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Sustainability description (from ILO Sustainability rubric)
Cal State East Bay envisions a future that ensures environmental integrity, economic vitality, and a just society for present and future generations, and for graduates who will be able to act responsibly and sustainably, in their personal and professional lives, at local, national, and global levels.

Why faculty developed this guide
In 2007, the Academic Senate resolved that all Cal State East Bay students will receive an education on environmental sustainability. Accordingly, sustainability is one of East Bay’s six Institutional Learning Outcomes (ILOs) and Shared Strategic Commitments. Thus, all students graduating from Cal State East Bay should be proficient in the subject. To operationalize the Sustainability ILO, the University implemented a Sustainability Overlay graduation requirement.

To evaluate our effectiveness in achieving this outcome, the University periodically assesses each ILO based on rubrics developed and piloted by the faculty and approved by the Senate. Evaluators assess ILO’s based on assignments submitted as part of students’ coursework. In practice, for the Sustainability ILO, those assignments would likely come from upper division Sustainability Overlay courses to guarantee that assessed students had indeed already received that element in their education. Because those courses are widely distributed across the University and the subject of sustainability is new to many fields, this guide was created by and for Cal State East Bay faculty to assist in the development of assignments that will enable students to fulfill the educational expectations specified in the Sustainability ILO.

The guide is organized by the 5 categories of the Sustainability ILO Rubric; it covers the broad range of issues related to sustainability, including the links between three factors - environmental integrity, social well-being, and economic vitality, and how together they enable the development of a sustainable society.
Significantly, it emphasizes that environmental sustainability is a prerequisite for social equity and economic vitality, while the reverse is not necessarily true. Note that, if your course is involved in the university-wide assessment of the Sustainability ILO, you are required to address all rubric categories in one or (most likely) multiple assignments. Further information on sustainability is provided towards the end of this guide, with reference to reliable sources of information that can also serve as a basis for assignment development.

General considerations for designing assignments to meet the Sustainability ILO

1. If your assignment is to be used to evaluate the sustainability ILO, it must support students in developing a holistic account of major sustainability issues, rather than parts of the problem in isolation. Smaller components of an assignment should relate to the larger context/big picture, that is, to urgent threats to environmental sustainability and the welfare of humans and the planet. It is likely to be necessary to scaffold assignments in order to meet all of the Sustainability ILO criteria.

2. Students should understand that environmental sustainability impacts are distributed disproportionately across geographical regions, population groups, and generations.

3. You might explore commonly held, but mistaken beliefs about environmental sustainability. Guide your students toward evidence, analyses, and outcomes that are universally accepted in the global scientific community.

4. Consider letting students know there may not be a perfectly “right” or “wrong” answer; there may be stronger and weaker arguments based on the quality and quantity of evidence provided.

5. As part of an assignment, consider collecting students’ perspectives, experiences, attitudes, and values around sustainability.

6. Consider assignments that are relevant to students’ current or future jobs and how sustainability may affect and be incorporated into their chosen professions.

7. Think about environmental sustainability broadly in the context of your discipline. For example, consider specific tools, skills, and terminologies from your field and their particular value in the analysis of environmental sustainability problems.

General questions to consider for designing ILO Sustainability assignments

1. Do you provide or ask students to create a glossary of terms and guidance on appropriate disciplinary vocabulary?

2. Do you expect students to identify, acknowledge, or evaluate reliable sources in their work?

3. Do you expect students to develop their own argument or to summarize or synthesize that of others?

Examples of assignment tips and instructions across disciplines

The table below provides suggestions for developing sustainability assignments for each of the ILO Sustainability Rubric categories, applicable across various disciplines. The left-hand column contains the definition of the category, elements that must be included in assignments used for assessment of the ILO rubric category, tips regarding the nature of the category, and guiding questions for developing assignments. The right-hand column contains example prompts that can be developed into assignments. Note that, if your course is being used to assess the Sustainability ILO, then it must address ALL of the categories. This can be achieved through one or (more likely) multiple assignments.
<table>
<thead>
<tr>
<th>This column contains the definition of the rubric category and gives tips and guiding questions for faculty when designing an assignment.</th>
<th>This column contains examples of language and approaches that instructors might use in writing assignment instructions.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>① “Threat(s) and Opportunities”</strong>&lt;br&gt;<strong>definition:</strong> Identification and description of key threats to environmental sustainability (between local and global) and economic/social opportunities that arise from addressing the threat(s) with supporting examples/evidence.</td>
<td><strong>Example assignment instructions/prompts for “Threat(s) and Opportunities”</strong>&lt;br&gt;- Identify threats and opportunities related to a particular scenario in your discipline. For example: a new global company planning to develop a project at a local destination bringing both threats and opportunities to the local and global systems; a government creates a policy impacting local and global systems and, therefore, increasing positive economic, environmental and socio-cultural impacts on the local destination. &lt;br&gt;- Identify or analyze the superstructure (e.g. policies, regulations, legal environment) that are established by local governments and local enterprises to optimize opportunities stemming from local to global initiatives and/or investments and to also overcome key environmental threats (e.g., does the public sector have a policy such as quotas on employing locals in middle level and upper level positions? Does the public sector have a policy that requires investors (e.g., hotels) improve the area (e.g., education, environment, landscaping, etc.)? If discussing a local policy, how does that translate into global impacts or outcomes?) &lt;br&gt;- Identify and analyze how local governmental decision-making on policy (e.g. on health/education/tourism) and infrastructure (e.g. roads/electricity/buildings/landscaping) can affect key environmental concerns with implications at the global scale, and provide new opportunities. Provide examples. &lt;br&gt;- How is global environmental change (e.g. climate disruption) increasing local natural disasters? What can individuals, communities, and local governments do to adapt and become more resilient? How do you create a sustainable disaster preparedness plan? Provide examples.</td>
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<tr>
<td><strong>Assessable assignments must address all of the following.</strong>&lt;br&gt;- A critical environmental threat&lt;br&gt;- Scale interactions (local to global or the reverse)&lt;br&gt;- Opportunities&lt;br&gt;- Examples and/or evidence</td>
<td><strong>Tips for “Threat(s) and Opportunities”</strong>&lt;br&gt;- Some examples of possible key environmental threats include: mass extinction, disruption of Earth’s life support systems, intolerable heat stress, large toxics contamination, clean water access, and catastrophic environmental disasters. &lt;br&gt;- For example, connections to key environmental threats can be made from: use of carbon emissions offsets; biodiversity impact; disruption of indigenous land management and associated cultural values, knowledge, and traditions; access to healthful water supply; impact investing; voluntary simplicity; and advocacy. &lt;br&gt;- Some examples of opportunities are: job creation, equity, aesthetic and cultural values.</td>
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</table>
### Guiding questions for developing assignments focused on “Threat(s) and Opportunities”
- Do you require that students use reliable sources and include appropriate evidence?
- Do you require that students identify both threats and opportunities?
- Do you explore how threats can be turned into opportunities at the individual, local, regional, and global level?
- Do you provide guidance on where to find reliable information on key threats?
- Do you expect students to provide evidence of the significance of the threat or threats?

### “Agency” definition: Identification and description of individual and collective actions (e.g. personal choice, voting, law, policy, community action) to address major sustainability threat(s) / opportunities.

**Assessable assignments must address all of the following.**
- Individual
- Collective
- Threats or opportunities

### Tips for “Agency”
- Consider the actors and stakeholders involved.
- What is the nature of the individual or collective action.
- Consider how assignments allow students to reflect on global issues.
- Consider providing guidance for individual and collective action and engagement.

### Example assignment instructions/prompts for “Agency”
- Write a letter to an elected official addressing a threat to environmental sustainability, proposing an action to improve local, regional, or global environmental conditions.
- Analyze how two different candidates stand on a sustainability issue and how their stance will potentially impact individual and collective well-being.
- Students engage in a debate over a ballot proposition arguing how individuals’ votes would affect society’s prospects for environmental sustainability.
- Identify and describe how individual engagement in an organization or a group focused on community action in the area of environmental sustainability has affected a community, locally and globally.
- Explain how NGOs have given individuals an effective collective voice affecting environmental decision-making.
- Analyze an international environmental agreement, and how it has affected the environment, communities, and individuals. How could the individual, local, or global agents play a role in changing or influencing the agreements?
Guiding questions for developing assignments focused on “Agency”

- Do you define the collective (e.g., national, international, community, tribal)?
- Do you define the individual (e.g., own-self, a person)?
- Do you identify the means of effecting change (e.g., personal choice, voting, law, policy, international agreements, community action, civic engagement) and how they affect change?
- How can students judge which individual or collective actions might be more or less significant.

- Examine how sustainability-related international legal frameworks are attempting to protect individual and community rights.
- Explore the barriers and opportunities that exist for various demographic groups in their efforts to implement political change toward environmental sustainability, (e.g., by indigenous groups, community groups, NGOs).
- Review the actions you take in daily life and detail two ways that you can significantly reduce your carbon footprint. What possible impact would these have on the local and international community?
- Analyze how students can or have influenced the University's environmental sustainability performance (e.g., provide concrete data, actions, plans, etc. to advance climate neutrality on our campuses), and the means used to achieve those changes.
- Examine locals’ reaction/community action towards a scenario of environmental injustice committed by private or public sector entities such as pollution, locals’ rights abuse, or capital escape. Use a situation when negatives were turned into positives.

3 “Interconnectedness” definition:
Articulation of the interconnectedness between economic well-being, social equity, AND environmental quality with supporting examples/evidence.

Assessable assignments must address all of the following.

- Interconnectedness among all:
  - economic well-being.
  - social equity.
  - environmental quality.
- Supporting examples and/or evidence.

Tips for “Interconnectedness”

- Consider promoting a goal and equitable balance between all three pillars of sustainable development (economic, social and environmental).
- Consider providing definitions for economic well-being, social equity and environmental quality in the context of your assignment.

Example assignment instructions/prompts for “Interconnectedness”

- Working as individuals, on your colored ‘sticky’ pads write an emerging or anticipated impact of anthropogenic greenhouse gas emissions (one impact per sticky): environmental impacts on the GREEN stickies, social impacts (including equity impacts) on the YELLOW stickies, and economic impacts on the PINK stickies. Working in small groups, consolidate your ideas and place your color-coded stickies into three color regions on the giant sticky poster. Now draw directional impact arrows between the stickies (within and across color groups) showing how impacts in one area affect impacts in others. Label the arrows with a positive sign if the impacts are reinforcing (e.g., increasing temperature, increasing drought, increasing food shortages). Make sure to include supporting evidence/examples.
- Imagine you’re an environmental planner. Consider economic, social and environmental impacts of a proposed development project (e.g., shopping mall, school, beach access) and provide examples or evidence of those interconnections and their impacts.
- Consider providing students with guidance on how to obtain relevant and reliable evidence and examples.
- Consider using systems diagrams to illustrate the principles of interconnectedness.
- Recognize that 'equity' is used as a short-hand to represent two desired sustainability outcomes: quality of life and equity. We do not want equitable misery.

**Guiding questions for developing assignments focused on “Interconnectedness”**

- Do you explicitly ask for interconnections between all three components?
- Do you require students to recognize the unequal social impact of environmental impacts of policies, actions, etc?
- Do you define economic well being, social equity and environmental quality?
- Do you distinguish between direct and indirect impacts on the economic well being, social equity and environmental quality?
- Do you require that the student use visuals (e.g. schematics, systems diagrams) that show interconnections?

<table>
<thead>
<tr>
<th>4 “The Science” Definition: Application of systems-thinking/scientific concepts to describe how interactions between humans and natural systems affect sustainability with supporting examples/evidence.</th>
<th>Example assignment instructions/prompts for “The Science”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyze how building design and operation affects its human users, the local and global environment, and the implications for global sustainability (e.g., the energy performance of the building, the nature and</td>
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<tr>
<td>Select an advancement in sustainability (e.g., electric cars, reusable mugs and shopping bags, moving to a paperless society) and consider the potential implications for societies, economies and the environment and the interconnectedness among those outcomes.</td>
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<tr>
<td>Select a proposed or existing United Nations (UN) policy/project related to sustainability and map all the different UN agencies that are related to its development and implementation. Consider their differing roles with respect to economic well-being, social equity and environmental quality and how their roles relate to each other? What does this suggest about the definition of sustainable development and the best approaches to implementing it? Specifically, look at the UN Sustainable Development Goals (SDGs).</td>
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<tr>
<td>Select three UN Sustainable Development Goals and, using concrete examples, examine the economic, social, and environmental implications of achieving those goals and their inherent interrelationships.</td>
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<tr>
<td>Examine a product or service that can be designed, produced, used, and disposed of/recycled in different ways. Examine the economic, social, and environmental trade-offs that result from changing aspects of that product or service life cycle. Use concrete evidence or examples to support your argument.</td>
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<tr>
<td>Select a case study and analyze the impacts of a tourism project (e.g., a resort or a hotel) on a destination's environment, social-cultural and economic aspects and the interactions among them. Use concrete evidence or examples to support your argument.</td>
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</tr>
<tr>
<td>Research a scenario of a development project that has had a direct impact (positive or negative) on one aspect of the three-E's (e.g., economic) and how that resulted in impacts (negative or positive), in the long run, for one or both of the two other E's (i.e., environment and social equity). Use concrete evidence or examples to support your argument.</td>
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</tbody>
</table>
Assessable assignments must address all of the following:

- Systems thinking or science concepts.
- Interactions between human and natural systems.
- Make the link to sustainability
- Supporting evidence and/or example(s).

**Tips for “The Science”**

- The assignment may not need to be quantitative, but it should reflect the agreement (or emerging agreement) of the international scientific community (e.g., the Intergovernmental Panel on Climate Change, World Meteorological Association, United Nations Environment Program, and generally, the peer reviewed scientific literature).
- Consider focusing on the ecological outcomes of human activities on the biosphere (e.g., the impacts of: the use of pesticide on global ecological health, the combustion of fossil fuels and disruption of climate and its associated ecological impacts, the destruction of the natural environment and its implications for key-stone species and biodiversity, meat consumption and its many environmental impacts).
- Consider also including the impacts of those changes in the biosphere on humans (e.g., storm damage, agricultural productivity, fresh water availability).

**Guiding questions for developing assignments focused on “The Science”**

- Do you help students to interpret scientific data/graphics/models (e.g., from executive summaries of scientific reports designed for policy makers)?
- Do you teach systems-thinking and help students understand the relevant scientific concepts?
- Do you tell students where to find credible data and how you expect them to use it?

- Describe how CO₂ emissions from fossil fuel combustion disrupt global climate and ocean ecosystems. Be specific about the many different kinds of disruptions that result therefrom, using concrete examples and supporting evidence from the Intergovernmental Panel on Climate Change or other reputable sources. Describe how natural systems can react to these human impacts, exacerbating the effects and further undermining prospects for societal sustainability.
- Select a resource (e.g., electricity, water, waste, heat) or a product and trace its lifecycle. Using concrete evidence, explain how humans interact with natural biogeochemical cycles through that resource or product life cycle and the implications for global sustainability? Explain how substitute resources, materials, or practices could reduce those impacts.
- Select a product that claims to be “green.” Investigate the scientific validity of those claims and provide evidence of the non-sustainable impacts. What changes could be made to reduce the impacts?
- Select a claim made by “climate science deniers” and research its origins, its core argument and its validity. Provide and explain the scientific evidence that debunks those claims and the sustainability risks of anthropogenic climate disruption. Explain why your source of your evidence is credible.
- Analyze, scientifically, the practices of a sector (e.g., lodging) when it comes to water usage, using cleaning agents, or other practices and their relationship to global sustainability. Identify the nature of the impacts on different parts of the biosphere (e.g., freshwater systems, oceans, air, living organisms, soils, atmosphere/climate).
- Do you address the implications of the science for the field of study?
- Do you ask your students to track the direction of impact both from human activities to the environment, and the reverse?

| “Social Factors” definition: |
| Analysis and explanation of how social factors (e.g., historic/political/cultural) affect sustainability from different stakeholder perspectives with supporting examples/evidence. |

Assessable assignments must address all of the following.
- How social factors affect environmental sustainability.
- Perspectives of different stakeholders
- Examples and/or evidence.

Tips for “Social Factors”
- Consider historic/political/cultural influences on environmental sustainability as they relate to the discipline.
- Consider how social, cultural and historical factors shape stakeholders’ perspectives.
- Consider how widely-held belief systems do and have affected prospects for sustainability.

Guiding questions for developing assignments focused on “Social Factors”
- Do you ask the student to identify the relevant stakeholders and to identify their varying perspectives?
- Do you ask the student to acknowledge or analyze their own perspective relative to the range of stakeholder perspectives?
- Do you provide students with information on the different stakeholders (for example: employees, Example assignment instructions/prompts for “Social Factors”
- Write an essay titled Poverty, Affluence, and Sustainability on a Small Planet: Toward Solutions. The essay should differentiate how poverty and affluence affect environmental sustainability and each other on a planet already over carrying capacity. It should indicate essential elements of a solution to the problem that recognizes the I=PAT relationship (Impact = Population x Affluence x Technology) and different stakeholder's perspectives. Include concrete examples with appropriate citations.
- Compare challenges, successes and failures of poor communities versus affluent communities in pursuing environmental sustainability. Discuss likely conflicts in different stakeholders’ perspectives. Include concrete examples/evidence to support your thinking.
- Analyze a case study of a company with a corporate culture that focuses on sustainability. Identify all of the stakeholders and their various interests. Discuss how the social dynamics of the company influenced the development of that culture. Be explicit about the company's impact on the community and the environment. Provide examples/evidence to support your analysis.
- Examine the track record of an elected official on sustainability. Analyze the different influences on the politician (including different stakeholders) that could explain the outcomes observed. Include evidence, citing credible sources.
- Examine the histories of different communities presented in Jared Diamond's book Collapse. What factors explained why some communities collapsed, whereas others survived? Describe the dynamics between the different community stakeholders in the process of collapse or survival.
- Promote an idea that improves the environmental performance of a company to someone in a position of
consumers, local communities, investors, government/regulators, local businesses, multinational corporations, etc), and their roles in the context of your particular assignment?

- Do you provide students with guidance for identifying credible evidence and examples?
- Do you specify the social context and stakeholders to be considered?
- Do you explore the question: To what extent a technological solution is possible for the problems created by climate change, or, to what extent we need a cultural shift in how we understand our place within our planetary eco-systems?
- Does the assignment address whether social goals receive sufficient weight in decision-making that affect environmental sustainability and how imbalances might be corrected?
- Do you ask your students to analyze how different social factors affect a culture's definition of sustainability?

authority in the company in a way that would save the company money. Consider the perspectives of the company's broad array of stakeholders. Provide a strong substantiating example to support your argument.

- Compare two tourist destinations describing how tourism affected the destination's environmental sustainability outcomes. Consider the different historic/political/cultural factors involved and the response of different stakeholders. Provide concrete examples to support your argument.
- Compare the World Economic Forum with the World Social Forum with respect to the inclusion of stakeholder voices in decision-making, and the different environmental outcomes obtained therefrom. Provide concrete examples to support your argument.
- Examine the social and environmental reports of a B-Corp. Describe the criteria used to measure social and environmental outcomes and actions taken to influence them. Analyze the relationships between the reported social and environmental action and outcomes, and the effects on the various stakeholders.
- Examine and discuss political and social instability or unrest at a particular destination and its effects on the state of environmental sustainability. Describe the different stakeholders’ perspectives and provide concrete examples/evidence to support your argument.
## ILO Sustainability Rubric
Approved March 3, 2020 by Academic Senate

**Description:** Cal State East Bay envisions a future that ensures environmental integrity, economic vitality, and a just society for present and future generations and graduates who will be able to act responsibly and sustainably at local, national, and global levels in their personal and professional lives.

### Rubric Categories

<table>
<thead>
<tr>
<th>Rubric Categories</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Threat(s) and Opportunities:</td>
<td>Skillfully and comprehensively addresses all aspects of this category</td>
<td>Minor gaps in identification, description or evidence</td>
<td>Some significant gaps in identification, description and/or evidence</td>
<td>Major gaps, unclear or not relevant</td>
</tr>
<tr>
<td>Identification and description of key threats to environmental sustainability (between local and global) and economic/social opportunities that arise from addressing the threat(s) with supporting examples/evidence.</td>
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<td>2. Agency:</td>
<td>Appropriately identifies and describes key individual and collective actions</td>
<td>Minor misalignment(s) in identification(s) and/or errors in description(s)</td>
<td>Some significant misalignment(s) in identification(s) and/or errors in description(s)</td>
<td>Major misalignment(s) and/or errors, unclear or not relevant</td>
</tr>
<tr>
<td>Identification and description of individual and collective actions (e.g. personal choice, voting, law, policy, community action) to address major sustainability threat(s) / opportunities.</td>
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<td>3. Interconnectedness:</td>
<td>Skillfully and comprehensively addresses all aspects of this category</td>
<td>Minor gaps in articulation or evidence</td>
<td>Some significant gaps in articulation and/or evidence</td>
<td>Major gaps, unclear or not relevant</td>
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<td>Articulation of the interconnectedness between economic well-being, social equity, AND environmental quality with supporting examples/evidence.</td>
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<tr>
<td>4. The Science:</td>
<td>Skillfully and appropriately addresses all aspects of this category</td>
<td>Minor gaps in application or evidence</td>
<td>Some significant gaps in application and/or evidence</td>
<td>Major gaps, unclear or not relevant</td>
</tr>
<tr>
<td>Application of systems-thinking / scientific concepts to describe how interactions between humans and natural systems affect sustainability with supporting examples/evidence.</td>
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<tr>
<td>5. Social Factors:</td>
<td>Skillfully and logically addresses all aspects of this category</td>
<td>Minor gaps in analysis, explanation or evidence</td>
<td>Some significant gaps in analysis, explanation and/or evidence</td>
<td>Major gaps, unclear or not relevant</td>
</tr>
<tr>
<td>Analysis and explanation of how social factors (e.g. historic/political/cultural) affect sustainability from different stakeholder perspectives with supporting examples/evidence.</td>
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Instructional Resources available through the Office of Sustainability

The Office of Sustainability supports academic work to meet these initiatives in the following ways:

- Campus as a Living Lab project opportunities to start, continue, or complete an on-campus sustainability project through a course
- Engage faculty to contribute their expertise in the assessment, monitoring, updating and development of sustainability plans, procedures, and policies
- Support curriculum development, professional development and research opportunities in the area of sustainability
- Support the Academic Senate Committee on Sustainability.
- Engage faculty in campus governance through the Campus Sustainability Committee
- Connect faculty to:
  - the network of higher education sustainability professionals and academics in the CSU, region, and nation;
  - current research, resources, and national/regional conference opportunities;
  - community and regional partners looking to connect with our campus on issues related to sustainability; and
  - sustainability policies and procedures at the city, county, and state levels.

While there are a number of useful resources, here are several instructional resources faculty have noted that would be useful to help faculty develop a Sustainability related course assignment:

- UNESCOSustainable Development Goals Resources for Educators
- IPCC Special Report “Global Warming of 1.5°C” Summary for Teachers
- Achieving Transformative Sustainability Learning: Engaging Head, Hands and Heart
- Using education to fight climate change (Andrew Glenn, SJSU, 2020)
- Association for the Advancement of Sustainability in Higher Education (AASHE) Resource Hub
- CSUEB Office of Sustainability Faculty Resources Website
- CSUEB Carbon Commitment & Sustainability Dashboard

Opportunities for Students through the Office of Sustainability

Through cross-collaboration on projects, inside and outside of the classroom, the Office of Sustainability seeks to educate the campus community and provide valuable learning opportunities in the process. The list below highlights various ways for students to engage in sustainability.

- Sustainability Ambassadors - a paid student internship program with course credit option
- Collaborations between faculty, staff, and the Office of Sustainability to develop teaching and learning opportunities that leverage the campus as-a-living laboratory.
- SustainEastBay Club - a peer-to-peer, co-curricular opportunity to network with other students and participate in on- and off-campus sustainability events and activities
- Associated Students, Inc. Sustainability Committee - student government body focused on enhancing sustainability through activism
- Outreach - Student led classroom presentations on sustainability tailored to the audience/course
Association for the Advancement of Sustainability in Higher Education

Cal State East Bay is a member of the Association for the Advancement of Sustainability in Higher Education (AASHE) and is enrolled in its Sustainability Tracking, Assessment and Rating System (STARS-https://stars.aashe.org/). As part of this system, we attempt to track the proportion of our courses that are classed as sustainability-focused and sustainability-inclusive. To count as sustainability-focused, the course title or description must indicate a primary and explicit focus on sustainability which also needs to be reflected in the course content. To count as sustainability-inclusive, the course description or rationale provided in the course inventory must indicate that the course incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability challenges, issues, and concepts throughout the course. In addition, a second rating category relevant to this assignment guide is satisfied by utilizing the institution’s infrastructure and operations as a living laboratory for applied student learning for sustainability. The more courses that do this, the better our University performs with respect to this STARS category. These and the many other rating categories are explained in the current STARS manual https://stars.aashe.org/wp-content/uploads/2019/07/STARS-2.2-Technical-Manual.pdf.

Faculty Resources available through the Cal State East Bay Library

Faculty designing sustainability-related assignments for their courses are encouraged to consult their library liaison for information about library and Open Educational Resources (OER) available for their students, and for consultations on how to integrate information literacy into their assignments.

The library also has a LIBGuide for Sustainability listing resources and databases available to the CSU East Bay community. For information on these resources, please see this link: https://library.csueastbay.edu/sustainability

Contact information for two librarians with experience in the area of sustainability is also listed. Faculty are also encouraged to consider having a librarian come to their classes or provide an online session for students demonstrating these resources and/or teaching students how to evaluate sources and integrate information into their research work while citing appropriately in the assigned format, such as APA or MLA.

Faculty are also encouraged to suggest resources (books, journals, databases, videos) for the library to purchase as resources for their own research and as resources for their students and, when not using OER resources, to put materials on reserve for students in the Library.
Assignment Essentials Relevant to All Assignments

Students complete assignments to:
- practice applying skills, content, and concepts learned, demonstrate their achievement, and
- to be assessed and receive feedback on the achievement of assignment, course, and program learning outcomes.

- How will my assignment prompt students to show what content they have learned and/or demonstrate their skills?
- Does the array of assignments in this class address students with varied learning preferences multiple means of demonstrating knowledge and skill acquisition?

Students need clear and transparent expectations and instructions documented in writing:
- Assignment instructions should clearly identify tasks, provide the required format elements, and describe the final product.
- Assignment descriptions should help students clearly understand the main purpose.
- Assignment descriptions should also demonstrate the connections to how their work meets learning outcomes, builds on their knowledge and skills for future assignments, relates to graduation, and has professional relevance.
- A grading rubric that expresses expectations and aligns with the outcomes will assist students as they complete the assignment.

- How will assignment instructions clarify what tasks to do, how they are connected, how to get started, and how to complete the tasks?
- How will you know if students met the assignment expectations; how will students be assessed?

Chunk and scaffold assignments: Students perform better on assignments when instructors break them into manageable chunks. Presenting students with smaller assignments that build into a larger one creates the opportunity for early feedback and improvement.

Example of smaller assignments that build toward a research essay that meets expectations:

<table>
<thead>
<tr>
<th>Course timing</th>
<th>Week 6</th>
<th>Week 8</th>
<th>Week 10</th>
<th>Week 12</th>
<th>Week 14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Developmental Assignment Due</td>
<td>Thesis statement</td>
<td>Annotated Bibliography</td>
<td>Outline</td>
<td>Essay Draft</td>
<td>Final essay</td>
</tr>
</tbody>
</table>

Reflection Aids Retention: Students' learning improves and sticks when they reflect on their process and their completed assignment:
- Ask students to report what they learned from the assignment or what they would do differently in a future assignment.
- Student reflection on the assignment process and performance may also help you shape the next version of the assignment.
Examples of Assignments that Combined Cover the Sustainability ILO Rubric

These two sample assignments together address all the outcomes in the ILO Sustainability Rubric on page 10 of the guide. Feel free to use these as-is or to customize for your purpose. You can also use this as a model for how to customize an assignment to the rubric categories.

ASSIGNMENT 1

Climate Disruption Assignment

Purpose
Articulate the science behind the climate crisis, the threats and opportunities it presents, and what we individually and collectively can do to address the problem.

Skills
- Accurately interpreting climate science graphics
- Properly identifying, acknowledging and citing credible information sources

Content Knowledge
- Climate science
- Related vocabulary
- Climate threats
- Effective climate action (individual to global)
- Opportunities presented by solving the problem

Task
This assignment has you analyze the 2019 United in Science Report of the World Meteorological Organization and others.

Write a letter* to a government representative of your choice. Throughout your letter, cite the source and specific pages where you get your information. Your letter should explain all of the following:

- the justification behind the 1.5°C warming limit;
- how soon might we reach that limit given the best-estimate of the range of uncertainties. (refer to Figures on page 19);
- how soon must we reach carbon neutrality globally to avoid exceeding the limit;
- the actions necessary to do so (globally and at the individual level);
- the opportunities does the transformation to a carbon-free economy provide? (Be sure to address the potential for economic and equity gains (or losses)).

* Alternatively you might choose to produce a video or a different audience for your written piece.
Readings to assist you in understanding of the science.

An easy-to-understand source can help you understand the science.
https://www.ipcc.ch/site/assets/uploads/sites/2/2018/12/ST1.5_OCE_LR.pdf

The United Nations 2018 Special Report, Global Warming of 1.5 C. https://www.ipcc.ch/sr15/

Criteria for success

- Address assignment completely
- Properly explain the scientific arguments
- Properly cite and acknowledged sources
- Use appropriate professional vocabulary
ASSIGNMENT 2

Indigenous Peoples and Climate Disruption Assignment

Purpose
With respect to the environmental sustainability crisis students should:

- Recognize the interconnectedness among environmental quality, social equity, and economic well-being.
- Articulate how social factors affect environmental sustainability
- Recognize the perspectives of different stakeholders

Skills
- System mapping tools and concepts for analysis of complex systems
- Articulating an interdisciplinary written argument that describes a complex system

Content Knowledge
- Stakeholders and actors in the climate disruption
- Three 'P's (also known as the three E's) or spheres of sustainability and the factors contained therein; how these factors and the spheres are interrelated
- The place of indigenous people in that context

Task
1. Review the following sources on Systems Mapping
   - https://medium.com/disruptive-design/tools-for-systems-thinkers-the-6-fundamental-concepts-of-systems-thinking-379cdac3dc6a
   - https://medium.com/disruptive-design/tools-for-systems-thinkers-systems-mapping-2db5cf30ab3a

1. On Figure 1, provided:
   a. Add the following nodes (and/or connections) to the figure near the most related sphere (P). Let features that induce change (for example environmental law) be represented by arrows (connections) rather than nodes:
      - Education
      - Democracy
      - Autocracy
      - Capitalism
      - Globalization
      - Biodiversity
      - Food security
      - Governance
      - Environmental Law
      - Natural disaster
      - Economic disparity
- Population size
- Human rights
- Consumerism
- Waste management
- Enforcement
- Poor
- Current Generation
- Future Generation
- Conflict
- Homelessness
- Capitalists
- Consumers
- Workers

b. Draw in and label the nodes and all of the connections. (We recommend drawing in pencil. Do not worry if your figure starts to look messy. The real world is messy!)

c. Attach signs to the connections to depict the nature of the relationship.

d. In one or two paragraphs, identify and describe one or two feedback loops that emerged in your analysis.

2. Indigenous Peoples’ Case Study
   a. Review the following sources:
      - United Nations sources on Sustainability and Indigenous peoples, generally
        - United Nations Sustainable Development Goals Indigenous Peoples [website]
        - Indigenous People Positions Paper
        - Indigenous Peoples and the 2030 Agenda | United Nations For Indigenous Peoples
      - UN Sustainability, indigenous people and climate change
        - World Indigenous Peoples Initiative to the UNSG Climate Action Summit, Commitments for Action on Climate, 2019.
      - This Changes Everything [video]
   b. On Figure 2, provided, recreate your System Map with indigenous peoples at the center and climate impacts as the environmental sustainability focus. You are still considering the welfare of all humans and the planet (the entire map), but now you are primarily focused on how indigenous peoples may affect, and be affected by, the whole. Be sure to include all important stakeholders. (Note: some of your nodes and connections may be the same. Some may be different.)
   c. Write a journal article (1000 - 2000 words) describing the interactions between indigenous peoples, climate change, and global welfare, using your system map as a tool to analyze the interrelationships. What does your analysis indicate about how better outcomes can be attained?
Criteria for success

- System map (Figures 1 and 2) is rich and meaningful (appropriate nodes, connections, and signs); addressing the three spheres (three Ps) of sustainability with integrity.
- Appropriately identify all main stakeholders and at least one feedback loop.
- Figure 2 reflects context and conditions of indigenous communities globally.
- Writing accurately and articulately describes the interconnectedness of the many elements participating in the potential for a sustainable world.