

**Biology BA/BS  
Assessment Plan Summary**

# Biology BA/BS

## Effectively Deliver A Core Curriculum

**Goal Description:**

Students will be presented well designed classes to facilitate mastering of the materials identified as a core foundation in biology – Botany, Zoology and Cell Biology

RELATED ITEMS/ELEMENTS-----

RELATED ITEM LEVEL 1

**Mastery Of Core Curriculum**

**Learning Objective Description:**

Students will demonstrate a mastery of the core fields in biology: Botany, Zoology, Cell Biology, Microbiology, Genetics, Ecology and Evolution.

RELATED ITEM LEVEL 2

**Assessment Exam For Core Classes**

**Indicator Description:**

All graduating seniors will take an exiting Biology Assessment Exam (BAE), written by the Biology Faculty. We will analyze the BAE scores from the following areas: botany, zoology, cell biology, microbiology, genetics, evolution & ecology to evaluate whether students have a significant level of understanding of each of these fields.

**Criterion Description:**

All Biology majors will be expected to score significantly better than a failing grade in all core areas: botany, zoology, cell biology, microbiology, genetics, evolution and ecology.

**Findings Description:**

A departmental curriculum assessment committee has been established. This committee will map the departmental curriculum for undergraduates and develop a new curriculum assesement exam. This exam will be administered Spring 2017.

RELATED ITEM LEVEL 3

**Administer the BAE**

**Action Description:**

The department of Biological Sciences concluded that our annual assessment exam was out of date. We decided a new exam could provide better assessment of our students' knowledge base. To do so, a committee will be developed that will review the departmental core curriculum and will develop new sets of questions that are adequate for gauging student success in these core topics.

RELATED ITEM LEVEL 1

**Understanding The Scientific Method And Develop Critical Thinking**

**Learning Objective Description:**

Students will demonstrate an understanding of the general nature of scientific knowledge and how scientific knowledge is gained (the scientific method). They also will be able to critically evaluate scientific data to draw informed conclusions.

RELATED ITEM LEVEL 2

**BAE Analysis**

**Indicator Description:**

All graduating seniors will take the Biology Assessment Exam (BAE). We will use BAE exam scores from analytical questions to evaluate a student’s understanding of the scientific method and critical thinking.

**Criterion Description:**

The percentage of correct responses on the embedded exam questions should equal 70 percent or more.

**Findings Description:**

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RELATED ITEM LEVEL 3

### **Administer the BAE**

#### **Action Description:**

The department of Biological Sciences concluded that our annual assessment exam was out of date. We decided a new exam could provide better assessment of our students' knowledge base. To do so, a committee will be developed that will review the departmental core curriculum and will develop new sets of questions that are adequate for gauging student success in these core topics.

### **Update to Previous Cycle's Plan for Continuous Improvement**

#### **Previous Cycle's Plan For Continuous Improvement (Do Not Modify):**

The departmental will continue to evaluate:

1. expectations in each core area.
2. review questions within each core area
3. balance the number of factual knowledge questions and critical thinking questions.
4. create a broader range of question difficulties that will aid in analysis.
5. plan a mechanism to increase test turnout.

#### **Update of Progress to the Previous Cycle's PCI:**

A departmental curriculum assessment committee has been established. This committee will map the departmental curriculum for undergraduates and develop a new curriculum assesement exam. This exam will be administered Spring 2017.

### **Evaluating and Promoting Student Success**

#### **Closing Summary:**

After the new exit exam is developed, it will be administed to graduating seniors. We will review the results of this exam each year and we will identify weaknesses in content areas. We will then convene as a faculty to review these weaknesses and implement strategies for improving success in these areas. This may include changes to curriculum, instructional methods, etc.