

## Biological Sciences Assessment Plan

Positive student outcomes in terms of content learning, student skill and knowledge accumulation, and understanding of scientific process are integral goals for the School of Biological Sciences. We will apply a multi-instrument approach in order to assess student achievement of desired outcomes. We will form an assessment team, including members of the School's Undergraduate Studies Committee, to formally develop the assessment plan, design and administer the assessment instruments, collect data and report results to faculty and the university. We will apply three specific assessment strategies outlined below.

1. Pre- and post-tests of biology content and attitudes toward science. These tests will comprise validated questions addressing the nature of science and content knowledge in all general areas of biology. We will administer a pre-test to all incoming freshmen who declare a biology major, as well as incoming transfer students. An identical post-test will be administered to all graduating seniors. Data will be collected anonymously for each student and pre/post test scores will be compared on both an individual and overall basis. These data will inform the School's curriculum revision process to ensure that we provide all students with appropriate educational opportunities.
2. Survey of student satisfaction with their biology education experiences. All graduating seniors will complete this survey to provide information about the students' general experiences within the School and their self-efficacy perceptions. These data will assist us in providing the best possible undergraduate experience for our majors.
3. Tracking of post-graduation outcomes for our majors. Tracking data will include post-graduation career choices and percentages of all graduates, as well as members of underrepresented groups, who proceed to graduate degree programs. Long-term tracking will be facilitated through peer networking and alumni activity. The school website will provide a conduit for e-mail communication, information distribution, and alumni surveys.

The table below provides a tentative timetable for design and implementation of our formal assessments. #

### Assessment Timetable

Table Key: D = In development

P = Pilot

R = Instrument revision

I = Implementation

F = Formative assessment data analysis

<b>Assessment Component</b>	<b>Spring/Summer 2012</b>	<b>Fall 2012</b>	<b>Spring 2013</b>	<b>Fall 2013</b>	<b>Spring 2014</b>
Content pre/post test development	D	P, R	P, R		
Content pre-testing for incoming students and post-testing for graduating seniors		P	P	I, F	I, F
Student satisfaction survey for graduating seniors	I, F	I, F	I, F	I, F	I, F
Graduate tracking	D, I	I	I, F	I, F	I, F

At each biannual formative assessment point noted in the timetable, the assessment team will meet to discuss the implications of collected data and plan adjustments to the program to better meet program learning objectives. These results will be reported to the faculty on a bi-yearly basis, or more frequently as needed.

School of Biological Sciences (BSC) Undergraduate Assessment Plan  
*Assessment Process*

The School of Biological Sciences is initiating formal assessment of our program. The assessment committee will consist of members of the Undergraduate Studies Committee (appointed by the School's Director). The primary goal of the BSC Assessment Committee is to develop and validate assessment instruments that will provide critical feedback on the status of our undergraduate program in both content and student satisfaction. The secondary goal of the committee is collect program performance data from entering freshman and transfer students (content data only) as well as from graduating seniors (content and satisfaction data).

*Evaluation*

Once developed, content and satisfaction surveys will be administered to graduating seniors to validate our instruments. Data will be reviewed by the assessment committee and the School Director, and presented to the faculty. Once validation is complete, data will be analyzed and reviewed on an annual basis and reported to the faculty. Because

we do not currently have any available assessment data, we anticipate the validation and initial data collection phases will take five semesters (see Assessment Timetable).

## Faculty Meetings

### *Assessment Process*

The BSC faculty will meet at least once each semester to discuss program issues as they pertain to assessment (i.e., curriculum, recruitment goals). Any curricular changes will be discussed and approved by the faculty prior to review at the college and university levels.

### *Evaluation*

At least one of these meetings will include a review of the School's strategic plan, and how we are progressing towards our stated goals. This will also provide a means for revising goals and updating the strategic plan in light of those goals.

## Faculty Evaluation

### *Assessment Process*

Program faculty members are currently evaluated on three levels: student, peer, and professional.

### *Student Evaluations*

Faculty are required to administer evaluations each semester. Faculty do not directly administer the student evaluations, and the data collected are anonymous to promote honest evaluation and feedback. Data are analyzed for each course and compared to other courses at that level within the School (e.g. data from BSC 2\*\* would be compared to all other BSC 200-level courses). Faculty are encouraged to use these data to take appropriate corrective actions as needed to improve their courses.

### *Peer Evaluations*

### *Professional Evaluations*

Faculty are assessed by their publications and presentations within their professional disciplines.