

## Bachelor of Science, Biology, Cochran

Semester reporting: Spring Semester 2022

Reporting cycle: Annual Reporting Cycle

### Academic Program Assessment Report Information

<b>Prepared on:</b> 6/29/2022 4:22:48 PM	Prepared by: dawn.sherry@mga.edu
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<b>In which college or school is this program located?</b>	Health and Natural Sciences
<b>Program Type:</b>	Undergraduate
<b>Approximately how many students are in this program at this location?</b>	39

## Student Learning Outcomes

### SLO1

<p><b>SLO 1: What is the first Student Learning Outcome for this academic program? Student Learning Outcomes should be stated in measurable terms (i.e. students will be able to.....)</b></p>	<p>Biology majors should be able to demonstrate knowledge of the processes of evolution.</p>
<p><b>SLO 1: What instrument (assessment type) was used to measure student's ability to demonstrate mastery of this learning outcome? (i.e. exam, assignment with rubric, speech, demonstration of ability, lab assignment) and provide specific details of the instrument (e.g. Exam 2, Course HLSA 3800; Final Group Project, HIST 3900) is learning outcome?</b></p>	<p>Final Exam BIOL 3211</p>
<p><b>SLO 1: What target performance level would a student need to achieve on the assessment instrument to demonstrate mastery of this learning outcome? (i.e. 80% of all students will earn an average grade of 75% or better on....)</b></p>	<p>70 % students will correctly answer 5 final exam questions in BIOL 3211 Evolution course.</p>
<p><b>SLO 1: Provide details for your target performance level established (i.e. accreditation requirement, past performance data, peer program review, etc.)</b></p>	<p>Alignment with core concepts outlined in the Vision &amp; Change report on undergraduate biology education by the American Association for the Advancement of Science.</p>
<p><b>SLO 1: During this assessment cycle, what percent of the students who participated in this assessment met the target performance level and demonstrated mastery of this learning outcome.</b></p>	<p>0</p>
<p><b>SLO 1: Improvement Plans and Evidence of changes based on an analysis of the results: What changes were implemented based on an analysis of the students' performance on this Student Learning Outcome? (Evidence of the improvement must be kept and filed in the department or academic unit including but not limited to: changes in exam questions, reading assignments, syllabi, course instruction materials or assignments. Both old versions and new versions should be kept on file for 10 years. Major changes to curriculum must go through the Academic Affairs process.)</b></p>	<p>This SLO for Cochran is only evaluated every other year. Course was not offered in Fall 2021/Spring 2022 in Cochran due to low enrollment. The course will be offered next academic year. While the course was not offered in Cochran due to low enrollment, it was offered during this cycle in Macon.</p>

**SLO2**

<p><b>SLO 2: What is the second Student Learning Outcome for this academic program? Student Learning Outcomes should be stated in measurable terms (i.e. students will be able to.....)</b></p>	<p>Biology majors should be able to demonstrate knowledge of the differences and commonalities between prokaryotic and eukaryotic cells.</p>
<p><b>SLO 2: What instrument (assessment type) was used to measure student's ability to demonstrate mastery of this learning outcome? (i.e. exam, assignment with rubric, speech, demonstration of ability, lab assignment) and provide specific details of the instrument (e.g. Exam 2, Course HLSA 3800; Final Group Project, HIST 3900) is learning outcome?</b></p>	<p>Final Exam BIOL 3104K.</p>
<p><b>SLO 2: What target performance level would a student need to achieve on the assessment instrument to demonstrate mastery of this learning outcome? (i.e. 80% of all students will earn an average grade of 75% or better on....)</b></p>	<p>70% of students will correctly answer 5 questions on the BIOL 3104K Cell Biology final exam.</p>
<p><b>SLO 2: Provide details for your target performance level established (i.e. accreditation requirement, past performance data, peer program review, etc.)</b></p>	<p>Alignment with core concepts outlined in the Vision &amp; Change report on undergraduate biology education by the American Association for the Advancement of Science.</p>
<p><b>SLO 2: During this assessment cycle, what percent of the students who participated in this assessment met the target performance level and demonstrated mastery of this learning outcome.</b></p>	<p>91%</p>
<p><b>SLO 2: Improvement Plans and Evidence of changes based on an analysis of the results: What changes were implemented based on an analysis of the students' performance on this Student Learning Outcome? (Evidence of the improvement must be kept and filed in the department or academic unit including but not limited to: changes in exam questions, reading assignments, syllabi, course instruction materials or assignments. Both old versions and new versions should be kept on file for 10 years. Major changes to curriculum must go through the Academic Affairs process.)</b></p>	<p>Target was met, no changes are necessary at this time.</p>

**SLO3**

<b>SLO 3: What is the third Student Learning Outcome for this academic program? Student Learning Outcomes should be stated in measurable terms (i.e. students will be able to.....)</b>	Biology majors will be able to identify, interpret, model and analyze genetic material.
<b>SLO 3: What instrument (assessment type) was used to measure student's ability to demonstrate mastery of this learning outcome? (i.e. exam, assignment with rubric, speech, demonstration of ability, lab assignment) and provide specific details of the instrument (e.g. Exam 2, Course HLSA 3800; Final Group Project, HIST 3900) is learning outcome?</b>	Final Exam BIOL 4110K.
<b>SLO 3: What target performance level would a student need to achieve on the assessment instrument to demonstrate mastery of this learning outcome? (i.e. 80% of all students will earn an average grade of 75% or better on....)</b>	70% of students will correctly answer 5 questions on the BIOL 4110 Genetics Exam.
<b>SLO 3: Provide details for your target performance level established (i.e. accreditation requirement, past performance data, peer program review, etc.)</b>	Alignment with core concepts outlined in the Vision & Change report on undergraduate biology education by the American Association for the Advancement of Science.
<b>SLO 3: During this assessment cycle, what percent of the students who participated in this assessment met the target performance level and demonstrated mastery of this learning outcome.</b>	70%
<b>SLO 3: Improvement Plans and Evidence of changes based on an analysis of the results: What changes were implemented based on an analysis of the students' performance on this Student Learning Outcome? (Evidence of the improvement must be kept and filed in the department or academic unit including but not limited to: changes in exam questions, reading assignments, syllabi, course instruction materials or assignments. Both old versions and new versions should be kept on file for 10 years. Major changes to curriculum must go through the Academic Affairs process.)</b>	Target was met, no changes are necessary at this time.

**SLO4**

<p><b>SLO 4: What is the fourth Student Learning Outcome for this academic program? Student Learning Outcomes should be stated in measurable terms (i.e. students will be able to.....)</b></p>	<p>Biology majors should be able to demonstrate knowledge of diversity and speciation of living things.</p>
<p><b>SLO 4: What instrument (assessment type) was used to measure student's ability to demonstrate mastery of this learning outcome? (I.e. exam, assignment with rubric, speech, demonstration of ability, lab assignment) and provide specific details of the instrument (e.g. Exam 2, Course HLSA 3800; Final Group Project, HIST 3900) is learning outcome?</b></p>	<p>Final Exam BIOL 3510K, 3520K, 3360K. Biology majors should be able to demonstrate knowledge of diversity and speciation of living things.</p>
<p><b>SLO 4: What target performance level would a student need to achieve on the assessment instrument to demonstrate mastery of this learning outcome? (I.e. 80% of all students will earn an average grade of 75% or better on....)</b></p>	<p>70% of students will correctly answer 5 final exam questions in one of the following courses BIOL 3510K Invertebrate Zoology, BIOL 3520K Vertebrate Zoology or BIOL 3360K Plant Biology.</p>
<p><b>SLO 4: Provide details for your target performance level established (i.e. accreditation requirement, past performance data, peer program review, etc.)</b></p>	<p>Alignment with core concepts outlined in the Vision &amp; Change report on undergraduate biology education by the American Association for the Advancement of Science.</p>
<p><b>SLO 4: During this assessment cycle, what percent of the students who participated in this assessment met the target performance level and demonstrated mastery of this learning outcome.</b></p>	<p>80%</p>
<p><b>SLO 4: Improvement Plans and Evidence of changes based on an analysis of the results: What changes were implemented based on an analysis of the students' performance on this Student Learning Outcome? (Evidence of the improvement must be kept and filed in the department or academic unit including but not limited to: changes in exam questions, reading assignments, syllabi, course instruction materials or assignments. Both old versions and new versions should be kept on file for 10 years. Major changes to curriculum must go through the Academic Affairs process.)</b></p>	<p>Target was met, no changes are necessary at this time.</p>

## Sampling

How many students participated in the assessment of these learning outcomes, in this program, for this assessment cycle at this location?	14
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## Open Box for Assessment Comments

<b>Required: In this field, please document the overall use of assessment results for continuous improvement (consider the past, present, and future and specifically address these in your narrative).</b>	<p>The current assessments, which have been in place since its inception, provide useful information as to how well MGA biology majors understand core concepts in biology. Students in this program are also successfully passing GRE, MCAT and DAT exams, which speaks to the excellent preparation the biology program at MGA does for rigorous professional school entrance exams. This past year, the Biology faculty began reviewing upper level biology curricula in Fall 2021-Spring 2022 to ensure that the B.S. Biology program curricula is in alignment with the goals and objectives outlined in Vision and Change in Undergraduate Biology Education report published by AAAS and NSF. At this time, the team overseeing this curricula review has surveyed faculty as to the topics and competencies being covered in the upper level courses (Fall 2021). Next steps will be to summarize the survey results and to share these results with faculty (Spring/Summer/Fall 2022). We hope to discuss with faculty content areas or competencies that may be receiving too much or too little attention (Spring 2023). The information from this survey can then be used to modify or update assessments if necessary.</p>
<b>Optional Open Text Box For Assessment Comments:</b>	<p>*The correct answer for #25 is: BIOL 3520K FA 21: 83%; BIOL 3510 SP 21: 76. Form will not allow text.</p> <p>**The B.S. Biology program has 5 Student Learning Outcomes. This Google Doc only allows for four. Below is the data for the 5th SLO-Cochran campus.</p> <p>SLO 5: Biology majors should be able to communicate scientific information both written and orally. This is assessed with a written, oral or research project.</p> <p>Students should score 70% or higher on this project.</p>

	<p>BIOL 4120 was not offered in Fall 2021/Spring 2022 in Cochran due to low enrollment. The course will be offered next academic year. While the course was not offered in Cochran due to low enrollment, it was offered during this cycle in Macon.</p>
<p><b>If the COVID-19 pandemic impacted this assessment cycle, please provide specific details below. (Also submit any COVID-19 correspondence from your accrediting body to <a href="mailto:assessment@mga.edu">assessment@mga.edu</a> when you submit this form with your Department name and program in the subject line.)</b></p>	

