

Core Curriculum Annual Assessment

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|---|---------------------------------------|
| Year | 2022-23 |
| Course number and Name: | BIOL 1406 – General Biology I |
| Component area: | 030-Life and Physical Science |
| Number of sections offered: | Fall – 2 Sections; Spring – 1 Section |
| Number of students enrolled: | 296 |
| Contact Person (include email & Phone#) | Howard Yoder; Marilyn Kish-Molina |

Summary of Continuous Improvement Efforts since Last Report

Targets tied to critical thinking learning outcomes were either not met or were partially met in the previous three cycles (including the current cycle). Act on plans based on these findings including new instructional content, methodologies, and/or modalities of delivery have been developed and will be implemented.

Course highlights Since Last Report

A new online instructional unit on evolution by natural selection including critical thinking, analysis, and group problem solving activities will be implemented in the upcoming cycle.

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Table 1. Assessment Results and Analysis for Current Cycle

| Stage 1: PLAN | | | STAGE 2: DO | | Stage 3: STUDY | |
|--|---|---|---|---------------------------------------|---|--|
| General Education Competencies Addressed in this Course: | Assessment Method(s) – e.g. pre/post tests, embedded questions, portfolio evaluation, rubric-scored essay; list only activities for which you are reporting assessment data | Proficiency – e.g. the proficient student will correctly answer 5 out of the 6 embedded questions on the final exam | Benchmark – e.g. 80% of students taking the final exam will correctly answer 5 of the 6 embedded questions on the final exam | Results of course assessment(s) | Analysis of results – e.g. strengths and weaknesses What does this data tell you? How will you use this data? How were data from the last cycle used to make changes during this cycle, and what were the results of those changes? | Recommendations for Course based on assessment |
| Communication (required) | Rubric graded student activity | Cooperation and communication in experimental setup and data collection | Students will average 2.5 or higher on the rubric evaluation pertaining to cooperation and communication. Cooperation and communication were assessed by observing and scoring student behaviors when assigned a group task. Four areas | Target: Met See Analysis for details. | Target: Met Cooperation and communication were assessed by observing and scoring student behaviors when assigned a group task (following a standard operating procedure for experimental setup). Four areas of competency | Target thresholds for this SLO will be increased to a mean of 3.0 for the 2023-2024 cycle. |

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| | | | of competency were assessed. | | were assessed: contribution to team activities, individual contributions outside of team activities and goals, fostering of a constructive team climate with effective oral communication, and response to conflict. The average score over all measures was 3.80 (milestone II to capstone). The lowest mean score was individual contributions outside of team activities and goals (3.65), and the highest mean score was contribution to team activities (3.94). The mean score for response to conflict was 3.69, | |
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| | | | | | scores for assessment items 1, 2, and 5 were 90%, 94%, and 88% respect vely. N=69 | |
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Select One:
 Empirical &
Quantitative Skills
 Teamwork
 Social
responsibility
 Personal
Responsibility

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Table 2. Continuous Improvement Results Since Last Report

| STAGE 4: ACT | | |
|--|----------|--|
| Actions/Goals based on data results | Status | Discussion of status |
| <p>I plan to implement the same in depth online activity covering evolution that will help supplement the material covered in class, as well as adding some embedded questions in lecture covering this. I implemented some extra material but the aim is improve assessment to meet our goal. Some of the students have had minimal exposure to evolution and natural selection. Implementing an extra activity that involves critical thinking and natural selection would increase exposure and I give this two long semesters and see if this improves our goals further. Our average was 70% overall with two questions still not meeting the goal, but they improving. I plan to continue with this strategy in 2023-24.</p> | <p>P</p> | <p>New instructional materials, methods, and modes of delivery are in development.</p> |
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