4/5/11 Curriculum Committee Meeting Minutes By Maria Stubbings

Present: Stier, Pfatteicher, Stubbings, Lazewski, Paustian, Pelegri, Fadl, Bednarek, Bohnhoff, Hayslett, Sandberg

Call to Order

March 1 minutes approved

Capstone Review

• LA and Genetics will be reviewed in May

Biology Capstone-Stier

- Biocore 324: Organismal Biology Lab-intermediate level course
- Plant and animal physiology; experiments
- Critical thinking; work mostly individually, sometimes small groups
- Develop presentation, paper and/or poster
- Review each other's papers
- Capstone categories:
 - o Problem solving: yes; peer-reviewed papers, collaboration
 - Multidisciplinary: possibly; primarily biological-based
 - Teamwork: mostly
 - o Information resources: probably achieves; use during work on paper
 - Societal, economic, ethical, and professional issues: does not seem to achieve; could achieve (through experiments performed on themselves, other organisms)
- Overall comments:
 - Intermediate class could be a problem; not congruent with capstone
 - Significant number of students will not be taking it for capstone
 - Does not seem to address other issues (societal, etc.)
 - Should send suggestions to biocore department
 - However, intent of Biocore is to be a core biology sequence to prepare for advanced study
- Overall structure of biology capstone
 - Students can satisfy by:
 - Taking a course from the list of courses provided
 - Independent research (299, 399, 699, 681, 682, 691, 692, etc.) (2 credits; can split up 1 credit in each semester)
 - However, 699s are not reliably enforced; many times not restricted to seniors
 - Out of 106 bio students graduating in 2010, close to 2/3 used an independent research course, and $\sim 1/3$ used another course
 - Quality control of capstone:
 - Students supposed to meet with advisor before advisor

- Student meets with advisor after capstone and discuss how they completed the capstone, where advisor will fill out Capstone Approval Form
 - Form is reviewed by Biology staff (Will Lipske or Mary Smith), and they will report to Sue Gisler
 - If there are still questions, Will or Mary will contact the student's advisor or mentor to see if the capstone fulfills this
- The list of capstone-eligible courses does not seem like a coherent list
- People in ICBE are open to the idea of a single capstone, but they do not have the resources
- Biocore sequence developed before the Bio 151-152 sequence (1967); wanted an integrated biology sequence
- Occasionally courses not reviewed/approved (not on list) are used
 - Entom 302 (intro to entomology), 432 (taxonomy lab), genetics 545 (genetics lab), 566 (genetics capstone)
- Zoology 572 no longer taught
- Microbio 551 is the microbiology capstone; F&W Ecol 599 is one of the options for their capstone
- We should discuss 699's at some point and how they should be handled
- Should we allow a student to double-count capstones? (double majors)
- Zoo 555: Lab in Developmental Biology
- Capstone characteristics:
 - Problem solving: probably; conduct independent experiments
 - Multidisciplinary: probably does not achieve; strictly a techniques course
 - Teamwork: mostly achieves; 2/3 of course is in pairs or small groups; presentation limited to the course (single audience)
 - Information resources: does not necessarily achieve; readings are assigned
 - Societal, economic, ethical, scientific, and professional issues: unlikely; again, strictly a techniques course
 - o Communication: achieves; presentation (only to class, though)
- Overall comments:
 - Very hands-on course, but it doesn't seem to meet the capstone experience (focus seems too narrow)
- Zoo 612: Comparative Physiology Laboratory
- Recommended for Zoology majors; prerequisite is Zoo 611 (companion course)
- ~6 students took this for capstone in 2010
- Capstone criteria:
 - Problem solving skills: achieves; students conduct experiments, care for lab animals, use statistical software
 - Multidisciplinary: mostly achieves; students have to order and care for animals

- Teamwork: does not achieve; students work independently except for a single brainstorming session
- Information resources: achieved; stats packages; research paper requires references
- Societal, economic, ethical, scientific, and professional issues: does not seem to achieve; paper does not require addressing these issues
- Overall comments: most of the characteristics are not achieved
 - No teamwork
 - Issues are not addressed
- The course could be changed; however, most of the students in the course are zoology majors, not biology capstones
- Botany 670: adaptive restoration; advanced/grad level course
- Analysis and interpretation of data; team report; projects address true needs for that year
- Capstone criteria:
 - Problem solving skills: achieves; identify problem, work to solve it, lit reviews
 - Multidisciplinary: achieves; problems are biological based, but very broadly
 - Teamwork: achieves; students must develop and present work as a team; communication of results is done first to the instructor, and then presented to the consumer group
 - Information resources: achieves; course requires statistical software to analyze data; lit review
 - Societal, economic, ethical, scientific, and professional: uncertain if met
 - Communication: yes
- Overall comments: although the course was not specifically developed as a capstone, the professor seems to teach it as a capstone

May 10 meeting: prepare discussion/writeup for capstone overview and direction; could possibly start this in the April 24 meeting

Curriculum Sheet Format

- Bohnhoff: Should have both a curriculum sheet and an advising sheet
- Pfatteicher: however, the curriculum sheet should be helpful in advising, and if that tool is not useful for advising, we should try to fix the curriculum sheet instead
- Bohnhoff: BSE uses document as a planning document, and they also transfer in a lot of people
 - Pfatteicher: tracking, GPA calculating, etc. should be do-able in DARS; we could possibly do some formatting on the curriculum sheet to facilitate planning (or use the four year plan—we want that to look more like a worksheet than a roadmap)
- Bohnhoff: need to know how many credits each course is, what prerequisites are, what the titles are, etc.

- Pfatteicher: we are working on an online version of the curriculum sheet modeled after Soil Science, where all of that information will be available
- There is discussion about creating a new version of a What-If DARS that is more customizable; not only looking at a new major, but also being able to plug in certain courses, grades, etc.
- Course Guide coming out with a function for students to create a wish list of courses, and the advisor will be able to see what's in the student's wish list
- Bohnhoff: we should talk about what we want to see in advising information
- Pfatteicher: putting all the course information in (title, number of credits, etc.) for each course would not be feasible; curriculum sheets would be too long
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- Pelegri: we should include a link to the course guide (or let students know how to get there), so students know what geBLC code is/means
- Bohnhoff: is there a way to share individualized curriculum sheets with more than just advisor + advisee? (e.g. when one advisor has to take over for a semester because the other advisor is on sabbatical)
- Sandberg: Is it possible to link a word document to the advisor notes system?
 - Pfattecher: technically feasible, but we have not done it now

Paustian: motion to adjourn Pelegri: second

Meeting adjourned