

METEOROLOGY ASSESSMENT PLAN

Department/Program: Meteorology

Student Learning Objectives (SLO) for MAJORS

Students will:

1. Demonstrate knowledge of important concepts, theories, issues, and applications from across the discipline
2. Demonstrate proficiency of the critical skills required of professional meteorologists, including quantitative problem solving, computer applications, writing and public speaking
3. Demonstrate integration of core program material across meteorological topics, phenomena and physical scales

Outcome Measure	SLOs	Description of Departmental Use of Data
Comprehensive, objective exam administered each Spring to every senior major in meteorology. The exam covers material from the ten meteorology courses that form the core of the curriculum	1, 3	The exam results are examined each year by the meteorology faculty. Any systematic test biases will result in modifications to the exam. If content area problems are discovered, appropriate course changes will be instituted by the program.
Portfolio of work collected from seniors, including a résumé, writing sample, sample weather analysis assignment or similar project, and, if applicable, an internship supervisor evaluation and GRE scores	1, 2	Faculty examine the portfolios each year, with a simple score given to each portfolio. Faculty meet each year to discuss the results and explore any systematic problems with student writing, GRE scores, etc.
Percentage of senior majors who have completed an internship, summer research program, or participated in the Air Force ROTC program	2	We review this each year in order to track whether the students are successful in attaining a summer program that matches their career goals. A decline in student success with gaining internships would lead to an analysis of possible changes to the curriculum.
Exit survey for graduating seniors, which will explore student perception of their conceptual and tools knowledge in meteorology	1, 2, 3	The survey results are examined each year, to explore perceived strengths and weaknesses. Systematic perceived weaknesses would trigger changes in required or elective coursework.

1. **Results**—Review activities and findings by completing the Assessment Activities Table below. You can also provide a brief discussion afterward if you feel it would help the committee understand your assessment activities and findings during this cycle.

Assessment Activities Table

<p>This year we assessed SLO(s)...</p>	<p>...using Outcome Measure(s) (OMs).</p>	<p>Findings: program-performance for these SLOs, as indicated by these OMs, is: Excellent/Satisfactory/Needs Improvement</p>	<p>Strategies for Improvement (in selected areas):</p>
<p>SLO1. Demonstrate knowledge of important concepts, theories, issues, and applications from across the discipline</p>	<p>Direct OM: Comprehensive, objective exam taken by every senior. Indirect OM: Exit survey for graduating seniors</p>		
<p>SLO2. Demonstrate proficiency of the critical skills required of professional meteorologists, including quantitative problem solving, computer applications, writing and public speaking</p>	<p>Direct OM: Percentage of senior majors who have completed an internship, summer research program, or participated in the Air Force ROTC program Indirect OM: Portfolio including résumé,</p>		

	writing sample, sample analysis or project, and internship/GRE information.		
SLO3. Demonstrate integration of core program material across meteorological topics, phenomena and physical scales	<p>Direct OM:</p> <p>Comprehensive, objective exam taken by every senior.</p> <p>Indirect OM:</p> <p>Exit survey for graduating seniors.</p>		

Discussion (Optional):

2. What **revisions**, if any, to current SLOs and/or outcome measures did you make from previous plan?

3. **Plans**- What learning objectives will you be assessing in the next cycle?

Map II: Map Courses, Experiences and Activities to current Program/Department SLOs

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Student Learning Objectives (SLO) for General Education-NATURAL SCIENCE: Meteorology

USLOs 1-3. GSLO 2.

- 1 Students will understand the methodology of science as a way of knowing about the world.
- 2 Students will achieve a level of scientific literacy that enables them to both use the language of science appropriately and critically evaluate science as portrayed in media and popular culture.

Intructions

Mark the courses/events/experiences/activities that currently address either Program SLOs using the following:

Enter an **I** to indicate students are introduced to the SLO

R indicates the SLO is reinforced and students afforded opportunities to practice

M indicates that students have had sufficient practice and can now demonstrate mastery appropriate for the degree level

A indicates where evidence is collected and evaluated for program-level assessment as specified in the Departmental Assessment Plan

Course/ Experience	Program/Department SLOs				
	Major#1	Major#2	Major#3	GenEd#1	GenEd#2
MET 103 A	I		I	I	I
MET 130	I	I	R	I	I
MET 215	I	I	I	I	I
MET 216	R	R	R	R	R
MET 240	I	I	I	R	R
MET 271	R	R	R	R	R
MET 279	R	R	R	R	R
MET 291	R	M		R	R
MET 292	R	R	R	R	R
MET 319	R	R	R	R	R
MET 330	R	R	R	R	R
MET 335	R	R	R	R	R
MET 350	R	R	R	R	R
MET 369	R	R	R	R	R
MET 372	R	R	R	R	
MET 373	R	R	R	R	R
MET 385	R	R	R	R	R
MET 430	R	M	R	R	R
MET 435	R	R	R	R	R
MET 440	M	M	M	M	M
MET 460	R	M	R	R	R
MET 480	M	M	M	M	M
MET 481 A	M	M	M	M	M