Student Learning Outcomes for Humanitarian Engineering Past & Present

At the end of this course, students will be able to:

- demonstrate and apply knowledge of mathematics, science, engineering;
- demonstrate and apply knowledge of the religious, political, moral, historical, economic, and cultural contexts in which technologies were invented and used;
- identify, formulate, and solve engineering problems with understanding and sensitivity to their human and environmental context;
- design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, and sustainability;
- gather and synthesize information about the religious, moral, political, historical, economic, and cultural contexts in which technological problems are debated and addressed;
- conduct research into the history of a technological issue, finding, assessing, analyzing, interpreting, integrating and effectively using essential and appropriate primary and secondary sources, including quantitative and qualitative data;
- function on diverse teams;
- examine issues with a mind open to a variety of reasonable positions and subject their own views to rational criticism;
- present an argument in written, oral, and visual form that displays their knowledge and understanding of the diverse history, culture, social geography, economic considerations, and technical details of a particular technical intervention;
- demonstrate empathy through designing technical interventions that demonstrate an appreciation of ethics, shared humanity, and the diversity of human experience as influenced by culture, race, ethnicity, gender, and class across different times and places.
Planning for an Integrative Assignment

Please identify a course you regularly teach that you would like to adapt to include an integrative or transdisciplinary assignment (name of course):

Please indicate the projected enrollment and place in curriculum (Required for major? General education course? Gateway course? Capstone course? Etc.):

Brief description of course content:

List one or two important learning outcomes you want an integrative assignment to hit: