



SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS
Substantive Program Modification Form

UNIVERSITY:	USD
CURRENT PROGRAM TITLE:	Sustainability, B.A. (Natural Sciences Specialization and Social Sciences Specialization)
CIP CODE:	30.3301
UNIVERSITY DEPARTMENT:	Interdisciplinary Programs, College of Arts & Sciences
UNIVERSITY DIVISION:	College of Arts & Sciences

University Approval

To the Board of Regents and the Executive Director: I certify that I have read this proposal, that I believe it to be accurate, and that it has been evaluated and approved as provided by university policy.

Elizabeth M. Freeburg 2/5/2018
 Vice President of Academic Affairs or Date
 President of the University

1. This modification addresses a change in:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Total credits required within the discipline
<input checked="" type="checkbox"/> Total credits of elective course work
<input checked="" type="checkbox"/> Program name
<input type="checkbox"/> CIP Code | <input checked="" type="checkbox"/> Total credits of supportive course work
<input checked="" type="checkbox"/> Total credits required for program
<input checked="" type="checkbox"/> Existing specialization
<input checked="" type="checkbox"/> Other (explain below)
Remove Natural Science Specialization from the BA degree for Sustainability. Change to Phasing out. U.BA.SUST-NSCI |
|--|--|

2. Effective date of change: 8/1/2018

3. Program Degree Level (place an "X" in the appropriate box):

Associate Bachelor's Master's Doctoral

4. Category (place an "X" in the appropriate box):

Certificate Specialization Minor Major

5. If a name change is proposed, the change will occur (place an "X" in the appropriate box):

- On the effective date for all students
- On the effective date for students new to the program (enrolled students will graduate from existing program)

Proposed new name: _____

Reminder: Name changes may require updating related articulation agreements, site approvals, etc.

6. Primary Aspects of the Modification (*add lines or adjust cell size as needed*):

Existing Curriculum				Proposed Curriculum (<i>highlight changes</i>)			
Pref.	Num.	Title	Cr. Hrs.	Pref.	Num.	Title	Cr. Hrs.
Sustainability, B.A. (Natural Sciences Specialization and Social Sciences Specialization) Program Requirements:				Sustainability, B.A. (Human and Natural Systems specialization) Program Requirements:			
Departmental Requirements							
POLS	226	Introduction to Public Policy	3	POLS	226	Introduction to Public Policy	3
SUST	201	Sustainability and Society [SGR #3]	3	SUST	101	Sustainable Society [SGR #3]	3
SUST	203	Sustainability and Science	3	SUST	103/L	Sustainable Environment (with lab) [under review for SGR #6]	4
SUST	489	Sustainability Capstone	2	ECON	201	Microeconomics	3
Choose one of the following:				Remove			
BIOL	310	Environmental Science	3	SUST	489	Sustainability Capstone	2
ESCI	205	Environmental Earth Science		Remove	BIOL	310	Environmental Science
Choose one of the following:				Remove			
BIOL/ PHIL	454	Environmental Ethics	3	BIOL/ PHIL	454	Environmental Ethics	3
ECON	472	Resource and Environmental Economics		Remove	Choose one of the following (1 cr. minimum):		
Choose one of the following (1 cr. minimum):				Choose one of the following (1 cr. minimum):			
SUST	494	Sustainability Internship	1	SUST	494	Sustainability Internship	1
SUST	496	Sustainability Field Experience		SUST	496	Sustainability Field Experience	
SUST	498	Sustainability Undergrad. Research		SUST	498	Sustainability Undergrad. Research	
Total Core			18	Total Core			22
Choose one specialization (total 18 cr. with no more than four courses from any one prefix, for Double Majors no more than three courses from any one prefix):				Remove			
Natural Sciences Specialization				Remove specialization option from the B.A.-Coding should go to phasing out: U.BA.SUST-NSCI			
BIOL	311/L	Principles of Ecology (with lab)	4	Remove			
BIOL	310	Environmental Science	3	Remove			
BIOL	420/L	Introduction to Biostatistics and Computational Biology (with lab)	3	Remove			
BIOL	492	Topics: Ecosystem Ecology	3	Remove			
BIOL	492	Topics: Biodiversity & Ecosystem Function	3	Remove			
BIOL	407/L	Plants and Civilization	4	Remove			
BIOL	408/L	Landscape Ecology (with lab)	3	Remove			
BIOL	410	Conservation Biology	3	Remove			
BIOL	412/L	Freshwater Ecology (with lab)	3	Remove			
BIOL	440/L	Restoration Ecology (with lab)	4	Remove			
BIOL/ ESCI	442	Introduction to River Studies [G]	3	Remove			
BIOL/ PHIL	454	Environmental Ethics	3	Remove			
BIOL	466	Environmental Toxicology and Contamination	3	Remove			
CHEM	110/L	Elementary Environmental Chemistry (with lab) [SGR #6]	4	Remove			
CHEM	326/L	Organic Chemistry I [SGR #6]	4-5	Remove			
CHEM	482	Environmental Chemistry	3	Remove			
ECON	472	Resource and Environmental Economics	3	Remove			
ESCI/ SUST	321	Earth Resources	3	Remove			
ESCI	360	Global Climate Change	3	Remove			
ESCI/ SUST	385	The Energy Crisis	3	Remove			

PHYS							
ESCI/ ANTH/ POLS	425	Introduction to GIS	3	Remove			
ESCI	473	Fundamentals of Hydrogeology	3	Remove			
OCEN	401	Oceanography	3	Remove			
SUST	491 ^a	Independent Study	1-3	Remove			
SUST	492 ^a	Topics	1-3	Remove			
Total Specialization			18	Remove			
Total Specialization for the Double Major			12	Remove			
Total Specialization for the Double Major			12	Remove			
				Remove			
Social Sciences Specialization				Human and Natural Systems Specialization			
				Sustainable Communities Emphasis (at least 3 courses from the Social Systems course group and 1 from Natural Systems course group)			
				Science and Society Emphasis (at least 3 courses from the Natural Systems Course Group and at least 1 from Social Systems course group)			
				Social Systems Course Group (at least 1 course)			
ANTH/ SUST	426	Collapse of Societies	3	ANTH/ SUST	426	Collapse of Societies	3
ANTH/ SUST	427	The Holocene	3	ANTH/ SUST	427	The Holocene	3
ANTH/ SUST	428	Sustainability and Urbanism	3	ANTH/ SUST	428	Sustainability and Urbanism	3
ANTH/ POLS/E SCI	425	Introduction to GIS	3	ANTH	470	Anthropology of Food	3
BADM	338	Green Entrepreneurship	3	ECON	472	Resource and Environmental Economics	3
BIOL/ PHIL	454	Environmental Ethics	3	HIST	372	American West	3
ECON	410	Economic Development	3	POLS	320	Public Administration	3
ECON	472	Resource and Environmental Economics	3	POLS	407	Environmental Law & Policy	3
ENGL	305	Professional, Technical, and Grant Writing	3	SOC	432	Collective Behavior and Social Change	3
MCOM	243	Public Relations Principles	3	SOC	450	Race and Ethnic Minorities	3
POLS	320	Public Administration	3	SPCM	418	Environmental Communication	3
POLS	404	Local Government Administration and Politics	3	Course Group Subtotal			
POLS	407	Environmental Law and Policy	3	3-12			
POLS	421	Introduction to the Nonprofit Sector	3	Environmental Systems Course Group (at least 1 course)			
POLS	424	Planning Principles and Techniques	3	ESCI	321	Earth and Water Resources	3
PSYC	418	Advanced Environmental Psychology	3	ESCI	360	Global Climate Change	3
SOC	410	Methods of Social Research	3	ESCI	385	Energy and Sustainability	3
SOC	450	Race & Ethnic Minorities	3	BIOL	311/L	Principles of Ecology	4
SOC	432	Collective Behavior and Social Change	3	BIOL	410	Conservation Biology	3
SPCM	418	Environmental Communication	3	BIOL	440/L	Restoration Ecology	4
SPCM	422	Persuasion	3	CHEM	482	Environmental Chemistry	3
SPCM	485	Communication & Conflict Resolution	3	Course Group Subtotal			
SUST	421	Sustaining the Human Food Supply	3	3-12			
SUST	491 ^a	Independent Study	1-3	Human and Natural Systems Electives			
SUST	492 ^a	Topics	1-3	ENGL	403	Grant Writing	3
				POLS	404	Local Government Administration and Politics	3
				POLS	421	Introduction to the Nonprofit Sector	3
				SOC	410	Methods of Social Research	3
				SPCM	422	Persuasion	3
				SPCM	485	Communication and Conflict Resolution	3
				BIOL	408/L	Landscape Ecology	3
				BIOL	412/L	Freshwater Ecology	3
				BIOL	417/L	Field Ecology	3

		BIOL	418	Ecosystem Ecology	3
		BIOL/ ESCI	442	Introduction to River Studies	3
		BIOL	466	Environmental Toxicology and Contaminants	3
		BIOL	420/L	Introduction to Biostatistics & Computational Biology	3
		ESCI	473	Hydrogeology	3
		ESCI	411	Geomorphology	3
		ESCI	425	Introduction to Geographical Information Systems	3
		SUST	491	Independent Study	1-3
		SUST	492	Topics	1-3
		SUST	396	Field Experience	1-2
				Subtotal	0-3
	Total Specialization	18		Total Specialization	15
	Total Specialization for the Double Major	12		Remove	
	Departmental Requirements Subtotal:	36		Total number of hours required for major	37
	Double Major Departmental Requirements Subtotal:	30		Remove	
				Double major option	
				Students who choose Sustainability as one of two majors complete a 31-credit hour version of the Sustainability major. Double-majors complete all core requirements for the major (22 hours) and select a specialization. In the specialization, 9 hours of coursework are required with at least one course selected from each course group for the selected specialization.	
Total number of hours required Natural Sciences specialization	18			Delete this specialization from the B.A.	N/A
Total number of hours required Social Sciences specialization	18			Total number of hours required Human and Natural Systems specialization	15
Total number of hours required for double major	30			Total number of hours required for double major	31
Total number of hours required for major	36			Total number of hours required for major	37
Total number of hours required for degree	120			Total number of hours required for degree	120

7. Explanation of the Change: The proposed changes include changes to the core courses for the major and revision of the specializations for the major. Changes to the core courses include the addition to Microeconomics (ECON 201), the deletion of Environmental Earth Science (ESCI 205), the deletion of Resource and Environmental Economics (ECON 472), and updates to Sustainability and Society (SUST 201) and Sustainability and Science (SUST 203) to reflect the changes in course number and name that have been submitted for those courses.

Both specializations have been revised, and only the former “Social Sciences” specialization remains available as a B.A. Both specializations have also been renamed to reflect the strengths of the program and the professional opportunities for graduates. The revisions of the specializations serve two general objectives: (1) to provide both specializations with a “course group” structure to assure breadth of content in upper-division courses; and (2) to add foundational requirements to the former “*natural science*” specialization to make it more equivalent to other natural science majors at USD (and other universities), thus it is no longer to be offered for a B.A. Two emphases are offered in the Human and Natural Systems specialization so that students may still choose to have a social science focus or a natural science focus (without the additional courses required for the revised science-oriented specialization).