## CALIFORNIA STATE UNIVERSITY, BAKERSFIELD ACADEMIC SENATE

**AAC** 

### Approval of the Minor in Environmental Sustainability

#### **RES 222329**

**RESOLVED**: That the CSUB Academic Senate approve the proposed Minor in

Environmental Sustainability; and be if further resolved

**RESOLVED**: That the Sustainability Committee be encouraged to review the course options

within the minor during the 25/26 academic year to determine

• if the content of courses currently in the minor have sufficient focus on sustainability-related learning outcomes to make their inclusion in the minor appropriate, and

• if changes to the minor to increase coherence for both students and potential employers is merited.

**RATIONALE:** 

The proposed minor addresses an important community need and can be implemented using already authorized resources. Every level of review has found it to be sound academically. Approving this minor may also allow the GE Theme S minor to focus exclusively on social justice, providing two options for minors with more coherence than the current Theme S minor.

#### **Attachments:**

CSUB Changes to Degree Form Final Sust Minor Updated Table AAC recommendations

Approved by the Academic Senate May 4, 2023

#### **Distribution List:**

President
Provost
AVP Faculty Affairs
AVP Academic Affairs
BPA Dean
NSME Dean

Antelope Valley Dean Library Dean Department Chairs General Faculty



# California State University, Bakersfield Academic Operations & Support Services

Mail Stop: EDUC 22, 9001 Stockdale Highway Bakersfield, California 93311-1022

Email: curriculum@csub.edu Tel. (661) 654-6181

DOWNLOAD THIS FORM AND DO A "SAVE AS" COPY (and save in [designated] folder) BEFORE FILLING OUT THE FORM

### **CHANGES TO DEGREE FORM**

Form Number

PROPOSAL ACTION (S	elect One	3
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**EFFECTIVE CATALOG YEAR: FALL** 

O PROGRAM REVISION O PROGRAM CANCELLATION

O PROGRAM PLACED IN MORATORIUM O ADD CONCENTRATION O ADD EMPHASIS

O ADD OPTION O ADD MINOR

#### **PROGRAM OR SCHOOL & DEPARTMENT**

School/Program: Business and Public Administration

**Department:** Environmental Resource Management Program

Proposed by: Aaron Hegde

#### DEGREE INFORMATION (MAJOR, CONCENTRATION/EMPHASIS/OPTION/MINOR)

Degree Title: Minor in Environmental Sustainability

#### **REVISIONS TO CURRENT DEGREE DESCRIPTION AND REQUIREMENTS**

Degree Description Add/Revise Details):	Insert Degree Description from Current University Catalog; Use Strikethrough and Underline MS Word Actions To Delete To	ext O

#### ADDING AN OPTION, CONCENTRATION OR SPECIAL EMPHASIS (ATTACH APPROPRIATE DOCUMENTS):

Per EO 1071, before any option, concentration, or special emphasis (or similar subprogram) approved under this delegation, can be implemented, the campus shall obtain a Chancellor's Office confirmation of compliance with CSU policy and applicable law. Campus notifications shall be submitted to the Department of Academic Programs and Faculty Development (degrees@calstate.edu). The following information must be submitted:

- The exact title of the new subprogram and the complete degree designation and title of the major degree program housing the new subprogram (e.g., Bachelor of Science in Biology with a Concentration in Biochemistry);
- A list of courses and required units constituting that new subprogram;
- Total units required to complete the entire degree, including the combination of subprogram and major program;
- The complete list of courses and required units constituting the major degree program as approved by the Chancellor's Office;
- A 4-year major-and-subprogram roadmap for freshmen and a 2-year major-and-subprogram roadmap for transfer students;
- The CSU degree program code (formerly called "HEGIS") that students use to apply to the major degree program;
- The campus-proposed CSU degree program code to be used to report enrollments in the concentration (may be the same as the degree code);
- A detailed cost-recovery budget for self-support subprograms to be offered within state-support major degree programs; and
- Documentation of all campus-required curricular approvals.

#### **ADDING A MINOR**

#### **Program Description and Minor Requirements:**

The minor in Sustainability is open to ERM majors as well as any other major who would like to add it to their degre

#### RATIONALE FOR DEGREE PROPOSAL (required):

#### **Provide Rationale for Degree Proposal:**

There is no sustainability minor at CSUB. This will provide an opportunity for students to gain knowledge in a releva

#### IMPACT OF DEGREE PROPOSAL ON OTHER PROGRAMS OR DEPARTMENTS

What is the Impact of This Degree Proposal on Course Offerings from Other Department(S) Or Programs? Please Include Supporting Emails with This Proposal:

None. Uses courses already offered by departments (either for majors or for the GE program)

#### **IMPACT OF DEGREE PROPOSAL ON COURSE(S)**

List All the New and Revised Courses Required for This Degree Proposal (If Applicable): ERM 1090

Attach/Submit All the Course Proposal Forms Together with This Form for Curricular Review and Approval

#### **NEXT STEPS**

- Attach Course Proposal Form(s) to This Proposal (If Applicable)
- Attach Appropriate Documents if Adding an Option, Concentration or Special Emphasis
- Attach Revised Academic Roadmap
- Submit to Department/Program Curriculum Committee for Review & Approval
- Department Submits to School/Program Curriculum Committee for Review & Approval
- School/Program Curriculum Committee Submits Related Forms to GECCo (If Applicable)
- · Chancellor's Office (CO) Notification for Implementation of Option, Concentration or Special Emphasis
- If No Additional Approvals Are Required, School/Program Curriculum Committee Submits to Academic Operations
  After Final Approvals Have Been Recorded. See Annual Catalog & Curriculum Deadlines Dates

#### **SCHOOL/PROGRAM COMMITTEE & OTHER APPROVALS:**

5011554; R\$C11			
Department Chair/Program Director: S. Aaron	Hegde	Date: 10	0/17/2022
School/Program Curriculum Committee Chair:	Chandra Commuri (Oct 25, 2022 14:17 PDT)	Date:	Oct 25, 2022
Dean of School:	Seung Bach (Oct 25, 2022 14:56 PDT)	Date:	Oct 25, 2022
Director of GE:		Date:	
CO Notification for Implementation of Option, C	oncentration or Special Emphasis:	Date:	
CO Confirmation of Compliance for Options, Cor	ncentration or Special Emphasis:	Date:	
President's Approval for Minor:		Date:	
WSCUC Approval:		Date:	
Director of Academic Operations:		Date:	

#### **ACADEMIC OPERATIONS USE ONLY:**

Effective Term:	Catalog Year:
Comments:	
CIP Code:	
HEGIS Code:	
Program Code:	
Plan Code:	
Sub-Plan Code:	

Catalog Updated:
Updated Academic Requirements Page:
Updated Academic Road Maps:
Updated Program Plan Mapper:
Admissions Office Notified:

#### PROPOSAL FOR A NEW MINOR, CONCENTRATION or EMPHASIS

Proposals to add a new minor, concentration or emphasis must receive appropriate campus approval prior to implementation. In addition, the Chancellor's Office must be notified of the campus approval prior to implementation. All attachments are to be added to this cover sheet and remain with the proposal through the required steps of evaluation. Please consult with the Associate Vice President of Academic Programs for questions or assistance.

This new proposal is a (check one):	
Minor - Is this minor available to all undergraduate students	dents?  Yes No, only in
Concentration Emphasis within the degree Minor in Environmental Sustainability	2023 (fall)
Title Use the following degree code 49050 inst	ead of the major degree code for reporting (note the
Originating Department or Individual:	
If a department formally approved the attached proposal, at date.  Signature:	
Curriculum Committee(s): Interschool programs should a school or department curriculum committees before being sacting as the University Curriculum Committee. A memoral committee must be attached. If any revisions were required must be attached.	ubmitted to the Academic Affairs Committee, ndum and approval date from the curriculum
Chair Signature: Chandra Commuri (Oct 25, 2022 14:17 PDT)	date: Oct 25, 2022
School Dean(s): I have reviewed this proposal and send it is comments attached. These comments include my analysis of to support the program and the origin(s) of those resources.  Dean Signature: Seun Bach (Oct 25, 2022 14:56 PDT)	of the resource commitments that must be made
AVP of Academic Programs: I have reviewed this propos	
Date of Senate Approval: Da	ate of President Approval:

Please attach the final Academic Senate Resolution, as signed by the President and return to the Office of Academic Programs, which will notify the Chancellor's Office and the appropriate campus departments. A copy of this form and final electronic catalog copy must be sent to the Director of Academic Operations and Support.

## Proposal for a <u>Minor in Environmental Sustainability</u>, proposed by the Environmental Resource Management Program

GOAL: The proposed Minor in Sustainability is an impactful way in which students with different academic backgrounds and career goals can acquire a deeper understanding of sustainability principles, worldviews, strategies, politics, and ethics to examine the critical, all-encompassing sustainability issues that affect us all, followed by exploring potential solutions as a result. This minor deepens the student's awareness of the complexity of environmental problems and the pressing need for actions. Courses in this minor are being taught by faculty members from all schools at CSUB, and thus, is truly interdisciplinary. However, it was developed in a manner to allow students to choose electives that best complements their major. Whether a student pursues a natural science degree, or a business degree, or is interested in the effects of globalization or politics, the proposed elective courses enhance a deeper understanding of the complexity of sustainability related problems and potential solutions. Only courses with a significant sustainability related content (at least 20%) are included in the list of electives.

The proposed Minor supports the following university learning outcomes: Goal II: Students will be able to communicate orally and in writing; Goal V: Students will become engaged citizens; and Goal VI: Students will develop a well-rounded skill set. The minor requires the completion of a core course ERM 1090: Introduction to Sustainability. In addition, students are required to choose one course from four out of five categories listed below.

- 1. Environmental justice and ethics, ecological footprints and human lifestyle
- 2. Scientific aspects related to sustainability
- 3. Historical and social science components related to sustainability
- 4. Importance of education, communication, and literature to promote sustainability
- 5. Environmental politics and economic development in the Anthropocene

Overall, this minor requires 13 course units.

#### ENVIRONMENTAL SUSTAINABILITY MINOR LEARNING OUTCOMES:

Outcome 1: Students will identify factors that influence sustainability, which may include economic, social, ethical, cultural, political, historical and scientific.

Outcome 2: Students will analyze the connectedness between the factors that influence sustainability.

Outcome 3: Students will be able to effectively communicate the factors that influence sustainability and the connectedness between them.

Students must choose one course from four out of five categories outlined in the table below.

Categories	Programs	Qualified Course	Course Title	Units	Prerequisites	Theme course
1. A&H	Environmental Jus	tice and Ethics/ Eco	logical Footprints and Hu	man Lif	estyle	
	Philosophy	PHIL3368	Environmental Ethics	3		yes, UD-C, Theme S
	Philosophy	PHIL3358	Phil, Tech & our Future	3		yes, UD-C

	Religious Studies	RS3538	Religion & Human Rights	3		yes, UD-C
	Religious Studies	RS4528	Religion, Ethics, and Social Justice	3	45 units and completion of LD area C	yes, UD-C Theme S
2. NSME	Scientific Aspects re	lated to Sustainabil	ity		-7/-	
	Biology & Human Biology	BIOL1009	Principles of Ecology	3	none	no
	Geology	GEOL1209	Earthquakes, Volcanoes & Nat. Disasters	3		yes, GE-B
-	Geology	GEOL2020	Introduction to Environmental Science	3		no
	Geology	GEOL2030	Introduction to Oceanography	3		no
	Geology	GEOL3011	Natural History of National Parks	4	GEOL2010	no
	Geology	GEOL3050	Geological Oceanography	4		no
	Geology	GEOL4020	Environmental Geochemistry	4	GEOL3010	no
	Geology	GEOL4050	GIS for Natural Sciences	4		no
	Science	SCI2310	Introduction to Earth Science	2		no
	Science	SCI3009	California Natural History	3		yes, UD-B Theme S
	Science	SCI3129	Environmental Chemistry and Sustainability	3		yes, UD-B Theme S
	Science	SCI3109	The Science of Food	3		yes (UD-B
	Science	SCI3329	Water in the West	3		yes UD-B, Theme S
	Science	SCI3639	Intro to Weather Dynamics	3		yes, UD-B
	Science	SCI3319	Cali Geol & Society	3		yes, UD-B
	Chemistry	CHEM2500	Foundations of Food Science		CHEM 1000 and 1001	No
	Kinesiology	KINE3118	Epidemiology & Wellness	3		yes, UD-D
	Engineering	ECE/ENGR1628	Introduction to Engineering	2	ECE/ENGR1618	no
	Sciences	SCI3409	Stats of Inequality	3		yes, UD-D Theme S
3. SS&E, A&H	Historical and Socia	l Science Componer	nts related to Sustainabili	ty		
	Anthropology	ANTH2308	Native People of Northern America	3		Theme S
	Anthropology	ANTH3318	Peoples of Mexico	3		Theme S
	Anthropology	ANTH3340	People and the Environment	3		no
	Anthropology	ANTH3320	Native Peoples of California	3		no
	Anthropology	ANTH3310	Globalization and Cultural change	3	ENGL1109 or 110 and completion of	no

					another ANTH course with a C- or higher	
	Anthropology	ANTH4100	Cultural Resource Management	3	ANTH118 or 104, must be a sophomore	no
	Political Sciences	PLSI3648	Food Policy & Politics	3		yes, UD-D Theme S
	Public Policy and Administration	PPA3500	Nonprofit Organizations in America	3		no
	Public Policy and Administration	PPA4690	Urban Planning and Public Policy	3	must be sophomore	no
	Psychology	PSYC3648	Environmental Psychology	3		GE-SELF
	Psychology	PSYC2648	Living the Green Life	3		GE-SELF
	Sociology	SOC4008	Society and the Natural Environment	3		no
	Sociology	SOC4018	Social Change & Social Movements	3		yes, UD-D
	Sociology	SOC4028	Globalization & Social Changes	3		yes, UD-D
	Sociology	SOC4038	Technology & Society	3		yes, UD-D
	Sociology	SOC4308	Sociology of Immigration	3		yes, UD-D
	Sociology	SOC3300	Cultural and Social Geography	3		no
	Sociology	SOC3600	Social Services and Social Problems	3	Open to students in the Sociology Human Services concentration only	no
	Sociology	SOC3640	Urban Sociology	3		
	Sociology	SOC4200	Globalization and Social Change	3		no
	Sociology	SOC4650	Neighborhood and Community	3		no
	History	HIST4528	Plagues & Public Health	3		yes, UD-C
	History	HIST3650	Science, Medicine & Empire	3		no
	History	HIST3258	The American Environment	3		yes, UD-C Theme S
	History	HIST3228	American Indian History	3		yes, JYDR
4. SS&E, A&H		ation, Communic	ation, and Literature to pro	omote S	ustainability	
	Teacher Education					
	English	ENGL3248	Ethnic Literature	3		yes, UD-C
	English	ENGL3268	Writing Nature	3		yes, UD-C
	Communications	COMM3058	Intercultural Communication	3		Theme S

	Communications	COMM3080	Communication and the Environment	3		no			
5. BPA	Environmental Pol	Environmental Politics and Economic Development in the Anthropocene							
	Agricultural	AGBS3520	Economics of Ag. and	3	ECON2018	no			
	Business		Nat. Res.						
	Agricultural	AGBS3530	Agricultural Trade	3	ECON2018	no			
	Business		Policy						
	Economics	ECON3108	Economy of Health &	3		yes, UD-D			
			Health Care						
	Economics	ECON3508	Environmental	3		yes, UD-D			
			Economy			Theme S			
	Economics	ECON3418	Energy Econ & Policy	3		yes, UD-D			
						Theme S			
	Economics	ECON4108	Int. Econ Dvlpmt.	3		yes, UD-D			
						Theme S			
	Economics	ECON4588	Human Rights Econ	3		yes, UD-D			
	Economics	ECON3118	The Pacific Rim	3		yes, UD-D			
			Economies						
	Environmental	ERM4110	Environmental Law	3		no			
	Resource								
	Management								
	Public Policy and	PPA4038	Public Policy Process	3		yes, GWAI			
	Administration								

## Updated table, based on AAC recommendations.

Students must choose one course from four out of five categories outlined in the table below (students need to cover 1 course each out of 4 categories). Existing Theme courses are highlighted in light green:

Schools	Programs	Qualified Course	Course Title	Units	Prerequisites	Theme course
1. A&H	Environmental Justice and Ethics/ Ecological Footprints and Human Lifestyle					
	Philosophy	PHIL 3368	Environmental Philosophy	3		yes, UD-C, Theme S
	Philosophy	PHIL 3358	Phil, Tech & our Future	3		yes, UD-C
	Religious Studies	RS 3260	Indigenous Religious Traditions of the Americas	3		no
	Religious Studies	RS 4528	Religion, Ethics, and Social Justice	3	45 units and completion of LD area C	yes, UD-C, Theme S
2. NSME	Scientific Aspects related to Sustainability					
	Biology & Human Biology	BIOL1039	Principles of Ecology	3	none	no
	Biology & Human Biology	BIOL 3210	Human Ecology	3	BIOL 2210, BIOL 2220, and BIOL 2230	no
	Geology	GEOL 2310	Introduction to Earth Science	3		no
	Geology	GEOL 3310	Integrated Science – Earth Science	3	Geol 2310	no
	Geology	GEOL 3318	California Geology and Society	3	45 units and LD B completed	no
	Geology	GEOL 2020	Introduction to Environmental Science	3		no
	Geology	GEOL 2030	Introduction to Oceanography	3		no
	Geology	GEOL 2050	Introduction to Soil Science	4	GEOL2010 or permission	no
	Geology	GEOL 3011	Natural History of National Parks	4	GEOL2010	no
	Geology	GEOL 3339	Dinosaurs	3	45 units and LD B completed	Yes, UPB, Theme S
	Geology	GEOL 4050 and 4150	GIS for Natural Sciences	4		no
	Science	SCI 3009	California Natural History	3	45 units and LD B completed	yes, UD-B, Theme S

	Science	SCI 3129	Environmental Chemistry and	3	45 units and LD B completed	yes, UD-B, Theme S
	Science	GEOL 3329	Sustainability Water in the West	3	45 units and LD	yes UD-B,
	Chemistry	CHEM 3500	Foundations of Food Science		B completed CHEM 1000 and 1001, 2230, 2400, 2900/2940	Theme S No
	Engineering	ECE/ENGR 1628	Introduction to Engineering	2	ECE/ENGR1618	no
3. SS&E, A&H	Historical and Social Science Components related to Sustainability					
	Anthropology	ANTH 2308	Native People of Northern America	3	Pre or Co-req A2	Theme S
	Anthropology	ANTH 3318	Peoples of Mexico	3	45 units and LD D completed	Theme S
	Anthropology	ANTH 3340	People and the Environment	3	ENGL 1109 and C- or higher in one ANTH course	no
	Anthropology	ANTH 3320	Native Peoples of California	3	ANTH118 or permission of instructor	no
	Anthropology	ANTH 4100	Cultural Resource Management	3	ANTH118 or 104, must be a sophomore	no
	Political Sciences	PLSI 3648	Food Policy & Politics	3	45 units and LD D completed	yes, UD-D, Theme S
	Political Sciences	PLSI 3470	Environmental Politics	3	Sophomore or higher	no
	Public Policy and Administration	PPA 4690	Urban Planning and Public Policy	3	must be sophomore	no
	Psychology	PSYC 3648	Environmental Psychology	3		GE-SELF
	Psychology	PSYC 2648	Living the Green Life	3		GE-SELF
	Sociology	SOC 4008	Society and the Natural Environment	3	45 units and LD D completed; Pre or Co-req A2	no
	History	HIST 4528	Plagues & Public Health	3	45 units and LD C completed	yes, UD-C
	History	HIST 3258	The American Environment	3	45 units and LD C completed	yes, UD-C, Theme S
4. SS&E, A&H	Importance of Education, Communication, and Literature to promote Sustainability					
	English	ENGL 3268	Writing Nature	3		yes, UD-C, Theme S

	Communications	COMM 3089	Communication and the Environment	3		no
5. BPA	Environmental Politics and Economic Development in the Anthropocene					
	Agricultural Business	AGBS 3520	Economics of Ag. and Nat. Res.	3	ECON 2018	no
	Economics	ECON 3508	Environmental Economy	3	45 units and LD C completed	yes, UD-D, Theme S
	Economics	ECON 3418	Energy Econ & Policy	3	45 units and LD C completed	yes, UD-D, Theme S
	Environmental Resource Management	ERM 4110	Environmental Law	3		no