SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

Substantive Program Modification Form

UNIVERSITY:	**SDSU**
CURRENT PROGRAM TITLE:	**Ecology and Environmental Science (B.S.) - Rangeland Ecology and Management Specialization**
CIP CODE:	**03.0104 – EES Major** **01.1106 - Rangeland Ecology and Management Specialization**
UNIVERSITY DEPARTMENT:	**Natural Resource Management**
BANNER DEPARTMENT CODE:	**SNAR**
UNIVERSITY DIVISION:	**Agriculture, Food & Environmental Science**
BANNER DIVISION CODE:	**3F**

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.

Dennis D. Hedge — Vice President of Academic Affairs or President of the University

3/24/2021 — Date

1. **This modification addresses a change in:**
   - ☒ Total credits required within the discipline
   - ☒ Total credits of elective course work
   - ☐ Program name
   - ☐ CIP Code
   - ☐ Total credits of supportive course work
   - ☐ Total credits required for program
   - ☒ Existing specialization
   - ☐ Other (explain below)
2. **Effective date of change:** 2021-2022 Academic Year
3. **Program Degree Level:** Associate ☐ Bachelor's ☒ Master's ☐ Doctoral ☐
4. **Category:** Certificate ☐ Specialization ☒ Minor ☐ Major ☐
5. **If a name change is proposed, the change will occur:**
   - ☐ 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:
6. **Primary Aspects of the Modification:**

Existing Curriculum				*Proposed Curriculum (Highlight Changes)*			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
System General Education Requirements			**32**	**System General Education Requirements**			**32**
ENGL	101	Composition I (SGR #1)	3	ENGL	101	Composition I (SGR #1)	3
ENGL	201	Composition II (SGR #1)	3	ENGL	201	Composition II (SGR #1)	3
SPCM	101	Fundamentals of Speech (SGR #2)	3	CMST	101	Fundamentals of Speech (SGR #2)	3
ECON	201	Principles of Economics (SGR #3)	3	ECON	201	Principles of Economics (SGR #3)	3

Existing Curriculum				*Proposed Curriculum (Highlight Changes)*			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
SOC OR SOC OR SOC	100 150 240	Intro to Sociology (3) (SGR #3) Social Problems (3) (SGR #3) The Sociology of Rural America (3) (SGR #3)	3	SOC OR SOC OR SOC	100 150 240	Intro to Sociology (3) (SGR #3) Social Problems (3) (SGR #3) The Sociology of Rural America (3) (SGR #3)	3
		Student Choice (SGR #4)	3			Student Choice (SGR #4)	3
		Student Choice (SGR #4)	3			Student Choice (SGR #4)	3
MATH	114	College Algebra (SGR #5) or higher	3	MATH	114	College Algebra (SGR #5) or higher	3
BIOL	151-151L	General Biology I & Lab (SGR #6)	4	BIOL	151-151L	General Biology I & Lab (SGR #6)	4
CHEM OR CHEM	106-106L 112-112L	Chemistry Survey & Lab (4) (SGR #6) General Chemistry & Lab (4) SGR #6)	4	CHEM OR CHEM	106-106L 112-112L	Chemistry Survey & Lab (4) (SGR #6) General Chemistry & Lab (4) SGR #6)	4
College Requirements			**0**	**College Requirements**			**0**
Students seeking the Bachelor of Science degree must complete the System General Education Requirements. In some majors, the student must select a "specialization." Additional requirements for both Bachelor of Science degrees follow. 1. The requirements of one of the College's majors must be met. Specific requirements are listed under each program of study. 2. 25 semester credits must be upper division (300 and above), with the exception that MATH 125 and 225, Calculus II and III, may be counted as five credits toward the total. **Bachelor of Science in Agriculture, Food and Environmental Sciences** Students must complete a minimum of 11 credits from the approved list of Group 1 courses in Agriculture, Food and Environmental Science. Some departments require specific courses from the list, whereas others leave the selection entirely to the student and the advisor (see Group 1 List in Catalog). • ABS 475-475L - Integrated Natural Resource Management and Lab Credits: 3 (Major Requirement) • NRM 282-282L - Natural Resource Statistics and Lab Credits: 3 (Major Requirement) • PS 213-213L - Soils and Lab [SGR #6] Credits: 2, 1 (Major Requirement) • RANG 205 - Introduction to Range Management [SGR #6] Credits: 3 (Major Requirement)				Students seeking the Bachelor of Science degree must complete the System General Education Requirements. In some majors, the student must select a "specialization." Additional requirements for both Bachelor of Science degrees follow. 3. The requirements of one of the College's majors must be met. Specific requirements are listed under each program of study. 4. 25 semester credits must be upper division (300 and above), with the exception that MATH 125 and 225, Calculus II and III, may be counted as five credits toward the total. **Bachelor of Science in Agriculture, Food and Environmental Sciences** Students must complete a minimum of 11 credits from the approved list of Group 1 courses in Agriculture, Food and Environmental Science. Some departments require specific courses from the list, whereas others leave the selection entirely to the student and the advisor (see Group 1 List in Catalog). • ABS 475-475L - Integrated Natural Resource Management and Lab Credits: 3 (Major Requirement) • NRM 282-282L - Natural Resource Statistics and Lab Credits: 3 (Major Requirement) • PS 213-213L - Soils and Lab [SGR #6] Credits: 2, 1 (Major Requirement) • RANG 205 - Introduction to Range Management [SGR #6] Credits: 3 (Major Requirement)		
Major Requirements			**61-63**	**Major Requirements**			**60-62**
ABS	475-475L	Integrated Natural Resource Management & Lab	3	ABS	475-475L	Integrated Natural Resource Management & Lab	3
BIOL OR BOT OR NRM	153-153L 201-201L 200-200L	General Biology II & Lab (4) General Botany I & Lab (3) Animal Diversity & Lab (3)	3-4	BIOL OR BOT OR NRM	153-153L 201-201L 200-200L	General Biology II & Lab (4) General Botany I & Lab (3) Animal Diversity & Lab (3)	3-4
CHEM OR CHEM	108-108L 114-114L	Organic and Biochemistry & Lab (5) General Chemistry II & Lab (4)	4-5	CHEM OR CHEM	108-108L 114-114L	Organic and Biochemistry & Lab (5) General Chemistry II & Lab (4)	4-5
EES	425-425L	Disturbance & Restoration Ecology & Lab	3	EES	425-425L	Disturbance & Restoration Ecology & Lab	3
GEOG	372-372L	Introduction to GIS & Lab	3	GEOG	372-372L	Introduction to GIS & Lab	3

Existing Curriculum				*Proposed Curriculum (Highlight Changes)*			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
NRM	119	Orientation to Natural Resource Management	2	NRM	119	Orientation to Natural Resource Management	2
NRM	230	Natural Resource Field Techniques	3	NRM	230	Natural Resource Field Techniques	2
NRM	276	Scientific Communications	1	NRM	276	Scientific Communications	1
NRM	282-282L	Natural Resource Management Statistics & Lab	3	NRM	282-282L	Natural Resource Management Statistics & Lab	3
NRM	300	Laws and Policies in Natural Resource Management	3	NRM	300	Laws and Policies in Natural Resource Management	3
NRM	311	Principles of Ecology	3	NRM	311	Principles of Ecology	3
PHYS OR PHYS	101-101L 111-111L	Survey of Physics & Lab (4) Introduction to Physics & Lab (4)	4	PHYS OR PHYS	101-101L 111-111L	Survey of Physics & Lab (4) Introduction to Physics & Lab (4)	4
PS	213-213L	Soils & Lab	3	PS	213-213L	Soils & Lab	3
RANG	205	Introduction to Range Management	3	RANG	205	Introduction to Range Management	3
RANG	210-210L	Range Plant Identification and Lab	2	RANG	210-210L	Range Plant Identification and Lab	2
RANG	215	Introduction to Integrated Ranch Management	3	RANG	215	Introduction to Integrated Ranch Management	3
RANG	321	Wildland Ecosystems	3	RANG	321	Wildland Ecosystems	3
RANG	374-374L	Habitat Conservation and Management and Lab	4	RANG	374-374L	Habitat Conservation and Management and Lab	4
RANG	400	Judging Teams	1	RANG	400	Judging Teams	1
RANG	421	Grassland Fire Ecology	3	RANG	421	Grassland Fire Ecology	3
RANG	425-425L	Rangeland Assessment and Monitoring and Lab	3	RANG	425-425L	Rangeland Assessment and Monitoring and Lab	3
RANG or RANG or RANG or RANG	491 494 496 498	Independent Study Internship Field Experience Undergraduate Research/Scholarship	1	RANG or RANG or RANG or RANG	491 494 496 498	Independent Study Internship Field Experience Undergraduate Research/Scholarship	1
Supporting Coursework			**19**	**Supporting Coursework**			**19**
AS	101-101L	Introduction to Animal Science and Lab	3,1	AS	101-101L	Introduction to Animal Science and Lab	3,1
AS	218	Survey of Animal Nutrition	3	AS	218	Survey of Animal Nutrition	3
BOT	301-301L	Plant Systematics and Lab	3	BOT	301-301L	Plant Systematics and Lab	3
PRAG OR PS	410-410L 462-462L	Soil Geography and Land Use Interpretation and Lab (2, 1) Environmental Soil Management and Lab (3)	3	PRAG OR PS	410-410L 462-462L	Soil Geography and Land Use Interpretation and Lab (2, 1) Environmental Soil Management and Lab (3)	3
Select 6 credits from the following courses. 6 credits				Select 6 credits from the following courses. 6 credits			
AGEC	271	Farm and Ranch Management	3	AGEC	271	Farm and Ranch Management	3
BOT	303-303L	Forest Ecology and Management and Lab	3	BOT	303-303L	Forest Ecology and Management and Lab	3
PS	313	Forage Crop and Pasture Management	3	PS	313	Forage Crop and Pasture Management	3
WL	220	Introduction to Wildlife and Fisheries Management	3	WL	220	Introduction to Wildlife and Fisheries Management	3
Electives			**6-8**	**Electives**			**7-9**

Summary of Credits Ecology and Environmental Science (B.S.)			
System General Education Requirements	**32**	**System General Education Requirements**	**32**
College Requirements	**0**	**College Requirements**	**0**
Major Requirements	**61-63**	**Major Requirements**	**60-62**
Supporting Coursework	**19**	**Supporting Coursework**	**19**
Electives	**6-8**	**Electives**	**7-9**

Existing Curriculum				*Proposed Curriculum (Highlight Changes)*			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
Total number of hours required for major			80-82	Total number of hours required for major			79-81
Total number of hours required for degree			120	Total number of hours required for degree			120

Academic Requirements:
Students must achieve a grade of "C" or better in all major core courses.

7. Explanation of the Change:

NRM 230 Natural Resource Management Techniques is being changed from 3 to 2 credits.