

GE Theme course submission worksheet: Sustainability

Overview

Courses in the GE Themes aim to provide students with opportunities to explore big picture ideas and problems within the specific practice and expertise of a discipline or department. Although many Theme courses serve within disciplinary majors or minors, by requesting inclusion in the General Education, programs are committing to the incorporation of the goals of the focal theme and the success and participation of students from outside of their program.

Each category of the GE has specific learning goals and Expected Learning Outcomes (ELOs) that connect to the big picture goals of the program. ELOs describe the knowledge or skills students should have by the end of the course. Courses in the GE Themes must meet the ELOs common for all GE Themes and those specific to the Theme, in addition to any ELOs the instructor has developed specific to that course. All courses in the GE must indicate that they are part of the GE and include the Goals and ELOs of their GE category on their syllabus.

The prompts in this form elicit information about how this course meets the expectations of the GE Themes. The form will be reviewed by a group of content experts (the Theme Advisory) and by a group of curriculum experts (the Theme Panel), with the latter having responsibility for the ELOs and Goals common to all themes (those things that make a course appropriate for the GE Themes) and the former having responsibility for the ELOs and Goals specific to the topic of **this** Theme

Briefly describe how this course connects to or exemplifies the concept of this Theme (Sustainability)

In a sentence or two, explain how this class “fits’ within the focal Theme. This will help reviewers understand the intended frame of reference for the course-specific activities described below.

Students taking this course will critically evaluate how international, national, regional, state, and local sustainability goals will work synergistically with climate change policy that is designed to mitigate the public health impacts from the effects of climate change and improve climate change adaptation or reduce community vulnerability and increase community resilience to climate change while accessing the most current climate change scientific reports from the US and Internationally, and becoming aware of the history of international policy-making conferences.

Connect this course to the Goals and ELOs shared by *all* Themes

Below are the Goals and ELOs common to all Themes. In the accompanying table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The specifics of the activities matter—listing “readings” without

a reference to the topic of those readings will not allow the reviewers to understand how the ELO will be met. However, the panel evaluating the fit of the course to the Theme will review this form in conjunction with the syllabus, so if readings, lecture/discussion topics, or other specifics are provided on the syllabus, it is not necessary to reiterate them within this form. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

Goal 1: Successful students will analyze an important topic or idea at a more advanced and in-depth level than the foundations. In this context, “advanced” refers to courses that are e.g., synthetic, rely on research or cutting-edge findings, or deeply engage with the subject matter, among other possibilities.

ELO 1.1 Engage in critical and logical thinking.

Course activities and assignments to meet these ELOs

This course will build the skills needed to engage in critical and logical thinking in this class. First, students will critically evaluate initial responses/posts from their peers in a Discussion and Debate Board. The initial responses/posts will be summaries of popular press or peer-reviewed journal articles answering specific prompts. The additional responses to their peers' initial posts will be required to refute, support, or validate the claims, issues, or actions in their peers' news or journal articles using scientific justification from the Learning Materials or their own credible references.

Second, students will write a research paper to promote further study of the impact from the effects of climate change and global warming on human health. The research paper is a study of one of the effects of climate change (such as extreme weather events, air pollution, or floods) in any region of the world that may have significant public health impacts. For this research paper, students will develop a thesis statement that is expected to answer this research question: 1. Which one of the health impacts from the effects of climate change is the most critical to mitigate and adapt to both now and until 2050, and why? The research paper is expected to prove or disprove their thesis statement.

Third, in the Homework Assignments, students will be asked to prepare a short essay with scientific justification on a local, state, national, or international sustainability practice that will mitigate one of the public health impacts from the effects of climate change discussed and improve climate change adaptation or reduce community vulnerability and increase community resilience.

232 words.

ELO 1.2 Engage in an advanced, in-depth, scholarly exploration of the topic or ideas within this theme.

Course activities and assignments to meet these ELOs

Students will write a research paper to promote further study of the impact from the effects of climate change and global warming on human health. The research paper is a study of one of the effects of climate change (such as extreme weather events, air pollution, or floods) in any region of the world that may have significant public health impacts. For this research paper, students will develop a thesis statement that is expected to answer this research question: 1. Which one of the health impacts from the effects of climate change is the most critical to mitigate and adapt to both now and until 2050, and why? The research paper is expected to prove or disprove their thesis statement.

Goal 2: Successful students will integrate approaches to the theme by making connections to out-of-classroom experiences with academic knowledge or across disciplines and/or to work they have done in previous classes and that they anticipate doing in future.

ELO 2.1 Identify, describe, and synthesize approaches or experiences.

Course activities and assignments to meet these ELOs

Students describe what video significantly impacted their understanding of sustainability, climate change, and global warming compared to the other videos. They explain why/how it significantly impacted your understanding of sustainability, climate change, and global warming, and what they learned that you didn't know before they watched the video.

Students are required to participate in Discussion and Debate Boards to find popular press news articles on the impacts of climate change on human health and answer specific prompts, which gives them exposure to all of the public health impacts of climate change. These public health impacts and the effects of climate change involve issues that they may have experienced in their daily lives, like food safety, vector-borne diseases, safe drinking water, mental health issues, extreme weather events, poor air quality, excessive heat, and vulnerable populations of concern. Students will identify and synthesize their own experiences and approaches to these issues when they complete these Discussion and Debate Boards by finding articles that they can relate to from their own experiences or interests.

ELO 2.2 Demonstrate a developing sense of self as a learner through reflection, self-assessment, and creative work, building on prior experiences to respond to new and challenging contexts.

Course activities and assignments to meet these ELOs

Students complete an Essay about how the course affected their understanding of climate change: In no more than 200 words, describe the impact of this course on your understanding and confidence in the science of climate change.

Students will complete a Creative Project: Using one of the local, state, national, or international (UNSDG) sustainable development goals, students will need to creatively represent how this goal improves public health. They can use a TED talk, infographic, homemade video, or other creative work.

Goals and ELOs unique to Sustainability

Below are the Goals and ELOs specific to this Theme. As above, in the accompanying Table, for each ELO, describe the activities (discussions, readings, lectures, assignments) that provide opportunities for students to achieve those outcomes. The answer should be concise and use language accessible to colleagues outside of the submitting department or discipline. The ELOs are expected to vary in their “coverage” in terms of number of activities or emphasis within the course. Examples from successful courses are shared on the next page.

GOAL 3: Students analyze and explain how social and natural systems function, interact, and evolve over time; how human wellbeing depends on these interactions; how actions have impacts on subsequent generations and societies globally; and how human values, behaviors, and institutions impact multi-faceted, potential solutions across time.

ELO 3.1 Describe elements of the fundamental dependence of humans on Earth and environmental systems and on the resilience of these systems.

Course activities and assignments to meet these ELOs

Students taking this course will critically evaluate how international, national, regional, state, and local sustainability goals will work synergistically with climate change policy that is designed to mitigate the public health impacts from the effects of climate change and improve climate change adaptation or reduce community vulnerability and increase community resilience to climate change while accessing the most current climate change scientific reports from the US and Internationally, and becoming aware of the history of international policy-making conferences. Students will be able to discuss the definition of climate change and weather, the difference between the causes of climate change (e.g., greenhouse gas), the effects of climate change (e.g. drought and other extreme weather events), and the short and long-term impacts of these effects on ecosystem and human health, such as excessive heat-related illnesses, vector- and waterborne diseases, increased exposure to environmental toxicants, and exacerbation of cardiovascular and respiratory diseases due to declining air quality. The concepts of prevention, mitigation, adaptation, vulnerability, and resilience will be presented in the

Learning Materials as they relate to the impacts of climate change on human health. The course will also serve as a platform for the students to participate in discussions and debates on the impacts of climate change on human health.

An example of an activity follows:

Homework

Write a short factual essay with credible justification on a local, state, national, or international sustainability goal that will mitigate ONE of the public health impacts from the effects of climate change discussed in this module and improve climate change adaptation or reduce community vulnerability and increase community resilience. Include the causes and effects of climate change that are associated with your public health impact. This assignment will help with writing the “Body” of your research paper due at the end of this module.

ELO 3.2 Describe, analyze and critique the roles and impacts of human activity and technology on both human society and the natural world, in the past, currently, and in the future.

Course activities and assignments to meet these ELOs

Homework

Write a short essay on the **future** human health impact from the effects of climate change that you believe will be the most accurately predicted in 2050 and why. This opinion essay does need to have credible justification.

Write a short essay on the **current** human health impact from the effects of climate change that you believe is the most important to mitigate and why. This opinion essay does need to have credible justification.

ELO 3.3 Devise informed and meaningful responses to problems and arguments in the area of sustainability based on the interpretation of appropriate evidence and an explicit statement of values.

Course activities and assignments to meet these ELOs

Discussion/Debate Board

Initial Response: Answer prompts to summarize a popular press article about implementing sustainability practices related to mitigating the impacts of climate change on human health within the USA.

Additional Response: Answer prompts to refute, support, or validate the claims, issues, or implementation/actions in your peers’ news articles using scientific justification from the Learning Materials or your own credible references.