University of Hawai'i
Code Request Form for Academic Programs

NEW OR REPLACE PROGRAM CODE

☑ **New Program Code** ☐ **Replace Program Code** Date: September 10, 2022

REQUESTOR CONTACT INFORMATION

Name	Pheng Xiong	Campus	UH Manoa
Title	University Registrar	Email	pxiong@hawaii.edu
Office/Dept	Office of the Registrar	Phone	808-956-5322

NEW PROGRAM CODE TO CREATE

Institution	UH Manoa	Campus	UH Manoa
Level	Undergraduate	Effective Term	Fall 2022

	Code (Max. Characters)		Description	Check if requesting new code:	
College	(2)	23	Academic Excellence	☐	See Banner form STVCOLL
Department	(4)	IS	Interdisciplinary Studies	☐	See Banner form STVDEPT
Degree/Certificate	(6)	BA	Bachelor of Arts	☐	See Banner form STVDEGC
Major	(4)	IS	Interdisciplinary Studies	☐	See Banner form STVMAJR
Concentration	(4)	BMSG	BAM Sustainability&Geo	☑	See Banner form STVMAJR
Minor	(4)			☐	See Banner form STVMAJR

If a similar major/concentration code exists in Banner, please list the code:

Justification to warrant a new major/concentration code similar to an existing major/concentration code:

Is this major/concentration code being used the same way at the other UH campuses?	☐ Yes	☑ No
Should this program be available for applicants to select as their planned course of study on the online application? *If yes, student may select the code as their only program of study.*	☐ Yes	☑ No

RULES PERTAINING TO FINANCIAL AID AND 150% DIRECT SUBSIDIZED LOAN LIMIT LEGISLATION

Is 50% or greater of the classes in this program offered at a location other than the Home Campus?	☐ Yes	☑ No
Is this program/major/certificate financial aid eligible?	☑ Yes	☐ No
Does this certificate qualify as a Gainful Employment Program (Title IV-eligible certificate program)?	☐ Yes	☑ No

See http://www.ifap.ed.gov/GainfulEmploymentInfo/index.html

Program Length
In academic years; decimals are acceptable. The length of the program should match what is published by the campus in any online and/or written publication. 4 Years

Special Program Designations ☐ A ☐ B ☐ N ☐ P ☐ T ☐ U
See Special Program Designations Code Definitions on IRAO Program Code Request webpage

Required Terms of Enrollment: ☑ Fall ☑ Spring ☐ Summer ☐ Extended

Form modified: Oct 20208

University of Hawai'i
Code Request Form for Academic Programs

NEW OR REPLACE PROGRAM CODE

EXISTING PROGRAM CODE TO REPLACE, IF APPLICABLE

Program Code		Program Description	
Institution		Campus	UH Manoa
College		Department	
Level			

Are current students "grandfathered" under the program code? ☐ Yes ☐ No

Should the old program code be available for use in Banner? ☐ Yes ☐ No

Effective _____ **, old program code will no longer be available to admit or recruit students.**
Term (ie. Fall 2020)

This will turn off the online application, recruitment (effects Banner forms SRASUMI and SRAQUIK) and admissions (effects Banner forms SAADCRV, SAAADMS, SAASUMI, SAAQUIK, and SAAQUAN) Banner modules.

Effective _____ **, old program code will no longer be available to award degree to students.**
Term (ie. Fall 2020)

This will turn off the general student (effects Banner form SGASTDN) and academic history (effects Banner form SHADEGR) Banner modules.

ATTACHMENTS

BOR Approved: Sole-credential Certificate, Associate, Bachelor and Graduate Degrees, and sole credential certificates

☐ BOR Meeting Minutes & Supporting Documents ☐ Curriculum

Chancellor Approved: Concentrations, Certificates and Associate in Technical Studies (ATS) Degree

☐ Memo from Chancellor to notify Vice President for Academic Planning and Policy regarding program action.

☒ Curriculum

CERTIFICATES ONLY: Please check one (1) statement. This certificate is a...

☐ BOR approved certificate. BOR Meeting/Approval Date: _____

☐ Chancellor approved within an authorized BOR program. BOR Program: _____

☐ Chancellor approved CO in accordance with UHCCP 5.203, Section IV.B.10.

VERIFICATIONS

By signing below, I verify that I have reviewed and confirm the above information that is pertinent to my position.

Registrar (Print Name)	**Financial Aid Officer** (Print Name)	**For Community Colleges, verification of consultation with OVPCC Academic Affairs:**
Pheng Xiong	Jodie Kuba	Tammi Oyadomari-Chun
Digitally signed by Pheng Xiong Date: 2022.09.10 15:42:56 -10'00'	Digitally signed by Jodie Kuba Date: 2022.09.12 10:12:19 -10'00' 09/12/2022	
Signature Date	Signature Date	Signature Date

ADDITIONAL COMMENTS

Note that IS-BA will need to be reorg'd in Banner to college code 23. A separate request will be made to move all IS students to a new IS-BA(23) code as part of the UH Manoa phase II reorg. Org chart is attached. This present request is only for the BAM.

Form modified: Oct 2020

UNIVERSITY of HAWAI'I® MĀNOA

Department of Geography and Environment
2424 Maile Way, Saunders Hall 445
Honolulu, Hawai'i 96822-2223

March 07, 2022

MEMORANDUM

TO: Laura Lyons
Interim Vice Provost for Academic Excellence

VIA: Krystyna Aune
Dean, Graduate Division
Digitally signed by Krystyna S. Aune
Date: 2022.03.30 07:47:10 -10'00'

VIA: Denise Konan
Dean, College of Social Sciences
Denise Konan Digitally signed by Denise Konan
Date: 2022.03.29 19:20:06 -10'00'

VIA: Hong Jiang
Acting Chair, Geography and Environment

FROM: Krisna Suryanata
Graduate Chair, Geography and Environment

Makena Coffman
Director, Institute for Sustainability and Resilience

Amy Schiffner
Director, Interdisciplinary Studies

SUBJECT: Combined Pathway, Bachelor's Degree in Interdisciplinary Studies: Sustainability and Master's Degree in Geography and Environment

SPECIFIC ACTION REQUESTED:

It is requested that the Interim Vice Provost for Academic Excellence approve the program modification to create a combined degree pathway for students to earn Bachelor's Degree in Interdisciplinary Studies: Sustainability and Master's Degree in Geography and Environment.

RECOMMENDED EFFECTIVE DATE:

Fall 2022

ADDITIONAL COST:

None

PURPOSE:

To facilitate graduate-level education to exceptional undergraduate students through a combined pathway so they can complete the BA degree and MA degree in less time by double-counting course work (3 courses) at the undergraduate tuition rate. The pathway is designed for students to graduate with both degrees in as few as five years.

BACKGROUND:

The BA in Interdisciplinary Studies: Sustainability is an interdisciplinary program in which students develop skills to understand social and environmental implications of sustainability in the context of contemporary local, regional, and global challenges. Students take courses across disciplines and tailor their program around a particular focus of interest: 1) Sustainable Environmental Policy; 2) Food, Energy and Water Systems; 3) From Global Issues to Local Action; 4) Sustainable Island Ecosystems; 5) Environmental Justice, Value and Ethics; or 6) Climate Change. The program includes a capstone and can be completed in four years. The current BA requirements in Sustainability is attached.

The MA in Geography and Environment: Geography is a discipline that examines global change and local impacts on humans and the environment. Its three interrelated themes include: 1) Environmental geography**,** which engages students in a systematic study of the Earth's physical nature and human activities that change it; 2) Human geography, which focuses on cultural, economic, environmental, and political processes that shape the human experience and sense of place; and 3) Geospatial information science, which includes the use of geographic information systems (GIS), remote sensing science and cartography to support research into environmental and societal issues. The MA program allows students to deepen their understanding of the theoretical and applied aspects of Geography, prepare them for the advanced requirements of the current job market and develop advanced skills in conducting research in their field. The Plan A program requires completion of 30 credits and includes a completion of a thesis. This program can be completed in two years. The department does not offer a Plan B (non-thesis) program. The current MA requirements in Geography and Environment is attached.

Due to increased competition for positions in the public and private sectors, a Master's degree is increasingly needed to compete in the job market. The skills and independence that students develop during a Master's program are essential for successful industry employment with competitive salaries. The BAM pathway opens up the possibility of offering a streamlined pathway that could attract more of our current high performing undergraduate students to complete their Master's degree here and also attract additional students from the mainland and locally to attend UH Mānoa.

The number of U.S. continental universities that offer a combined BA and MA degree in Geography and Environment is still relatively small (e.g. Penn State, Utah, SUNY-Albany, Miami U., Arizona St. U., Clark), but is growing relatively fast. Considering that these dual degrees are the future direction that a lot of peer departments will seek soon, it is important that we establish our standing in this competitive environment. Creating this combined program would attract more students to UH Mānoa. In addition, we believe that offering a combined BA+MA degree will facilitate the decision of our exceptional students to pursue their graduate degree at UH Mānoa.

PROPOSED PROGRAM

The new combined BA+MA program in Interdisciplinary Studies: Sustainability / Geography and Environment will require students to take a minimum of 141 credits. Of this, nine will be double-counted toward both degrees. With the double-counted courses, students will earn 150 credits, reflecting 120 credits for the BA and 30 credits for the MA.

Students must complete a gateway class with a B or better grade to be eligible for the program. The gateway class is **SUST 326/GEO 325 Geography, Environment and Society (DS)**. This course is part of the Upper-Division Major Core Courses for the Interdisciplinary Studies: Sustainability degree.

Nine (9) credits may be double-counted across the two programs:

- GEO 695 Concepts and Theories in Geography (3 credits) will be counted within the Interdisciplinary Studies: Sustainability major as an Upper-Division Major Core Course (3 credits)
- GEO 696 Research Design / Methods in Geography (3 credits) will be substituted for the SUST 495 Sustainability Capstone (3 credits)
- One course numbered 400+ that fits the student's Interdisciplinary Studies: Sustainability major area of concentration as well as the Master's in Geography and Environment:
    - GEO 411 / SUST 413 Past Global Change and the Human Era (3 credits)
    - GEO 426 / SUST 426 Environment, Resources, and Society (3 credits)
    - GEO 422 / SUST 423 Agriculture, Food and Society (3 credits)
    - SUST 427 / ERTH 420 Beaches, Reefs, and Climate Change (3 credits)
    - SUST 420 / NREM 420 Community and Natural Resource Management (3 credits)

Students will apply to the BA+MA program in the form of early graduate admission after their fifth semester (junior year). They will submit the same application documents as applicants to the regular MA program no later than March 15 to be considered for the Fall admission of the same year.

Accepted students will receive notice of "admission," typically in the spring of the junior year (6th semester). The following semester, which would generally be the fall of senior year (7th semester), pathway students begin the double-counted coursework at the undergraduate tuition rate. Pathway students are considered dual program students. An overall cumulative

GPA of 3.0 or higher (upon graduation with the baccalaureate degree) is required to apply for and continue in the graduate program.

ACTION RECOMMENDED

It is recommended that the Interim Provost for Academic Excellence approve the program modification to create a combined degree pathway for students to earn a Bachelor's Degree in Interdisciplinary Studies: Sustainability and a Master's Degree in Geography and Environment.

ATTACHMENTS

1. Current BA Requirements in Sustainability
2. Current MA Requirements in Geography and Environment
3. Proposed combined pathway for Bachelor's in Interdisciplinary Studies: Sustainability and Master's in Geography and Environment

Approved / Disapproved:

Laura Lyons — 4.27.22

Laura Lyons
Interim Associate Vice Chancellor for Academic Affairs

Date

Attachment 1: Undergraduate Major Requirements in Sustainability

Course Programming for BA in IS: Sustainability
88 core and major credits, 32 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 microeconomics course with approval

AND
Statistics
- BIOL 220/BOT 220 Biostatistics (3) FQ
  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 consent
- 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 DB – *All/Sustainable Environmental Policy*
*SUST116/ERTH106 Humans and the Environment DP – *All/Sustainable Environmental Policy*
*SUST210/NREM210/PEPS210 Introduction to Environmental Science DB – *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 DS - *Sustainable Island Ecosystems*
*SUST170/REL170 Religion and the Environment FGB - *Environmental Justice, Values, and Ethics*
*SUST260/IS260 Introduction to Environmental Humanities DH - *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 (ERTH 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 DS
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 DS
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 concentration. 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 DB
PRE: NREM/TPSS 251 or 210; CHEM 151 or higher; and BIOL 172; or consent
SUST312/NREM302 Natural Resource and Environmental Policy DS
PRE: SUST/NREM/PEPS 210 or (BIOL 101 or higher) or GEO 101 or (ERTH 101 or higher); and 220/NREM 220 or one ECON course or two DS courses
SUST317/HWST307 Mālama ʻĀina Resource Management Visual Technologies
PRE: HWST 107
SUST323/OCN321/PPC 340 Applied Principles of Environmental & Energy Policy DS
PRE: any 100 or 200 level OCN course, or consent.
SUST358/NREM358 Basic Environmental Benefit Cost Analysis DS
PRE: NREM 220/NREM 220 or ECON 130 or consent
SUST380/POLS380 Environmental Law and Politics DS
SUST411/NREM410 (4) Methods in Wildlife Management & Conservation
PRE: BIOL 171
SUST415/TIM415/GEO415 Nature-Based Tourism Management DS
PRE: TIM 101 or GEO/TIM 324
SUST420/NREM420 Community and Natural Resource Management DS
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 DS
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/HWST457 ʻĀina Mauliloa: Hawaiian Ecosystems
PRE: BOT 105 or 107, HWST 107, and junior standing; or consent
SUST458/ECON458 Project Evaluation and Resource Management DS
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 DS
PRE: sophomore standing or higher, or consent
SUST320/PEPS310 Environment and Agriculture
SUST323/OCN321/PPC340 Applied Principles of Environmental & Energy Policy DS
PRE: any 100 or 200 level OCN course, or consent.
SUST332/ECON332 Economics of Global Climate Change DS
PRE: ECON 120 or 130 or 131, or consent
SUST 335/ANTH 335 Society and Environment DS
PRE: ANTH 152
SUST336/ECON336/PPC336 Energy Economics and Policy DS
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 DS
PRE: junior standing or higher, or consent

From Global Issues to Local Action
SUST314/GEO302 Global Environmental Issues
SUST322/GEO322 Globalization and the Environment DS
PRE: Junior standing or higher
SUST324/POLS324 Global Environmental Politics DS
SUST326/GEO325 Geography, Environment, and Society DS
SUST330/GEO330 Culture and Environment DS
PRE: 102, 151, or consent
SUST332/ECON332 Economics of Global Climate Change DS
PRE: 120 or 130 or 131, or consent
SUST333/ANTH333 Climate Change and Cultural Response: Past, Present and Future DS
SUST340/IS340 Human Values and the Environment
PRE: any ENG DL or PHIL or GEO course, or consent.
SUST350/ECON350 Sustainable Development DS
PRE: ECON 120 or 130 or 131, or consent
SUST 401/HIST 401 History of the Indian Ocean World DH
PRE: junior or senior standing or consent
SUST426/GEO426 Environment, Resources and Society DS
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 DP

Sustainable Island Ecosystems
SUST317/HWST307 Mālama ʻĀina Resource Management Visual Technologies
PRE: HWST 107
SUST313/BOT301 Plant Conservation Biology DB
PRE:BOT/BIOL305 or consent. Co-req: BOT301L
SUST321/ES320 Hawaiʻi and the Pacific DH
PRE: One DS or DH course
SUST341/ES340 Land Tenure and Use in Hawaiʻi DH
PRE: One DS or DH course
SUST351/ES350 Economic Change and Hawaiʻi'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 DB
PRE: BOT 202/202L or BIOL 265/265L or consent
SUST446/BOT446 Hawaiian Ethnobotany DS
PRE: BOT 440 or consent
SUST450/BOT450/BIOL454 Natural History of Hawaiian Islands DB
PRE: one semester of biological sciences at college level
SUST 455/ES455C Topics in Comparative Ethnic Conflict: Hawaiian Sovereignty in the Pacific Context DS
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 ʻĀina 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/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 DS
PRE: one DS or DH course, or consent
SUST335/ANTH335 Society and Environment DS
PRE: ANTH 152
SUST338/ART338 Inter-Woven Structures DA
PRE: Sophomore standing or higher
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 DS
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 DS
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 DH
SUST439/ART439 Installation/Performance-Material in Context DA
PRE: ART 116

Climate Change
SUST332/ECON332 Economics of Global Climate Change DS
PRE: 120 or 130 or 131, or consent
SUST333/ANTH333 Climate Change and Cultural Response: Past, Present and Future DS
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 DP

VI. CAPSTONE (3)
SUST 495 Sustainability Capstone

Attachment 2: Geography and Environment MA Requirements

Each MA student is required to complete a minimum 30 credit hours of coursework at the 400-level or higher.

I. Required Core Courses (7 Credits)

Core courses cannot be substituted with directed studies courses (GEO 699) and students must obtain a B grade or higher to satisfy these requirements. If the core courses are not offered in a particular semester, with the prior approval of the Graduate Chair, a student may take an equivalent course in another department.

- **GEO 692, Faculty Seminar Series (1 credit)**
  Graduate seminar required of entering graduate students unless waived by department. Single credit course in which faculty present ongoing research in their fields.
- **GEO 695, Concepts and Theories in Geography (3 credits)**
  Concepts, theory, models. Geographic approaches to spatial and environmental problems. Required of entering graduate students unless waived by department.
- **GEO 696, Research Design / Methods in Geography (3 credits)**
  Elements of research design, practical field experience, exposure to research and ideologies, broad exposure to heritage and ethos of the discipline

II. Research Skills (3 Credits)

MA Students must complete at least 3 credits of coursework in research skills appropriate to their specialization. This can include quantitative techniques, qualitative research methods, field, or laboratory skills. A GEO 699 course may be used to satisfy this requirement with the approval of a student's advisor and the Graduate Chair.

III. Specialization (12 Credits)

MA students must consult with their Advisor to devise an approved program of courses that constitute a coherent specialization. Faculty supervise students with specializations in human geography, environmental geography, and geospatial technologies, and all proposed specializations must be supported by faculty expertise within the department. All courses must be at the 400-level or higher and at least 6 credits must be at the 600 level or higher. Students may include up to 3 credits from cognate departments or programs with approval from their advisor and the Graduate Chair. Geography 699 credits may only be used under special circumstances to fulfill the specialization requirement with prior approval of their advisor and Graduate Chair.

IV. Thesis Writing (8 Credits)

MA students receive credit while preparing their thesis under the direction of an Advisor. The thesis is a substantial undertaking that demonstrates a student's ability to formulate a research problem, assemble and analyze data, draw appropriate conclusions, and express findings clearly and concisely.

Attachment 3: Bachelor's in Interdisciplinary Studies: Sustainability and Master's in Geography and Environment Pathway

We propose to offer a combined Bachelor's in Sustainability and Master's in Geography and Environment (Plan A) pathway that allows students to earn both degrees in five years.

Minimum Credits: The new combined BA+MA program will require students to take a minimum of 141 credits. Of this, nine will be double-counted toward both degrees. With the double-counted courses, students will earn 150 credits, reflecting 120 credits for the BA and 30 credits for the MA.

Double Counting: Up to nine (9) credits of coursework may be double-counted for both the bachelor's and master's degree, including two (2) 600-level courses and one (1) 400-level course.

- GEO 695 Concepts and Theories in Geography (3 credits) will be counted within the Interdisciplinary Studies: Sustainability major as an Upper-Division Major Core Course (3 credits)
- GEO 696 Research Design / Methods in Geography (3 credits) will be substituted for the SUST 495 Capstone (3 credits)
- One course numbered 400+ that fits the student's Interdisciplinary Studies: Sustainability major area of concentration as well as the Master's in Geography and Environment:
    - GEO 411 / SUST 413 Past Global Change and the Human Era (3 credits)
    - GEO 426 / SUST 426 Environment, Resources, and Society (3 credits)
    - GEO 422 / SUST 423 Agriculture, Food and Society (3 credits)
    - SUST 427 / ERTH 420 Beaches, Reefs, and Climate Change (3 credits)
    - SUST 420 / NREM 420 Community and Natural Resource Management (3 credits)
- All courses must be passed with a grade of B or better.

Gateway Course: GEO 325 / SUST 326 (Geography, Environment and Society – 3 credits). Undergraduate majors must complete this course with a minimum grade of B or higher in order to be considered for the pathway. This course is part of the Upper-Division Major Core Courses for the Interdisciplinary Studies: Sustainability degree.

Application: Students must submit the Graduate Admissions Application and fee as well as all required program admission materials by March 15 to be considered for the Fall admission of the same year.

Admission: Accepted students will receive notice of "admission," typically in the spring of the junior year (6th semester). The following semester, which would generally be the fall of senior year (7th semester), pathway students begin the double-counted coursework at the undergraduate tuition rate. Pathway students are considered dual program students. An overall

cumulative GPA of 3.0 or higher (upon graduation with the baccalaureate degree) is required to apply for and continue in the graduate program.

Bachelor's Degree: The bachelor's degree is conferred after successful completion of all required coursework, including meeting the minimum upper division credit requirement (currently 45 credits) for the undergraduate degree. Interdisciplinary Studies: Sustainability BA requires a minimum of 36 credits within the major degree pathway.

Graduate Enrollment: Pathway students begin their 9th semester as "graduate students," and continue the master's degree program at the graduate tuition rate. Continuous enrollment after conferral of the bachelor's degree is required (unless on approved leave of absence after the first semester as a graduate student). If the baccalaureate degree is not conferred, graduate status will be inactivated and the student may not continue to take courses applicable to the graduate program.

Leaves of Absence: Until the bachelor's degree is conferred, pathway students should follow the undergraduate procedures to request a leave of absence (LOA), if needed. Graduate students, once classified, must be enrolled for at least one semester before becoming eligible for a LOA.

Combined Degree Program: Sustainability + Geography & Environment

Undergraduate Tuition								Graduate Tuition	
Freshman Year		**Sophomore Year**		**Junior Year**		**Senior Year**		**MA Year**	
Fall		**Fall**		**Fall**		**Fall**		**Fall**	
Major Prereq DS	3	**Major Prereq**	3	**GEO 325 /SUST**		**GEO 695 (Upper**	**3**	**Research skills**	**3**
Major Foundation	3	**Major Foundation**	3	**326 (DS)**	**3**	**Division Major Core)**		**(400+)**	**3**
FW		HSL 201	3	**Major Elective**		**GEO 692***	**1**	**Specialization**	**3**
FG A/B/C	**3**	DA/DH/DL	3	**(Area 1)**	**3**	**Major Elective (Area**	**3**	**(400+)**	**3**
HSL 101	3	H	3	E (300+)	3	**2)****		**Specialization**	
	3			O (300+)	3	**Upper Division Major**	**3**	**(600+)**	
				W	3	**Core**		**Specialization**	
						W	3	**(600+)**	
						W (300+)	**3**		
Credits	15	Credits	15	Credits	15	Credits	16		12
Spring		**Spring**		**Spring**		**Spring**		**Spring**	
Major Prereq	3	**Major Foundation**		**Upper Div Major**		**GEO 696 (capstone**	**3**	**GEO 700******	**8**
Major Foundation	3	**(200+)**	**3**	**Core**	**3**	**SUST 495)*****			
FQ	**3**	DA/DH/DL	3	**Major Elective**		**Major Elective DS**	**3**		
HSL 102	3	DS	3	**Area 1)**	**3**	**(Area 2)****			
FG A/B/C	3	DY	3	**Major Elective**		**Upper Division Major**	**3**		
		HSL 202	3	**DB (Area 2)**	**3**	**Core**			
				W	3	W (300+)	3		
				DP	3	Elective	3		
Credits	15	Credits	15	Credits	15	Credits	15	Credits	8
Total Credits	**30**	**Total Credits**	**60**	**Total Credits**	**91**	**Total Credits**	**121**	**Total Credits**	**150**
						BA (SUST) awarded		**MA (GEO) awarded**	

NOTES:

- This is a sample plan to finish both BA and MA in five years, and assumes that students start their studies in a Fall semester.
- In general, a student would apply to the Master's program during their "second-semester junior" semester, and be admitted to the Master's program via the pathway in their "first-semester senior" semester, when they would be allowed to begin taking double-counted 600-level courses.
- Undergrads must take a minimum of 12 credits per semester to maintain full-time status. Full-time status for graduate students is 8 credits per semester.
- **GEO 325/SUST 326** is the gateway course for the pathway, which requires a grade of 'B' or better.
- Courses in **bold black font** are required for Interdisciplinary Studies: Sustainability BA
- Courses in **bold blue font** are required for Geography MA (Plan A)
- Courses in **bold red font** are those that are double-counted for both the BA and MA. To be double-counted toward the MA, the student must earn grades of 'B' or better.
- * GEO 692 is required of all entering graduate students, including pathway students. It will count toward the MA, but not toward the BA.
- ** One double-counted 400+ course (choose from GEO 411/SUST 413, GEO/SUST 415, GEO 422/SUST 423, GEO/SUST 426) can be taken in the Fall or Spring of the Senior year as a major elective course.

- *** GEO 696 (Research Design and Methods in Geography) substitutes for SUST 495 Sustainability Capstone and is double counted. Students write their research proposals in this course, to be presented to their respective advisory committee. Students file Form 2 following committee approval, typically during the Fall semester of the fifth year.
- In year 5 (first year of MA), students earn 21 total credits that can be distributed over two semesters.
- **** Up to 7 unused credits of GEO 699 (independent research) may be converted into GEO 700 (thesis research).
- With the double-counted courses, the actual minimum number of total credits taken by students is 141, but the “Total Credits” earned after completion of the MA is 150, reflecting 120 credits earned for the BA and 30 credits earned for the MA.

STATE OF HAWAI`I
UNIVERSITY OF HAWAI'I
UNIVERSITY OF HAWAI`I AT MĀNOA
OFFICE OF THE VICE PROVOST FOR ACADEMIC EXCELLENCE

POSITION ORGANIZATION CHART (OVPAE)

PC=President's Cabinet
MC=Mānoa Cabinet

PRESIDENT, UNIVERSITY OF HAWAI`I
(Hybrid) (PC)(MC)

OFFICE OF THE PROVOST
(Mānoa) (PC)(MC)
UNIVERSITY OF HAWAII AT MĀNOA

OFFICE OF THE VICE PROVOST FOR ACADEMIC EXCELLENCE 1/
(Mānoa)(MC)
Org Code: TBD

Associate Vice Chancellor for Academic Affairs, EM, #89169	1.00
Academic Affairs Program Officer, EM, #89009	1.00
Educational Spec, PBB, #79837	1.00
Educational Specialist, PBB, #80812	1.00
Program Specialist, PBB, #81742	1.00
Human Resources Specialist, PBC, #79166	1.00

DEPARTMENT TOTAL: **PERM**
General Funds: 44.00

ASSESSMENT AND CURRICULA SUPPORT OFFICE
Org Code: MAOASM
Chart OVPAE-A

GENERAL EDUCATION OFFICE
Org Code: MAGEN
Chart OVPAE-A

HONORS PROGRAM
Org Code: TBD
Chart OVPAE-A

INTERDISCIPLINARY STUDIES PROGRAM
Org Code: TBD
Chart OVPAE-A

ROTC
Org Code: MAMSCI
Chart OVPAE-A

GRADUATE DIVISON
Org Code: MAGRAD
Chart OVPAE-B

OFFICE OF FACULTY EXCELLENCE
Org Code: MAACPL
Chart OVPAE-C

1/ Collaborate with Study Abroad
Positions to be redescribed, as appropriate

CHART TOTAL **PERM**
General Fund: 6.00