Academic Assessment Workspace

BS in Biology

Created on: 10.23.2014 03:38:00 PM CDT
Last Modified: 06.09.2015 03:16:23 PM CDT
# Table of Contents

## General Information

## Standing Requirements
- Mission Statement .................................................. 2
- Learning Objective/Outcome ........................................ 2
- Curriculum Map ........................................................ 2

## 2009-2010 Assessment Cycle
- Assessment Plan ..................................................... 3
- Assessment Findings .................................................. 3
- Operational Plan ........................................................ 3
- Status Report .......................................................... 3

## 2010-2011 Assessment Cycle
- Assessment Plan ..................................................... 4
- Assessment Findings .................................................. 4
- Operational Plan ........................................................ 4
- Status Report .......................................................... 4

## 2011-2012 Assessment Cycle
- Assessment Plan ..................................................... 5
- Assessment Findings .................................................. 5
- Operational Plan ........................................................ 5
- Status Report .......................................................... 5

## 2012-2013 Assessment Cycle
- Assessment Plan ..................................................... 6
- Assessment Findings .................................................. 6
- Operational Plan ........................................................ 6
- Status Report .......................................................... 6

## 2013-2014 Assessment Cycle
- Assessment Plan ..................................................... 7
- Assessment Findings .................................................. 8
- Operational Plan ........................................................ 10
- Status Report .......................................................... 12
General Information (Academic Assessment Workspace)
Standing Requirements

Mission Statement

The Department of Biology seeks to enable students in Biology to become outstanding contributors in their areas of interest and in society at large.

Learning Objective/Outcome

BS in Biology Outcome Set

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Mapping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Higher Level of Original Research</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Involve undergraduate biology majors in higher level of original research beyond that of our current research course.</td>
<td></td>
</tr>
<tr>
<td>Service-based Learning</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Involve undergraduate biology major in service-based learning in core curricula.</td>
<td></td>
</tr>
<tr>
<td>Performance and Readiness for Major Field Test</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Enhance students' academic performance and readiness of the Biology Major Field Test.</td>
<td></td>
</tr>
<tr>
<td>Incoming Freshman Academic Background</td>
<td>No Mapping</td>
</tr>
<tr>
<td>Improve incoming freshman science and math academic background, for pursuing science curricula by 50%.</td>
<td></td>
</tr>
</tbody>
</table>

Curriculum Map

There are no curriculum maps
2009-2010 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Operational Plan
- Status Report
2010-2011 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Operational Plan
- Status Report
2011-2012 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Operational Plan
- Status Report
2012-2013 Assessment Cycle

- Assessment Plan
- Assessment Findings
- Operational Plan
- Status Report
2013-2014 Assessment Cycle

Assessment Plan

Mission Statement
The Department of Biology seeks to enable students in Biology to become outstanding contributors in their areas of interest and in society at large.

Outcomes and Measures

BS in Biology Outcome Set

Outcome

Higher Level of Original Research
Involve undergraduate biology majors in higher level of original research beyond that of our current research course.

Measure: Compete for Research Opportunities
Program level; Direct - Student Artifact

Details/Description: Student will compete for research opportunities at Philander Smith College, University of Arkansas School for Medical Sciences, and other research institutions.

Acceptable Target: Continue to identify opportunity for research and emphasize reporting and preparing application and increase student success by 10% each year until we reach 100%.

Ideal Target:
Implementation Plan (timeline): Increase student success each year by 10% each year until we reach 100%.

Key/Responsible Personnel: Biology Department Faculty

Service-based Learning
Involve undergraduate biology major in service-based learning in core curricula.

Measure: Post-evaluation survey and presentation
Program level; Direct - Student Artifact

Details/Description: Students will complete a post-evaluation survey and presentation.

Acceptable Target: 75% of our course offerings will engage in service-based learning.

Ideal Target:
Implementation Plan (timeline): 

Key/Responsible Personnel: Biology Faculty

Performance and Readiness for Major Field Test
Enhance students’ academic performance and readiness of the Biology Major Field Test.

Measure: ETS Biology Major Field Test
Program level; Direct - Exam

Details/Description: ETS Biology Major Field Test

Acceptable Target: 90% of graduating seniors will pass the Biology Major Field Test at the 70th percentile.

Ideal Target:
Implementation Plan (timeline): 

Key/Responsible Personnel: Biology Faculty
### Incoming Freshman Academic Background

Improve incoming freshman science and math academic background, for pursuing science curricula by 50%.

**Measure:** ACT, Proficiency Profile Exam (Rising Junior Exam)
- Program level; Direct - Exam

**Details/Description:** ACT, Proficiency Profile Exam (Rising Junior Exam)
- **Acceptable Target:** The mean score of Biology students will be in the top 60th percentile on the science and math sections of the Proficiency Profile Exam (Rising Junior Exam).
- **Ideal Target:**
  - **Implementation Plan (timeline):**
  - **Key/Responsible Personnel:** Biology Faculty

### Assessment Findings

#### Finding per Measure

### BS in Biology Outcome Set

**Outcome**

#### Higher Level of Original Research

Involve undergraduate biology majors in higher level of original research beyond that of our current research course.

**Measure:** Compete for Research Opportunities
- Program level; Direct - Student Artifact

**Details/Description:** Student will compete for research opportunities at Philander Smith College, University of Arkansas School for Medical Sciences, and other research institutions.
- **Acceptable Target:** Continue to identify opportunity for research and emphasize reporting and preparing application and increase student success by 10% each year until we reach 100%.
- **Ideal Target:**
  - **Implementation Plan (timeline):** Increase student success each year by 10% each year until we reach 100%.
  - **Key/Responsible Personnel:** Biology Department Faculty

**Summary of Findings:** 40% of our students have successfully participated in research.

**Results:** Acceptable Target Achievement: Met; Ideal Target Achievement : Approaching

**Recommendations:**

**Reflections/Notes:**

**This Findings is associated with the following Actions:**

**NSF Phase II Research Laboratories**
(Operational Plan; 2013-2014 Assessment Cycle)

#### Service-based Learning

Involve undergraduate biology major in service-based learning in core curricula.

**Measure:** Post-evaluation survey and presentation
- Program level; Direct - Student Artifact

**Details/Description:** Students will complete a post-evaluation survey and presentation.
- **Acceptable Target:** 75% of our course offerings will engage in service-based learning.
- **Ideal Target:**
  - **Implementation Plan (timeline):**
Key/Responsible Personnel: Biology Faculty

Findings for Post-evaluation survey and presentation

Summary of Findings: 30% of our core courses have engaged in service-based learning. 
Results: Acceptable Target Achievement: Not Met; Ideal Target Achievement: Approaching
Recommendations: 
Reflections/Notes:

This Findings is associated with the following Actions:
Increase Service-Based Learning Experiences 
(Operational Plan; 2013-2014 Assessment Cycle)

Performance and Readiness for Major Field Test
Enhance students' academic performance and readiness of the Biology Major Field Test.

Measure: ETS Biology Major Field Test 
Program level; Direct - Exam

Details/Description: ETS Biology Major Field Test
Acceptable Target: 90% of graduating seniors will pass the Biology Major Field Test at the 70th percentile.
Ideal Target: 
Implementation Plan (timeline):
Key/Responsible Personnel: Biology Faculty

Findings for ETS Biology Major Field Test

Summary of Findings: Senior scores range from 135-186. Only 80% pass the Major Field Test at the 70th percentile.
Results: Acceptable Target Achievement: Not Met; Ideal Target Achievement: Approaching
Recommendations:
Reflections/Notes:

This Findings is associated with the following Actions:
Preparatory Courses, Assess Curriculum, Professional Prep Courses 
(Operational Plan; 2013-2014 Assessment Cycle)

Incoming Freshman Academic Background
Improve incoming freshman science and math academic background, for pursuing science curricula by 50%.

Measure: ACT, Proficiency Profile Exam (Rising Junior Exam) 
Program level; Direct - Exam

Details/Description: ACT, Proficiency Profile Exam (Rising Junior Exam)
Acceptable Target: The mean score of Biology students will be in the top 60th percentile on the science and math sections of the Proficiency Profile Exam (Rising Junior Exam).
Ideal Target: 
Implementation Plan (timeline):
Key/Responsible Personnel: Biology Faculty

Findings for ACT, Proficiency Profile Exam (Rising Junior Exam)

Summary of Findings: *Need data information of students performance on these test.
Operational Plan

Mission Statement

The Department of Biology seeks to enable students in Biology to become outstanding contributors in their areas of interest and in society at large.

Actions

BS in Biology Outcome Set

Outcome

Higher Level of Original Research

Involves undergraduate biology majors in higher level of original research beyond that of our current research course.

Action: NSF Phase II Research Laboratories

This Action is associated with the following Findings

Findings for Compete for Research Opportunities
(Assessment Plan and Assessment Findings; 2013-2014 Assessment Cycle)

Summary of Findings: 40% of our students have successfully participated in research.

Action details: The National Science Foundation's Phase II Historically Black Colleges and Universities Undergraduate Program will increase this effort by providing research intensive laboratories to prepare the students. We need to collect data and establish statistical trends in students' performance.

Implementation Plan (timeline):

Key/Responsible Personnel: Biology Faculty

Measures:

Budget approval required? (describe):

Budget request amount: $0.00

Priority:
### Service-based Learning

Involves undergraduate biology major in service-based learning in core curricula.

**Action:** Increase Service-Based Learning Experiences

This Action is associated with the following Findings

**Findings for Post-evaluation survey and presentation**
(Assessment Plan and Assessment Findings; 2013-2014 Assessment Cycle)

**Summary of Findings:** 30% of our core courses have engaged in service-based learning.

**Action details:** Continue to increase our core curricula into 75% service-based learning experiences.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:** Biology Faculty

**Measures:**

**Budget approval required? (describe):**

**Budget request amount:** $0.00

**Priority:**

### Performance and Readiness for Major Field Test

Enhance students' academic performance and readiness of the Biology Major Field Test.

**Action:** Preparatory Courses, Assess Curriculum, Professional Prep Courses

This Action is associated with the following Findings

**Findings for ETS Biology Major Field Test**
(Assessment Plan and Assessment Findings; 2013-2014 Assessment Cycle)

**Summary of Findings:** Senior scores range from 135-186. Only 80% pass the Major Field Test at the 70th percentile.

**Action details:**
1) Develop preparatory course to prepare students for the Major Field Test. Assess our current curriculum to reflect the content of the Major Field Test
2) Grade of C or better will be required of all biology students in English Composition I and II, as well as Advanced Composition course.
3) Facilitate biology students' participation in professional prep courses offered by local higher-education institutions.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:** Biology Faculty

**Measures:**

**Budget approval required? (describe):**

**Budget request amount:** $0.00

**Priority:**

### Incoming Freshman Academic Background

Improve incoming freshman science and math academic background, for pursuing science curricula by 50%.

**Action:** Remediation and Supplemental Instruction

This Action is associated with the following Findings

**Findings for ACT, Proficiency Profile Exam (Rising Junior Exam)**
(Assessment Plan and Assessment Findings; 2013-2014 Assessment Cycle)

**Summary of Findings:** *Need data information of students performance on these test.*
Action details: All biology students who score in the lower 50th percentile on the math and science sections of the ACT shall receive remedial and other supplemental instruction during their freshman year.

Develop an effective remedial curricula to include both knowledge-based content courses (basic concepts, terminology), as well as courses to develop academic skills, critical-thinking, time-management, vocabulary).

Remedial students and those encountering academic difficulty will be required to attend faculty proctored study sessions primarily to tutor and facilitate individual learning skills.

Implementation Plan (timeline):

Key/Responsible Personnel: Biology Faculty

Measures:

Budget approval required? (describe):

Budget request amount: $0.00

Priority:

Status Report

Action Statuses

BS in Biology Outcome Set

Outcome

Higher Level of Original Research

Involving undergraduate biology majors in higher level of original research beyond that of our current research course.

Action: NSF Phase II Research Laboratories

Action details: The National Science Foundation's Phase II Historically Black Colleges and Universities Undergraduate Program will increase this effort by providing research intensive laboratories to prepare the students. We need to collect data and establish statistical trends in students' performance.

Implementation Plan (timeline):

Key/Responsible Personnel: Biology Faculty

Measures:

Budget approval required? (describe):

Budget request amount: $0.00

Priority:

No Status Added

Service-based Learning

Action: Increase Service-Based Learning Experiences
Involves undergraduate biology major in service-based learning in core curricula.

**Action details:** Continue to increase our core curricula into 75% service-based learning experiences.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:** Biology Faculty

**Measures:**

**Budget approval required? (describe):**

**Budget request amount:** $0.00

**Priority:**

---

**Status for Increase Service-Based Learning Experiences**

*No Status Added*

---

**Performance and Readiness for Major Field Test**

Enhance students’ academic performance and readiness of the Biology Major Field Test.

**Action:** Preparatory Courses, Assess Curriculum, Professional Prep Courses

**Action details:** 1) Develop preparatory course to prepare students for the Major Field Test. Assess our current curriculum to reflect the content of the Major Field Test 2) Grade of C or better will be required of all biology students in English Composition I and II, as well as Advanced Composition course. 3) Facilitate biology students’ participation in professional prep courses offered by local higher-education institutions.

**Implementation Plan (timeline):**

**Key/Responsible Personnel:** Biology Faculty

**Measures:**

**Budget approval required? (describe):**

**Budget request amount:** $0.00

**Priority:**

---

**Status for Preparatory Courses, Assess Curriculum, Professional Prep Courses**

*No Status Added*

---

**Incoming Freshman Academic Background**

Improve incoming freshman science and math academic background, for pursuing science curricula by 50%.

**Action:** Remediation and Supplemental Instruction

**Action details:** All biology students who score in the lower 50th percentile on the math and science sections of the ACT shall receive remedial and other supplemental instruction during their freshman year.

Develop an effective remedial curricula to include both knowledge-based content courses (basic concepts, terminology), as well as courses to develop academic skills, critical-thinking, time-management, vocabulary).

Remedial students and those encountering academic difficulty will be required to attend faculty proctored study sessions primarily to tutor and facilitate individual learning skills.

**Implementation Plan (timeline):**

---
Key/Responsible Personnel: Biology Faculty

Measures:

Budget approval required? (describe):

Budget request amount: $0.00

Priority:

Status for Remediation and Supplemental Instruction

No Status Added

Status Summary

No text specified

Summary of Next Steps

No text specified