

**Memorandum of Understanding**  
**2005 Program Review**  
**Biology Department**  
**College of Arts and Sciences**  
**May 13, 2005**

Members of the Biology Department faculty, the Division Director of Natural Sciences, and the Dean of the College of Arts and Sciences met with the Vice Chancellor for Academic Affairs on May 13, 2005, to review and discuss issues resulting from the Biology Department program review of Fall, 2002. The self-study report by the Biology Department (on file) and the report by the external reviewer (on file) were the basis for the discussion. Summary points and an action plan for the Biology Department follow.

Part I. Summary Points

- The Biology Department has a reputation of rigorous instruction for its majors as well as providing quality service courses for other departments and courses to meet general education requirements of the university.
- The Biology Department offers both BA and BS degrees. The BS degree requires additional advanced courses in other sciences and mathematics, while the BA degree has two tracks: (1) molecular and cell biology and (2) ecology, evolution, and conservation biology (a new offering as of academic year 2001).
- Faculty members in this department have received numerous honors for excellence in teaching and pride themselves on knowing their students well and providing personalized advising and directed studies opportunities for biology majors.
- Measurement of learning goals occurs through traditional exams, comparison of laboratory write-ups from lower division to upper division students' work, two semesters of a required major capstone seminar course which includes research and presentation of the research, majors' scores on GRE biology aptitude portions and the MCAT's, and feedback from graduates who go on to graduate programs and medical, veterinary, and dental schools.
- The number of biology majors increased more than 50% from academic year 1997-98 to academic year 2002-2003 while the number of FTE faculty remained fairly consistent over the same period.
- Research activities in the department have increased markedly over the past few years. More than four million dollars in research monies have been attributed to the grant writing efforts of Biology Department faculty.
- Inadequate resources in laboratory and office space as well as in clerical assistance are two factors which limit any further increase in research activities.

- Goals of the department over the next seven years are to continue their ongoing revision of curriculum to keep up with advances in the field, to expand research opportunities for faculty, to double the number of undergraduates involved in directed research, and to continue to contribute to the newly-approved Master of Science degree in Tropical Conservation Biology and Environmental Science.

## Part II. Plan of Action

1. In response to the External Reviewer's comment that the department should consist of 14 faculty and 2 instructors, it is unlikely that EPSCoR will be funding any new faculty positions. Two ways to address this problem are to increase class size and look into the possibility of replacing regular grant buy-outs with a tenure-track person.
2. Now that the MS degree in Tropical conservation Biology and Environmental Science has become a reality, the VCAA and dean commit to giving faculty credit for chairing master's theses.
3. Rather than creating new courses in Biology as the External Reviewer recommends, the Biology Department will review the content of the current introductory courses in Zoology and Botany to integrate content more effectively. The department can re-visit this plan when new faculty teach these courses.
4. The Department has no intention of offering an interdisciplinary degree with Chemistry. Instead, the Biology Department chair will work cooperatively with the Chemistry chair to try to increase the number of classes available to accommodate biology majors. It is essential that the biology department program be bolstered by high-level chemistry and mathematics offerings.
5. The department will not pursue a degree in Marine biology. It is not feasible to undertake a new degree program at this time with the resources available.
6. Student outcome assessment needs to be broadened. Currently the department relies on lab reports, exams, and a capstone seminar series for majors, all of which are important but need to be expanded upon. The chair of the department conducts an end-of-the-year comparison of BIOL 270 lab reports with upper division course lab reports to gain evidence of improvement in and evolution of thinking about science. The VCAA and Dean will offer the department the opportunity for its majors to take the ETS Biology Field Exam for further evidence of the achievement of learning outcomes.
7. The VCAA and the Dean recognize the need for more space in order to continue the department's excellence in teaching to expand its research agenda. Once the space allocation in the new Science and Technology Building is resolved, they will re-visit the space issues with the department. Everyone agrees it is desirable to keep the department in one space, although splitting it might be a short term solution while a longer term solution becomes available.

8. No new funds are available for increasing library resources, start up funds, or maintenance of equipment. Funding for TA's and RA's should continue through building it into grants. The department, however, should build a case for all these needs into a program change request for the next biennial funding term. Meanwhile, the Dean will explore the possibility of a policy shift that would allow tuition waivers for TA's and RA's.
9. In the near future the costs of the Biology Department will be assisted in three ways:
  - a) through the development by the VCAA of a coefficient model of funding for academic programs;
  - b) through the Dean's plan to organize a priority system that will direct monies to areas where they are most needed; and
  - c) through the department working collaboratively to develop a compelling case for laboratory fees to help address the budget needs of their teaching and research laboratories. This case would be presented to the President of the system.
10. The VCAA and the Dean will commit to greater staff support for the department by making the clerical needs of the department a high priority when funds become available.

## Signatures

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William J. Mautz, Chair and Associate Professor	Date
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Leon Hallacher, Professor	Date
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Donald K. Price, Associate Professor	Date
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John F. Scott, Associate Professor	Date
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Cedric Muir, Assistant Professor	Date
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Rebecca Ostertag, Assistant Professor	Date
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Elizabeth Stacy, Assistant Professor	Date
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Grant C. Gerrish, Instructor	Date
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Christine Kornet, Instructor	Date
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Don Hemmes, Professor & Chair of Natural Sciences Division	Date
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Randy Hirokawa, Dean of College of Arts and Sciences	Date
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Stephen Hora, Interim Vice Chancellor for Academic Affairs	Date