**Program Name: Bachelor of Science, Interdisciplinary Sciences** **CIP Code: 30.0101** **Department: HMCSE Dean**

| | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 |
|---|---|---|---|---|---|---|
| **Domain** | **Program-Level Student Learning Outcome** | **2020-2021** | **2021-2022** | **2022-2023** | **2023-2024** | **2024-2025** |
| **Content** | Identify and apply key scientific concepts to address real-world questions and challenges. | **Data Collection:** Gather baseline data in courses that introduce content knowledge from exams and baseline data from core required upper level courses that reinforce content knowledge. | **Improvement Plan:** Implement improved introductory Biology interventions (workshops, recitations, HIPs). | **Follow-Up Assessment - Data Collection:** Assess exam data that reinforce content knowledge from exams from core required upper level courses that reinforce content knowledge to assess improvement from year 1. | | **Data Collection:** Gather baseline data in courses that introduce content knowledge from exams and baseline data from core required upper level courses that reinforce content knowledge. |
| **Critical Thinking** | Solve problems using scientific methods and inquiry. | | **Data Collection**: Gather baseline data from lab courses that assess experimental knowledge using exams or quizzes. | **Improvement Plan**: Implement improvement plan and interventions. | **Follow-Up Assessment - Data Collection**: Ffollow up from same lab courses that assess experimental knowledge using exams or quizzes. | |
| **Communication** | Communicate effectively in either verbal or written media appropriate for academic and professional environments. | **Data Collection:** Gather baseline data from courses that require paper report or presentation. Use rubric to assess baseline performance. | **Improvement Plan:** Implement communication improvement plan and interventions (workshops, recitations, HIPs). | **Follow-Up Assessment - Data Collection:** Assess communication performance using rubric from courses that require paper report or presentation. | | **Data Collection:** Gather baseline data in courses that introduce content knowledge from exams and baseline data from core required upper level courses that reinforce content knowledge. |
| **Integrity / Values** | Describe ethical challenges involved in conducting scientific research. | | **Data Collection:** Assessment of student responses in a scientific ethics case study activity in a course required for all majors | **Improvement Plan:** Seek more involved case studies or speakers to discuss research ethics in the natural sciences | **Follow-Up Assessment - Data Collection:** Assessment of student responses in a scientific ethics case study activity to see if there were gains from previous data collection in a required for all majors | |

Revised: November 7, 2019

**Assessment Activity (Examples)**

Gather baseline data
(Revise rubric; gather data)
Implement actions for improvement
Follow-up assessment (impact data)

**Methods of Assessment**

**Direct Measures:**
Exam questions
Student paper (rubric)
Presentation (rubric)

**Indirect Measures:**
Focus group
Exit interview
Alumni survey

**External Direct Measures:**
Supervisor/Employer feedback
External Professional Exam