Curriculum Map: Biology BS

Date: October 3, 2018

		Required Foundation Courses			Required Course	Program Electives		Required Course
	Program Goals (PGs) & Program Student Learning Outcomes (PSLOs)	Bio 201	Bio 202	Bio 301	Bio 307	Bio 300s	Bio 400s	Seminar 486-489
PG1	**Students understand of the basic principles governing biological organisms and communities.**							
PSLO 1.1	Students will be able to fundamental information about biological systems	I	I	R		R	M	M
PSLO 1.2	Students will be able to explain fundamental knowledge of principles governing biological systems.	I	I	R		R	M	M
PSLO 1.3	Students will be able to apply their knowledge to explain the reasons underlying the outcome of a biological process	I	I	R		R	M	M
PSLO 1.4	Students will be able to analyze information about biological systems and use it to predict the outcome of a manipulation of a system.	I	I	R		R	M	M
PSLO 1.5	Students will be able to analyze data regarding a biological model to evaluate the plausibility of the model.			I		I	R	M
PG2	**Students understand and are able to apply the scientific method.**							
PSLO 2.1	Students will be able to articulate their hypothesis or question.							
PSLO 2.2	Students will be able to make reasonable predictions based on a hypothesis or model.	I	I	R		R	M	M
PSLO 2.3	Students will be able to explain and/or propose an experiment with appropriate controls to test a hypothesis or model.	I	I	R		R	M	M
PSLO 2.4	Students will be able to relate the results of an experiment to their hypothesis and prediction.	I	I	R		R	M	M
PG3	**Students have basic technical laboratory skills to collect data and are able to analyze data using appropriate statistical methods where required.**							
PSLO 3.1	Students will demonstrate ability to perform basic technical laboratory skills.	I	I	R		R	M	
PSLO 3.2	Students will be able to use appropriate common statistical methods to analyze data, including measures of significance.	I	I	R	R	R	M	
PSLO 3.3	Students will be able to use common methods of presenting data, such as graphs or data tables, and interpret them.	I	I	R	R	R	M	M
PG4	**Students are able to communicate ideas and data in writing, including in standard scientific format.**							
PSLO 4.1	Students will be able to write about an experiment or experiments using the standard structure of a research article.	I	I	R		R	M	M
PSLO 4.2	Students will be able to use and apply scientific terminology.	I	I	R	R	R	M	M
PSLO 4.3	Students will be able to identify reliable sources of information.	I	I	R		R	M	M
	Scale: I-Introduced, D-Reinforced, M-Mastered							