NEW OR REPLACE PROGRAM CODE

New Prog	gram Code	Replace Program Code	Date:	
REQUESTOR CON	NTACT INFORMATION	ı		
Name		_		
Title				
	CODE TO CREATE	Communication		
Level		Effective Term		
	Code (Max. Characters)	Description	Check if requesting new	code:
College	(2)		See Banner form STVC	COLL
Department			See Banner form STVI	DEPT
Degree/Certificate			See Banner form STVI	DEGC
Major				ИAJR
Concentration	(4)		See Banner form STVN	ИAJR
Minor	(4)		See Banner form STVN	ИAJR
If a similar major/co	ncentration code exists in B	anner, please list the code:		
Justification to warra	ant a new major/concentrat	ion code similar to an existing ma	jor/concentration code:	
Is this major/concen	tration code being used the	same way at the other UH campu	ises? Yes	No
	• •	to select as their planned course of the code as their only program of study.	f study Yes	No
RULES PERTAINI	NG TO FINANCIAL AID	AND 150% DIRECT SUBSID	IZED LOAN LIMIT LEGISLA	TION
Is 50% or greater of Campus?	the classes in this program o	offered at a location other than th	e Home Yes	No
Is this program/majo	or/certificate financial aid el	igible?	Yes	No
program)?	qualify as a Gainful Employi GainfulEmploymentInfo/index.html	ment Program (Title IV-eligible cer	tificate Yes	No
Program Length In academic years; decimals any online and/or written pu		gram should match what is published by the ca	npus in	
Special Program Des See Special Program Design Program Code Request web	nations Code Definitions on IRAO	A B	N] U
Required Terms of E	nrollment:	Spring	Summer Extend	ed

Form modified: Oct 20208

NEW OR REPLACE PROGRAM CODE

EXISTING PROGRAM CODE TO REPLACE, IF APPLICABLE

Program Code		Progra	m Description						
Institution		Campu	s						
College	Department								
Level									
Are current students	s "grandfathered"	under the program co	ode?		Yes		No		
Should the old progr	ram code be availa	ble for use in Banner?			Yes		No		
Effective Term (i	, old e. Fall 2020)	program code will no	longer be availab	le to admit or recru	ıit students.	1			
		ecruitment (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	e President for Acade	emic Planning and I	Policy regarding pro	gram action	١.			
Curriculum									
CERTIFICATES ONLY	: Please check one	(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 Office (Print Name)	er	For Community verification of COVPCC Academ	consultation	ı with			
				Tammi Oyadom					
					<u></u>		_		
Signature	Date	Signature	Date	Signature		Date	_		
ADDITIONAL CO	MMENTS								
							·		
_									

Form modified: Oct 2020

Institute for Sustainability and Resilience



November 30, 2021

MEMORANDUM

TO: Laura E. Lyons

Interim Vice Provost for Academic Excellence

FROM:

Makena Coffman

Director, Institute for Systainability and Resilience

Amy Schiffner Director, Interdisciplinary Studies

SUBJECT: APPROVAL OF PROGRAM MODIFICATION TO THE MAJOR EQUIVALENT IN

SUSTAINABILITY IN THE INTERDISCIPLINARY STUDIES PROGRAM

SPECIFIC ACTION REQUESTED:

It is requested that the Interim Vice Provost for Academic Excellence approve modifications to the Major Equivalent in Sustainability within the Interdisciplinary Studies Program.

REQUESTED EFFECTIVE TERM:

Spring 2022 or next effective term.

ADDITIONAL COST:

No additional resources are needed at this time.

RATIONALE/PURPOSE OF PROPOSED CHANGE(S):

The Major Equivalent in Sustainability within the Interdisciplinary Studies Program was approved in October 2019 and went into effect in Spring 2020. There are currently twenty-four enrolled students and the expectation is that the program will continue to grow as incoming students learn about this opportunity. Since its initial launch, a number of sustainability-focused courses have been identified and cross-listed as SUST. The primary purpose of this modification is to add these courses into the lower division requirements and upper division areas of concentration (i.e. "tracks"). Additional courses also allow for the expansion of upper division tracks to include a concentration in climate change. In addition, since the creation of the initial programmatic pathway, a key course in the lower division requirements, SUST/TAHR/SOCS 250, has not been offered with the frequency initially intended due to faculty departures from the CSS Sustainability Cluster hire. As such, the motivation of this modification to go into effect as soon as possible, beginning Spring 2022, is to fill this gap in curriculum and to give students clear alternatives. The program is currently operating by making substitutions for SUST 250 on a case-by-case basis, and would benefit the student experience to make this explicit within program materials (i.e. via the program sheet and within student STAR course pathways). Lastly, this modification creates major pre-requisites, which through learning about how current students are going through the program, creates a more clear lower division course pathway as well as allows for more upper division credits and therefore a deeper sustainability focus.

This modification will prompt an update of the program sheet and 4-year plan (current and suggested are appended to this request), as well as the areas of concentration will be amended in the description in the the catalog (under "Instructional Support, Research and Service Units").

Institute for Sustainability and Resilience



DETAILED LIST OF CHANGE(S):

- Remove "Introductory Foundation Courses."
- Add 9 credits of major pre-requisites, to be completed prior or concurrently to lower division major coursework, as attached.
- Amend list of upper-division major core courses, as attached.
- Increase upper-division major core course credits from 9 to 12.
- Change three area of concentration titles ("Sustainable Environmental Policy," "From Global Issues to Local Action," and "Environmental Justice, Values, and Ethics") that correspond as minor changes from prior areas of concentration.
- Add area of concentration "Climate Change."
- Amend list of upper-division area of concentration courses, as attached.
- Increase upper-division major elective course credits from 12 to 15, to be taken within two areas of concentration.

DETAILED LIST OF CONSULTATION WITH IMPACTED PROGRAMS:

The presented modifications are based on the recommendations of the ISR Curriculum Committee, and their review of the BA curriculum in AY20-21, with final consultation via email during September 2021. The ISR Curriculum Committee members involved in this review include:

- Guohui Zhang, Associate Professor, Representing the College of Engineering
- Marguerite Butler, Associate Professor, Representing the College of Natural Sciences
- Laurel Mei-Singh, Assistant Professor, Representing the College of Social Sciences AY20-21
- Jonathan Padwe, Associate Professor, Representing the College of Social Sciences AY21-22
- Mikey Kantar, Assistant Professor, Representing the College of Tropical Agriculture and Human Resources
- Malia Akutagawa, Associate Professor, Representing Hawai'inuiākea School of Hawaiian Knowledge
- Michael Guidry, Specialist, Representing the School of Ocean and Earth Science and Technology
- Pauline Chinn, Professor, Representing College of Education
- Jaimey Hamilton Faris, Associate Professor, Representing the College of Arts, Languages, and Letters
- Mary Babcock, Professor, Representing the College of Arts, Languages, and Letters, Fall 2021 (during Dr. Faris's sabbatical)
- Christopher Cannon, Assistant Professor, Representing the Shidler College of Business, beginning Fall 2021

The presented modifications were also reviewed and comments given by the Interdisciplinary Studies Faculty Council. (Dr. Coffman recused herself from this review.)

ACTION RECOMMENDED:

It is recommended that the Interim Vice Provost for Academic Excellence approve the modifications to the Major Equivalent in Sustainability within the Interdisciplinary Studies Program.

ATTACHMENTS:

- 1. Current Program Sheet
- 2. Proposed Program Sheet (with and without track changes)
- 3. Current 4 Year Plan Template
- 4. Proposed 4 Year Plan Template (with proposed changes in Red)
- 5. Current/Proposed Catalog description (with proposed changes marked in Red)

Institute for Sustainability and Resilience



APPROVED/DISAPPROVED:

5 December 2021

Date

Interim Vice Provost for Academic Excellence

University of Hawai'i at Mānoa

Office of Undergraduate Education Program Sheet 2020-2021

Bachelor of Arts (BA) in Interdisciplinary Studies: Sustainability

Admissions: Selective Process: Application Min. Total Credits: 120 (88 in core & major + 32 in electives)

	wiii. Totai Credits: 120 (
UHM General Educati	ion Core Requirements
Foundations	
FW ENG 100, 100A	A, 190, ESL 100, or AMST 111
FQ*	
FG (A / B / C)	
FG (A / B / C)	
	hanged in Fall 2018. If you entered the please see your college/school advisor.
Diversification	
DA / DH / DL	
DA / DH / DL	
DB	
DP	
DY	
DS	
DS	
* See degree, college an	nd major requirements for courses that
can also fulfill these.	
UHM Graduation Req	uirements
Focus	
Н	
E (300+)	
O (300+)	

	20	11.4
•	36	credits

- Minimum exit GPA: 2.5 in the major equivalent
- Minimum C grade (not C-) in courses
- Senior capstone project
- Mandatory advising

College Requirements

Credit Maximums

- 8 KRS activity
- 9 Directed Reading / Research
- 12 Practicum / Internship

Hawaiian / Second Language	
101	
102	
201	
202	

Credit Minimums

W W W W (300+) W (300+)

- 120 total applicable
- 30 in residence at UHM
- 45 upper division (300+ level) credits

Grade Point Average

- 2.0 cumulative or higher (*Note: Other GPAs may be required.*)
- Good academic standing

This program sheet was prepared to provide information and does not constitute a contract. See back for major requirements. Meet regularly with your major advisor.

Admission: Open.		
Application: Not applicable		
Min. major credits: 45		
Requirements		
Major Prerequisites (choose one from e	each or equivalent with a	approval, 9 credits)
	SUST/NREM 220*DS	
	O, ECON 321*DS, NREM	310
		UST 120/CHEM 110* DP, CHEM 161*DP
		es, 6 credits; at least 3 credits must be at 200-level)
SUST 112/OCN 102/GES 102*		
SUST 114/PLAN 101	SUST/ANTH 204	SUST/SOCS/TAHR 250*DS
SUST 115/OCN 105	SUST/NREM/P	
SUST 116/ERTH 106* DP	SUST 211/TPSS	
SUST/HIST 157	SUST 217/HWS	
Upper Division Major Core Courses (1		71 201
SUST 312/NREM 302*DS	SUST/ANTH 335* DS	SUST/OCN 442/TIM 462
SUST 314/GEO 302	SUST/ECON 350	SUST 456/HWST 458
SUST 316/NREM 306	SUST/NREM 358*DS	SUST/ECON 458
SUST/GEO 322*DS	SUST/POLS 380*DS	SUST/HWST 459
SUST/POLS 324*DS	SUST 413/GEO 411* DP	
SUST/COM 325	SUST/NREM 420	SUST/NREM 494
SUST 326/GEO 325*DS	SUST/GEO 426*DS	SOST/TREM 171
SUST/GEO 330 *DS	SUST/CEE/OCN 441	
Major Electives: Select 2 Areas of Cond		
Sustainable Environmental Policy	celler anon (15 creates)	
SUST 311/NREM 301	SUST/TIM/GEO 415	SUST 451/NREM 450
SUST 312/NREM 302	SUST/NREM 420	SUST/BOT/HWST 457
SUST 317/HWST 307 SUST		SUST/ECON 458
SUST 323/OCN 321	SUST/GEO 426*DS	SUST/HWST 459
SUST/NREM 358	SUST/CEE/OCN 441	
SUST/POLS 380*DS	SUST/OCN 442/TIM 46	
SUST 411/NREM 410	SUST/CEE 444	,
Food, Energy, and Water (FEW) Syst		
SUST 315/GEO 305	SUST/ECON 332	SUST/PEPS/TPSS 371
SUST 320/PEPS 310	SUST/ANTH 335	SUST/PEPS/TPSS 410
SUST 323/OCN 321/PPC340	SUST/ECON/PPC 336	SUST 423/GEO 422
From Global Issues to Local Action		
SUST 314/GEO 302	SUST/GEO 332	SUST/GEO 426
SUST/GEO 322	SUST/GEO 333	SUST 427/ERTH 420
SUST/POLS 324	SUST/IS 340	SUST 461/ES 460
SUST 326/GEO 325	SUST/ECON 350	SUST/GES/ATMO 304
SUST/GEO 330	SUST/HIST 401	0001/020/111110 001
Sustainable Island Ecosystems		
SUST 313/BOT 301	SUST/HWST 356	SUST 455/ES 355C
SUST 317/HWST 307 SUST		SUST 456/HWST 458
SUST 321/ES 320	SUST 445/BOT 444	SUST/BOT/HWST 457
SUST 341/ES 340	SUST/BOT 446	SUST/BOT/HWST 459
SUST 351/ES 350*DS SUST/		SUST/BOT/HWST 460
Environmental Justice, Values, and E		
SUST 316/NREM 306	SUST/SOC/WGSS 367	SUST 456/HWST 458
SUST 318/ES 308	SUST 414/OCN 411	SUST 461/ES 460
SUST/ANTH 335*DS	SUST/ART 439	SUST/ANTH 482
SUST/ANTH 338	SUST 455/ES 455C	SUST/ART 484
	5651 166725 1666	5051/11111 101

University of Hawaiʻi at Mānoa Office of Undergraduate Education Program Sheet 2020-2021

Bachelor of Arts (BA) in Interdisciplinary Studies: Sustainability

Admissions: Selective Process: Application
Min. Total Credits: 120 (88 in core & major + 32 in electives)

SUST/IS 340			
Climate Change			
SUST/ECON 332	SUST 414/OCN 411	SUST/CEE 440	
SUST/ANTH 333	SUST 427/ERTH 410	SUST/GES/ATMO 304	
Capstone (3 credits)			
SUST 495			
Note: Refer to the Courses section	in the Catalog for prerequisite	information	

Interdisciplinary Studies (IS) Program: Sinclair 108; (808) 956-7297; www.hawaii.edu/is For degree advising, contact isp@hawaii.edu.

Rev. AS 6/2020

University of Hawai'i at Mānoa

Office of Undergraduate Education Program Sheet 2020-2021

Bachelor of Arts (BA) in Interdisciplinary Studies: Sustainability

Admissions: Selective Process: Application

Min. Total Credits: 120 (8879 in core & major + 41-32 in electives)

UHM General Edu	cation Core Requirements
Foundations	
	00 A 100 ESI 100 or AMST 111
FO*	00A, 190, ESL 100, or AMST 111
FG (A / B / C)	
FG (A / B / C)	- I - I - F H 2010 IC
	nt changed in Fall 2018. If you entered the at, please see your college/school advisor.
Diversification	n, pieuse see your conege/school uuvisor.
DA / DH / DL	
DA / DH / DL	
DB DB	
DB DB	
DY	
DS	
DS	
	e and major requirements for courses that
can also fulfill these.	
UHM Graduation I	Requirements
_	
Focus	
H	
E (300+)	
O (300+)	
W	
W	
W	
W (300+)	
W (300+)	
Hawaiian / Second	Language
101	
102	
201	
202	
Credit Minimums	
• 120 total applicat	nle
- 120 total applicat	710

- 36 credits
- Minimum exit GPA: 2.5 in the major equivalent
- Minimum C grade (not C-) in courses
- Senior capstone project
- Mandatory advising

College Requirements

Credit Maximums

- 8 KRS activity
- 9 Directed Reading / Research
- 12 Practicum / Internship

This program sheet was prepared to provide information and does not constitute a contract. See back for major requirements. Meet regularly with your major advisor.

• 30 in residence at UHM

• Good academic standing

Grade Point Average

required.)

• 45 upper division (300+ level) credits

2.0 cumulative or higher (Note: Other GPAs may be

Admission: Open.		
Application: Not applicable		
Min. major credits: 4536		
Requirements		
Major Pre-Rrequisites (choose one fro	m each or equivalent wit	th approval, 9 credits)
Economics: ECON 130*DS.	SUST/NREM 220*DS	
	0, ECON 321*DS, NREM	310
		UST 120/CHEM 110* DP, CHEM 161*DP
		es, 6 credits; at least 3 credits must be at 200-level)
SUST 112/OCN 102/GES 102		
SUST 114/PLAN 101	SUST/ANTH 204	SUST/SOCS/TAHR 250*DS
SUST 115/OCN 105	SUST/NREM/F	
SUST 116/ERTH 106* DP		
SUST/HIST 157	SUST 217/HW	
Upper Division Major Core Courses (1		31 207
SUST 312/NREM 302*DS	SUST/ANTH 335* DS	SUST/OCN 442/TIM 462
SUST 312/NREW 302 SUST 314/GEO 302	SUST/ECON 350	SUST 456/HWST 458
SUST 314/GEO 302 SUST 316/NREM 306	SUST/NREM 358*DS	SUST/ECON 458
SUST/GEO 322*DS	SUST/POLS 380*DS	SUST/HWST 459
SUST/POLS 324*DS	SUST 413/GEO 411* DP	
SUST/COM 325	SUST/NREM 420	SUST/NREM 494
SUST 326/GEO 325*DS	SUST/GEO 426*DS	
SUST/GEO 330 *DS	SUST/CEE/OCN 441	
Major Electives: Select 2 Areas of Con	centration (15 credits)	
Sustainable Environmental Policy		27.72T 151 5.72 7.150
SUST 311/NREM 301	SUST/TIM/GEO 415	SUST 451/NREM 450
SUST 312/NREM 302	SUST/NREM 420	SUST/BOT/HWST 457
SUST 317/HWST 307 SUST		SUST/ECON 458
SUST 323/OCN 321	SUST/GEO 426*DS	SUST/HWST 459
SUST/NREM 358	SUST/CEE/OCN 441	
SUST/POLS 380*DS	SUST/OCN 442/TIM 4	62 SUST/NREM 494
SUST 411/NREM 410		
Food, Energy, and Water (FEW) Sys		
SUST 315/GEO 305	SUST/ECON 332	SUST/PEPS/TPSS 371
SUST 320/PEPS 310	SUST/ANTH 335	SUST/PEPS/TPSS 410
SUST 323/OCN 321/PPC340	SUST/ECON/PPC 336	SUST 423/GEO 422
From Global Issues to Local Action		
SUST 314/GEO 302	SUST/GEO 332	SUST/GEO 426
SUST/GEO 322	SUST/GEO 333	SUST 427/ERTH 420
SUST/POLS 324	SUST/IS 340	SUST 461/ES 460
SUST 326/GEO 325	SUST/ECON 350	SUST/GES/ATMO 304
SUST/GEO 330	SUST/HIST 401	
Sustainable Island Ecosystems		
SUST 313/BOT 301	SUST/HWST 356	SUST 455/ES 355C
SUST 317/HWST 307 SUST	427/ERTH 420*DP	SUST 456/HWST 458
SUST 321/ES 320	SUST 445/BOT 444	SUST/BOT/HWST 457
SUST 341/ES 340	SUST/BOT 446	SUST/BOT/HWST 459
SUST 351/ES 350*DS SUST	BOT 450/BIOL 454	SUST/BOT/HWST 460
Environmental Justice, Values, and I		
SUST 316/NREM 306	SUST/SOC/WGSS 367	——— SUST 456/HWST 458
SUST 318/ES 308	SUST 414/OCN 411	SUST 461/ES 460
SUST/ANTH 335*DS	SUST/ART 439	SUST/ANTH 482
SUST/ANTH 338	SUST 455/ES 455C	SUST/ART 484

University of Hawai'i at Mānoa

Office of Undergraduate Education Program Sheet 2020-2021

Bachelor of Arts (BA) in Interdisciplinary Studies: Sustainability

Admissions: Selective Process: Application
Min. Total Credits: 120 (8879 in core & major + 41-32 in electives)

SUST/IS 340			
Climate Change			
SUST/ECON 332	SUST 414/OCN 411	SUST/CEE 440	
SUST/ANTH 333	SUST 427/ERTH 410	SUST/GES/ATMO 304	
Capstone (3 credits)			
SUST 495			
Note: Refer to the Courses section is	in the Catalog for prerequisite	information	

Interdisciplinary Studies (IS) Program: Sinclair 108; (808) 956-7297; www.hawaii.edu/is For degree advising, contact isp@hawaii.edu.

Rev. AS 6/2020

University of Hawai'i at Mānoa – Four-Year Academic Plan 2022-2023 Interdisciplinary Studies Program Bachelor of Arts (BA) in Sustainability

This is a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.

Year 1		Year 2		Year 3		Year 4	
Fall		Fall		Fall		Fall	
Major Prereq DS	3	Major Prereq	3	Upper Division Major	3	Capstone	3
Major Foundation	3	Major Foundation	3	Major Elective (Area 1)	3	Upper Division Major	3
FW	3	Н	3	E (300+)	3	Major Elective DS (Area	3
HSL 101	3	DA/DH/DL	3	O (300+)	3	W	3
FGA/B/C	3	HSL 201	3	w	3	W (300+)	3
Credits	15	Credits	15	Credits	15	Credits	15
Spring		Spring		Spring	-10	Spring	
Major Prereq	3	Major Foundation (200+)	3	Upper Division Major	3	Upper Division Major	3
Major Foundation	3	DA/DH/DL	3	Major Elective (Area 1)	3	Major Elective (Area 2)	3
FQ	3	DS	3	Major Elective DB (Area	3	W (300+)	3
HSL 102	3	DY	3	W	3	Elective	3
FGA/B/C	3	HSL 202	3	DP	3	Elective	3
Credits	15	Credits	15	Credits	15	Credits	15
	15		15		15		15
Summer		Summer		Summer		Summer	
Credits	0	Credits	0	Credits	0	Credits	0
Total Credits	30	Total Credits	60	Total Credits	90	Total Credits	120

Notes:

Students must incorporate all focus requirements into this plan. Focus designations (i.e., W, E, O, H) are CRN specific & semester specific. Minimum 45 upper division (300+ course) credits are required.

University of Hawai'i at Mānoa – Four-Year Academic Plan 2022-2023 Interdisciplinary Studies Program Bachelor of Arts (BA) in Sustainability

This is a sample academic plan. Students should meet with an academic advisor prior to registration to formulate their own plan.

Year 1		Year 2		Year 3		Year 4	
Fall		Fall		Fall		Fall	
Major Pre-Req DS	3	Major Pre-Req	3	Upper Division Major	3	Capstone	3
Major Foundation	3	Major Foundation	3	Major Elective (Area 1)	3	Upper Division Major	3
FW	3	Н	3	E (300+)	3	Major Elective DS (Area	3
HSL 101	3	DA/DH/DL	3	O (300+)	3	W	3
FGA/B/C	3	HSL 201	3	W	3	W (300+)	3
Credits	15	Credits	15	Credits	15	Credits	15
Spring		Spring		Spring		Spring	
Major Pre-Req	3	Major Foundation (200+)	3	Upper Division Major	3	Upper Division Major	3
Major Foundation	3	DA/DH/DL	3	Major Elective (Area 1)	3	Major Elective (Area 2)	3
FQ	3	DS	3	Major Elective DB (Area	3	W (300+)	3
HSL 102	3	DY	3	w `	3	Elective	3
FG <mark>A/B/C</mark>	3	HSL 202	3	DP	3	Elective	3
Credits	15	Credits	15	Credits	15	Credits	15
Summer		Summer		Summer		Summer	
Credits	0	Credits	0	Credits	0	Credits	0
Total Credits	30		60			Total Credits	120

Notes:

Students must incorporate all focus requirements into this plan. Focus designations (i.e., W, E, O, H) are CRN specific & semester specific. Minimum 45 upper division (300+ course) credits are required.

Course Programming for BA in IS: Sustainability

88 core and major credits, 41 elective credits
Minimum 120 total, of which 45 need to be upper division

I. GENERAL EDUCATION REQUIREMENTS

http://www.catalog.hawaii.edu/corerequirements/coreRequirements.html

- A. FOUNDATIONS REQUIREMENTS
 - Written Communication (FW; 3 credits)
 - Quantitative Reasoning (FQ; 3 credits)
 - Global and Multicultural Perspectives (FGA, FGB, FGC; 6 credits)
- B. DIVERSIFICATION REQUIREMENTS
 - Arts, Humanities, and Literatures (6 credits from 2 categories)
 - Arts (DA)
 - Humanities (DH)
 - Literatures (DL)
 - Social Sciences (DS; a total of 6 credits from 2 different departments)
 - Natural Sciences
 - -Biological Science (DB; 3 credits)
 - -Physical Science (DP; 3 credits)
 - -Laboratory (science) (DY; 1 credit)
- C. FOCUS REQUIREMENTS (Instructor specific)
 - Contemporary Ethical Issues (E or ETH; 1 course, 300- or 400-level)
 - Hawaiian, Asian, and Pacific Issues (H or HAP; 1 course, any level)
 - Oral Communication (O or OC; 1 course, 300- or 400-level)
 - Writing Intensive (W or WI; 5 courses, at least two of which are at the 300- or 400-level)
- D. HAWAIIAN/SECOND LANGUAGE REQUIREMENT
 - HSL; competence at the 202 level

II. MAJOR PREREQUISITE COURSES

Nine credits of prerequisite courses are required for completion of the major and can be taken concurrently with lower-division major coursework.

Economics

- ECON 130 Principles of Microeconomics (3) DS
- OR SUST 220/NREM 220 Agricultural and Resource Economics (3) DS
- OR equivalent/higher level microeconomcis course with approval

AND

Statistics

BIOL 220/BOT 220 Biostatistics (3)

PRE: BIOL 171, 172 or BOT 101; and BIOL/BOT 220L (or concurrent) and MATH 134 or MATH assessment exam (with score required for MATH 140)

- OR ECON 321 Introduction to Statistics (3) DS
- OR NREM 310 Statistics in Agriculture and Human Resources (3)
- OR equivalent/higher level statistics course with approval [e.g., BUS 310, GEO 380, PSY 225, PH 350, SOCS 225, SOC 176, PH 210, BUS 250, ANTH 220]

AND

Biology

- BIOL 101 Biology and Society (3) DB [for gen ed: BIOL 101L Lab (1) DY]
- OR BIOL 171 Introduction to Biology I (3) DB [for gen ed: BIOL 171L Lab (1) DY]

PRE: CHEM 131, 151, 161, 171 or 181A or concurrent, and BIOL 171L (concurrent), or

OR equivalent/higher level course biology course with approval

OR

Chemistry

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

PRE: Related to Chem 100, see catalog

- OR CHEM 161 General Chemistry I (3) DP
- OR equivalent/higher level chemistry course with approval

Note: Prerequisites replace prior "Introductory Foundation Courses."

III. MAJOR FOUNDATION COURSE REQUIREMENTS (6)

Select two 3-credit courses from below. Where relevant, classes are related to upper-division areas of concentration for advising purposes. At least 3 credits must be at the 200 level. Courses must be taken from two different colleges.

SUST112/OCN102/GES102 Introduction to the Environment, Climate Change and Sustainability DB – All/Sustainable Environmental Policy

SUST251/NREM251/TPSS251 Scientific Principles of Sustainability - All/Sustainable Environmental Policy

*SUST116/ERTH106 Humans and the Environment DP - All/Sustainable Environmental Policy

*SUST210/NREM210/PEPS210 Introduction to Environmental Science – *All/Sustainable Environmental Policy* SUST250/SOCS250/TAHR250 Introduction to Sustainability from Social Science Perspectives DS – *Sustainable Environmental Policy/ Environmental Justice, Values, and Ethics*

*SUST211/TPSS200 Agriculture, Environment, and Society DB - Food, Energy, and Water (FEW) Systems

*SUST114/PLAN101 Sustainable Cities - Sustainable Environmental Policy/From Global Issues to Local Action

*SUST115/OCN105 Sustainability in a Changing World FGA - From Global Issues to Local Action

*SUST157/HIST157 Global Environmental History FGC - All/From Global Issues to Local Action

SUST217/HWST 207 Hawaiian Perspectives in Ahupua'a - Sustainable Island Ecosystems

PRE: HWST 107

*SUST204/ANTH204 Historical Ecology of Hawai'i - Sustainable Island Ecosystems

*SUST222/ES221 Hawaiians - Sustainable Island Ecosystems

*SUST170/REL170 Religion and the Environment - Environmental Justice, Values, and Ethics

*SUST260/IS260 Introduction to Environmental Humanities - Environmental Justice, Values, and Ethics

Note: Asterisks (*) notes courses that have been added.

IV. UPPER-DIVISION MAJOR CORE COURSES (12)

Select four 3-credit courses from the list below. Some courses appear in major electives but must be counted towards either major core courses or major elective, but not both.

SUST312/NREM302 (3) Natural Resource and Environmental Policy DS

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

SUST314/GEO302 (3) Global Environmental Issues

SUST316/NREM306 Environmental Ethics

PRE: NREM 210 or GEO 101 or PHIL 101 or PHIL 103

SUST322/GEO322 (3) Globalization and Environment DS

PRE: Junior standing or higher

SUST324/POLS324 (3) Global Environmental Politics DS

SUST 325/COM 325 (3) Communicating Sustainability

PRE: COM 201 (with a minimum grade of B) or consent.

SUST326/GEO325 (3) Geography, Environment, and Society DS

SUST330/GEO 330 (3) Culture and Environment DS

SUST335/ANTH335 (3) Society and Environment DS

PRE: ANTH 152

SUST350/ECON350 (3) Sustainable Development

PRE: ECON 120 or 130 or 131, or consent

SUST380/POLS380 (3) Environmental Law and Politics DS

SUST 413/GEO 411 Past Global Change and the Human Era DP

PRE: Junior standing or higher, or consent

SUST420/NREM420 Community and Natural Resource Management

PRE: two social science courses or consent

SUST426/GEO426 (3) Environment, Resources and Society DS

PRE: 102, 151, or consent

SUS441/CEE 441/OCN441 (3) Principles of Sustainability Analysis

PRE: CHEM 161 and PHYS 170 with a minimum grade of C-; or consent

SUST442/OCN442/TIM462 (3) Environmental Management Systems

PRE: Junior standing or higher

SUST456/HWST 458 (4) Natural Resource Issues and Ethics

PRE: HWST 207 or HWST 307 or HWST 356

SUST 481/HIST480/AMST425 American Environmental History DH

SUST494/NREM494 (3) Environmental Problem Solving

PRE: NREM 310, 301/SUST 311 (or concurrent), 302/SUST 312 (or concurrent), and senior; or consent

V. MAJOR ELECTIVES (15)

Select five 3-credit courses from two areas of concentrations. Some courses also appear in major electives but must be counted towards either major core courses or major elective, but not both. Substitutions with other upper-division SUST courses with approval.

Sustainable Environmental Policy

SUST311/NREM301 Natural Resource Management

PRE: NREM/TPSS 251 or 210; CHEM 151 or higher; and BIOL 172; or consent

SUST312/NREM302 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

220 or one ECON course or two DS courses

SUST317/HWST307 Mālama 'Āina Resource Management Visual Technologies

PRE: HWST 107

SUST323/OCN321 Applied Principles of Environmental & Energy Policy

PRE: any 100 or 200 level OCN course, or consent.

SUST358/NREM358 Basic Environmental Benefit Cost Analysis

PRE: NREM 220/NREM 220 or ECON 130 or consent

SUST380/POLS380 Environmental Law and Politics

SUST411/NREM410 (4) Methods in Wildlife Management & Conservation

PRE: BIOL 171

SUST415/TIM415/GEO415 Nature-Based Tourism Management

PRE: TIM 101 or GEO/TIM 324

SUST420/NREM420 Community and Natural Resource Management

PRE: two social science courses or consent

SUST 421/TIM420 Sustainable Tourism Policies and Practices

PRE: 101 and departmental approval

SUST426/GEO426 Environment, Resources and Society

PRE: 102, 151, or consent

SUST441/CEE441/OCN441 Principles of Sustainability Analysis

PRE: CHEM 161 and PHYS 170 with a minimum grade of C-; or consent

SUST 442/OCN 442/TIM 462 Principles of Environmental Management Systems

PRE: Junior standing or higher

SUST444/CEE444 Infrastructure: Project Impacts, Policy and Sustainability

PRE: senior standing, open to engineering, science, urban planning, and economics majors

SUST451/NREM450 Wildlife Ecology and Management

PRE: BIOL172 or consent

SUST457/BOT457/HWST457 'Āina Mauliloa: Hawaiian Ecosystems

PRE: BOT 105 or 107, HWST 107, and junior standing; or consent

SUST458/ECON458 Project Evaluation and Resource Management

PRE: ECON 301

SUST459/HWST459 Strategies in Hawaiian Resource Use

PRE: HWST 207 or HWST 307 or HWST 356

SUST480/NREM480 Applied Forest Ecology

PRE: NREM 301/SUST 311 and NREM 380 or consent

SUST494/NREM494 Environmental Problem Solving

PRE: NREM 310, 301/SUST 311 (or concurrent), 302/SUST 312 (or concurrent), and senior; or consent

Food, Energy, and Water (FEW) Systems

SUST315/GEO305 Water and Society

PRE: sophomore standing or higher, or consent

SUST320/PEPS310 Environment and Agriculture

SUST323/OCN321/PPC340 Applied Principles of Environmental & Energy Policy

PRE: any 100 or 200 level OCN course, or consent.

SUST332/ECON332 Economics of Global Climate Change

PRE: ECON 120 or 130 or 131, or consent

SUST 335/ANTH 335 Society and Environment

PRE: ANTH 152

SUST336/ECON336/PPC336 Energy Economics and Policy

PRE: ECON 120 or 130 or 131

SUST371/PEPS371/TPSS371 Genetics: Theory to Application

SUST410/PEPS410/TPSS410 (2) Sustainable Soil and Plant Health Management

 ${\sf SUST423/GEO422} \ Agriculture, \ Food \ and \ Society$

PRE: junior standing or higher, or consent

From Global Issues to Local Action

SUST314/GEO302 Global Environmental Issues

SUST322/GEO322 Globalization and the Environment

PRE: Junior standing or higher

SUST324/POLS324 Global Environmental Politics

SUST326/GEO325 Geography, Environment, and Society

SUST330/GEO330 Culture and Environment

PRE: 102, 151, or consent

SUST332/ECON332 Economics of Global Climate Change

PRE: 120 or 130 or 131, or consent

SUST333/ANTH333 Climate Change and Cultural Response: Past, Present and Future

SUST340/IS340 Human Values and the Environment

PRE: any ENG DL or PHIL or GEO course, or consent.

SUST350/ECON350 Sustainable Development

PRE: ECON 120 or 130 or 131, or consent

SUST 401/HIST 401 History of the Indian Ocean World

PRE: junior or senior standing or consent

SUST426/GEO426 Environment, Resources and Society

PRE: 102, 151, or consent

SUST427/ERTH420 Beaches, Reefs, and Climate Change DP

PRE: Junior standing or higher, or consent

SUST461/ES460 Global Ethnic Conflict

PRE: one DS or DH course or consent.

SUST304/GES304/ATMO304 Global and Local Perspectives on Severe Weather

Sustainable Island Ecosystems

SUST317/HWST307 Mālama 'Āina Resource Management Visual Technologies

PRE: HWST 107

SUST313/BOT301 Plant Consevation Biology

PRE:BOT/BIOL305 or consent. Co-req: BOT301L

SUST321/ES320 Hawai'i and the Pacific

PRE: One DS or DH course

SUST341/ES340 Land Tenure and Use in Hawai'i

PRE: One DS or DH course

SUST351/ES350 Economic Change and Hawai'i's People DS

PRE: one DS or DH course

SUST356/HWST356 Aloha Kanaloa - Marine Resources and Abundance

PRE: HWST 107

SUST427/ERTH420 Beaches, Reefs, and Climate Change DP

PRE: Junior standing or higher, or consent

SUST445/BOT444 Ethnoecology and Conservation

PRE: BOT 202/202L or BIOL 265/265L or consent

SUST446/BOT446 Hawaiian Ethnobotany

PRE: BOT 440 or consent

SUST450/BOT450/BIOL454 Natural History of Hawaiian Islands

PRE: one semester of biological sciences at college level

SUST 455/ES455C Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in the Pacific Context

PRE: one DS or DH course, or consent

SUST456/HWST458 Natural Resource Issues and Ethics

PRE:217/HWST207 or 317/HWST307 or SUST/HWST356

SUST457/BOT457/HWST457 'Āina Mauliola: Hawaiian Ecosystems

PRE: BOT 105 or 107, HWST 107, and junior standing; or consent

SUST459/HWST459 Strategies in Hawaiian Resource Use

PRE: HWST 207 or HWST 307 or HWST 356

SUST 460/BOT 460/HWST 460 Hui Konohiki Practicum

PRE: HWST 207 or HWST 307 or HWST 356

Environmental Justice, Values, and Ethics

SUST316/NREM306 Environmental Ethics

PRE: NREM 210 or GEO 101 or PHIL 101 or PHIL 103

SUST318/ES308 Race, Indigeneity and Environmental Justice

PRE: one DS or DH course, or consent

SUST335/ANTH335 Society and Environment DS

PRE: ANTH 152

SUST338/ART338 Inter-Woven Structures

PRE: Sophomore standing or higer

SUST340/IS340 Human Values and the Environment

PRE: any ENG DL or PHIL or GEO course, or consent.

SUST367/SOC367/WGSS367 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

SUST414/OCN 411 The Ethics of Climate Change and Geoengineering

PRE: 310

SUST455/ES455C Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in the Pacific Context

PRE: one DS or DH course, or consent

SUST456/HWST458 Natural Resource Issues and Ethics

PRE:217/HWST207 or 317/HWST307 or SUST/HWST356

SUST461/ES460 Global Ethnic Conflict

PRE: One DS or DH course or consent

SUST482/ANTH482 Anthropology and the Environment: Culture, Power and Politics DS

PRE: ANTH 152 or 415 or consent

SUST484/ART484 Contemporary Art and Ecology

SUST439/Art439 Installation/Performance-Material in Context

PRE: ART 116

Climate Change

SUST332/ECON332 Economics of Global Climate Change

PRE: 120 or 130 or 131, or consent

SUST333/ANTH333 Climate Change and Cultural Response: Past, Present and Future

SUST 414/OCN 411 The Ethics of Climate Change and Geoengineering

PRE: 310

SUST427/ERTH420 Beaches, Reefs, and Climate Change DP

PRE: Junior standing or higher, or consent

SUST440/CEE440 Vulnerability and Adaptation on Coastal Infrastructure

PRE: Senior standing or higher

SUST304/GES304/ATMO304 Global and Local Perspectives on Severe Weather

VI. CAPSTONE (3)

SUST 495 Sustainability Capstone

VI. CURRENT SUST COURSES

100-Level SUST 101 Dynamic Earth SUST 102 The Natural Environment DP SUST 170 Religion and the Environment SUST 103 Integrative Systems Biology (4) DB SUST 111L Biology and Society Laboratory (1) DY SUST 112 Introduction to the Environment and Sustainability DB SUST 112L Introduction to the Environment and Sustainability (1) DY SUST 113 Quantifying Global and Environmental Change FQ SUST 114 Sustainable Cities SUST 115 Sustainability in a Changing World FGA SUST 116 Humans and the Environment DP SUST 120 Chemistry in a Sustainable World DP SUST 156 Sustainable Food and Energy Field Course (V) DB SUST 157 Global Environmental History FGC 300-Level SUST 304 Global and Local Perspectives on Severe Weather DP SUST 310 Conservation Ethics (1) SUST 311 Natural Resources Management DB SUST 312 Natural Resource and Environmental Policy DS SUST 313 Plant Conservation Biology DB SUST 313L Plant Conservation Biology Lab (1) DY SUST 314 Global Environmental Issues SUST 315 Water and Society DS SUST 316 Environmental Ethics SUST 317 Mālama 'Āina Resource Management Visual Technologies SUST 318 Race, Indigeneity, and Environmental Justice DS SUST 320 Environment and Agriculture DS SUST 321 Hawai'i and the Pacific DH SUST 322 Globalization and Environment DS SUST 323 Applied Principles of Environmental & Energy Policy DS SUST 324 Global Environmental Politics DS SUST 325 Communicating Sustainability SUST 326 Geography, Environment, and Society DS SUST 330 Culture and Environment DS SUST 332 Economics of Global Climate Change DS SUST 333 Climate Change and Cultural Response: Past, Present, and Future DS SUST 335 Society and Environment DS SUST 336 Energy Economics DS SUST 338 Inter-Woven Structures DA

SUST 340 Human Values and the Environment

SUST 341 Land Tenure and Use in Hawai'i DH

SUST 356 Aloha Kanaloa - Marine Resources and

SUST 367 Sustainability, Technoscience, and Social

SUST 350 Sustainable Development DS

Abundance

Justice DS

400-Level Management Conservation Context DA Infrastructure Sustainability SUST 351 Economic Change and Hawai'i's People DS SUST 358 Basic Environmental Benefit Cost Analysis

200-Level

SUST 204 Historical Ecology of Hawai'i

SUST 210 Introduction to Environmental Science DB

SUST 211 Agriculture, Environment, and Society DB

SUST 217 Hawaiian Perspectives in Ahupua'a SUST 220 Agricultural and Resource Economics DS SUST 221 Organic Food Crop Production (2) DY SUST 222 Hawaiians DS SUST 250 Introduction to Sustainability from Social Science Perspectives DS SUST 251 Scientific Principles of Sustainability DB SUST 260 Introduction to Environmental Humanities SUST 484 Contemporary Art and Ecology SUST 401 History of the Indian Ocean World DH SUST 410 Sustainable Soil and Plant Health SUST 411 Methods in Wildlife Management & SUST 412 The Ocean Economy DS SUST 413 Past Global Change and the Human Era DP SUST 414 The Ethics of Climate Change and Geoenaineerina SUST 415 Nature-Based Tourism Management DS SUST 420 Community and Natural Resource Management DS SUST 421 Sustainable Tourism Policies and Practices SUST 422 Biocontrol of Invasive Species DB SUST 423 Agriculture, Food and Society DS SUST 425 Environmental Geochemistry DP SUST 426 Environment, Resources and Society DS SUST 427 Beaches, Reefs, and Climate Change DP SUST 433 Interdisciplinary Science Curriculum SUST 436 Use, Re-use, and Radical Re-use DA SUST 439 Installation/Performance--Material in SUST 440 Vulnerability & Adaptation on Coastal SUST 441 Principles of Sustainability Analysis SUST 442 Environmental Management Systems SUST 444 Infrastructure: Project Impacts, Policy and SUST 445 Ethnoecology and Conservation DB SUST 446 Hawaiian Ethnobotany DS SUST 449 Climate Modeling, Data Analysis and Applications (Major Restriction) SUST 450 Natural History of Hawaiian Islands DB SUST 451 Wildlife Ecology and Management SUST 455 Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in Pacific Context DS SUST 456 Natural Resource Issues and Ethics (4) SUST 457 'Āina Mauliola: Hawaiian Ecosystems SUST 458 Project Evaluation and Resource

SUST 371 Genetics: Theory to Application	Management DS
SUST 380 Environmental Law and Politics DS	SUST 459 Strategies in Hawaiian Resource Use
SUST 387 Politics of the Ocean DS	SUST 460 Hui Konohiki Practicum
	SUST 461 Global Ethnic Conflict
	SUST 480 Applied Forest Ecology
	SUST 481 American Environmental History DH
	SUST 482 Anthropology and the Environment: Culture,
	Power and Politics DS
	SUST 484 Contemporary Art and Ecology DH
	SUST 494 Environmental Problem Solving
	SUST 496 Sustainability & Resilience Seminar (1)

Last updated: 12/4/2021

Course Programming for BA in IS: Sustainability

79-88 core and major credits, 41 elective credits
Minimum 120 total, of which 45 need to be upper division

I. GENERAL EDUCATION REQUIREMENTS

http://www.catalog.hawaii.edu/corerequirements/coreRequirements.html

- A. FOUNDATIONS REQUIREMENTS
 - Written Communication (FW; 3 credits)
 - Quantitative Reasoning (FQ; 3 credits)
 - Global and Multicultural Perspectives (FGA, FGB, FGC; 6 credits)
- B. DIVERSIFICATION REQUIREMENTS
 - Arts, Humanities, and Literatures (6 credits from 2 categories)
 - Arts (DA)
 - Humanities (DH)
 - Literatures (DL)
 - Social Sciences (DS; a total of 6 credits from 2 different departments)
 - Natural Sciences
 - -Biological Science (DB; 3 credits)
 - -Physical Science (DP; 3 credits)
 - -Laboratory (science) (DY; 1 credit)
- C. FOCUS REQUIREMENTS (Instructor specific)
 - Contemporary Ethical Issues (E or ETH; 1 course, 300- or 400-level)
 - Hawaiian, Asian, and Pacific Issues (H or HAP; 1 course, any level)
 - Oral Communication (O or OC; 1 course, 300- or 400-level)
 - Writing Intensive (W or WI; 5 courses, at least two of which are at the 300- or 400-level)
- D. HAWAIIAN/SECOND LANGUAGE REQUIREMENT
 - HSL; competence at the 202 level

II. MAJOR PRE-REQUISITE COURSES

Nine credits of pre-requisite courses are required for completion of the major and can be taken concurrently with lower-division major coursework.

Economics

- ECON 130 Principles of Microeconomics (3) DS
- OR SUST 220/NREM 220 Agricultural and Resource Economics (3) DS
- OR equivalent/higher level microeconomcis course with approval

AND

Statistics

BIOL 220/BOT 220 Biostatistics (3)

PRE: BIOL 171, 172 or BOT 101; and BIOL/BOT 220L (or concurrent) and MATH 134 or MATH assessment exam (with score required for MATH 140)

- OR ECON 321 Introduction to Statistics (3) DS
- OR NREM 310 Statistics in Agriculture and Human Resources (3)
- OR equivalent/higher level statistics course with approval [e.g., BUS 310, GEO 380, PSY 225, PH 350, SOCS 225, SOC 176, PH 210, BUS 250, ANTH 220]

AND

Biology

- BIOL 101 Biology and Society (3) DB [for gen ed: BIOL 101L Lab (1) DY]
- OR BIOL 171 Introduction to Biology I (3) DB [for gen ed: BIOL 171L Lab (1) DY]

PRE: CHEM 131, 151, 161, 171 or 181A or concurrent, and BIOL 171L (concurrent), or

• OR equivalent/higher level course biology course with approval

OR

Chemistry

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

PRE: Related to Chem 100, see catalog

- OR CHEM 161 General Chemistry I (3) DP
- OR equivalent/higher level chemistry course with approval

Note: Pre-requisites replace prior "Introductory Foundation Courses."

III. MAJOR FOUNDATION COURSE REQUIREMENTS (6)

Select two 3-credit courses from below. Where relevant, classes are related to upper-division areas of concentration for advising purposes. At least 3 credits must be at the 200 level. Courses must be taken from two different colleges.

SUST112/OCN102/GES102 Introduction to the Environment, Climate Change and Sustainability DB – All/Sustainable Environmental Policy

SUST251/NREM251/TPSS251 Scientific Principles of Sustainability - All/Sustainable Environmental Policy

*SUST116/ERTH106 Humans and the Environment DP - All/Sustainable Environmental Policy

*SUST210/NREM210/PEPS210 Introduction to Environmental Science – *All/Sustainable Environmental Policy* SUST250/SOCS250/TAHR250 Introduction to Sustainability from Social Science Perspectives DS – *Sustainable Environmental Policy/ Environmental Justice, Values, and Ethics*

*SUST211/TPSS200 Agriculture, Environment, and Society DB - Food, Energy, and Water (FEW) Systems

*SUST114/PLAN101 Sustainable Cities - Sustainable Environmental Policy/From Global Issues to Local Action

*SUST115/OCN105 Sustainability in a Changing World FGA - From Global Issues to Local Action

*SUST157/HIST157 Global Environmental History FGC - All/From Global Issues to Local Action

SUST217/HWST 207 Hawaiian Perspectives in Ahupua'a - Sustainable Island Ecosystems

PRE: HWST 107

*SUST204/ANTH204 Historical Ecology of Hawai'i - Sustainable Island Ecosystems

*SUST222/ES221 Hawaiians - Sustainable Island Ecosystems

*SUST170/REL170 Religion and the Environment - Environmental Justice, Values, and Ethics

*SUST260/IS260 Introduction to Environmental Humanities - Environmental Justice, Values, and Ethics

Note: Asterisks (*) notes courses that have been added.

IV. UPPER-DIVISION MAJOR CORE COURSES (12)

Select four 3-credit courses from the list below. Some courses appear in major electives but must be counted towards either major core courses or major elective, but not both.

SUST312/NREM302 (3) Natural Resource and Environmental Policy DS

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

SUST314/GEO302 (3) Global Environmental Issues

SUST316/NREM306 Environmental Ethics

PRE: NREM 210 or GEO 101 or PHIL 101 or PHIL 103

SUST322/GEO322 (3) Globalization and Environment DS

PRE: Junior standing or higher

SUST324/POLS324 (3) Global Environmental Politics DS

SUST 325/COM 325 (3) Communicating Sustainability

PRE: COM 201 (with a minimum grade of B) or consent.

SUST326/GEO325 (3) Geography, Environment, and Society DS

SUST330/GEO 330 (3) Culture and Environment DS

SUST335/ANTH335 (3) Society and Environment DS

PRE: ANTH 152

SUST350/ECON350 (3) Sustainable Development

PRE: ECON 120 or 130 or 131, or consent

SUST380/POLS380 (3) Environmental Law and Politics DS

SUST 413/GEO 411 Past Global Change and the Human Era DP

PRE: Junior standing or higher, or consent

SUST420/NREM420 Community and Natural Resource Management

PRE: two social science courses or consent

SUST426/GEO426 (3) Environment, Resources and Society DS

PRE: 102, 151, or consent

SUS441/CEE 441/OCN441 (3) Principles of Sustainability Analysis

PRE: CHEM 161 and PHYS 170 with a minimum grade of C-; or consent

SUST442/OCN442/TIM462 (3) Environmental Management Systems

PRE: Junior standing or higher

SUST456/HWST 458 (4) Natural Resource Issues and Ethics

PRE: HWST 207 or HWST 307 or HWST 356

SUST 481/HIST480/AMST425 American Environmental History DH

SUST494/NREM494 (3) Environmental Problem Solving

PRE: NREM 310, 301/SUST 311 (or concurrent), 302/SUST 312 (or concurrent), and senior; or consent

V. MAJOR ELECTIVES (15)

Select five 3-credit courses from two areas of concentrations. Some courses also appear in major electives but must be counted towards either major core courses or major elective, but not both. Substitutions with other upper-division SUST courses with approval.

Sustainable Environmental Policy

SUST311/NREM301 Natural Resource Management

PRE: NREM/TPSS 251 or 210; CHEM 151 or higher; and BIOL 172; or consent

SUST312/NREM302 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

SUST317/HWST307 Mālama 'Āina Resource Management Visual Technologies

PRE: HWST 107

SUST323/OCN321 Applied Principles of Environmental & Energy Policy

PRE: any 100 or 200 level OCN course, or consent.

SUST358/NREM358 Basic Environmental Benefit Cost Analysis

PRE: NREM 220/NREM 220 or ECON 130 or consent

SUST380/POLS380 Environmental Law and Politics

SUST411/NREM410 (4) Methods in Wildlife Management & Conservation

PRE: BIOL 171

SUST415/TIM415/GEO415 Nature-Based Tourism Management

PRE: TIM 101 or GEO/TIM 324

SUST420/NREM420 Community and Natural Resource Management

PRE: two social science courses or consent

SUST 421/TIM420 Sustainable Tourism Policies and Practices

PRE: 101 and departmental approval

SUST426/GEO426 Environment, Resources and Society

PRE: 102, 151, or consent

SUST441/CEE441/OCN441 Principles of Sustainability Analysis

PRE: CHEM 161 and PHYS 170 with a minimum grade of C-; or consent

SUST 442/OCN 442/TIM 462 Principles of Environmental Management Systems

PRE: Junior standing or higher

SUST444/CEE444 Infrastructure: Project Impacts, Policy and Sustainability

PRE: senior standing, open to engineering, science, urban planning, and economics majors

SUST451/NREM450 Wildlife Ecology and Management

PRE: BIOL172 or consent

SUST457/BOT457/HWST457 'Āina Mauliloa: Hawaiian Ecosystems

PRE: BOT 105 or 107, HWST 107, and junior standing; or consent

SUST458/ECON458 Project Evaluation and Resource Management

PRE: ECON 301

SUST459/HWST459 Strategies in Hawaiian Resource Use

PRE: HWST 207 or HWST 307 or HWST 356

SUST480/NREM480 Applied Forest Ecology

PRE: NREM 301/SUST 311 and NREM 380 or consent

SUST494/NREM494 Environmental Problem Solving

PRE: NREM 310, 301/SUST 311 (or concurrent), 302/SUST 312 (or concurrent), and senior; or consent

Food, Energy, and Water (FEW) Systems

SUST315/GEO305 Water and Society

PRE: sophomore standing or higher, or consent

SUST320/PEPS310 Environment and Agriculture

SUST323/OCN321/PPC340 Applied Principles of Environmental & Energy Policy

PRE: any 100 or 200 level OCN course, or consent. SUST332/ECON332 Economics of Global Climate Change

PRE: ECON 120 or 130 or 131, or consent

SUST 335/ANTH 335 Society and Environment

PRE: ANTH 152

SUST336/ECON336/PPC336 Energy Economics and Policy

PRE: ECON 120 or 130 or 131

SUST371/PEPS371/TPSS371 Genetics: Theory to Application

SUST410/PEPS410/TPSS410 (2) Sustainable Soil and Plant Health Management

SUST423/GEO422 Agriculture, Food and Society

PRE: junior standing or higher, or consent

From Global Issues to Local Action

SUST314/GEO302 Global Environmental Issues

SUST322/GEO322 Globalization and the Environment

PRE: Junior standing or higher

SUST324/POLS324 Global Environmental Politics

SUST326/GEO325 Geography, Environment, and Society

SUST330/GEO330 Culture and Environment

PRE: 102, 151, or consent

SUST332/ECON332 Economics of Global Climate Change

PRE: 120 or 130 or 131, or consent

SUST333/ANTH333 Climate Change and Cultural Response: Past, Present and Future

SUST340/IS340 Human Values and the Environment

PRE: any ENG DL or PHIL or GEO course, or consent.

SUST350/ECON350 Sustainable Development

PRE: ECON 120 or 130 or 131, or consent

SUST 401/HIST 401 History of the Indian Ocean World

PRE: junior or senior standing or consent

SUST426/GEO426 Environment, Resources and Society

PRE: 102, 151, or consent

SUST427/ERTH420 Beaches, Reefs, and Climate Change DP

PRE: Junior standing or higher, or consent

SUST461/ES460 Global Ethnic Conflict

PRE: one DS or DH course or consent.

SUST304/GES304/ATMO304 Global and Local Perspectives on Severe Weather

Sustainable Island Ecosystems

SUST317/HWST307 Mālama 'Āina Resource Management Visual Technologies

PRE: HWST 107

SUST313/BOT301 Plant Consevation Biology

PRE:BOT/BIOL305 or consent. Co-req: BOT301L

SUST321/ES320 Hawai'i and the Pacific

PRE: One DS or DH course

SUST341/ES340 Land Tenure and Use in Hawai'i

PRE: One DS or DH course

SUST351/ES350 Economic Change and Hawai'i's People DS

PRE: one DS or DH course

SUST356/HWST356 Aloha Kanaloa - Marine Resources and Abundance

PRE: HWST 107

SUST427/ERTH420 Beaches, Reefs, and Climate Change DP

PRE: Junior standing or higher, or consent

SUST445/BOT444 Ethnoecology and Conservation

PRE: BOT 202/202L or BIOL 265/265L or consent

SUST446/BOT446 Hawaiian Ethnobotany

PRE: BOT 440 or consent

SUST450/BOT450/BIOL454 Natural History of Hawaiian Islands

PRE: one semester of biological sciences at college level

SUST 455/ES455C Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in the Pacific Context

PRE: one DS or DH course, or consent

SUST456/HWST458 Natural Resource Issues and Ethics

PRE:217/HWST207 or 317/HWST307 or SUST/HWST356

SUST457/BOT457/HWST457 'Āina Mauliola: Hawaiian Ecosystems

PRE: BOT 105 or 107, HWST 107, and junior standing; or consent

SUST459/HWST459 Strategies in Hawaiian Resource Use

PRE: HWST 207 or HWST 307 or HWST 356

SUST 460/BOT 460/HWST 460 Hui Konohiki Practicum

PRE: HWST 207 or HWST 307 or HWST 356

Environmental Justice, Values, and Ethics

SUST316/NREM306 Environmental Ethics

PRE: NREM 210 or GEO 101 or PHIL 101 or PHIL 103

SUST318/ES308 Race, Indigeneity and Environmental Justice

PRE: one DS or DH course, or consent

SUST335/ANTH335 Society and Environment DS

PRE: ANTH 152

SUST338/ART338 Inter-Woven Structures

PRE: Sophomore standing or higer

SUST340/IS340 Human Values and the Environment

PRE: any ENG DL or PHIL or GEO course, or consent.

SUST367/SOC367/WGSS367 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

SUST414/OCN 411 The Ethics of Climate Change and Geoengineering

PRE: 310

SUST455/ES455C Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in the Pacific Context

PRE: one DS or DH course, or consent

SUST456/HWST458 Natural Resource Issues and Ethics

PRE:217/HWST207 or 317/HWST307 or SUST/HWST356

SUST461/ES460 Global Ethnic Conflict

PRE: One DS or DH course or consent

SUST482/ANTH482 Anthropology and the Environment: Culture, Power and Politics DS

PRE: ANTH 152 or 415 or consent

SUST484/ART484 Contemporary Art and Ecology

SUST439/Art439 Installation/Performance-Material in Context

PRE: ART 116

Climate Change

SUST332/ECON332 Economics of Global Climate Change

PRE: 120 or 130 or 131, or consent

SUST333/ANTH333 Climate Change and Cultural Response: Past, Present and Future

SUST 414/OCN 411 The Ethics of Climate Change and Geoengineering

PRE: 310

SUST427/ERTH420 Beaches, Reefs, and Climate Change DP

PRE: Junior standing or higher, or consent

SUST440/CEE440 Vulnerability and Adaptation on Coastal Infrastructure

PRE: Senior standing or higher

SUST304/GES304/ATMO304 Global and Local Perspectives on Severe Weather

VI. CAPSTONE (3)

SUST 495 Sustainability Capstone

VI. CURRENT SUST COURSES

100-Level

SUST 101 Dynamic Earth

SUST 102 The Natural Environment DP

SUST 170 Religion and the Environment

SUST 103 Integrative Systems Biology (4) DB

SUST 111L Biology and Society Laboratory (1) DY

SUST 112 Introduction to the Environment and Sustainability DB

SUST 112L Introduction to the Environment and Sustainability (1) DY

SUST 113 Quantifying Global and Environmental Change FO

SUST 114 Sustainable Cities

SUST 115 Sustainability in a Changing World FGA

SUST 116 Humans and the Environment DP

SUST 120 Chemistry in a Sustainable World DP

SUST 156 Sustainable Food and Energy Field Course (V) DB

SUST 157 Global Environmental History FGC

300-Level

SUST 304 Global and Local Perspectives on Severe Weather DP

SUST 310 Conservation Ethics (1)

SUST 311 Natural Resources Management DB

SUST 312 Natural Resource and Environmental Policy DS

SUST 313 Plant Conservation Biology DB

SUST 313L Plant Conservation Biology Lab (1) DY

SUST 314 Global Environmental Issues

SUST 315 Water and Society DS

SUST 316 Environmental Ethics

SUST 317 Mālama 'Āina Resource Management Visual Technologies

SUST 318 Race, Indigeneity, and Environmental Justice DS

SUST 320 Environment and Agriculture DS

SUST 321 Hawai'i and the Pacific DH

SUST 322 Globalization and Environment DS

SUST 323 Applied Principles of Environmental & Energy Policy DS

SUST 324 Global Environmental Politics DS

SUST 325 Communicating Sustainability

SUST 326 Geography, Environment, and Society DS

SUST 330 Culture and Environment DS

SUST 332 Economics of Global Climate Change DS

SUST 333 Climate Change and Cultural Response:

Past, Present, and Future DS

SUST 335 Society and Environment DS

SUST 336 Energy Economics DS

SUST 338 Inter-Woven Structures DA

SUST 340 Human Values and the Environment

SUST 341 Land Tenure and Use in Hawai'i DH

SUST 350 Sustainable Development DS

SUST 351 Economic Change and Hawai'i's People DS

SUST 356 Aloha Kanaloa – Marine Resources and Abundance

SUST 358 Basic Environmental Benefit Cost Analysis

SUST 367 Sustainability, Technoscience, and Social Justice DS $\,$

200-Level

SUST 204 Historical Ecology of Hawai'i

SUST 210 Introduction to Environmental Science DB

SUST 211 Agriculture, Environment, and Society DB

SUST 217 Hawaiian Perspectives in Ahupua'a

SUST 220 Agricultural and Resource Economics DS

SUST 221 Organic Food Crop Production (2) DY

SUST 222 Hawaiians DS

SUST 250 Introduction to Sustainability from Social Science Perspectives DS

SUST 251 Scientific Principles of Sustainability DB

SUST 260 Introduction to Environmental Humanities

400-Level

SUST 484 Contemporary Art and Ecology

SUST 401 History of the Indian Ocean World DH

SUST 410 Sustainable Soil and Plant Health

Management
SUST 411 Methods in Wildlife Managen

SUST 411 Methods in Wildlife Management & Conservation

SUST 412 The Ocean Economy DS

SUST 413 Past Global Change and the Human Era DP

SUST 414 The Ethics of Climate Change and

Geoengineering

SUST 415 Nature-Based Tourism Management DS

SUST 420 Community and Natural Resource Management DS

SUST 421 Sustainable Tourism Policies and Practices

SUST 422 Biocontrol of Invasive Species DB

SUST 423 Agriculture, Food and Society DS

SUST 425 Environmental Geochemistry DP

SUST 426 Environment, Resources and Society DS

SUST 427 Beaches, Reefs, and Climate Change DP

SUST 433 Interdisciplinary Science Curriculum

SUST 436 Use, Re-use, and Radical Re-use DA

SUST 439 Installation/Performance--Material in

Context DA

SUST 440 Vulnerability & Adaptation on Coastal Infrastructure

SUST 441 Principles of Sustainability Analysis

SUST 442 Environmental Management Systems

SUST 444 Infrastructure: Project Impacts, Policy and Sustainability

SUST 445 Ethnoecology and Conservation DB

SUST 446 Hawaiian Ethnobotany DS

SUST 449 Climate Modeling, Data Analysis and Applications (Major Restriction)

SUST 450 Natural History of Hawaiian Islands DB

SUST 451 Wildlife Ecology and Management

SUST 455 Topics in Comparative Ethnic Conflict:

Hawaiian Sovereignty in Pacific Context DS

SUST 456 Natural Resource Issues and Ethics (4)

SUST 457 'Āina Mauliola: Hawaiian Ecosystems

SUST 458 Project Evaluation and Resource

SUST 371 Genetics: Theory to Application	Management DS
SUST 380 Environmental Law and Politics DS	SUST 459 Strategies in Hawaiian Resource Use
SUST 387 Politics of the Ocean DS	SUST 460 Hui Konohiki Practicum
	SUST 461 Global Ethnic Conflict
	SUST 480 Applied Forest Ecology
	SUST 481 American Environmental History DH
	SUST 482 Anthropology and the Environment: Culture,
	Power and Politics DS
	SUST 484 Contemporary Art and Ecology DH
	SUST 494 Environmental Problem Solving
	SUST 496 Sustainability & Resilience Seminar (1)

Last updated: 12/3/2021

students, faculty, and staff can obtain access to the Internet and UH technology resources through their UH username; short courses and professional development activities are available for faculty and staff. The ITS Help Desk provides a single point of contact for access to ITS services and technical support.

Office of International and Exchange Programs

Queen Lili'uokalani Center for Student Services 206

2600 Campus Road Honolulu, HI 96822 Tel: (808) 956-2223 Email: shillber@hawaii.edu

Web: manoa.hawaii.edu/international/

The Office of International and Exchange Programs (OIEP), in consultation with faculty, administrators, and the campus community, provides the international vision for the university. It does so by guiding relevant policies and expanding the university's international presence and reputation through networking with communities at home and around the world. This office advocates, supports, and promotes international opportunities and activities both on campus and overseas. Led by the Assistant Vice Chancellor, the chief international education officer, and the principal advisor to the Provost and Vice Chancellor on all matters pertaining to international education, OIEP is comprised of the following functional units: Faculty and Scholar Immigration Services, International Student Services, Manoa International Exchange, and the Study Abroad Center. The OIEP serves as a catalyst for the university's international engagement, facilitating and coordinating its global activities and initiatives.

Study Abroad Center

Moore Hall 115 1890 East-West Road Honolulu, HI 96822 Tel: (808) 956-5143 Fax: (808) 956-9319 Email: uhmsac@hawaii.edu Web: www.studyabroad.org

The Study Abroad Center (SAC) collaborates with various UH Mānoa academic departments to provide opportunities for students to study, and faculty members to teach and conduct research in another country. For more details, go to the Programs section in "Undergraduate Education."

Mānoa International Exchange

Queen Lili'uokalani Center for Student Services 206 2600 Campus Road

2600 Campus Road Honolulu, HI 96822 Tel: (808) 956-4728 Fax: (808) 956-5076 Email: uhmix@hawaii.edu

Web: manoa.hawaii.edu/mix/

UH Mānoa International Exchange (MIX) provides an opportunity for UH Mānoa students to study overseas and students from our overseas partner universities to study at Mānoa. An international exchange may be for one or two semesters; some summer exchange programs are also available. Participating students are registered as full-time UH Mānoa students while on exchange, and pay only their normal tuition. Upon completing the exchange, students receive transfer credit based on an evaluation of the transcript provided by the host university.



International Student Services

Queen Lili'uokalani Center for Student Services 206

2600 Campus Road Honolulu, HI 96822 Tel: (808) 956-8613 Fax: (808) 956-5076

Email: issmanoa@hawaii.edu Web: www.hawaii.edu/issmanoa/

International Student Services (ISS) provides assistance to approximately 1,200 international students who come from more than 85 countries to study at UH Mānoa. ISS advises students on regulations affecting their non-immigrant visa status in the U.S., provides opportunities to help students adjust to local and U.S. cultures by working closely with the International Student Association, and serves as the office responsible for meeting international student federal compliance mandates.

Faculty and Scholar Immigration Services

Physical Science Building 102-106 2565 McCarthy Mall

Honolulu, HI 96822 Tel: (808) 956-2224 Fax: (808) 956-5030 Email: fsis@hawaii.edu Web: www.hawaii.edu/fsis/

Faculty and Scholar Immigration Services (FSIS) provides immigration advising and support services for international faculty, APTs, exchange visitors, and sponsoring departments across the UH System. FSIS reviews and updates UH immigration policies and procedures and serves as a liaison between UH and federal agencies on employment-based immigration matters.

Institute for Sustainability and Resilience (ISR)

2424 Maile Way Saunders Hall 113 Honolulu, HI 96822 Tel: (808) 956-2890 Email: isr@hawaii.edu

Web: manoa.hawaii.edu/isr/

The Institute for Sustainability and Resilience (ISR) at UH Mānoa aims to help Hawai'i meet our local and global obligations to environmental sustainability, with an emphasis on promoting well-being from the lens of community resilience. ISR will provide a campus-wide focus for instructional, research and outreach programs relating to sustainability and resilience in Hawai'i, as lessons from our islands can help provide global

solutions. ISR will partner with communities across Hawai'i to address challenges to sustainability and resilience, as well as foster multidisciplinary curricular programs that empower students to meet the critical challenges of bridging local to global, problems to solutions.

Interdisciplinary Studies, in collaboration with ISR, offers a BA in Sustainability. The program allows students to harness a cross-disciplinary approach to sustainability by taking classes from multiple departments across campus. Sustainability classes build understanding of the interconnectivity of human and natural systems. Students can tailor their program around five six possible areas of concentration: Environmental Policy and Management;

Sustainable Environmental Policy

- Food, Energy, and Water (FEW) Systems;
- Globalization and Sustainable Development; From Global Issues to Local Action;
- Sustainable Island Ecosystems; and
- Environmental Justice, and Ethics. Values, and Ethics; and
- Climate Change.
 Students who understand the basis of environmental systems and sustainability solutions will be well equipped for a wide range of careers, for example, in the fields of education, natural resources management, corporate responsibility, government and policy, and sustainability planning.

Institutional Research Office

2500 Campus Road Hawai'i Hall 107 Honolulu, HI 96822 Tel: (808) 956-5366 Fax: (808) 956-7115

Email: miro@hawaii.edu Web: manoa.hawaii.edu/miro/

The mission of the Manoa Institutional Research Office is to enhance institutional effectiveness by: collecting, analyzing, and reporting information for institutional strategic planning, assessment, program review, policy formulation, and decision making for both academic and administrative functions; coordinating responses to inquiries for universityrelated information; and serving as a comprehensive source for information about the institution.

Harold L. Lyon Arboretum

3860 Mānoa Road Honolulu, HI 96822 Tel: (808) 988-0456 Fax: (808) 988-0462

Web: manoa.hawaii.edu/lyonarboretum/

Harold L. Lyon Arboretum is a research unit that serves in a supporting capacity for all educational, scientific, and service activities; it is also an integral player in the research and conservation efforts of the state's native flora. Our mission is to inspire and cultivate the conservation of tropical plant biodiversity, and connect it to Hawai'i's culture through education and research. It is home to a living collection of more than 19,000 individual plants representing some 8,000 taxa, featuring a vast assortment of tropical and ornamental plants, including heliconias, gingers, aroids, bromeliads, native Hawaiian plants, and one of the largest palm collections in the world. The Hawaiian Rare Plant Program (HRPP) conserves hundreds of threatened and endangered plant species in the state, and utilizes micropropagation and seed banking to house native taxa and flora of Hawai'i; many are critically endangered (<50 surviving individuals). The Seed Conservation Laboratory has more than 26 million seeds representing ~600 taxa, and the

Micropropagation Laboratory, which houses species that do not store well as seed, hosts ~30,000 plant individuals representing around 160 native taxa.

University of Hawai'i Cancer Center

701 Ilalo Street Honolulu, HI 96813 Tel: (808) 586-3010 Fax: (808) 586-3052

Web: www.uhcancercenter.org

The University of Hawai'i Cancer Center is a free-standing organized research unit of UH Manoa focusing on cancer research. Its faculty members are comprised of scientists and clinicians from various disciplines reflecting the broad research interests of the center. The UH Cancer Center is a National Cancer Institute (NCI)-designated cancer center, a prestigious designation granted only to the most eminent and successful cancer centers in the nation after a rigorous peer review. The designation comes with a Cancer Center Support Grant that provides funding for various shared resources such as Analytical Biochemistry; Biostatistics; Genomics and Bioinformatics; Metabolomics; and Nutrition Support. The UH Cancer Center also operates the Hawai'i Tumor Registry as well as core research facilities, including Microscopy, Imaging, and Flow Cytometry; Pathology and the Clinical Trials Office, which provides access to clinical trials for cancer patients in Hawai'i.

The UH Cancer Center members are engaged in all aspects of cancer research, and generates over \$30 million in extramural research support annually. In addition to conducting fundamental research, the UH Cancer Center also provides research opportunities for minority and underserved high school students and college undergraduates through internships, as well as MS, MD, MPH, and PhD students enrolled in academic disciplines closely aligned with the faculty's research interests.

The UH Cancer Center's research activities are organized into two programs: Cancer Biology (CB) and Population Sciences in the Pacific (PSP), each with specific areas of interest. PSP areas of interest are: (1) cancer epidemiology, which examines the underlying ethnic and racial differences in cancer incidence and mortality and the roles of lifestyle factors, genetics, hormones, and infectious agents in cancer causation; and (2) cancer prevention, which seeks to advance the understanding of behavioral, psychosocial, biological, social, and environmental factors associated with cancer; test interventions to reduce cancer risk, increase early detection, and improve survivorship; and disseminate research that benefits multiethnic, multicultural, and underserved populations. The CB program studies cancer mechanisms that drive cancer development, progression, and invasion and works to translate the discoveries into more effective prevention, detection, and therapeutic interventions. The CB areas of interest are: (1) natural products and cell signaling, which investigates anticancer targets and pathways of clinical and therapeutic significance; focuses on new drug discoveries and development, with the emphasis on identifying safe and effective natural product-based anticancer drugs, and taking advantage of the vast natural product resources of Hawai'i and the Pacific region; and (2) translational and clinical research that aims to translate research discoveries into clinical applications, while providing Hawai'i's patients access to the most promising research opportunities and contributes Hawai'i's unique multiethnic population to national

ADD TEXT IN-LINE:

** ISR also offers a Certificate in Sustainability. The 15-credit certificate is intended for degree-seeking undergraduate students looking for cross-disciplinary education in sustainability that complements their major degree.