

**College of Letters and Sciences  
Departments and Programs in the Natural Sciences**

**Department of Zoology  
Assessment Plan: Undergraduate**

Goals for a Zoology Major: The Zoology major should have a capacity for critical thinking and conceptual skills that allow understanding of biological complexity and the interrelationship of humans and natural systems. Students should appreciate the diversity of life, having a basic understanding of genetic, cellular, physiological, ecological, and evolutionary principles and a solid foundation in related disciplines of chemistry, physics, and mathematics. Students should understand how scientific information is obtained and evaluated and understand its application to societal issues.

Unique Characteristics of the Zoology Major:

- Broad, integrated training in biology
- Focus on basic principles and processes of biology
- Flexibility to tailor major, with advising, to individual's goals
- Wide range of opportunities for senior thesis and other independent projects

Methods of Assessment:

1. Alumni survey/Long term cohort study of graduates at one, three, and five years
2. DARS review
3. Faculty interviews
4. Focus groups of juniors and seniors
5. Pilot portfolio assessment
6. Course evaluations

Feedback Mechanism:

1. Oversight by Instructional Programs Committee with presentation to faculty in Fall and Spring, including continuous improvement of the standing assessment process itself (Annual)
2. Coordination by student services specialist (Annual)
3. Report submitted to Assessment Council (Annual)
4. Long term study results disseminated (1,3,and 5 year intervals)
5. Review of standing process by Instructional Programs Committee, with full faculty oversight (5 year cycle)

**Implementation Plan for Department of Zoology:  
Assessment and Programmatic Improvement**

**Standing Evaluation Process**

**Stage 1: Educational / programmatic goals and objectives defined:**

**1998-99 Academic Year:**

**Goals for a Zoology Major:**

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**Stage 2: Assessment Methods (Purposes and Results):**

**Completed: 1998-99 Academic Year:**

**Methods Used/Purposes/Results:**

**Alumni Survey:**

Purpose: To determine major themes of student experience and broad links to life experiences

Results: Aggregated responses to 210 returned surveys indicated that Zoology alumni thought they had been prepared well for work and graduate/professional school. Alumni recommendations for improvement targeted advising and career counseling.

**DARS Review:**

Purpose: To identify patterns of courses undergraduates take

Results: Undergraduates generally make appropriate choices in course selection (*i.e.*, they do not inappropriately specialize.) Not all students take genetics, ecology, and evolution as the department's updated goals and catalog description suggest, however.

**Faculty Activities Report:**

Purpose: To update this existing departmental review mechanism to include activities related to improvement of teaching, learning, and assessment activities and to develop a standing process that acknowledges commitment to teaching

Results: Instructional improvement section supplements the report and results are used to identify department members for award nominations

**Faculty Interviews:**

Purpose: To locate best departmental practices in teaching, learning, and assessing

Results: Most Zoology faculty are engaged in a variety of self-directed activities developed to improve teaching, learning, and assessment. These activities include action research, updated assessments to draw out the critical thinking of students, collaborating to improve joint teaching ventures, increasing opportunities for lab and field work, and mentoring students as biologists. Results indicate that most faculty successfully integrate research, teaching, and mentoring and consistently extend opportunities to undergraduates in ways that integrate them into current research, teach them how to

think critically, solve problems, and work with others.

**Focus Groups of Juniors and Seniors:**

**Purpose:** To understand the undergraduate experience in Zoology and to use responses to design a long-term study of graduates at 1, 3, and 5-year intervals

**Results:** Students report that they are well prepared in the biological sciences and appreciate the opportunities to work with respected researchers. Students also report growth in abilities more broadly, including the ability to think critically, to communicate in writing and speaking, and to think quantitatively. They targeted advising, career counseling, and departmental and university-wide communications for improvement.

**Long-term Study:**

**Purpose:** To design a long-term study using alumni survey and focus group results to follow up with alumni at 1, 3, and 5-year intervals

**Results:** Instructional Programs Committee approves questions and phone interviews will be made in the 1999-00 school year.

**To Be Completed in the 1999-2000 Academic Year:**

**Graduate Program Assessment:** To develop a standing assessment process (to include updating the current orientation process and yearly survey in use with graduate students; to initiate exit interviews with graduate students)

**Syllabus Updates:** To articulate the department's goals and unique characteristics within the context of courses

**Writing Portfolio/Sampling Project:** To explore the possibility of sampling student writing for Instructional Programs Committee to directly assess student achievement in terms of departmental goals (*i.e.*, to revise goals as needed and to characterize and demonstrate student learning for outside audiences)

**Stage 3: Dissemination of results for program improvement:**

**Completed: 1998-99 Academic Year:**

- Department voted to approve Goals for a Zoology Major and Unique characteristics of a Zoology Major (December, 1998)
- Report of Assessment Results Written and Disseminated (Final presentation to full department in September, 1999)
- Instructional Programs Committee designates early meeting each semester to reviewing assessment results
- Fall Faculty Meetings designated for Project Review (September), October (Graduate Program Activities), and November (Undergraduate Program Activities)

**To be Completed/Implemented in the 1999-00 Academic Year:**

- Colloquium on teaching, learning, and/or assessment topic each semester
- Graduate student questionnaire and exit interviews (Year long)
- Phone Survey of 1999 BA and BS Graduates (Year long; Results disseminated include graphically presented data)
- Syllabi updates to include goals and characteristics (On-line by May 2000)

- Writing Portfolio decision made by Instructional Programs Committee (December, 2000)

**Stage 4: Timetable for assessment plan implementation:**

- Time line for completion and dissemination established
  - Yearly Overview 1995 through 2005
  - Staff responsibility matrix for assessment tasks (See Appendix A)

**Stage 5: Assessment objectives, methods, and timetable to school/college academic planning councils:**

- Submit yearly report to Assessment Council through the Associate Dean of the Natural Sciences in College of Letters and Sciences (Includes results of long-term study and any changes in the standing evaluation process or goals and characteristics)

**Stage 6: Implementation of assessment plans with revision as needed:**

- Instructional Programs Committee Reviews standing process and suggests revisions to process itself and uses information to make quality-oriented decisions (Includes updating standing process and assessment activities every five years: Review of stages 1 through 3)

**Note: Stages 1 through 3 are completed in a five-year cycle. Stages 4 through 6 are completed annually.**