BIOLOGY
ASSESSMENT PLAN

DESCRIPTION OF ASSESSMENT PLAN

1. The Department's Assessment Committee will oversee all aspects of the Assessment Program. The Committee will consist of at least three faculty members from the Department and will include the Department's Chairperson.

2. The Committee has developed a Faculty Rating Form for the Assessment of Student Learning (see attached form). This instrument will be used by faculty teaching core biology courses (e.g. ecology and evolution, genetics, microbiology, physiology, etc.). The Assessment Committee will manage the collection of data and will analyze and report the results.

3. The Committee will develop a Student Knowledge Assessment Instrument to be given to exiting students in the Biology and Life Science majors. An outline of the proposed Instrument is attached. Modified forms of the Instrument will be used for Cytotechnology and Medical Technology majors. The Assessment Committee will direct the administration of the examinations and will analyze and report the results.

4. The Department will request authorization and funding to administer the Educational Testing Service Major Field Test in Biology every two years to juniors and seniors in the Biology and Life Science majors. This is a commercially available and nationally recognized biology examination that will permit a comparison of our students with a national profile of biology majors. Subjects covered on the exam closely match our Biology and Life Science core curricula. Assessment Indicators are provided for eight areas ranging from subcellular to evolutionary biology and analytical skills. The Assessment Committee will direct the administration of the examination and will analyze and report the results.

5. Additional information such as: a) admissions to graduate and professional schools, b) scores on national tests (GRE Biology Subject Test, Medical College Admission Test (Biology Section), Optometry Admission Test (Biology Section), etc, and c) acceptances to clinical internships and pass rates on professional licensing examinations for cytotechnology and medical technology majors will also be used to assess student achievement.

6. The Committee will evaluate the Assessment Program periodically and will recommend changes as needed.

The Relationship of the Biology Department's Assessment Plan To Departmental Goals and Student Outcomes

GOAL 1: To provide strong academic preparation for students majoring in Biology, Life Science (Teaching), Medical Technology and Cytotechnology.

OUTCOME 1.1: Students will understand the basic principles of the biological sciences

INDICATOR 1.1.1: Results from the Faculty Rating Form for the Assessment of Student Learning [see Assessment Plan: Item 2].

INDICATOR 1.1.2: Performance on the Student Knowledge Assessment Instrument [see Assessment Plan: Item 3].

INDICATOR 1.1.3: Performance on the ETS Major Field Test in Biology (administered every two years) [see Assessment Plan: Item 4].
INDICATOR 1.1.4: Scores on national tests (GRE Biology Subject Test, Medical College Admission Test (Biology Section), Optometry Admission Test (Biology Section), etc.) [see Assessment Plan: Item 5].

INDICATOR 1.1.5: Pass rates on certification exams for Medical Technology and Cytotechnology majors [see Assessment Plan: Item 5].

OUTCOME 1.2: Students will demonstrate competency in basic laboratory and field skills.

INDICATOR 1.2.1: Results from Faculty Rating Form for the Assessment of Student Learning (see Assessment Plan: Item 2).

OUTCOME 1.3: Students will demonstrate the computer skills required for their biology classes.

INDICATOR 1.3.1: Results from Faculty Rating Form for the Assessment of Student Learning [see Assessment Plan: Item 2].

GOAL 2: To have every student conduct searches of the scientific literature.

OUTCOME 2.1: Students will conduct searches of the scientific literature.

INDICATOR 2.1.1: Results from Faculty Rating Form for the Assessment of Student Learning [see Assessment Plan: Item 2].

INDICATOR 2.1.2: Documentation of student participation in Biology Seminar (Biol. 484) in which students must conduct searches of the scientific literature.

GOAL 3: To have every student proficient in written and oral scientific communication.

OUTCOME 3.1: Students will communicate effectively on scientific topics.

INDICATOR 3.1.1: Results from Faculty Rating Form for the Assessment of Student Learning [see Assessment Plan: Item 2].

INDICATOR 3.1.2: Documentation of student participation in Biology Seminar (Biol. 484) in which effective scientific communication is required.

INDICATOR 3.1.3: Collections of student scientific publications, abstracts and posters, and documentation of oral presentations by students at scientific meetings.

GOAL 4: To have every student understand scientific methodology and conduct scientific investigations.

OUTCOME 4.1: Students will conduct scientific investigations.

INDICATOR 4.1.1: Results from Faculty Rating Form for the Assessment of Student Learning [see Assessment Plan: Item 2].

INDICATOR 4.1.2: Documentation of student participation in a) classes requiring scientific investigations, and b) formal laboratory research that was not part of a class.

GOAL 5: To have students participate in professional activities
OUTCOME 5.1: Students will participate in professional activities.

INDICATOR 5.1.1: Results from Faculty Rating Form for the Assessment of Student Learning (see Assessment Plan: Item 2).