Implementation

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University of Hawaii System Office of Sustainability (UHOS)

Innovation for the perpetuation of well-being

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Welcome!

This document is intended to assist campuses in the University of Hawaii 10 campus system to implement and adapt a Sustainability Designation (S Des) for courses integrating sustainability across the curriculum. We are also pleased to share this document with other university systems seeking a model for transforming curriculum. We began conversation about this designation in 2008, with the first conversation about sustainability across the UH system, and what it meant to us as faculty. I attended several trainings, including the AASHE STARS training, and the AASHE Sustainability Curriculum Leadership program modeled on the Ponderosa Project. These discussions have always been about teaching, learning, students — and the future. To paraphrase David Orr, students deserve an education relevant to the future they will inherit. We need to tell them the truth, and convey in our courses in every discipline the knowledge, skills, attitudes, and behaviors that will be needed to survive, and thrive, in a more sustainable world. We need to ensure that higher education remains relevant in a rapidly changing international context, where “local” and “global” meet and where humans comprehend our relationships and function with the biosphere, and with each other.

Mahalo to the many colleagues who have assisted with, experimented, discussed, designed, failed, championed, negotiated, acquiesced, spoken up, and most of all, been patient and flexible in this long grassroots effort: Tim Botkin, Roberta Brashear, Eileen Cain, Justin Carvalho, Joshua Cooper, Harry Davis, Bob Franco, Carl Jennings, Dave Krupp, Wendy Kuntz, William Labby, Pua Lincoln-Maielua, Keala Losch, Christian Palmer, Tara Rojas, Mike Ross, William Sage, Cynthia Smith, Norman Takeya.

Mahalo to UH president David Lassner for his support of EP 4.202, the University of Hawaii Executive Policy on Sustainability, and for providing resources and leadership to move this effort forward, bringing together related initiatives: STEM, SENCER, Hawaii Papa O ke Au, and the Mālama Honua Worldwide Voyage. Deep gratitude to the scholars who have provided input and insight: Hokulani Aikau, Josh Kaakua, Linda Furuto, Manulani Meyer, Aulii Silva, Ramsay Taum, Arnim Wiek.

I would like the reader to know the intentions of the S Designation are to use the best aspects of a system bureaucracy to provide coherence in a rapidly changing curriculum: to support interdisciplinary dialogue among and between faculty in all areas; to inspire research and community engagement on real, local sustainability issues; to teach sustainability principles, skills, attitudes, and ways of thinking and knowing with consistency, rigor, and hope.

Krista Hiser, PhD
Professor, Kapi’olani Community College
PART 1: BACKGROUND

VALUES

The S Designation can be useful for many types of course design, driven by place-based, ‘āina-based, and culture-based curricula as well as many types of active pedagogy such as service-learning, problem-based learning, and undergraduate research. We seek to suffuse curriculum with localized understandings and culturally relevant and appropriate language, vocabulary, protocols, values, wisdoms, expertise, and ways of knowing.

Sustainability is continuity, the practice of awareness of our context and culture and how we care for and within both. In Olelo Hawai‘i, continuity is mo‘o. So another way of asking this question about sustainability is: “Does the mo‘o live in my course?” How does continuity weave throughout my class and the assignments I ask from my haumana?

MO‘O (Continuity) is found in the following ideals:
moʻolelo - what are the stories you are teaching? How do they link with the spaces and cultures you are now in?
mo'okuauhau - what is the historic context of your ideas and what is the genesis of each of them?
moʻopuna - what does the future look like and how does your course affect its efficacy?

Other core values of sustainability curriculum across the system the system include:

‘Āina aloha - "Love of the land", speaks to a relationship of kinship with the natural environment, an acknowledgement that mankind is a part of nature, whose fate is intrinsically linked to the health our our lands and seas.

`imi `ike - "Student is the teacher / Teacher is the student,” Imi Ike acknowledges the reciprocal relationship of teacher & student, thereby acknowledging all forms of knowledge as inherently valuable.

Malama Honua - "To care for our island earth", Hōkūle‘a’s message to our global community. Malama Honua means to take care of and protect everything that makes up our world: land, oceans, living beings, our cultures, and our communities. It means learning from the lessons of islanders to take care of your limited resources, as though you were living on a canoe in the open ocean or an island in the middle of the sea. On a canoe, water, food, plants, and other basic needs are in limited supply and are tended to with great care; so too we must tend to our resources on islands, and for all of Island Earth. (PVS Website.)
And a new noun, **mauō**, for **sustainability**. **Mauō** is made up of two basic words; **mau**, stability, unbroken continuity, and **ō**, enduring in a healthy state. This new Hawaiian word was coined by the Hawaiian Lexicon Committee in 2016. Formerly, there was no need for the word **mauō** because it was a normal part of Hawaiian life. Today, it is critical that we distinguish between what is sustainable and what is not. The Māmaka Kaiao New Words entry is: **mauō** *common noun* **Sustainability. Comb., mau +ō.**

The values of ho‘omauō and `imi `ike are how we can both “think local” and “think global”:

> Figure 1: “establish a university-wide culture that integrates sustainability values in an island context with global impact.”

**DEFINITIONS**

While there are many different approaches and definitions to “sustainability”, we mean, in general, “serving the needs of the present without jeopardizing the needs of the future.”
Wherever possible, we refer to the original Earth Charter which defines sustainability “in all its dimensions: cultural, economic, environmental, and social.”

The Earth Charter introduces the “Four Pillars” of sustainability:
• cultural vibrancy,
• economic prosperity,
• environmental responsibility
• and social justice.

Thus, an environmental science course seems “obviously” related to sustainability, but in fact some courses could relate to environment or society without directly interacting with sustainability concepts which live, really, in the intersection of two or more pillars. A common critique of higher education is its tendency to reinforce “silos” of thinking which is a common cause of ‘unintended consequences’ or unsustainability; thus, it is a benefit to students to teach sustainability issues and the content of academic disciplines through a more real-world “systems thinking” framework, which reinforces our capacity to address challenges as they exist, rather than as we have organized our information.

**GOALS of the S Designation**

• Students with an interest in sustainability will have a way to navigate through existing Gen Ed requirements, without adding any new requirements, using the S Designation as a guide. The designation makes existing course offerings more visible.
• The S designation can also be applied in CTE courses; the S Designation provides an entry point and connection with general education courses. S Des courses may be desirable preparation for some CTE fields.
• The S designation ensures coherent integration of Sustainability Across the Curriculum, including place-based, real-world problem solving and appropriate active pedagogies.
• The S designation provides a benchmark and method of “counting” curriculum for strategic planning, campus sustainability plans, and climate action plan documentation.
• The S designation provides grounding for 2 to 4 year pathways with a concentration in Sustainability.
• The S designation provides students and faculty with common vocabulary that enables a clear statement of the problems encountered in the study of sustainability.
• The S Designation process supports campus work in context, relevant to localized issues, resources, and campus cultures.
• The S Designation has systemwide coherence, but is ultimately unique to each campus.

The S Designation is a strategy to implement EP 4.202 System Sustainability Policy, and it is recommended that all faculty familiarize themselves with the goals of this policy as they relate to curriculum, research, teaching & learning, culture, and community engagement.
PART 2: PROCESS FOR IMPLEMENTATION

Overview

Recommended steps for campus implementation include:

Step 1. Create a formal campus committee, preferably a standing subcommittee of the faculty senate, to manage Sustainability Curriculum on that campus. Note: most campuses have two committees, a Sustainability Curriculum Committee and a General Sustainability Committee.

Step 2. Create strategic plan language. The designation should be tied to campus strategic plan, campus sustainability plan, and campus climate action plans.

Step 3. Design an intake process. The intake process should emphasize _conversation_ and _interdisciplinary dialogue_. It should conclude with a vote to designate the course, or to wait.

Step 4. The course is identified as S Focused, S Related, or S Ready.

Step 5. The course is designated at the CRN or Course Level. CTE and other alternative designation methods are considered.

Step 6. The course information is entered into the UHOS Master S Designation Spreadsheet. The faculty member includes a statement in their syllabus, adds one sustainability learning outcome, and then shares the syllabus with the committee.

Step 7. Courses will be made visible to students in Banner, tracked for strategic planning purposes, and highlighted as appropriate at campus or system level. Collaborations, pathways, and opportunities for professional development will be identified from the master spreadsheet.

Step 8. Courses are re-evaluated every 5 years to maintain or upgrade their S designation. Faculty may “upgrade” from S Related to S Focused at any time by revisiting their application and sharing with the committee.

Step 9. Next Steps: student learning outcomes are assessed at campus or system level to determine efficacy of the curriculum in developing key competencies in sustainability.

_The next section of the handbook goes into more detail about each of these steps._
Committees

1. *Creating a formal campus committee, preferably a standing subcommittee of the faculty senate, to manage sustainability curriculum on that campus. Most campuses now have two committees:*

<table>
<thead>
<tr>
<th>Sustainability Curriculum Committee</th>
<th>General Sustainability Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Formal Faculty Senate Subcommittee</td>
<td>Informal, or chancellor-initiated</td>
</tr>
<tr>
<td>Faculty representative from each academic department and unit.</td>
<td>Anyone can join. Recommended to have VCAA, VCSA, and VCOS represented, to include academic affairs, student affairs, and operations.</td>
</tr>
<tr>
<td>Students may be invited as guests but are not voting members of this committee</td>
<td>Student membership encouraged.</td>
</tr>
<tr>
<td>Reports to faculty senate, and back to departments.</td>
<td>Reports to chancellor</td>
</tr>
<tr>
<td>Has a representative on the SSCC (System Sustainability Curriculum council.)</td>
<td>Has a representative on the SSC (System Sustainability Council)</td>
</tr>
<tr>
<td>One member also serves on General Sustainability Committee!</td>
<td>One member also serves on Sustainability Curriculum Committee!</td>
</tr>
<tr>
<td>Responsible for promoting, managing, approving (by vote of quorum), recordkeeping, sharing information, and renewing designation.</td>
<td>Responsible for campus sustainability plan, Earth Day, all aspects outside of curriculum.</td>
</tr>
</tbody>
</table>

At the end of this document, a campus-by-campus report is provided, including where available the organization, membership, and charters of committees on each campus. The primary function of the committee should be to oversee the S Designation and support faculty development in this area.

Sustainability Curriculum Committee Guidelines and Charters

**Haw CC** has a formal faculty senate subcommittee and courses ready to implement the S Designation. **Haw CC** Palamanui is participating.
Hon CC has a formal faculty senate subcommittee “Sustainability Designation Review Committee” Their charter is contained in the appendix.

Kau CC has an ad hoc faculty senate subcommittee “Sustainability Designation Committee” established to create and implement criteria to determine which classes fulfilled the S-Focused and S-Related Criteria. Their charter is contained in the appendix.

Kap CC has a formal faculty senate subcommittee “Sustainability Committee” which originally formed as an ad hoc but was voted as a standing committee in 2015. The primary function of the committee is to handle S Designation course review process; the committee also interacts with campus sustainability issues as they relate to faculty life and classroom impacts. Their charter is contained in the appendix. Kap CC recently approved its first course level S Designation and has a process to designate all sections of a course during regular 5 year review.

Lee CC has an informal committee that has been involved with the S Designation criteria since 2010. While their committee is active, they do not have a formal designation mechanism at this time.

Win CC has a formal faculty senate subcommittee, “Sustainability Curriculum Committee.” The primary responsibility of the Sustainability Curriculum Committee is to develop and subsequently apply a model for the implementation of s-designation courses, defining terms, policies, procedures for approval, and assessment of these courses. Their charter is contained in the appendix.

UH Maui College has a chartered UHMC Sustainability Committee which includes the Chancellor, VCs, faculty, staff and students. It is charged with overseeing campus sustainability efforts and administering the UHMC Sustainability Lens, A sub-set of this committee is representative to the Academic Senate as an ad hoc group, open to any interested faculty members.

The 4-year campuses are completing catalog audits to determine courses eligible for S-Focused designation; at this time, mechanisms for scaling the intake and review process to the larger and more complex scale are still being determined at UHM, UHWO, UH Hilo, and UH Maui College. The goal is 2 year – 4 year articulation and the creation of meaningful pathways into sustainability related programs as well as upper division courses.

Strategic Planning

2. Creating strategic plan language. The designation should be tied to campus strategic plan, campus sustainability plan, and ACUPCC campus climate action plans. Example:

Kap CC
Campus Strategic plan 2015-2020: Outcome II. Hawaii Innovation Initiative
(F)* Increase the number of sustainability designated course sections from 27 to 60 and develop "Pathways to UH 4-year Campuses."
Establish baselines and benchmarks for ‘āina-based and place-based learning and teacher preparation
Increase annual number of students completing service learning assignments from 700 to 900.

Samples of strategic plan language can be included in the Campus Implementation Appendix.

Talk Story Intake

3. Designing an intake process. The intake process should emphasize conversation and interdisciplinary dialogue. It should conclude with a vote to designate the course, or to wait.

In general, the faculty member completes a google form questionnaire to apply for the designation. Suggested questions are below. This process may be tailored to suit campus needs and culture.

- Timestamp/Name/Department/Course Alpha, Number, and Title
- Personal statement: why are you seeking the S Designation?
- Indicate which of following Sustainability Learning Outcomes will be added to the proposed S Designation course syllabus (in addition to existing course competencies/outcomes). We ask faculty to limit their choice to one or two learning outcomes.
- Indicate if the course will be sustainability "Focused" or "Related".
- Select one or more of the Sustainability Core Concepts that will be included in the syllabus
- Provide a brief statement relating current perspectives on sustainability through your disciplinary
- Which Sustainability Learning Outcomes will you add to the course? (Pull down Menu)
- For the Sustainability Learning Outcome(s) you checked off above, describe how they will be incorporated into the course.
- Describe one or more forms of active pedagogy that will be used in the course.
- Describe any readings and resources related to sustainability that are used in the course.
It is strongly recommended, though not required, that a faculty member attends a “Talk Story Intake” meeting of the committee to discuss their course. Guests may be invited. These conversations serve several important functions: professional development for all, guidance for faculty new to sustainability, and coherence of sustainability content across first year and second year courses.

For example, if students are viewing a particular film in many Eng 100 sections, it might not make sense to show that film in second year courses. If students are completing a carbon footprint exercise in Pacific Island Studies, they would be familiar with those concepts in a later Economics course. Knowing when and how to introduce potentially overwhelming environmental topics across the curriculum helps to avoid creating “green fatigue”.

The suggested “Intake Interview” is also an opportunity to introduce Hawaiian cultural components and to develop a sense of place. Localized issues and established community partner relationships can be shared, creating synergies with existing projects.

A relaxed and welcoming ambiance can be created with music, food, and water to drink. If appropriate, an oli, invocation, or setting of intention can establish the larger values and purpose of the meeting. This could also be accomplished with an inspirational quote, moment of silence, or whatever method feels comfortable. The process should not feel like extra paperwork, or a bureaucratic rubber stamping.

All members of the committee and guests should briefly introduce themselves and share their relationship to sustainability curriculum and how they teach it.

30 minutes to 60 minutes is ideal to discuss each course, with committee members taking turns asking questions from the application form. Notes are taken directly into the google forms spreadsheet. Allow all members of the committee to share ideas and create interdisciplinary connections. Of course, the intake interview may be condensed to whatever time is available.

A vote is taken; a quorum of committee members must be present to vote. It is okay to “hold” a course, putting it in the S Ready category to follow up later with the faculty member after they have had a chance to develop their assignments or course design.

Faculty are asked to submit their syllabus, course materials (texts, films), and an assignment if they wish to share it. This can be held at the Laulima SYS Sustainability Curriculum. A resource bank of texts, articles, and films can be developed from this list.

Be sure to acknowledge the faculty member and celebrate the designation by sharing with the relevant department chair and campus administrators.
S Focused, S Related, or S Ready, Honors

4. The course is identified as S Focused, S Related, S Ready, or Honors

**S Focused (SF)**

S Focused courses have a thematic, primary, explicit focus on sustainability as an integrated concept having social, economic, and environmental dimensions. Course content is at least 60% focused on Sustainability. (S Focused courses may in future be indicated on transcript and/or count towards certificates or program entry as these mechanisms evolve.)

**S Related (SR)**

An S Related course is primarily focused on a topic other than sustainability, but incorporates a unit or module on sustainability or a sustainability challenge, includes one or more sustainability-focused activities, or integrates sustainability issues throughout the course. These units/modules, activities or issues should be documented in course descriptions or syllabi. A minimum of 10% of course content is focused on Sustainability. (S Related courses allow faculty to get started with an assignment related to sustainability. They may evolve into S Focused courses, but would not be indicated on transcripts.)

**S Ready**

An S Ready course is a course identified by catalog audit, departmental review, or faculty input as potentially S Focused or Related, but for any reason has not gone through the campus designation process, or does not meet some feature of the designation, or does not wish to include the formal designation. S Ready courses would not be identified to students, but are useful for internal information in order to identify courses that could be developed into S designated courses.

**SUSTAINABILITY INDEPENDENT STUDY COURSES (S-INDEP):** An idea under discussion is to create an Honors Sustainability Independent Study option, modeled on Honors courses. Any section of any course could be turned into an S-INDEP by a student wishing to design additional projects or readings into the course. S Designation faculty might serve as advisers on this process, and the Sustainability Curriculum Committee could oversee the Independent Study designations. Campuses should work with faculty senate and existing Honors programs to explore this model.

**Alternative Models: CRN, Course Level, CTE, Worldviews**

CRN (Instructor) vs. Course-Level Designation; CTE Designation; Alternative Models of Sustainability Worldviews
The S Designation was designed to integrate Sustainability Across the Curriculum. The criteria are designed to create coherence and rigor — not obstacles. The S Designation is equally applicable to both General Education and Career Technical Education (CTE) courses, although the process and criteria may differ. Thus, CTE courses may have slightly different requirements as relevant to that field.

If the unique background or course design of a particular topic seems to interact with Sustainability from a different perspective, an “alternative worldview” application for the S Designation may certainly be proposed to the campus committee. For example: foreign exchange or language courses; field-based courses; indigenous perspectives and Hawaiian ways of knowing.

However, in general:

The designation is usually obtained first at the CRN (Course Record Number) or Instructor level. This is an opt-in process wherein a particular instructor takes initiative to consciously integrate sustainability concepts and global sustainability dialogue into their course. The instructor “holds” the designation for 5 years, at which point they will be asked to update their S Designation, via their campus committee. At the CRN level, the S Designation does not go through Kuali, or the Curriculum committee; the instructor includes all original learning outcomes and descriptions in the course, adding one Sustainability Learning Outcome and a syllabus statement.

Courses may also be designated at the “course” level, meaning that ALL sections of a course are S-designated. This process occurs at the 5 year update & review stage, using normal course update procedures and reviews, in cooperation with the S Designation committee. The course update goes first through the S Designation committee, then to Curriculum committee. A course coordinator holds responsibility for ensuring that all sections of this course will engage appropriately with sustainability, and that the faculty or lecturers teaching the course will be current in campus, system, and statewide goals and dialogue around sustainability. See appendix, or an example of Kapi`olani’s approach to designation at the course level; campuses may need to follow their own guidelines.

Again, the purpose of the designation is to create curricular coherence that engages students in the global and statewide goals and dialogue that most impact their future. It is thus an important part of regular course updating.

**UHOS Master Spreadsheet**

6. The course information is entered into the UHOS Master S Designation Spreadsheet. The faculty member includes a statement in their syllabus, adds one sustainability learning outcome, and shares the syllabus with the committee.
Spreadsheet fields (be sure to collect all information):

<table>
<thead>
<tr>
<th>CAMPUS</th>
<th>Course Alpha</th>
<th>Course #</th>
<th>Course Title</th>
<th>Last Name</th>
<th>First Name</th>
<th>Department</th>
<th>S-focused</th>
<th>S-related</th>
<th>S-Ready</th>
</tr>
</thead>
</table>

Spreadsheet Access:
Haw CC: Roberta Brashear
Haw CC Palamanui: Pua Lincoln-Maielua
Hon CC: Cynthia Smith
Lee CC: Tara Rojas
Kap CC: Wendy Kuntz
Kau CC: Justin Carvalho
Win CC: Christian Palmer

UHMC: Tim Botkin
UHM: Brian Turano
UHH: Ryan Perroy
UHWO: Manulani Meyer

Collaborations, pathways, and opportunities for professional development will be identified from the master spreadsheet. The master spreadsheet will be used to provide regular updates to a systemwide list, made visible at: the UHOS website under Programs/Courses:
http://www.hawaii.edu/sustainability/sustainability-courses/

Banner Visibility

7. Courses will be made visible to students in Banner, tracked for strategic planning purposes, and highlighted as appropriate at campus or system level.

Be sure to include whoever does Banner input and programming in conversation about the S Designation; often, this is done by department secretaries. The ideal protocol is:
For S Focused courses, follow WI procedures, manually inputting S in the Course Title, just as for WI courses (example: WI-Business & Managerial Writg).

Example of Sustainability Designated course listing in Banner:

SF-Composition I
This ENG 100 class section (CRN 32160) is S-focused, meaning that content will concentrate on sustainability, including its social, economic, and environmental dimensions and/or the class will examine an issue or topic using sustainability as a lens. For more information please visit:
(include campus S Designation website or link to UHOS)
For S Related courses, include just the course comment:
This ENG 100 class section (CRN 31121) is S-related (SR), meaning that some assignments and content will concentrate on issues of sustainability. For more information please visit: (include campus S Designation website or link to UHOS)

Be sure to update department chairs regularly; a great idea is to chart the number of S Designated courses in each department, providing a snapshot of Sustainability Across the Curriculum.

Renewing & Upgrading

8. Courses are re-evaluated every 5 years to maintain or upgrade their S designation.

No procedures exist yet for re-evaluation.

Next Steps

9. Next Steps: student learning outcomes are assessed at campus or system level to determine efficacy of the curriculum in developing key competencies in sustainability.

No procedures exist yet for program-level assessment, although the system council has agreed that the Key Competencies in Sustainability provided by Arnim Wiek provide a strong starting point.

Key Competencies

The System Sustainability Curriculum Council has approved use of Arnim Wiek’s “Key competencies” for sustainability, which are supported by a variety of scholars (de Haan 2006; Sterling and Thomas 2006; Barth et al. 2007; Wiek et al. 2011b; Frisk and Larson 2011; Rieckmann 2012; Steiner 2013; Thomas and Day 2014).

These key competencies are (Wiek et al. 2011b):
• Systems thinking competence
• Futures thinking (or anticipatory) competence
• Values thinking (or normative) competence
• Strategic thinking (or action-oriented) competence
• Collaboration (or interpersonal) competence

Conversations about “hallmarks”, “outcomes” and “foundations” create ongoing confusion. At this time, there is no movement to make the S courses required; the goal is to catalyze diffusion
of sustainability learning throughout the curriculum. However, a broader umbrella of learning outcomes seems useful.

PART 3: COURSE CONTENT

It should be noted that, while transforming and updating the curriculum overall is a goal, not every course needs to relate to sustainability. According to AASHE STARS 2.0 manual:

> While a foundational course such as chemistry or sociology might provide knowledge that is useful to practitioners of sustainability, it would not be considered a sustainability course. Likewise, although specific tools or practices such as GIS (Geographical Information Systems) or engineering can be applied towards sustainability, such courses would not count as sustainability courses unless their primary and explicit focus is on sustainable applications. If there is a sustainability unit, module or activity within one of these courses, but it is not the main focus, the course may be counted as a “course that includes sustainability” [ie: S Related].

In this section, we revisit the intake interview questions adding more information about the value of this information. Again, it is recommended that the process include some form of dialogue, interview, or intake process; however, the questions themselves as well as the shape of that process are determined by the campuses.

Personal statement

Provide a brief statement relating current perspectives on sustainability through your disciplinary lens.

Allowing faculty to articulate and share their perspective on sustainability is an important part of creating a shared culture around sustainability. They may discuss their personal commitments or behaviors, or which aspects of sustainability issues matter most to them. Teaching is personal, and faculty values come across in their teaching. Articulating this statement helps these values become visible to the teacher. This ultimately helps to reduce cognitive dissonance.

Sustainability Learning Outcomes

*Indicate which of following Sustainability Learning Outcomes will be added to the proposed S Designation course syllabus (in addition to existing course competencies/outcomes). We ask faculty to limit their choice to one or two learning outcomes.*
For the Sustainability Learning Outcome(s) you checked off above, describe how they will be incorporated into the course.

*Indicate which of following Sustainability Learning Outcomes will be added to the proposed S Designation course syllabus (in addition to existing course competencies/outcomes). We ask faculty to limit their choice to one or two learning outcomes.*

For the Sustainability Learning Outcome(s) you checked off above, describe how they will be incorporated into the course.

Faculty teaching a Sustainability Designated course should include one or more of these learning outcomes for their course, in addition to the regular learning outcomes in the course outline. (If the Sustainability Learning Outcome is added to the course outline, that is a way of designating ALL sections of that course; see: Alternative Models)

1) Define sustainability on local, national, and international levels.
2) Identify the personal values and attitudes that can facilitate sustainable living.
3) Describe how the individual relates to the wider issues of sustainability.
4) Measure one’s impact on the triple bottom line: People, Planet, Profit.
5) Identify the sociocultural values and attitudes that facilitate sustainable living at the local, regional and global levels.
6) Apply concepts of sustainability to local, regional and/or global challenges.
7) Demonstrate how concepts of sustainability are connected to local, regional and global issues.
8) Describe how traditional and indigenous perspectives inform practices of sustainability.

These learning outcomes were developed by a KCC Faculty C4ward group Sustainability Across The Curriculum in 2011-2012. The group spent an entire year researching syllabi from universities across the US and internationally, and consolidated their findings to this “bank” in order to streamline and simplify.

Faculty are welcome to write a new learning outcome, and add it to the bank!

**Core Concepts**

Select one or more of the Core Concepts of Sustainability that will be included in the syllabus.

*2016 Core Concepts of Sustainability*

1. Sustainable economics: Quadruple Bottom Line, Gross National Happiness
2. Ecosystem Services / Biodiversity
3. Ecological Footprint, Carbon Footprint
4. Cradle to Cradle / Waste Reduction
5. Climate Change Mitigation / Renewable Energy
6. Local First / Food Sovereignty / Food Miles
7. Adaptive Resilience

**Why Core Concepts?**
The core concepts have evolved from systemwide discussion since 2009, and are regularly reviewed and updated by the System Sustainability Curriculum Council. For example, in 2015 the (then committee) changed concept 5 from Net Zero Energy to Renewable Energy and Climate Change Mitigation, expressing a conceptual focus on sustainable energy, with language evolving to emphasize the significance of climate change. The Core Concepts are intended to:

• Create common vocabulary across courses, levels, and disciplines in the system.
• Represent “google friendly” terms or umbrella terms that drop students into the global discourse on sustainability
• Evolve as sustainability evolves (though we strive to keep it at 7).

A powerpoint, “Sustainability 101” is available (hiser@hawaii.edu), providing a localized framing and an overview of each concept. A Brief description of each concept follows:

**7 Core concepts of Sustainability**
S Designation: University of Hawaii System

*Sustainability is here defined as serving the needs of the present without jeopardizing the needs of the future. These core concepts refer to sustainability in all its dimensions: environmental, economic, social, political, and cultural.*

**Sustainable Economics**
(Triple/Quadruple bottom line, Gross National Happiness)
Sustainable (or ecological) economics is defined by its focus on nature, justice, and time, as well as Issues of **intergenerational equity**, **irreversibility** of environmental change, **uncertainty** of long-term outcomes

**Ecosystem Services**
Ecosystem services describe what nature does for “free”. These services fall into four broad categories: **provisioning**, such as the production of food and water; **regulating**, such as the control of climate and disease; **supporting**, such as **nutrient cycles** and crop **pollination**; and **cultural**, such as spiritual and recreational benefits.

**Ecological Footprint**
(Carbon Footprint)
An **ecological footprint** is a measure of human impact on Earth’s **ecosystems**. It’s typically measured in area of **wilderness** or amount of **natural capital** consumed each year. It is estimated that as of 2007 our planet has been using natural capital 1.5 times as fast as nature can renew it.
**Waste Reduction**
(Cradle to Cradle, C2C, Regenerative Design)
C2C is a holistic economic, industrial and social framework that seeks to create systems that are not only efficient but also essentially waste free.
Oahu deals with 1.6 million tons of waste per year. (9lbs per day, per person.) Recycling and waste-to-energy combined for a total waste landfill diversion rate of nearly 73% for 2014.

**Carbon Neutrality**
Carbon neutrality is used in the context of carbon dioxide releasing processes associated with transportation, energy production, and industrial processes such as production of carbon neutral fuel.
Carbon neutrality is related to energy, net zero energy, and renewable energy.

**Local First**
(Food Sovereignty, Food Miles)
Local first means that the local economy and wellbeing of local communities is important. “Buy local.”
Food sovereignty and Food Miles are local first concepts applied to food.

**Adaptive Resilience**
Resilience is the capacity of an ecosystem or community to respond to a perturbation or disturbance by resisting damage and recovering quickly.
Adaptive resilience uses a disruption or threat of such to move beyond “business as usual” to do things differently or more sustainably.

**Active Pedagogy**
Sustainability Curriculum is not just about the content; it is about pedagogy.

Research indicates that there is a strong potential for students to become overwhelmed by sustainability and environmental issues. Cognitive dissonance occurs when students are told one thing by teachers, but then see something else on campus -- for example, “we should conserve energy” (while wearing sweaters inside because the AC is too cold.) The best way to teach self-efficacy and develop sustainable behavior change is to give students an opportunity to see solution-based thinking in the real world. They become inspired and see new career paths when they work with nonprofits, community organizations, and leaders in the community.
In fact, extensive research is emerging on the cognitive science of climate change, and why it’s so hard to talk about. See Don’t Even Think about It: Why Our Brains are Wired to Ignore Climate Change by George Marshall. Most of us recognize that climate change is real yet we do nothing to stop it. What is the psychological mechanism that allows us to know something is true but act as if it is not?

Faculty teaching an S Designated course should be able to talk about their interpretation of this concept, through any of the following:

- service-learning
- ‘āina-based learning
- place-based learning
- problem-based learning
- project-based learning
- undergraduate Research
- Other

Appendix: Campus Implementation

“THIS IS HOW WE DO IT”

Each campus is invited to share whatever they want to in this section. Suggestions:

- Contact person
- Committee Charters
- An informal “how it’s going” type of statement
- What they have changed about the intake process
- How the S Designation works on their campus
- Suggestions to overcome obstacles
- Model courses
- Links to campus websites, further information, ETC.

This information can be valuable to faculty ON your campus, as well as on OTHER campuses.

Haw CC

Haw CC Palamanui:
Hon CC

Honolulu CC Charter

Approved by FSEC
February 12, 2016
Sustainability Designation Review Committee
Committee Details
  _Tenure/Non-Tenure: T/N
  _Full Time/Part Time: F/P
  _Elected/Appointed: A

Composition
The Committee is made up of faculty from the following divisions. The Committee will be appointed by the Committee on Committees in consultation with the Chair of the Sustainability Committee, to be staffed as follows:
  _Four representatives from University College (UC), one each from the following areas: Math/Natural Sciences; Language Arts; Humanities, and Social Sciences; Kulana Hawai’i.
  _One representative from Student Services (Counselor)
  _One representative from Tech I
  _One representative from Tech II
  _Staggered two-year terms are recommended to provide continuity.

Purpose
The Sustainability Related Designation Course Application Review Committee will ensure courses receive the S-Designation in alignment with campus and system curriculum standards.

Function
This committee
  _Reviews and approves applications for S-Designation in sustainability related courses.
  _Ensures that the appropriate information as required by system and college procedures be included in each curriculum and course proposal.
  _Submits an annual report to Committee on Programs and Curricula listing those courses granted S-designation.

Workload
The committee will meet as needed to review proposals submitted based on a submissions timeline established by the Committee each year.
ARTICLE I. PURPOSE AND FUNCTION OF THE SUSTAINABILITY DESIGNATION COMMITTEE

This committee was created to have a mechanism to review course outlines to insure that courses receive the Sustainability Designation (S-Designation) in alignment with campus and system curriculum standards.

This committee:

- Reviews and approves applications for S-Designation in sustainability related courses.
- Ensures that the appropriate information as required by system and college procedures be included in each curriculum and course proposal.
- Submits an annual report to Committee on Programs and Curricula listing those courses granted S-designation.

It is also responsible for creating, regularly reviewing, and, if necessary, updating the S-Designation Criteria; for creating the forms and procedures for applying for such designations; and for creating policies and forms for student waivers and for meeting the criteria through equivalent activities.

HISTORY

During Fall Term, 2016, an ad hoc committee was established to create criteria from which it could be determined which classes fulfilled the S-Focused and S-Related Criteria. As the ad hoc committee began defining the criteria for the S-designations, a Draft of the System S-Designation Handbook was released. The committee has done its best to be in alignment with the handbook and its criteria.

ARTICLE II: COMPOSITION
ARTICLE III: MEETINGS
The S-Designation Committee shall meet at least twice each semester. Additional meetings may be called by the chairperson based on need.

ARTICLE IV: BYLAWS

The S-Designation Committee may adopt bylaws as it deems necessary for its actions. All bylaws must be approved by a majority of its members, that is, by a vote of three or more.

Section 1. Parliamentary Authority - The S-Designation Committee meetings will follow Robert’s Rules of Order in all voting situations that are not otherwise provided for in its Charter and Bylaws.

Section 2. Quorum – At least three members must be present to conduct an official S-Designation Committee meeting. All votes regarding course designations by the committee must be determined by a vote of three members.

ARTICLE V: AMENDMENT OF CHARTER

Section 1. Proposing Amendments - Amendments may be proposed by any member of the S-Designation Committee. Such proposals shall require a vote of at least three members to constitute an effective vote. For an amendment to be adopted, it must receive a majority of votes.

Kap CC

Lee CC

Win CC