ASNS Program Review Plan from Original Program Proposal

Maps of Program Learning Outcomes by Course and Preliminary Assessment Plan

Upon successful completion of the Associate in Science Degree in Natural Science (ASNS), students will be able to

(PLO 1) explain the natural and technological world using reflection and quantitative analysis including preparation of a plan to collect, process, and interpret data; evaluation of the plan, procedures, and findings; and communication of the conclusions;

(PLO 2) explain scientific knowledge and understanding to different audiences for a range of purposes; and

(PLO 3) apply scientific knowledge, skills, and understandings to problems and issues in daily life.

The following tables indicate which required courses fulfill specific program learning outcomes (PLOs). This assessment model was developed by the Assessment Committee at UHMC.

Maps of Program Learning Outcomes by Courses

3 Major Emphasis: The student is actively involved (uses, reinforces, applies, and is evaluated) in the student learning outcomes. The learner outcome is the focus of the class.
2 Moderate Emphasis: The student is actively uses, reinforces, applies, and is evaluated by this learner outcome, but it is not the focus of the class.
1 Minor Emphasis: The student is provided the opportunity to use, reinforce, and apply but does not get evaluated on this learner outcome.
0 No Emphasis: The student does not address this learner outcome.

Map of Program Learning Outcomes by Course
General Education and Program Requirements

	CHEM 161	CHEM 161L	CHEM 162	CHEM 162L	MATH 205
PLO 1	3	3	3	3	2
PLO 2	3	3	3	3	1
PLO 3	3	3	3	3	1

Map of Program Learning Outcomes by Course
Biological Science Concentration

	BIOL 171	BIOL 171L	BIOL 172	BIOL 172L	PHYS 151	PHYS 152
PLO 1	3	3	3	3	3	3
PLO 2	3	3	3	3	3	3
PLO 3	3	3	3	3	3	3

Map of Program Learning Outcomes by Course
Physical Science Concentration

	MATH 206	PHYS 170	PHYS 272
PLO 1	2	3	3
PLO 2	2	3	3
PLO 3	2	3	3

Maps of General Education Outcomes

Map of General Education Outcomes by Course
General Education & Program Requirements

	CHEM 161	CHEM 161L	CHEM 162	CHEM 162L	MATH 205
Critical thinking	3	3	3	3	3
Information retrieval & technology	2	2	2	2	1
Quantitative reasoning	3	3	3	3	3
Oral communication	1	1	1	1	1
Written communication	2	2	2	2	2
Creativity	2	2	2	2	1

Map of General Education Outcomes by Course
Biological Science Concentration

Appendix #2

	BIOL 171	BIOL 171L	BIOL 172L	BIOL 172	PHYS 151	PHYS 152
Critical thinking	3	3	3	3	3	3
Information retrieval & technology	2	2	2	2	2	2
Quantitative reasoning	2	2	2	2	3	3
Oral communication	2	2	2	2	1	1
Written communication	2	2	2	2	2	2
Creativity	2	2	2	2	2	2

Map of General Education Outcomes by Course
Physical Science Concentration

	MATH 206	PHYS 170	PHYS 272
Critical thinking	3	3	3
Information retrieval & technology	2	2	2
Quantitative reasoning	3	3	3
Oral communication	1	1	1
Written communication	2	2	2
Creativity	1	2	2

Program learning outcomes to be assessed each year of the program review cycle learning outcomes identified by PLO number

Appendix #2

PLO	F10	S11	F11	S12	F12	S13	F13	S14
1	CHEM 161/161L	CHEM 162/162L	MATH 205	MATH 206	PHYS 170	PHYS 272	BIOL 171/171L	BIOL 172/172L
2			BIOL 171/171L	BIOL 172/172L	CHEM 161/161L	CHEM 162/162L	PHYS 170	PHYS 272
3			PHYS 151	PHYS 152	BIOL 171/171L	BIOL 172/172L	CHEM 161/161L	CHEM 162/162L