THIRD SCIENCE



GE programs at universities typically consist of two components: 1) development of a foundational skillset in written and oral communication literacy and in quantitative literacy (the traditional first-year English and Math), and 2) a distribution requirement consisting of a set of courses that acquaint students with the breadth of human understanding in the humanities, arts, social sciences, and natural sciences. The intent of the foundational skillset is to provide students with fundamental skills that will enhance their success throughout their university studies, and thus should be completed in the first year. The intent of the distribution requirement is to cultivate critical thinking and lifelong learning in the various academic fields that create a holistically educated person.

An unfortunate opinion that all too often makes its way into discussions of GE is the purported lack of practicality in distribution requirements, largely due to the perception that courses in the distribution component are not focused on practical workplace skills. There are good data to indicate, however, that those who are most financially successful in their lifelong careers, and those who self-identify as having a high quality of life, are those with a solid background and passion for the liberal arts and sciences. In fact, a recent study funded by the Tiegel Foundation showed that long-term financial success in life and overall quality of life are strongly associated with the number of courses college students take outside of their majors (the study is not yet published but available in summary form at a number of sites, including this one:

https://www.insidehighered.com/news/2017/01/09/research-documents-life-impact-attending-liberal-arts-college).

Regarding the science component of UVU's GE, particularly the third science, there has never been a time when a deep and meaningful understanding of science has been more important. We live in a time when many people resist the scientific consensus that the earth more than a few thousand years old, that vaccines are safe, and that the global climate is changing, despite hugely overwhelming evidence in support of these conclusions. Such resistance has real implications for human health and safety, and results from ignorance of the nature of scientific inquiry. Moreover, UVU's GE objectives of critical thinking and lifelong learning are the principal aims of the third science requirement. Although UVU's science requirements are more flexible than at most universities, many, if not most, students choose to enroll in the survey courses (BIOL 1010 and PHSC 1000), for the first two science courses. These survey courses are the standard GE science courses offered at most universities. The third science ensures that at least one GE science course delves into a topic with sufficient depth to kindle deeper understanding of science, to motivate lifelong learning in science, and to teach critical thinking skills as students learn how to sort out reliable scientific evidence from unsubstantiated claims and challenge preconceived notions.

The department chairs and members of the dean's office of the College of Science have discussed the idea of a freshman seminar, and there is strong support for it, especially recognizing that it will likely have a science component. If at all possible, we encourage the re-envisioning committee to explore options that do not require elimination of the third-science requirement. One possibility, is crafting the freshman seminar to be a learning community that links two or three existing GE courses in the same semester as a common interconnected set of classes to ensure interdisciplinarity while simultaneously meeting GE requirements.