Student Learning Outcomes Assessment Summary

Wildlife Biology and Conservation, BS

College of Natural Science and Mathematics

AY2014-15 and 2015-16

Submitted by: Kris Hundertmark
Contact Information: 474-7159
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1. Assessment information collected

As assessment criteria we currently track the number of undergraduates in the program, the graduation rate, and the time to completion of the degree. We also track the number of students who pass or fail our written- and oral-intensive courses (those with a WLF designator) to measure the effectiveness of our teaching of communications skills.

We currently have 94 Wildlife Biology and Conservation undergraduate majors and 4 students with minors in the program. We ended Spring 2014 with 83 students. We graduated 9 (11%) students in AY2014-15 and 16 (17%) students in AY 2015-2016; the latter data yields a crude estimate of time to graduation of 5.9 years.

We had 34 undergraduates take writing-intensive courses during this period and all passed. We had 13 students take oral-intensive courses and 12 passed.

2. Conclusions drawn from the information summarized above

The number of students in the program is similar to previous years (Fall 2013=93, Spring 2014=82) but the number of graduating seniors in AY 2015-16 increased almost two-fold over previous years. A time to graduation of 5.9 years is indicative of the difficulty that many of our students have with passing their math requirements on the first try and the number that require Developmental Math courses. Over 33% of our students fail MATH F156X (Precalculus) on their first attempt. They must have placement in precalculus at a minimum to begin the introductory biology series and therefore can be delayed a year or more while developing their math skills. The Math Bridge program instituted by the Dept. of Mathematics and Statistics is our best hope to lower that measure but it is too early to assess the program's effectiveness in decreasing time to graduation.

In general, our students do well in upper-division writing- and oral-intensive courses, indicating that their communications skills are well developed at graduation.

3. **Curricular changes resulting from conclusions drawn above**
   Math Bridge, the online preparatory mathematics program designed to prepare students for calculus, is now a mandatory course for students exhibiting poor math skills, therefore we dropped it as a requirement in WLF F101.

   We adopted a communications plan to replace W and O courses to ensure that our graduates can communicate effectively both in writing and orally and to both scientific and general audiences.

   As a result of faculty departures, we eliminated WLF F410 and WLF F460 as required courses for the Wildlife Biology and Conservation BS degree. We also changed elective requirements such that students must now take at least 3 of the 4 following classes: WLF F421 (Ecology and Management of Large Mammals), WLF F425 (Ecology and Management of Birds), BIOL F425 (Mammalogy), and BIOL F426 (Ornithology).

4. **Identify the faculty members involved in reaching the conclusions drawn above and agreeing upon the curricular changes resulting**
   Mark Lindberg, Greg Breed, Falk Huettmann, Patricia Doak, Todd Brinkman, Brad Griffith, Knut Kielland