

Assessment Criteria

1. Graduates taking the senior major biology (ETS) field exam will be at or above the 50th percentile compared to national results with no subscale score below the 30th percentile.
2. Course embedded activities will require students to demonstrate their levels of learning, skills, and communication using departmental criteria:
 - a. By the end of each semester course, students will score a minimum of 70% on departmental rubrics for writing scientific papers, oral presentations, and critiquing peer-reviewed journal articles where appropriate.
 - b. Students in all 3000 level organismal courses and 4000 level capstone courses will demonstrate their understanding of the vocabulary of biology by reading and critiquing at least one primary paper.
 - c. At least 50% of biology majors will present original research in department symposia
3. At least 50% of students will participate in undergraduate research, service learning, cooperative education, and/or internships.
4. At least 50% of students and faculty will participate in a student-faculty focus group each semester, to address issues of advising, grading, curriculum and retention. Results of focus group will be used to develop a strategic plan for the department in subsequent faculty meetings. Meeting results and subsequent responses will be posted for students in the science building hallways, on the department web-page, and in the school newspaper.
5. Ongoing advisory committees will review programs and ensure relevant curriculum opportunities (e.g., industry contacts and community members for biology, faculty committee to assess preparedness for medical-related field, teaching observations for teaching majors, undergraduate research oversight committee.). The department will solicit an external review of biology programs from another regional university of similar size.
6. Student and Peer Teaching evaluations will rate faculty at 80% or greater for overall teaching effectiveness.
7. A graduate exit survey and an alumni survey will be conducted at intervals post-graduation, 1, 6, and 10 years. 75% of biology graduates will indicate on the Exit and Alumni surveys that their biology program was effective in preparing them for post-baccalaureate plans.

2003 RESULTS

July 10, 2003

1. On the ETS biology field exam, 2003 biology graduates scored a mean scale score of 156.5, range 131-172, ranking in the 67th percentile of all institutions taking this exam.. 62 % 2003 graduates \geq 50 percentile (n= 40) . However, 10 graduates had at least one subscale score below 30th percentile.
2. Levels of Learning, skills and communication:
 - a. In all appropriate upper division courses, students scored $>$ 70% on departmental rubrics for writing scientific papers, oral presentations, and critiquing peer-reviewed journal articles (see syllabi criteria for course requirements)
 - b. All students in the following 3000 level organismal courses (see syllabi for Entomology, Ornithology, Plant Physiology, Herpetology/Icthyology, Cell Biology, Vertebrate Physiology), and 4000 level capstone courses , (Biotechnology, History and Literature of Biology, Animal Behavior) demonstrated their understanding of the vocabulary of biology by reading and critiquing at least one primary paper (see syllabi criteria for course requirements)
 - c. 202 biology majors presented original research in class, department and University symposia: Biology 2 (146), Vertebrate Physiology (30), Biology symposium (30), University Scholarship Day (2)

3. 33 Students registered for undergrad research, coop ed, internship credit; all students enrolled in Conservation Biology (24), Invertebrate Biology (19), Animal Behavior (19), Biotechnology (17), Biology 2 (146), participated in undergrad research and/or service learning projects.

4. A college of science student-faculty focus group was conducted by the student senate both fall and spring semester. Many Biology students and faculty participated, however, roll was not taken so no statistics are available on the level of participation. In addition, the exit exam included opportunities for graduating seniors to address issues of advising, grading, curriculum and retention. Results of the senate focus group have been discussed in biology faculty meetings and addressed individually by faculty. On a University wide basis the advising issue has been addressed by the hiring of college advisors. Biology Faculty will also use the focus group information and exit survey to develop a strategic plan for the department in subsequent faculty meetings for 2003-2004. Meeting results and subsequent responses will be posted for students in the science building hallways, on the department web-page, and in the school newspaper.

5. . Three replacement faculty were hired for the upcoming school year, the biology faculty used the hiring process to prioritize program needs, especially opportunities for undergraduate research. Ongoing committees continue to meet and review programs and ensure relevant curriculum opportunities (e.g., industry contacts and community members for biology, faculty committee to assess preparedness for medical-related field, teaching observations for teaching majors, undergraduate research oversight committee.). The department has not solicited an external review of biology programs from another regional university of similar size, but will seek to do this in 2003-2004.

6. Fall and Spring semester Student and Peer Teaching evaluations rated biology faculty at 80.92% for overall teaching effectiveness (Fall = 79.95 %, Spring '03 = 81.89%, Overall Avg = 80.92 %)

7. In the 2003 graduate exit survey, the 2003 graduates rated 61.5% of the courses they had taken in their program as Useful or very useful for post-baccalaureate plans (24 out of the 39 courses). No alumni surveys have been conducted at this date .