

Date: 07/23

Program Name: MS Environmental Science - Thesis

CIP Code: 03.0104

Department: ENV

		Year 1	Year 2	Year 3	Year 4	Year 5
Domain	Program-Level Student Learning Outcome (From ALC or ALP)	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029
Content	Summarize and describe how human activities affect, and are affected by, interactions with the atmosphere, hydrosphere, geosphere, and/or biosphere.		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. Department faculty reflect on findings and decide on improvement plan.	Improvement Plan: Implement improved introductory interventions (workshops, recitations, HIPs, course modifications). Follow-Up Assessment - Data Collection: Assess data that reinforce content knowledge from core required upper level courses that reinforce content knowledge to assess improvement from previous year.		
Communication	Demonstrate proficiency in professional presentation and writing skills, including use of professional editorial style and organization.			Data Collection: Gather baseline data from courses that assess experimental knowledge using assignments. Department faculty reflect on findings and decide on improvement plan.	Improvement Plan: Implement improvement plan and interventions. Follow-Up Assessment - Data Collection: Follow-up assessment from courses that assess experimental knowledge to evaluate impact of improvement plan.	
Critical Thinking	Synthesize scientific literature to identify gaps in current scientific knowledge for the preparation of original research or a critical review of a scientific concept.				Data Collection: Gather baseline data from courses that require report or presentation. Use rubric to assess baseline performance. Department faculty reflect on findings and decide on improvement plan.	Improvement Plan: Implement communication improvement plan and interventions (workshops, recitations, HIPs, course modifications). Follow-Up Assessment - Data Collection: Assess communication performance using rubric from courses that require paper report or presentation.
Integrity / Values	Demonstrate general scientific principles of integrity in reports, proposals, and thesis.	Improvement Plan: Modify assessment method. Follow-Up Assessment - Data Collection: Assessment of ethical behavior by students with new method to evaluate both the new method and ethical behavior of students.				Data Collection: Assessment of ethical behavior by students either with 2019-2020 assessment approach or modified approach. Department faculty reflect on findings and decide on improvement plan.

Assessment Activity (Examples)

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

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

Methods of Assessment

Indirect Measures:
 Focus group
 Exit interview
 Alumni survey

External Direct Measures:
 Supervisor/Employer feedback
 External Professional Exam

Revised 30 July 2019