Writing in the discipline
Department of Biology

Program: BS in Biology

The Department of Biology emphasizes primary literature and scientific writing in every course in the Biology major, however, after extensive discussion amongst the faculty of the department it was felt that the following three courses formally provide instruction in different forms of scientific writing and will provide valuable assessment data with regard to progress in writing skills during a student’s undergraduate science career:

- **BIOL 111 Introductory Biology I** - Introduction to scientific communication and modeling primary scientific literature
- **BIOL 320 Cell and Molecular Biology** - Developing further data analysis and communication skills – modeling primary scientific literature
- **BIOL 460 Senior Seminar** - Synthesizing information: writing a scientific review paper

All three courses are required for the BS in Biology

BIOL 111 includes a series of laboratory experiences and each semester at least one of these exercises (depending on the instructor there may be more than one) will require a formal laboratory report formatted as a scientific paper. The laboratory report will be constructed over a number of weeks allowing the student to prepare one section at a time. These assignments are viewed as a way to introduce students to scientific communication and therefore will be guided in the writing process. Students will be instructed in the way in which data is generally presented and discussed in scientific literature, how to identify relevant background information, cite sources and write succinctly. Each section will include a submitted draft with instructor comments and critiques before a final paper is submitted.

BIOL 320 includes a series of laboratory experiments which generate qualitative and quantitative data. The data generated through these experiments must be analyzed and presented as a formal laboratory report. These reports

BIOL 460 is the capstone course of the Biology major and in this course students are required to select peer reviewed manuscript which has recently been published. They are required to complete a literature search based on their chosen topic and prepare a review-style article based on that experience. The review paper is submitted as a series of critically evaluated drafts culminating in a final submission at the completion of the course.

Assessment of all three of these courses will be based, at least in part, on the quality of the writing assignments. The Biology program assessment already uses BIOL 460 as a critical part of our assessment program.

Approved by the Committee on General Education
November 9, 2012