

Annual Goals for Biology

2010-2011

Title:	Capstone Course Implementation
Description:	Begin the implementation of BI 498, Senior Assessment Seminar, by first determining what chapters/sections of the Campbell textbook we will ask students to review and then writing multiple choice test questions that will be used in review quizzes.
Budget:	0.00
University Goals:	1,2
Strategic Goals:	
Responsibility:	Department Chair
Participation:	nearly all faculty
Results:	The Campbell textbook for BI 111/112 was reviewed for chapters/sections that covered the subject material for the Major Field Test in Biology. Faculty were then asked to submit multiple choice review questions in their areas of expertise. All faculty have submitted these questions to the department chair who is in the process of editing them into a common format.
Actions:	The department is now ready to begin offering BI 498, Senior Assessment Seminar. Because this course will be required only for students entering UNA under the 2011-2012 Catalog (or who otherwise adopt this or later catalogs), it will be a few years before the course is actually offered.
Improvements:	

Title:	FSB 202 Renovation
Description:	Complete the renovation/remodeling of FSB 202 for use as a cell biology/genetics laboratory.
Budget:	\$5,700.00
University Goals:	1,2
Strategic Goals:	

Responsibility: Department Chair
Participation: Drs. Tina Hubler and Amy Crews
Results: A new sink and storage cabinets were installed and old cabinets were removed.
Actions: Students in Cell Biology and Genetics classes are now taught in a laboratory that better suits their needs.
Improvements:

Title: Additional Faculty
Description: Request additional faculty at the instructor level to meet the demand for freshman level courses.
Budget: 0.00
University Goals: 1,2
Strategic Goals: 228
Responsibility: Department Chair
Participation:
Results: In October 2010, the department chair submitted a request to Dean Hansen (with detailed justification) for an additional instructor, but received no reply from the administration.
Actions:
Improvements: Department chair will again submit a request for additional faculty to the administration in fall 2011.

Student Learning Outcomes for Biology

2010-2011

Title: Knowledge of Population Biology, Ecology, and Evolution
Description: Demonstrate knowledge of population biology, ecology, and evolution.
Budget: \$0.00

Core Competencies: 5

25% Online:

50% Online:

Core Competencies: 5

How Often: Per semester

Assessed this Year? Yes

Responsibility:

Participation: Department Chair

Direct Assessments

Major Field Test- Biology

Indirect Assessments

Results: The department's goal is for students to be in the 50th percentile or higher in Population Biology, Ecology, and Evolution on the Major Field Test in Biology. A new version of this test is produced every five years, and the department used this new version in fall 2010 and spring 2011. However, national percentiles for this new version will not be published until September 2011, so the results for 42 students who took the exam cannot be used this year.

Curriculum: A new course, BI 498, Senior Assessment Seminar, was approved by the University Curriculum Committee and appears in the 2011-2012 Catalog. This course includes review of the major subject areas of biology, preparation of a professional portfolio, participation in departmental assessment, and completion of a comprehensive examination for the major. It is expected that this course (required of all graduating seniors) will make students take the Major Field Test more seriously and result in improved scores in all areas.

Because this course will be required only for students entering UNA under the 2011-2012 Catalog (or who otherwise adopt this or later catalogs), it will be a few years before the course is actually offered and benefits seen.

Actions:

Improvements:

Title: Analytical Skills

Description: Develop critical thinking skills relevant to biology.

Budget: \$0.00

Core Competencies: 2,4

25% Online:

50% Online:

Core Competencies: 2,4

How Often: Per semester

Assessed this Year? Yes

Responsibility: Department Chair

Participation:

Direct Assessments

Major Field Test- Biology

Indirect Assessments

Results: The department's goal is for students to be in the 50th percentile or higher in

Analytical Skills on the Major Field Test in Biology. A new version of this test is produced every five years, and the department used this new version in fall 2010 and spring 2011. However, national percentiles for this new version will not be published until September 2011, so the results for 42 students who took the exam cannot be used this year.

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Actions:

Improvements:

Title:	Biological Literature Retrieval & Evaluation
Description:	Demonstrate the ability to retrieve and evaluate information from the scientific literature, electronic databases, and online resources through successful completion of several homework assignments in BI 300(W), Biological Literature.
Budget:	\$0.00
Core Competencies:	3
25% Online:	
50% Online:	
Core Competencies:	3
How Often:	Per semester
Assessed this Year?	Yes
Responsibility:	Professor Robert Daly
Participation:	
Direct	

Assessments

Four homework assignments

Indirect Assessments

Results: A score of 70% or above was used a benchmark for successful achievement of the student learning outcome. Grades were assessed for students enrolled in BI 300(W) in 2010-2011 on four homework assignments related to this desired outcome: 1. "Reference Format"- 74% of the students achieved a grade of 70% or above; benchmark met. 2. "Library Search"- 72% of the students achieved a grade of 70% or above; benchmark met. 3. "Biological Abstracts"- 67% of the students achieved a grade of 70% or above; benchmark not met. 4. "Biology Data Book"- 81% of the students achieved a grade of 70% or above; benchmark met.

Curriculum:

Actions: The benchmark on the homework assignment that involves Biological Abstracts was not met this year. Collier Library will begin a subscription to an electronic database that includes Biological Abstracts, and it is anticipated that performance of students will be improved.

Improvements:

Title:	Basic Laboratory Instrumentation & Techniques
Description:	Demonstrate the ability to use scientific instrumentation and perform basic laboratory techniques through successful completion of laboratories in BI 305, Cell Biology, and BI 306, Genetics.
Budget:	\$0.00
Core Competencies:	1,2,3,4
25% Online:	
50% Online:	

Core Competencies: 1,2,3,4
How Often: Per semester
Assessed this Year? Yes
Responsibility: Professors Amy Crews & Tina Hubler

Participation:

Direct Assessments

laboratory quizzes & reports

Indirect Assessments

Results: A score of 70% or above was used a benchmark for successful achievement of the student learning outcome. Grades on laboratory reports and quizzes were assessed for students enrolled in BI 305, Cell Biology, in 2010-2011 on the exercise “Succinate Dehydrogenase Activity in Isolated Mitochondria.” For the laboratory report on this exercise, 85% achieved a grade of 70% or above. For the laboratory quiz on this exercise, 83% achieved a grade of 70% or above. Grades on laboratory quizzes were assessed for students enrolled in BI 306, Genetics, in 2010-2011 on the exercise “Transformation of Bacteria with Green Fluorescent Protein Expression Vector.” For the laboratory quiz on this exercise, 73% achieved a grade of 70% or above.

Curriculum:

Actions:

Improvements:

Title: Knowledge of Cell Biology

Description: Demonstrate knowledge of cell biology.

Budget: \$0.00
Core Competencies: 5
25% Online:
50% Online:
Core Competencies: 5
How Often: Per semester
Assessed this Year? Yes
Responsibility: Department Chair
Participation:
Direct Assessments

Major Field Test- Biology

Indirect Assessments

Results: The department's goal is for students to be in the 50th percentile or higher in Cell Biology on the Major Field Test in Biology. A new version of this test is produced every five years, and the department used this new version in fall 2010 and spring 2011. However, national percentiles for this new version will not be published until September 2011, so the results for 42 students who took the exam cannot be used this year.

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Actions:

Improvements:

Title: Knowledge of Molecular Biology & Genetics
Description: Demonstrate knowledge of molecular biology and genetics.
Budget: \$0.00
Core Competencies: 5
25% Online:
50% Online:
Core Competencies: 5
How Often: Per semester
Assessed this Year? Yes
Responsibility: Department Chair
Participation:
Direct Assessments

Major Field Test- Biology

Indirect Assessments

Results: The department's goal is for students to be in the 50th percentile or higher in Molecular Biology and Genetics on the Major Field Test in Biology. A new version of this test is produced every five years, and the department used this new version in fall 2010 and spring 2011. However, national percentiles for this new version will not be published until September 2011, so the results for 42 students who took the exam cannot be used this year.

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Actions:

Improvements:

Title:	Knowledge of Organismal Biology
Description:	Demonstrate knowledge of organismal biology.
Budget:	\$0.00
Core Competencies:	5
25% Online:	
50% Online:	
Core Competencies:	5
How Often:	Per semester
Assessed this Year?	Yes
Responsibility:	Department Chair
Participation:	
Direct Assessments	

Major Field Test- Biology

Indirect Assessments

Results: The department's goal is for students to be in the 50th percentile or higher in Organismal Biology on the Major Field Test in Biology. A new version of this test is produced every five years, and the department used this new version in fall 2010 and spring 2011. However, national percentiles for this new version will not be published until September 2011, so the results for 42 students who took the exam cannot be used this year.

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Improvements: