ConnSCU GENERAL EDUCATION ASSESSMENT RUBRIC COMPETENCY AREA: Scientific knowledge and understanding

	4	3	2	1
Outcomes	Highly Competent	Competent	Minimally Competent	Not Competent
Communicate using appropriate scientific terminology.	Can define and use scientific terminology in a new context	Can define and use scientific terminology in a given context	Can define scientific terminology but cannot use it appropriately	Cannot define scientific terminology
Use representations and models to communicate scientific knowledge and solve scientific problems.	Use representations and models to communicate scientific knowledge and solve scientific problems.	Can use representations and models to communicate scientific knowledge and solve scientific problems in a given context	Can use representations and models to communicate scientific knowledge but cannot use them to solve scientific problems	Cannot use representations and models to communicate scientific knowledge or solve scientific problems
Plan and implement data collection strategies appropriate to a particular scientific question.	Can plan and implement data collection strategies appropriate to a new or unique scientific question	Can plan and implement data collection strategies appropriate to a particular scientific question	Can plan and implement data collection strategies appropriate to a particular scientific question with instructor assistance.	Cannot plan and implement data collection strategies
Articulate the reasons that scientific explanations and theories are refined or replaced.	Can articulate the reasons that scientific explanations and theories are refined or replaced	Can articulate the reasons that a particular scientific explanation or theory is refined or replaced	Can articulate the reasons that a particular scientific explanation or theory is refined or replaced with significant instructor prompting.	Cannot articulate the reasons that a particular scientific explanation or theory is refined or replaced
Evaluate the quality of scientific information on the basis of its source and the methods used to generate it.	Can evaluate the quality of scientific information on the basis of its source and the methods used to generate it	Can recognize valid sources and methods used to generate scientific information	Can recognize valid sources of scientific information from limited choices of sources provided by an instructor.	Cannot recognize valid sources and methods used to generate scientific information