

Table 1: Student Learning Objectives: GenEd Primary Area and Quest

Biological Sciences Objectives	Quest 2 Objectives	This course's Objectives (This course will...)	Objectives will be Accomplished By...
Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences.	Address in relevant ways the history, key themes, principles, terminologies, theories, or methodologies of the various social or biophysical science disciplines that enable us to address pressing questions and challenges about human society and/or the state of our planet.	...explore the evolutionary and ecological factors underlying the distribution of biodiversity in tropical rain forests, how humans use and alter rain forests, and the social, economic, and biological consequences of these activities.	...reading and discussing research about rain forests, gathering and analyzing data, discussing major themes and scientific issues with experts from around the world.
Courses focus on major scientific developments and their impacts on society, science and the environment, and the relevant processes that govern biological systems.	Present different social and/or biophysical science methods and theories and consider how their biases and influences shape pressing questions about the human condition and/or the state of our planet.	...emphasize how molecular biology, genomics, remote sensing, computational tools, and other scientific developments have advanced our understanding of the ecology and evolution of rain forest biota, resulting in both novel hypotheses and implications for other disciplines.	...reading foundational and contemporary studies to compare their limitations and implications, while also learning and reflecting on the historical reasons behind the dominance of particular ideas or research communities.
Students will formulate empirically-testable hypotheses derived from the study of living things, apply logical reasoning skills through scientific criticism and argument, and apply techniques of discovery and critical thinking to evaluate outcomes of experiments.	Enable students to analyze and evaluate (in writing and other forms of communication appropriate to the social and/or biophysical sciences) qualitative or quantitative data relevant to pressing questions concerning human society and/or the state of our planet.	...provide an opportunity for students to develop and test hypotheses regarding trends in deforestation and its impacts, how forest regeneration varies geographically, and how alternative approaches to tropical conservation will influence climate change.	...allowing students to gather and analyze socioeconomic data, along with data on forest cover and species composition, to test hypotheses about geographic variation in deforestation and its impacts. Students will communicate the results and broader societal implications of their analyses in writing and other formats.
Biological science courses provide instruction in the basic concepts, theories and terms of the scientific method in the context of the life sciences.	Analyze critically the role social and/or the biophysical sciences play in the lives of individuals and societies and the role they might play in students' undergraduate degree programs.	...show how ecologists and evolutionary biologists develop hypotheses to test fundamental concepts and theories, use experiments and other methods to gather data to test these hypotheses, and interpret analyses of these data to draw conclusions and formulate new hypotheses.	...reading and discussing scientific articles with an emphasis on identifying the questions and considering what alternative methods could have been used to address them. Including papers on topics such as the relationship between rain forests and climate change or how consumer choices influence the sustainability of tropical forests and products. It will also allow them to also consider how tropical biologists and the results of their research can influence decisions made by governments and other levels of society, which has implications for them regardless of their chosen field of study.
	Explore or directly reference social and/or biophysical science resources outside the classroom and explain how engagement with those resources complements classroom work.		...analyzing biological data, visiting the FLMNH butterfly rainforest, documenting the myriad rain forest products they use daily, and documenting the depiction of rain forests in movies, TV programs, and other popular media. This engagement will complement classroom discussions of particularly challenging concepts and emphasize that they actually interact daily with geographically distant rain forests.