Bergen | Center for Institutional Effectiveness

AS.NSM.BIO.TECH Program Alignment Matrix

Course		GE1 Written and Oral Communication Students will communicate effectively in both speech and writing.	GE2 Quantitative Knowledge and Skills Students will use appropriate mathematical and statistical concepts and operations to interpret data and to solve problems.	GE3 Scientific Knowledge and Reasoning Students will use the scientific method of inquiry, through the acquisition of scientific knowledge.	GE4 Technological Competency or Information Literacy Students will use computer systems or other appropriate forms of technology to achieve educational and personal goals.	GE5 Society and Human Behavior Student will use social science theories and concepts to analyze human behavior and social and political institutions and to act as responsible citizens	GE6 Humanistic Perspective Students will analyze works in the fields of art, music, or theater; history; literature; and philosophy and/or religious studies; and will gain competence in the use of a foreign language	GE7 Historical Perspective Students will understand historical events and movements in World, Western, non-Western or American societies and assess their subsequent significance.	GE8 Global and Cultural Awareness Students will understand the importance of a global perspective and culturally diverse peoples.	GE9 Ethical Reasoning and Action Students will understand ethical issues and situations.	**Program Learning Goal 1** **Students will be knowledgeable in the methodology of biotechnology including genetic modification, isolation, purification, and analysis of nucleic acids and proteins.**	**Program Learning Goal 2** **Students will acquire the skills necessary to properly handle genetically modified organisms and employ the safeguards necessary when working with such organisms.**
Bio-101	**Aligned?(Write' yes' if aligned)**			yes								
	Means of Assessment:			Students will be evaluated by lecture and laboratory examinations and student projects.								
Bio- 203	**Aligned?**		yes	yes								
	Means of Assessment:		Students will be evaluated by lecture and laboratory examinations and laboratory reports.	Students will be evaluated by lecture and laboratory examinations and laboratory reports.								
Bio-210	**Aligned?**		yes	yes	yes						yes	yes
	Means of Assessment:		Students will be evaluated by lecture and laboratory examinations or laboratory reports.	Students will be evaluated by lecture and laboratory examinations and laboratory reports.	Students will be evaluated by lecture and laboratory examinations and student projects.						Students will be evaluated by observation in the laboratory and analysis of experimental results. Assessment will also be based upon performance on exam questions.	Students will be evaluated by observation in the laboratory and analysis of experimental results. Assessment will also be based upon performance on exam questions.
Bio-211	**Aligned?**		yes	yes	yes						yes	
	Means of Assessment:		Students will be evaluated by lecture and laboratory examinations or laboratory reports.	Students will be evaluated by lecture and laboratory examinations and laboratory reports.	Students will be evaluated by lecture and laboratory examinations and student projects.						Students will be evaluated by observation in the laboratory and analysis of experimental results. Assessment will also be based upon performance on exam questions.	
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Program Learning Goal 3	Program Learning Goal 4	Program Learning Goal 5	Program Learning Goal 6									
Students will acquire knowledge of a variety of currently available genomic and proteomic databases.	**Students will acquire the skills required to analyze biological sequences and interpret the results of their analyses.**	**Students will acquire laboratory competence by developing and refining technical and analytical skills**	Students will have the ability to critically examine information and discover new knowledge through rigorous scientific reasoning	**Service Course for Other Discipline/Program**								
		yes	yes	no								
		Students will be evaluated by laboratory observation, laboratory exams or lab reports.	Students will be evaluated by laboratory observation, laboratory exams or lab reports.									
		yes	yes	no								
		Based on student performance on laboratory reports, laboratory quizzes and class participation.	Based on student performance on laboratory reports, and class participation.									
yes	yes	yes	yes	no								
Assessment will be based upon performance on computer assignments and exam questions.	Assessment will be based upon performance on computer assignments and exam questions.	Students will be evaluated by observation in the laboratory and analysis of experimental results. Assessment will also be based upon performance on exam questions.	Students will be evaluated by observation in the laboratory and analysis of experimental results. Assessment will also be based upon performance on exam questions.									
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