NEW OR REPLACE PROGRAM CODE

New Prog	gram Code 🔲 R	Replace Program Code	e Date:					
REQUESTOR CON	NTACT INFORMATION							
Name		Campus						
Title		Email	Email					
NEW PROGRAM	CODE TO CREATE							
Institution		Campus						
Level		Effective Term						
	Code (Max. Characters)	Description	Check if r	equesting new	ı code:			
College	(2)		See Ba	nner form STV	COLL			
Department				nner form STV	DEPT			
Degree/Certificate				nner form STV	DEGC			
Major				See Banner form STVMAJR				
Concentration				nner form STV	MAJR			
Minor								
Justification to warra	ant a new major/concentration	on code similar to an existing n	najor/concentration	n code:				
Is this maior/concen	tration code being used the	same way at the other UH cam	puses?	Yes \square	No			
Should this program	be available for applicants to	o select as their planned course e code as their only program of study.	e of study	Yes	No			
RULES PERTAINI	NG TO FINANCIAL AID	AND 150% DIRECT SUBS	IDIZED LOAN LI	MIT LEGISLA	ATION			
Is 50% or greater of Campus?	the classes in this program of	ffered at a location other than	the Home	Yes	No			
Is this program/majo	or/certificate financial aid elig	gible?		Yes	No			
program)?	qualify as a Gainful Employm	nent Program (Title IV-eligible c	ertificate	Yes	No			
o o		ram should match what is published by the	campus in					
Special Program Des	ignations nations Code Definitions on IRAO	☐ A ☐ B ☐	N P	_ т [U			
Required Terms of E		Spring [Summer	Extend	beb			

Form modified: Oct 20208

NEW OR REPLACE PROGRAM CODE

EXISTING PROGRAM CODE TO REPLACE, IF APPLICABLE

Program Code		Program Description						
Institution		Campus						
College		Department						
Level								
Are current students	s "grandfathered"	under the program co	ode?		Yes		No	
Should the old progr	Yes		No					
Effective Term (i	, old e. Fall 2020)	program code will no	longer be availab	le to admit or recru	ıit students.	1		
		recruitment (effects Ban AAQUIK, and SAAQUAN		and SRAQUIK) and ad	missions (effe	ects Ban	ner	
Effective Term (i	, old e. Fall 2020)	program code will no	longer be availab	le to award degree	to students	i .		
This will turn off the modules.	general student (eff	ects Banner form SGAST	TDN) and academic h	nistory (effects Banner	r form SHADE	GR) Ban	iner	
ATTACHMENTS								
	credential Certifica	ate, Associate, Bachel	or and Graduate Do	egrees, and sole cre	edential cert	ificates		
	nutes & Supporting			rriculum				
_		Certificates and Assoc	iate in Technical St	udies (ATS) Degree				
Memo from Char	ncellor to notify Vic	ce President for Acade	emic Planning and I	Policy regarding pro	gram action	١.		
Curriculum								
CERTIFICATES ONLY	: Please check one	e (1) statement. This	certificate is a					
		eeting/Approval Date:						
_		horized BOR program						
Chancellor appr	oved CO in accorda	ance with UHCCP 5.20	3, Section IV.B.10.					
VERIFICATIONS								
By signing below, I ve	erify that I have re	viewed and confirm t	he above informa	tion that is pertiner	nt to my pos	ition.		
Registrar (Print Name)		Financial Aid Officer (Print Name)		For Community Colleges, verification of consultation with OVPCC Academic Affairs: Tammi Oyadomari-Chun				
Signature	Date	Signature	Date	Signature		Date	_	
ADDITIONAL CO	MMENTS							
							· <u></u>	
_								

Form modified: Oct 2020

April 26, 2021

MEMORANDUM

TO: David Lassner

President

Michael Bruno Michael Bruno VIA:

Provost

VIA:

Laura E. Lyons Jam F. Kang Associate Vice Chancellor for Academic Affairs

FROM:

Makena Coffman

Makena Coffman

Director, Institute for Sustainability and Resilience

SUBJECT: APPROVAL OF THE NEW UNDERGRADUATE CERTIFICATE IN

SUSTAINABILITY

SPECIFIC ACTION REQUESTED:

It is requested that the new undergraduate certificate in Sustainability be approved.

RECOMMENDED EFFECTIVE DATE:

Immediately upon approval.

ADDITIONAL COST:

None.

PURPOSE:

This certificate will provide undergraduate students with an education in sustainability that complements a students' primary degree and enables them to be better environmental stewards.

The transformation of society towards environmental sustainability, incorporating social and environmental justice paradigms, is one of the most important challenges currently facing humankind. Creating, modeling, and teaching sustainability at UHM meets University-wide goals set forth in Executive Policy 4.202 as well as supports UHM's Institutional Learning Objective that "Students demonstrate excellence, integrity and engagement through ... Stewardship of the natural environment." The movement toward integrating the concept of sustainability into UHM educational programs has grown out of wide student and faculty concern over severe threats to human and environmental wellbeing as a result of environmental degradation. Part of the organizational mission of ISR is to identify and emphasize sustainability-focused curricula across the UHM campus. As of Fall 2018, through ISR, students at UHM can now easily identify sustainability-focused courses cross-listed with a "SUST" course subject within the catalog. SUST courses provide an understanding of the interconnectivity of

human and natural systems and emphasize evidence-based reasoning on the implications of sustainability problems and/or proposed solutions. There are currently 93 undergraduate SUST courses (21 lower division and 72 upper division), 27 graduate SUST courses, with 32 participating departments.

An undergraduate sustainability certificate program at UHM will increase the depth to which UHM undergraduate students explore the interlinkages between human and natural systems as they relate to environmental stewardship. Students who complete this certificate will be able to engage in systems thinking and problem solving for the purpose of creating enduring processes for environmental stewardship. The certificate has three required programmatic learning objectives (PLOs):

Within the Undergraduate Certificate in Sustainability at UH Mānoa, students will develop:

1. Understanding of the interconnectivity of human and natural systems;

At the undergraduate level students will, for example, demonstrate awareness of how natural and economic or social systems interact to foster or prevent environmental sustainability, including recognizing underlying processes or stressors.

2. Evidence-based reasoning on the implications of sustainability problems and/or proposed solutions;

For example, at the undergraduate level students will be able to distinguish the local, national or global scale of sustainability challenges and proposed solutions, demonstrate critical reflection on sustainability solutions and their ethical or justice implications.

3. Understanding that multiple knowledge systems inform processes for achieving sustainability;

For example, a student will be able to discern the multiple values that shape decision making as it affects socio-economic, cultural, and biophysical dimensions of society and environment

Each SUST course meets the first two SLOs as a requirement for cross-listing and is reviewed for continued cross-list every five years. The third SLO is achieved through the certificate structure, which encourages students to explore sustainability through multiple disciplines.

BACKGROUND:

Ensuring sustainable stewardship of our environment while simultaneously creating vibrant and resilient societies requires theory, practice and integration across multiple fields. Sustainability as a concept has been defined within several major discourses. The most often cited comes from the United Nations World Commission on Environment and Development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission, 1987). Another notable sustainability discourse refers to Elkington's (1999) "triple-bottom-line," where economic, social and environmental considerations are integrated and/or put into balance. Often the definition of sustainability is operationalized by merging these two frames, as done by the U.S. Environmental Protection Agency within their own definition, "Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which human and nature can exist in productive harmony to support present and future

generations." This hybrid definition well fits the purposes of this certificate, where courses will emphasize the interlinkages between human and natural systems. Understanding environmental processes must complement a similar understanding of historical, political, economic, and social/cultural dynamics. Meaningfully addressing environmental crises requires bridging multiple disciplines and perspectives while reassessing our collective and individual relationships with the natural environment and the systems that have caused degradation. Though referring to environmental sustainability, the term "sustainability" is used throughout this proposal for succinctness.

The College of Education (CoEd), College of Engineering (CoE), College of Arts, Languages & Letters (CALL), College of Natural Sciences (CNS), College of Social Sciences (CSS), College of Tropical Agriculture & Human Resources (CTAHR), Hawai inuiākea School of Hawaiian Knowledge (HSHK). and the School of Ocean and Earth Science and Technology (SOEST) are committed to interdisciplinary education in sustainability. The CoEd is working to bolster their Sustainability within their Curriculum Studies program, including recently establishing a Graduate Certificate in Sustainability and Resilience Education and working with UH-West O'ahu to develop sustainably-focused math courses. In the CoE, the Department of Civil and Environmental Engineering (CEE) has offered sustainability courses since 2010, and in 2018 it launched a senior year track on Sustainability and Innovation. As of Fall 2018, 70 students who took CEE 444 have received Envision Sustainability Professional (ENV SP) certification by the Institute for Sustainable Infrastructure. The CALL explores the past, contemporary and future human and environmental interconnections to sustainability through history, languages, literatures, art, film, music, and cultural studies, as well as the sustainability of the human spirit through philosophy and religion. In the arena of environmentalism, related coursework is available in the history department, the art and art history department, and the department of philosophy. Faculty in CALL are working to further establish complementary curriculum in Environmental Humanities. Within CNS, instruction and research address diverse aspects of sustainability, including conservation biology, green chemistry and applications of computer science and mathematics to efficient resource use. CNS also offers two other interdisciplinary undergraduate certificates (Marine Option Program and Mathematical Biology). CSS has strong instructional and research programs in the human dimensions of environmental stewardship. In addition to the many sustainability-focused courses, CSS supports the Science Education for New Civic Engagements and Responsibilities (SENCER) Hawai'i program, which fosters solution-based engagement in teaching methods. CSS faculty also co-direct, with CoE, the Renewable Energy and Island Sustainability Graduate Certificate. CTAHR has demonstrated a strong role in science-based sustainability instruction, research and extension that impacts family well-being, natural resources, agricultural and animal production, and economic and environmental sustainability. In 2017 CTAHR committed to a faculty position in sustainable management that is designated to serve as the CTAHR leader for campus sustainability efforts, including this certificate. HSHK and Kamakakūokalani Center for Hawaiian Studies have focused two faculty hires since 2012 on its Mālama 'Āina strand and four cluster hires with CTAHR, NREM, SSRI and Law whose research and teaching are centered on sustainability. In SOEST, the Global Environmental Science program hosts a concentration in Sustainability Science while the Department of Earth Sciences hosts an undergraduate degree in Environmental Earth Sciences. SOEST is also home to a number of Organized Research Units that seek solutions to pressing environmental threats, like the development and integration of renewable energy. The National Academies of Sciences, Engineering, and Medicine emphasizes the demand for and the urgency to provide curricular programs in sustainability to meet ongoing environmental, economic, and societal challenges (2020). Together CoEd, CoE, CALL, CNS, CSS, CTAHR, HSHK, and SOEST are committed to collaborating with the Institute for Sustainability and Resilience (ISR) to support the campus-wide Undergraduate Certificate in Sustainability. ISR was established in 2018 at the University of Hawai'i at Mānoa (UHM) to provide a campus-wide platform for cross-disciplinary instruction that supports UHM's goal to help Hawai'i meet its local and global obligations toward environmental sustainability.

<u>ACTION RECOMMENDED:</u>
It is recommended that the new undergraduate certificate in Sustainability be approved.

APPROVED/DISAPPROVED

David Lassner

President

May 20, 2021

Date

University of Hawai'i at Mānoa Undergraduate Certificate in Sustainability

Proposed by the Institute for Sustainability & Resilience in partnership with the

College of Education, College of Engineering, College of Languages, Linguistics & Literature, College of Natural Sciences, College of Social Sciences, College of Tropical Agriculture and Human Resources, Hawai'inuiākea School of Hawaiian Knowledge, and School of Ocean and Earth Science and Technology

February 24, 2021 to MFS Minor Updates April 26, 2021

Ensuring sustainable stewardship of our environment while simultaneously creating vibrant and resilient societies requires theory, practice and integration across multiple fields. Sustainability as a concept has been defined within several major discourses. The most often cited comes from the United Nations World Commission on Environment and Development: "Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (Brundtland Commission, 1987). Another notable sustainability discourse refers to Elkington's (1999) "triple-bottom-line," where economic, social and environmental considerations are integrated and/or put into balance. Often the definition of sustainability is operationalized by merging these two frames, as done by the U.S. Environmental Protection Agency within their own definition, "Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. To pursue sustainability is to create and maintain the conditions under which human and nature can exist in productive harmony to support present and future generations." This hybrid definition well fits the purposes of this certificate, where courses will emphasize the interlinkages between human and natural systems. Understanding environmental processes must complement a similar understanding of historical, political, economic, and social/cultural dynamics. Meaningfully addressing environmental crises requires bridging multiple disciplines and perspectives while reassessing our collective and individual relationships with the natural environment and the systems that have caused degradation. Though referring to environmental sustainability, the term "sustainability" is used throughout this proposal for succinctness.

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interconnections to sustainability through history, languages, literatures, art, film, music, and cultural studies, as well as the sustainability of the human spirit through philosophy and religion. In the arena of environmentalism, related coursework is available in the history department, the art and art history department, and the department of philosophy. Faculty in CALL are working to further establish complementary curriculum in Environmental Humanities. Within CNS, instruction and research address diverse aspects of sustainability, including conservation biology, green chemistry and applications of computer science and mathematics to efficient resource use. CNS also offers two other interdisciplinary undergraduate certificates (Marine Option Program and Mathematical Biology). CSS has strong instructional and research programs in the human dimensions of environmental stewardship. In addition to the many sustainability-focused courses, CSS supports the Science Education for New Civic Engagements and Responsibilities (SENCER) Hawai'i program, which fosters solution-based engagement in teaching methods. CSS faculty also co-direct, with CoE, the Renewable Energy and Island Sustainability Graduate Certificate. CTAHR has demonstrated a strong role in science-based sustainability instruction, research and extension that impacts family well-being, natural resources, agricultural and animal production, and economic and environmental sustainability. In 2017 CTAHR committed to a faculty position in sustainable management that is designated to serve as the CTAHR leader for campus sustainability efforts, including this certificate. HSHK and Kamakakūokalani Center for Hawaiian Studies have focused two faculty hires since 2012 on its Mālama 'Āina strand and four cluster hires with CTAHR, NREM, SSRI and Law whose research and teaching are centered on sustainability. In SOEST, the Global Environmental Science program hosts a concentration in Sustainability Science while the Department of Earth Sciences hosts an undergraduate degree in Environmental Earth Sciences. SOEST is also home to a number of Organized Research Units that seek solutions to pressing environmental threats, like the development and integration of renewable energy.

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1. What is the purpose and objectives of the proposed academic subject certificate program, including the relationship to existing degree programs(s), if any?

Rationale, Purpose & Objectives: This certificate will provide undergraduate students with an education in sustainability that complements a students' primary degree and enables them to be better environmental stewards.

The transformation of society towards environmental sustainability, incorporating social and environmental justice paradigms, is one of the most important challenges currently facing humankind. Creating, modeling, and teaching sustainability at UHM meets University-wide goals set forth in Executive Policy 4.202 as well as supports UHM's Institutional Learning Objective that "Students demonstrate excellence, integrity and engagement through ... Stewardship of the natural environment." The movement toward integrating the concept of sustainability into UHM

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 - For example, at the undergraduate level students will be able to distinguish the local, national or global scale of sustainability challenges and proposed solutions, demonstrate critical reflection on sustainability solutions and their ethical or justice implications.
- 3. Understanding that multiple knowledge systems inform processes for achieving sustainability;

For example, a student will be able to discern the multiple values that shape decision making as it affects socio-economic, cultural, and biophysical dimensions of society and environment.

Each SUST course meets the first two SLOs as a requirement for cross-listing and is reviewed for continued cross-list every five years. The third SLO is achieved through the certificate structure, which encourages students to explore sustainability through multiple disciplines.

Relationship with existing programs: This proposed certificate will complement existing UHM undergraduate programs by providing a sustainability-focused education pathway in addition to their primary field of study. Many programs, including the eight academic units that have come together for this certificate, have academic coursework, research, and community programs around the issue of sustainability. There is ongoing effort to identify and cross-list sustainability-focused

curriculum across UHM through ISR. Using the SUST, the certificate allows for participation of all undergraduate serving units across UHM.¹ The certificate provides a means to link course opportunities for students of all academic backgrounds and demonstrates training in sustainability to potential employers or graduate schools.

The certificate also complements other sustainability-focused programs in development. Two such examples are 1) an active proposal for a themed pathway through General Education in "Sustainability and Resilience" and 2) a BA major equivalent in Interdisciplinary Studies focusing on Sustainability. The first is currently under review and, if accepted, students who choose to pursue the themed pathway would be well on their way to meeting certificate requirements. The second complements the certificate such that if a student started in the IS degree program but decided to change majors, they could potentially still receive the certificate degree to demonstrate their gained knowledge in the area. Both programs will be stewarded and informed by the ISR curriculum committee on an ongoing basis.

2. How will the program be administered? Who will be responsible for advising of students (e.g., department chair, program director or staff, individual faculty from the various participating departments)?

Certificate Administration: The ISR will accept and process student applications on an ongoing basis. Upon completion of the five courses, students will submit a completed application to the ISR. The ISR Director will review each application and be responsible for transmitting completed certificates to the Office of the Registrar in time to be listed on their transcript prior to graduation.

Advising: The ISR will coordinate advising with each of the eight supporting units, who are committed to working with their advising units. This will include training of advisors as to the processing requirements and deadlines of the certificate program, as well as general advice on course selection regarding the student's academic goals and interests.

Curriculum: The curriculum content of the certificate (and SUST courses) will be guided on an ongoing basis by a faculty advisory council. The ISR curriculum committee currently consists of representatives from 8 units (CALL, CSS, CoEd, CoE, CNS, CTAHR, HSHK and SOEST) and meets at least once per semester to review UHM Form 2 proposals for SUST designation as well as to inform sustainability-focused curricular programs. All units with SUST offered courses will be represented on the committee. The two criteria for SUST designation are that the course SLOs lead to: 1) Understanding of the interconnectivity of human and natural systems; and 2) Evidence-based reasoning on the implications of sustainability problems and/or proposed solutions. For more information, see: manoa.hawaii.edu/ISR/about/. Committee members serve two-year staggered appointments.² Upon the expiration of member terms, nominations are sought for the next committee representative. The call for nominations will go through the ISR Director to the unit's

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¹ In addition to the units listed within this proposal, a conversation was also held between the ISR Director and Shidler curriculum leadership. Professor Coffman attended the Shidler Curriculum Meeting on January 28, 2019 as well as November 23, 2020. At this time, Shidler has developed sustainability-focused courses and the next step is to submit them for SUST cross-list.

² To begin, several members are on three-year appointments to enable "staggering" long-term.

administration, as each unit has its own internal processes for determining university-level service (for example, some units have their own faculty senate protocols). The ISR Director will make the final appointments. Faculty serving on the council should be actively engaging in sustainability topics within teaching and/or research, but there is no expectation of them directly advising students.

3. What units (e.g., programs, departments, schools, colleges) are involved? Who are the faculty involved in the planning process and who will be involved in implementing the proposed academic subject certificate?

Participating Units

- Institute for Sustainability and Resilience (ISR)
- College of Education (CoEd)
- College of Engineering (CoE)
- College of Arts, Languages and Letters (CALL)
- College of Natural Sciences (CNS)
- College of Social Sciences (CSS)
- College of Tropical Agriculture and Human Resources (CTAHR)
- Hawai'inuiākea School of Hawaiian Knowledge (HSHK)
- School of Ocean and Earth Science and Technology (SOEST)

ISR Faculty Curriculum Committee

- Akutagawa, Malia, Associate Professor, Representing HSHK
- Butler, Marguerite, Professor, Representing CNS
- Chinn, Pauline, Professor, Representing CoEd
- Guidry, Michael, Associate Specialist, Representing SOEST
- Hamilton Faris, Jaimey, Associate Professor, Representing CALL
- Kantar, Michael, Assistant Professor, Representing CTAHR
- Mei-Singh, Laurel, Assistant Professor, Representing CSS
- Zhang, Guohui, Associate Professor, Representing CoE

Additional Faculty involved in the development of this proposal

- Cooney, Michael, Researcher, SOEST (Hawai'i Natural Energy Institute)
- Francis, Oceana, Associate Professor, CoE (Civil and Environmental Engineering) and SOEST (Sea Grant College Program)
- Glick, Mark, Assistant Specialist, SOEST (Hawai'i Natural Energy Institute)
- Hasager, Ulla, Associate Specialist, Director of Civic Engagement, CSS (ACCESS)
- Johnson, Philip, Professor, CNS (Information and Computer Sciences)
- Kimura, Aya H., Professor, CSS (Sociology)
- Lincoln, Noa, Associate Researcher, CTAHR (Tropical Plant and Soil Sciences)
- Litton, Creighton M., Professor, CTAHR (Natural Resources & Environmental Management)

- McGregor, Davianna Pōmaika'i, Professor, CSS (Ethnic Studies)
- Perez, Craig Santos, Associate Professor, CALL (English)
- Prevedouros, Panos, Professor, CoE (Civil & Environmental Engineering)
- Price, Melissa, Assistant Professor, CTAHR (Natural Resources & Environmental Management)
- Puniwai, Noelani, Assistant Professor, HSHK (Hawaiian Studies)
- Schimmel, Scott E., Assistant Professor, CSS (Communication)
- Stitt-Bergh, Monica, Specialist, Assessment and Curriculum Support Center
- Ticktin, Tamara, Professor, CNS (Botany)
- Xiao, Yuanzhang, Assistant Professor, CoE (Electrical Engineering)

Administrators involved in the development of this proposal

- Arnade, Peter, Dean, CALL
- Comerford, Nicholas, Dean, CTAHR
- Fletcher, Charles "Chip", Associate Dean for Academic Affairs, SOEST
- Helminck, Aloysius, Dean, CNS
- Konan, Denise, Dean, CSS
- Ma, David, Interim Associate Dean, CoE
- Morioka, Brennon, Dean, CoE
- Murata, Nathan, Dean, CoEd
- Osorio, Jon K., Dean, HSHK
- Sherwood, Alison, Interim Associate Dean, CNS
- Sutherland, Ross, Associate Dean, CSS
- Taylor, Brian, Dean, SOEST
- Wieczorek, Ania, Interim Associate Dean for Academic and Student Affairs, CTAHR

Consultation Process: The administrators and faculty within this list were consulted on multiple occasions (in-person and via email) in regards to their support for this certificate. A large in-person meeting was held in Fall 2018 and individual follow-up meetings were subsequently held, particularly with new units signing on in support of the certificate. The PLOs were informed and developed by the ISR curriculum committee and by conversations with the faculty signed onto this proposal. Prior to CAPP review, the proposal was circulated to all persons listed above, and required written (email) consent to move forward with the new submission.

4. What population will be served by the program (e.g., graduate students enrolled in degree programs at the University; professionals working in the community who wish to upgrade knowledge and skills, desire a certificate only, and will not enroll in a degree program; undergraduate students enrolled in degree program at the University (full-time, part-time))? What is the anticipated number of students to be served each year?

The certificate is intended for UHM degree-seeking undergraduate students interested in having a foundation in sustainability. It is designed for students seeking cross-disciplinary education in sustainability that complements their major degree. Five years after the certificate is established and implemented, it is anticipated that about 60-80 students will complete the program each year.

5. How is the program organized?

The program requires a total of 15 credits, of which 3-6 are lower and 9-12 are upper division. There must be a minimum of 9 upper division credits and a minimum of 3 lower division credits. The organization of the certificate aims to provide flexibility for students either early in their undergraduate program or more advanced. Students starting in the certificate early in their undergraduate program could, for example, take 6 credits of lower division courses and 9 credits of upper division courses. Transfer students and students beyond a third-year standing would be able to structure their certificate experience with 3 lower and 12 upper division credits, to be more in line with their academic development.

Students will choose five 3-credit SUST courses from at least two different home units. Students will be encouraged to reach outside of their core discipline in their course choices.

Rationale for lower-division courses: The lower division courses allow students to explore foundational concepts of sustainability through various disciplinary lenses. There are currently sixteen 3-credit courses offered in seven units from which students may choose 1-2 courses, totaling 3-6 credits.

Rationale for upper-division courses: Flexibility is encouraged here to enable SUST courses to complement the student's primary course of study. Therefore, students may choose to pursue a theme of interest within the course offerings or a broad multi-disciplinary view of sustainability. There are currently 64 3-credit upper division courses from which students can choose the 3-4 courses needed to complete their certificate, totaling 9-12 credits.

Each of these courses meets the first and second certificate PLOs that students will develop an "understanding of the interconnectivity of human and natural systems" as well as "evidence-based reasoning on the implications of sustainability problems and/or proposed solutions." By allowing students to choose multiple courses from different disciplinary perspectives, the student will meet the third PLO of "understanding that multiple knowledge systems inform processes for achieving sustainability."

Transfer Credits: For transfer students to UHM, courses from other institutions can count towards the certificate with director approval. The criteria for approval will be similar to determining any course alternative, such that there are comparable SLOs. For transfers from other UH campuses, students who have taken lower division S-designated courses can similarly receive credit for up to two lower division courses.

The current 3-credit SUST course offerings by units are currently as follows. (Note that some courses are listed in multiple units.)

College of Education

upper-division

• SUST 433/EDCS 433 (3) Interdisciplinary Science Curriculum

College of Engineering

upper-division

- SUST 440/CEE 440 (3) Vulnerability & Adaptation on Coastal Infrastructure (PRE: Senior standing or higher)
- SUST 441/CEE 441/OCN 441 (3) Principles of Sustainability Analysis (PRE: CHEM 161 and PHYS 170 with a minimum grade of C-; or consent)
- SUST 444/CEE 444 (3) Infrastructure: Project Impacts, Policy and Sustainability (PRE: senior standing, open to engineering, science, urban planning, and economics majors)
- SUST 449/ATMO 449/CEE 449 (3) Climate Modeling, Data Analysis and Applications (PRE: ATMO, CEE, ERTH, GES, OCN, NREM majors only. Senior standing or higher, or consent.)

College of Arts, Languages and Letters

lower-division

• SUST 157/HIST 157 (3) Global Environmental History

upper-division

- SUST TBD/ART 338 (3) Inter-Woven Structures (PRE: Sophomore standing)
- SUST 436/ART 436 (3) Use, Re-use, and Radical Re-use (PRE: ART 113 and 116 and one 200-level or above fiber course, and consent)
- SUST 439/ART 439 (3) Installation/Performance--Material in Context (PRE: ART 116)
- SUST 401/HIST 401 (3) History of the Indian Ocean World (PRE: junior or senior standing or consent)
- SUST 481/HIST 480/AMST 425 (3) American Environmental History

College of Natural Sciences

lower-division

• SUST 120/CHEM 110 (3) Chemistry in a Sustainable World

upper-division

- SUST 313/BOT 301 (3) Plant Conservation Biology (PRE: BOT 202/202L, or consent)
- SUST 445/BOT 444 (3) Ethnoecology and Conservation (PRE: BOT 202/202L or BIOL 265/265L or consent)
- SUST 446/BOT 446 (3) Hawaiian Ethnobotany (PRE: BOT 440 or consent)
- SUST 450/BOT 450/ZOOL 450 (3) Natural History of Hawaiian Islands (PRE: one semester of biological sciences at college level)

College of Social Sciences

lower-division

- SUST 204/ANTH 204 (3) Historical Ecology of Hawai'i
- SUST 222/ES 221 (3) Hawaiians
- SUST 114/PLAN 101 (3) Sustainable Cities
- SUST 250/SOCS 250/TAHR 250 (3) Introduction to Sustainability from Social Science Perspectives

upper-division

- SUST 333/ANTH 333 (3) Climate Change and Cultural Response: Past, Present, and Future
- SUST 335/ANTH 335 (3) Society and Environment (PRE: ANTH 152)
- SUST 482/ANTH 482 (3) Anthropology and the Environment: Culture, Power and Politics (PRE:

- 152 or 415 or consent)
- SUST 332/ECON 350 (3) Economics of Global Climate Change (PRE: ECON 120 or 130 or 131, or consent)
- SUST 336/ECON 336 (3) Energy Economics (PRE: ECON 120 or 130 or 131)
- SUST 350/ECON 350 (3) Sustainable Development (PRE: ECON 120 or 130 or 131, or consent)
- SUST 412/ECON 409 (3) The Ocean Economy (PRE: ECON 120 or 130, or consent)
- SUST 458/ECON 458 (3) Project Evaluation and Resource Management (PRE: ECON 301)
- SUST 318/ES 308 (3) Race, Indigeneity, and Environmental Justice
- SUST 321/ES 320 (3) Hawai'i and the Pacific (PRE: one DS or DH course)
- SUST 341/ES 340 (3) Land Tenure and Use in Hawai'i (PRE: one DS or DH course)
- SUST 351/ES 350 (3) Economic Change and Hawai'i's People (PRE: one DS or DH course)
- SUST 455/ES 355C (3) Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in Pacific Context
- SUST 461/ES 460 (3) Global Ethnic Conflict (PRE: one DS or DH course or consent.)
- SUST 314/GEO 302 (3) Global Environmental Issues
- SUST 315/GEO 305 (3) Water and Society (PRE: sophomore standing or higher, or consent)
- SUST 322/GEO 322 (3) Globalization and Environment (PRE: 102, 151, or consent)
- SUST 326/GEO 325 (3) Geography, Environment, and Society
- SUST 330/GEO 330 (3) Culture and Environment (PRE: 102, 151, or consent)
- SUST 413/GEO 411 (3) Past Global Change and the Human Era (PRE: junior standing or higher, or consent)
- SUST 415/GEO 415/TIM 415 (3) Nature-Based Tourism Management (PRE: TIM 101 or GEO/TIM 324)
- SUST 423/GEO 422 (3) Agriculture, Food and Society (PRE: junior standing or higher, or consent)
- SUST 426/GEO 426 (3) Environment, Resources and Society (PRE: 102, 151, or consent)
- SUST 324/POLS 324 (3) Global Environmental Politics
- SUST 380/POLS 380 (3) Environmental Law and Politics
- SUST 387/POLS 387 (3) Politics of the Ocean (PRE: any 100 or 200-level POLS course, or consent)
- SUST 323/OCN 321/PPC 321 (3) Applied Principles of Environmental & Energy Policy (PRE: any 100 or 200 level OCN course, or consent.)
- SUST 367/SOC 367/WS 367 (3) Sustainability, Technoscience, and Social Justice (PRE: SOC 151 or any 200- or 300-level WS course, or 100 or any 200-level SOC course, or consent)

College of Tropical Agriculture and Human Resources

lower-division

- SUST 220/NREM 220 (3) Agricultural and Resource Economics
- SUST 251/NREM 251/TPSS 251 (3) Scientific Principles of Sustainability
- SUST 210/PEPS 210/NREM 210 (3) Introduction to Environmental Science
- SUST 250/SOCS 250/TAHR 250 (3) Introduction to Sustainability from Social Science Perspectives
- SUST 211/TPSS 200 (3) Agriculture, Environment, and Society

upper-division

• SUST 311/NREM 301 (3) Natural Resources Management (PRE: NREM/TPSS 251 or 210; CHEM 151 or higher; and BIOL 172; or consent)

- SUST 312/NREM 302 (3) Natural Resource and Environmental Policy (PRE: SUST/NREM/PEPS 210 or (BIOL 101 or higher) or GEO 101 or (GG 101 or higher); and 220/NREM 220 or one ECON course or two DS courses)
- SUST 316/NREM 306 (3) Environmental Ethics (PRE: NREM 210 or GEO 101 or PHIL 101 or PHIL 103)
- SUST 358/NREM 358 (3) Basic Environmental Benefit Cost Analysis (PRE: NREM 220/NREM 220 or ECON 130 or
- consent)
- SUST 420/NREM 420 (3) Community and Natural Resource Management (PRE: two social science courses or consent)
- SUST 451/NREM 450 (3) Wildlife Ecology and Management (PRE: BIOL 172 or consent)
- SUST 480/NREM 480 (3) Applied Forest Ecology (PRE: 301/SUST 311 and 380 or consent)
- SUST 494/NREM 494 (3) Environmental Problem Solving (PRE: NREM 310, 301/SUST 311 (or concurrent), 302/SUST 312 (or concurrent), and senior; or consent)
- SUST 320/PEPS 310 (3) Environment and Agriculture
- SUST 422/PEPS 422 (3) Biocontrol of Invasive Species (PRE: PEPS 363 or consent)
- SUST 371/PEPS 371/TPSS 371 (3) Genetics: Theory to Application

Hawai'inuiākea School of Hawaiian Knowledge

lower-division

• SUST 217/HWST 207 (3) Hawaiian Perspectives in Ahupua'a (PRE: HWST 107)

upper-division

- SUST 317/HWST 307 (3) Mâlama 'Âina Resource Management Visual Technologies (PRE: 107)
- SUST 356/HWST 356 (3) Aloha Kanaloa-Marine Resources and Abundance (PRE: HWST 107)
- SUST 457/HWST 457 (3) 'Āina Mauliola: Hawaiian Ecosystems (PRE: BOT 105 or 107, HWST 107, and junior standing; or consent)
- SUST 459/HWST 459 (3) Strategies in Hawaiian Resource Use (PRE: HWST 207 or HWST 307 or HWST 356)
- SUST 460/HWST 460 (3) Hui Konohiki Practicum (PRE: HWST 207 or HWST 307 or HWST 356)

Interdisciplinary Studies

lower-division

• SUST TBD/IS 260 (3) Introduction to Environmental Humanities

upper-division

• SUST 340/IS 340 (3) Human Values and the Environment (PRE: any ENG DL or PHIL or GEO course, or consent.)

School of Ocean and Earth Science and Technology

lower-division

- SUST 113/ERTH 102 (3) Quantifying Global and Environmental Change
- SUST 116/ERTH 106 (3) Humans and the Environment
- SUST 112/OCN 102 (3) Introduction to the Environment and Sustainability

• SUST 115/OCN 105 (3) Sustainability in a Changing World

upper-division

- SUST 449/ATMO 449/CEE 449 (3) Climate Modeling, Data Analysis and Applications (PRE: ATMO, CEE, ERTH, GES, OCN, NREM majors only. Senior standing or higher, or consent.)
- SUST 425/ERTH 425 (3) Environmental Geochemistry (PRE: CHEM 161 and CHEM 162, or consent)
- SUST 427/ERTH 420 (3) Beaches, Reefs, and Climate Change (PRE: Junior standing or higher, or consent.)
- SUST 323/OCN 321/PPC 321 (3) Applied Principles of Environmental & Energy Policy (PRE: any 100 or 200 level OCN course, or consent.)
- SUST 414/OCN 411 (3) The Ethics of Climate Change and Geoengineering
- SUST 441/CEE 441/OCN 441 (3) Principles of Sustainability Analysis (PRE: CHEM 161 and PHYS 170 with a minimum grade of C-; or consent)
- SUST 442/OCN 442/TIM 462 (3) Principles of Environmental Management Systems (PRE: Junior standing or higher.)

School of Travel Industry Management

upper-division

- SUST 415/GEO 415/TIM 415 (3) Nature-Based Tourism Management (PRE: TIM 101 or GEO/TIM 324)
- SUST 442/OCN 442/TIM 462 (3) Principles of Environmental Management Systems (PRE: Junior standing or higher.) Note: this is offered through OCN
- SUST 421/TIM 420 (3) Sustainable Tourism Policies and Practices (PRE: TIM 101 and departmental approval) – Note: not recently offered, though in discussions with Shidler in regards to making this more regularly available

On an ongoing basis, the listing of current SUST courses (and their cross-list) can be found in the *Catalog*.

- a. What are the foundation courses and prerequisites needed for acceptance into the program (e.g., graduate or undergraduate status, grade point average; work experience)?
 - There are no prerequisites other than those associated with each course.
 - The criterion for the successful completion of the certificate is in line with the UHM guidelines (Successful completion of the certificate program requires a cumulative GPA of 2.5 for all courses counted towards the certificate).
- b. What are the fields of concentration (tracks, areas of specialization) in the program? If there is more than one concentration, how do the fields differ?

NA.

c. What are the number of credits required for the academic subject certificate? (Note that the minimum required credits for graduate and undergraduate academic subject certificates are 15)

15 credits.

d. What courses are required for the certificate program? What is the rationale for including these courses?

1-2 lower-division 3-credit SUST courses and 3-4 upper-division 3-credit SUST courses, totaling 5 courses from at least two different units, meaning different colleges/schools.

Rationale: The certificate is designed to foster an interdisciplinary understanding of environmental sustainability. Students are required to complete courses for this certificate from at least two different units. Furthermore, the flexibility in the certificate design provides the student with the ability to choose the amount of breadth versus depth in completing the certificate requirements.

e. What is the structure of the program (e.g., first-semester courses; required or core courses; electives)?

It is recommended that students take the lower division courses before the upper division courses. Students may apply to enter the certificate at any time in their undergraduate experience at UHM. As required for all undergraduate certificates, a cumulative GPA of 2.5 for all courses counted towards the certificate is required for successful completion

(http://manoa.hawaii.edu/ovcaa/planning_approval/certificate_programs.html).

f. Will a practicum or internship be required for the academic subject certificate? If so, how will the certificate program arrange for and administer the practicum?

NA.

g. Is there an integrative experience at the end of the certificate program and if so, of what nature, e.g., scholarly paper, research project, written examination, integrative interdisciplinary seminar?

The focus on SUST courses, and environmental sustainability by design, is the integrative experience.

6. What resources are required for program implementation and operation? How will these resources be obtained? Are additional resources required for the operation of the program?

The proposed certificate leverages existing advising resources in respective units, the existing Director position in ISR, as well as the SUST cross-listed course offerings across campus, and does not require new resources.

7. How will the effectiveness of the program be demonstrated and measured? How will student learning be assessed?

Student learning and program effectiveness will be measured using metrics and mechanisms established by the curriculum committee and collected on an ongoing basis by the ISR Director. SLOs will be assessed based on a collection of a sample of student work in selected signature assignments. Program metrics such as student enrollment, certificate completion, SUST courses offered, and student semester hours within SUST courses will be tracked by the ISR Director.

Post-graduation employment and other accomplishments by certificate students will be measured, as far as it is possible to stay in touch with students after graduation.

8. Are the program objectives appropriate functions of the College(s) and University? (Applies to proposals for all graduate certificates and for undergraduate certificates that involve units in more than one college or that require the commitment of new resources by the University.) Discuss relationship to University and Campus mission and evidence of continuing need for the program.

In 2014, the BOR policy adopted a landmark policy on sustainability (RP 4.208). It states that "the University will serve as a leader in how it stewards the resources of the islands and the world for the benefit of all. The University shall be a global leader and model for the integration of sustainability throughout its teaching, research, operations, and public service." The Executive Policy EP 4.202 signed in 2015 similarly committed the UH to sustainability goals. One of the main pillars is sustainability education. It states, "The University will encourage, facilitate and support curriculum development that advances the principles of sustainability and enables cross-campus collaborations that integrate teaching and research with solutions at the campus and community levels." The Undergraduate Certificate in Sustainability will support the mission of the University as stated in the University of Hawai'i Strategic Directions, 2015-2021, "interwoven in the strategic directions are two key imperatives embraced within the BOR-approved UH mission: a commitment to being a foremost indigenous-serving institution and advancing sustainability." Similarly, the Mānoa Strategic Plan 2015-2025 identifies sustainability (in curriculum, research and campus operations) as a key pillar of the campus's strategic goals. A 2020 report by the National Academies of Science, Engineering and Medicine recommended that "Academic institutions of higher education should embrace sustainability education as a vital field that requires specifically tailored educational experiences and the development of core sustainability-focused competencies and capacities delivered through courses, majors, minors, certifications, research and graduate degrees in sustainability." This certificate is a contributing component to responding to the urgent need for integrative programming within academic fields and in direct fulfillment of University and Campus objectives towards a more sustainable future.

References:

Brundtland Commission (1987). Our Common Future, The World Commission on Environment and Development. Oxford University Press.

Elkington, John (1999). Cannibals with Forks: Triple Bottom Line of 21st Century Business. John Wiley & Son Ltd.

National Academies of Sciences, Engineering, and Medicine 2020. Strengthening Sustainability Programs and Curricula at the Undergraduate and Graduate Levels. Washington, DC: The National Academies Press. https://doi.org/10.17226/25821.



MĀNOA FACULTY SENATE

April 7, 2021

MEMORANDUM VIA E-MAIL

TO: Benjamin Kudo, Chair

Board of Regents

David Lassner, President & CEO

University of Hawai'i

Michael Bruno, Provost

University of Hawai'i at Manoa

Sandy French, Interim Vice Chancellor for Administration, Finance & Operations

University of Hawai'i at Manoa

FROM: Paul McKimmy, Chair

Mānoa Faculty Senate Executive Committee

RE: Resolution Supporting the Proposal for an Undergraduate Certificate in Sustainability

The Mānoa Faculty Senate approved the <u>Resolution Supporting the Proposal for an Undergraduate Certificate in Sustainability</u> at the March 24, 2021 Senate meeting with 54 votes (98.18%) in support; 1 vote (1.82%) opposed; and 0 abstentions. The resolution is attached.

Please feel free to contact me if you have any questions or need additional information.

Paul McKimmy, Ed.D.

Paul B. Mc Kum

Mānoa Faculty Senate Chair

Thanh Truc Nguyen, Ed.D.

Mānoa Faculty Senate Secretary

MĀNOA FACULTY SENATE



Presented to the Mānoa Faculty Senate by the Committee on Academic Policy and Planning (CAPP) for a vote of the full Senate on March 24, 2021, a resolution supporting the proposal for an Undergraduate Certificate in Sustainability. Approved by the Mānoa Faculty Senate on March 24, 2021 with 54 votes (98.18%) in support; 1 vote (1.82%) opposed; and 0 abstentions.

RESOLUTION SUPPORTING THE PROPOSAL FOR AN UNDERGRADUATE CERTIFICATE IN SUSTAINABILITY

WHEREAS, the Institute for Sustainability and Resilience was established at UH Manoa in 2018 to provide a campus-wide platform for cross-disciplinary instruction on environmental sustainability; and

WHEREAS, the Institute for Sustainability and Resilience, in partnership with eight other UHM colleges, has proposed a 15 credit Undergraduate Certificate in Sustainability; and

WHEREAS, Executive Policy EP 4.202, signed in 2015, states, "The University will encourage, facilitate and support curriculum development that advances the principles of sustainability and enables cross-campus collaborations that integrate teaching and research with solutions at the campus and community levels." and

WHEREAS, ensuring sustainable stewardship of our environment while simultaneously creating vibrant and resilient societies requires theory, practice, and integration across multiple fields; and

WHEREAS, meaningfully addressing environmental crises requires bridging multiple disciplines and perspectives while reassessing our collective and individual relationships with our world's resources and the systems that have caused degradation; and

WHEREAS, the Undergraduate Certificate in Sustainability (SUST) will complement a student's primary field of study by providing foundational knowledge of the interconnectivity of natural and human systems, and of evidence-based reasoning on the implications of sustainability problems and/or proposed solutions, and will also engage students in systems thinking and problem solving for achieving sustainability; and

WHEREAS, the proposed certificate will provide cross-disciplinary training and will utilize the considerable expertise of faculty across nine University of Hawai'i units; and,

WHEREAS, proposers have consulted with relevant units and the proposed certificate does not duplicate or replace existing UHM programs, or programs at other UH campuses; and

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WHEREAS, the proposed certificate leverages existing advising resources in respective units, the existing Director position in ISR, as well as the SUST cross-listed course offerings across campus, and does not require new resources; therefore,

BE IT RESOLVED, that the Mānoa Faculty Senate recommends approval of the proposal to establish an Undergraduate Certificate in Sustainability at the University of Hawai'i at Mānoa.

Supporting Document:

Proposal for Undergraduate Certificate in Sustainability



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July 7, 2017

MEMORANDUM

IMANOA CHANCELLOFI'S OFFICE

TO:

David Lassner Interim Chancellor

FROM:

Michael Bruno

Interim Vice Chancellor for Academic Affairs

and Vice Chancellor for Research

SUBJECT:

Establishment of the Institute for Sustainability and Resilience

at the University of Hawai'i at Mānoa

SPECIFIC ACTION REQUESTED:

It is requested that the Chancellor establish the Institute for Sustainability and Resilience as a new interdisciplinary activity in the Office of the Vice Chancellor for Academic Affairs at the University of Hawai'i at Mānoa (UH Mānoa).

RECOMMENDED EFFECTIVE DATE:

Effective Fall 2017.

ADDITIONAL COST:

The new institute will draw on existing faculty who are paid from and tenured within their schools and colleges. The operating costs of the new institute, primarily coordinating in nature, will be supported through a modest reallocation of existing campus resources as outlined in the FY2017-18 UH Mānoa Operating Budget. No additional new resources are required at this time.

PURPOSE:

The proposed Institute for Sustainability and Resilience will provide what is widely understood to be lacking at UH Mānoa – a campuswide focus for fully interdisciplinary instructional, research and outreach programs relating to sustainability and resilience. It will serve as the coordinating body for sustainability and resilience-related activities across campus and provide UH Mānoa representation and participation in systemwide sustainability and resilience activities and initiatives. This coordination is essential to developing interdisciplinary educational programs that will attract enrollments into one of the most desired areas of study and help prepare all UH Mānoa students for 21st-century citizenship. It will also provide a stronger focus for competitive participation by the campus in large interdisciplinary global research initiatives and for philanthropic investment in sustainability and resilience at UH Mānoa.

David Lassner July 7, 2017 Page 2

BACKGROUND INFORMATION:

Per Executive Policy 5.206, Establishment and Review of Centers, "instructional, research, administrative or public service centers require Board of Regents approval when: (1) the center requires significant current or future commitments of institutional funding, personnel or physical resources, a substantive change in program mission, and/or involve major institutional liability; (2) the proposed center involves Board or Presidential agreements with external governmental or private entities; or (3) the proposed center involves an honorific name in the designation of the center. Authorization for centers that do not meet the above criteria is delegated to each, Vice President, Chancellor, System-wide Director, and the State Director for Career and Technical Education within their respective units or offices." The proposed Institute for Sustainability and Resilience will not initially meet the criteria requiring Board approval, and thus may be approved by the Chancellor. Formal BOR approval is anticipated in the context of the forthcoming reorganization of the UH Mānoa Chancellor and Vice Chancellor offices.

In outlining the mission and purpose of the University of Hawai'i, Board of Regents Policy RP 4.201 states that "The University shall be a global leader and model for the integration of sustainability throughout its teaching, research, operations, and public service" with elaboration in RP 4.201. Executive Policy E4.202: System Sustainability further states, "The University will encourage, facilitate, and support curriculum development that advances the principles of sustainability and enables cross-campus collaborations that integrate teaching and research with solutions at the campus and community levels." The proposed Institute for Sustainability and Resilience will spearhead our implementation of the UH System sustainability goals related to teaching, research and service at UH Mānoa. Namely, the Institute will facilitate the following, per Executive Policy:

Teaching

- The development of appropriate new courses and programs related to sustainability that
 articulate across campuses. This will include oversight at UH M\u00e4noa of the recently
 approved SUST ("S") subject code for the cross listing of nearly 70 sustainability and
 resilience-related courses. It will also lead development of and serve as the home for new
 interdisciplinary degree programs, certificate programs and a campus minor in
 sustainability.
- The integration of sustainability principles into existing curricula where appropriate.
- The development of campus and community based sites for laboratory or field-based learning related to sustainability, including engagement by students in the University's operational improvements in sustainability.
- The incorporation of sustainability practices and learning into student life and other cocurricular activities.
- The development of professional development opportunities for faculty and students related to curriculum development and delivery in sustainability.

Research

- Establish metrics to monitor and promote increased research and scholarship in sustainability at all levels.
- Professional development and collaboration opportunities for faculty and students in sustainability scholarship.

Service and Outreach

- The development of mutually beneficial partnerships with community organizations, nonprofit organizations, the private sector, and other colleges and universities in Hawai'i and beyond to advance sustainability initiatives.
- The creation of internship opportunities for students with external partners and collaborators.
- Supporting sustainability and related science education initiatives in Hawai'i's public schools.

Cultural Connections

- Embrace the culture, wisdom, and fundamental values of the indigenous people of Hawai'i to advance sustainability.
- Cultivate an inclusive University community with varied characteristics, ideas, cultures, and world-views through which our students, faculty, and staff celebrate difference and respect tradition and wisdom.

Upon approval, the Office Vice Chancellor for Academic Affairs will form a new UH Mānoa Sustainability Advisory Board to support the Institute's activities with appropriate support staff and assignment of faculty time to achieve the purposes outlined herein. It is anticipated that the Institute will be included in the forthcoming reorganization of the Mānoa Chancellor and Vice Chancellor offices, which will provide for formal BOR approval.

ACTION RECOMMENDED:

It is recommended that the Chancellor approve the Institute for Sustainability and Resilience at the University of Hawai'i at Mānoa.

ÁPPROVED / DISAPPROVED

David Lassner

C:

Interim Chancellor

Jan Gouveia, UH System Vice President for Administration Pearl Iboshi, UH System Director of Institutional Research & Assessment Wendy Pearson, Academic Affairs Program Officer Stuart Lau. Registrar Matthew Lynch, UH System Sustainability Coordinator

Diane Nakashima, Catalog Coordinator