



Program/Department: Associate of Science in Liberal Arts: Mathematics and Sciences (18318)

Submitted by:

Date Submitted:

1. Award Program Student Learning Outcomes

- A. Demonstrate an ability to analyze and evaluate scientific and mathematical topics.
- B. Clearly communicate scientific and mathematical reasoning and qualitative problem solving skills using appropriate vocabulary, methodologies and diverse technologies.
- C.
- D.
- E.
- F.

2. Mapping for Core/Required Courses of an Award Program

- 0 No Contribution:** The curriculum associated with the course Student Learning Outcome (SLO) does not contribute in any way to the students' ability to exhibit the knowledge/skills associated with the Award Program Student Learning Outcome (APSLO).
- 1 Minor Contribution:** The contribution of the curriculum associated with the course SLO to the students' ability to exhibit the knowledge/skills associated with the APSLO is not explicit but can be inferred.
- 2 Moderate Contribution:** The contribution of the curriculum associated with the course SLO to the students' ability to exhibit the knowledge/skills associated with the APSLO is clear. Data derived from the assessment of the course SLO can be used to measure the achievement of the APSLO.
- 3 Major Contribution:** The contribution of the curriculum associated with the course SLO to the students' ability to exhibit the knowledge/skills associated with the APSLO is explicit and substantial. Data derived from the assessment of the course SLO will be used to measure the achievement of the APSLO.



Utilizing the mapping criteria as your guide to linking course outcomes with program outcomes:

Core/Required Course	Course SLO	Award Program Student Learning Outcomes						
		A	B	C	D	E	F	G
ANTH 101	1							
	2							
ASTR 109	1							
	2							
	3							
ASTR 110	1							
	2							
	3							
ASTR 112	1							
	2							
	3							
ASTR 140	1							
	2							
BIOL 109	1							
	2							
BIOL 109H	1							
	2							
BIOL 109L	1							
	2							
BIOL 139	1							
	2							
	3							
BIOL 149	1							
	2							
	3							
BIOL 177	1							
	2							
BIOL 200	1							
	2							
BIOL 211	1							
	2							
	3							
BIOL 212	1							
	2							
	3							



Core/Required Course	Course SLO	Award Program Student Learning Outcomes						
		A	B	C	D	E	F	G
BIOL 214	1							
	2							
	3							
BIOL 221	1							
	2							
	3							
BIOL 229	1							
	2							
	3							
BIOL 231	1							
	2							
	3							
BIOL 239	1							
	2							
	3							
BIOL 249	1							
	2							
	3							
BIOL 259	1							
	2							
	3							
CHEM 209	1							
	2							
	3							
CHEM 210	1							
	2							
	3							
CHEM 219	1							
	2							
	3							
CHEM 229	1							
	2							
	3							
CHEM 249	1							
	2							
	3							
CHEM 259	1							
	2							
	3							
ENGR 210	1							
	2							



Core/Required Course	Course SLO	Award Program Student Learning Outcomes						
		A	B	C	D	E	F	G
PHYS 250A	1							
	2							
PHYS 250B	1							
	2							
PHYS 250C	1							
	2							
PSC 100	1							
	2							