of similar stature to Tier 3 electives the distinction was abolished in the BS revision. The remnant of Tier 2 was merged with Tier 3 as “upper division electives” from which students would select at least 15 hours of course work. This leaves our curriculum with two groups of classes: Core, and Electives. Justification: this removes the ambiguity of having two levels of electives, and simplifies the structure of the curriculum.

We attach a document containing the proposed curriculum. Changes to the

Catalog have been shown in an accompanying document.

We see these changes as being re-organizing, updating, and accuracy checking our curriculum. We anticipate a small effect on the Chemistry department with a decreased number of students taking Organic Chemistry Lab. As previously discussed with Dr. Haky, most Biology majors are keeping open their option of a career in a health related field so most will still take Organic Chemistry Lab. Therefore the decrease in enrollment that might result from making these electives will be small.

**Approval of proposed changes.**

The curriculum committee presented the proposed changes to a faculty meeting on Friday 17 August, where they were approved.

Department of Biological Sciences Chair

  
Dr. R. Murphey

Chair, College UPC

  
Dr. J. Haky

Dean, College of Science

  
Dr. G. Perry

Chair, University UPC

  
Dr. J. Haky

UG Dean

  
Dr. B. Claiborne

3/27/13

Provost

Dr. B. Claiborne