Student Name

A: An ability to apply knowledge of mathematics, science, and engineering

Course/Assignment used for Direct Measurement:

	Level of Accomplishment			
Categories of Performance	-1	0 Adequate (description of minimum standard)	+1 More than Adequate (provide comments)	Sub- Scores
	Inadequate (provide comments)			
Selects appropriate engineering theory (based on math and science) as needed to solve a problem		Demonstrated a basic understanding of the connection between mathematical equations and chemical, physical, and/or biological processes and systems. Was able to choose an appropriate mathematical equation(s) or scientific principle(s) that applied to an engineering problem. Demonstrated acceptable ability to develop a model, as needed, in engineering applications.		
Understands the concepts of calculus, algebra, trigonometry and statistics, as needed to solve a problem		Showed acceptable understanding of the concepts of calculus, algebra, trigonometry and statistics, as needed to solve problems.		
Uses the selected theoretical approach in an accurate and appropriate way.		Applied the selected theory correctly with proper units (with no more than infrequent minor mistakes). Showed an acceptable ability to determine and enter the proper inputs and parameters to equations/models. Identified and determined the key output that helps to solve a problem at hand.		
Presents and performs calculations correctly in their application		Showed an acceptable ability to present and perform calculations correctly in their application. May have exhibited some minor but infrequent errors. Used spreadsheets and other software where needed or helpful.		
			Total Score	
	(Total scores gre	eater than or equal to zero meet the minimum expectations of the faculty	/ and the program objectives.)	