SOUTH DAKOTA BOARD OF REGENTS
ACADEMIC AFFAIRS FORMS

Substantive Program Modification Form

UNIVERSITY:	**SDSU**
CURRENT PROGRAM TITLE:	**Wildlife & Fisheries Sciences (B.S.)**
CIP CODE:	**03.0601**
UNIVERSITY DEPARTMENT:	**Natural Resource Management**
UNIVERSITY DIVISION:	**Agriculture, Food & Environmental 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.

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

4/27/2019 — 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:** 2019-2020 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 Requirements			**31-32**	**System General Requirements**			**32**
SGR 1 Written Communication ENGL 101 Composition I (3) ENGL 201 Composition II (3)			6	SGR 1 Written Communication ENGL 101 Composition I (3) ENGL 201 Composition II (3)			6
SGR 2 Oral Communication SPCM 101 Fundamentals of Speech			3	SGR 2 Oral Communication SPCM 101 Fundamentals of Speech			3
SGR 3 Social Sciences/Diversity			6	SGR 3 Social Sciences/Diversity			6
SGR 4 Arts & Humanities/Diversity			6	SGR 4 Arts & Humanities/Diversity			6
SGR 5 Mathematics MATH 102 College Algebra			3	SGR 5 Mathematics MATH 114 College Algebra			3
SGR 6 Natural Sciences BIOL 101-101L Biology Survey I & Lab (3) OR			7-8	SGR 6 Natural Sciences ~~BIOL 101-101L Biology Survey I & Lab (3)~~ ~~OR~~			8

Existing Curriculum				*Proposed Curriculum (Highlight Changes)*			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
BIOL 151-151L General Biology I & Lab (4) AND PHYS 101-101L Survey of Physics (4) OR PHYS 111-111L Introduction to Physics I & Lab (4)				BIOL 151-151L General Biology I & Lab (4) AND PHYS 101-101L Survey of Physics (4) OR PHYS 111-111L Introduction to Physics I & Lab (4)			
College Requirements			**0**	**College Requirements**			**2**
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. • NRM 110 Introduction to Natural Resource Management (3) (Major Requirements) • NRM 282-282L Natural Resource Statistics & Lab (3) (Major Requirements) • RANG 374-374L Natural Resource Habitat Conservation, Management, and Restoration & Lab (4) (Major Requirements) • WL 220 Introduction to Wildlife and Management (3) (Major Requirements)				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. • ~~NRM 110 Introduction to Natural Resource Management (3) (Major Requirements)~~ • NRM 282-282L Natural Resource Statistics & Lab (3) (Major Requirements) • ~~RANG 374-374L Natural Resource Habitat Conservation, Management, and Restoration & Lab (4) (Major Requirements)~~ • NRM 311 Principles of Ecology (3) (Major Requirements) • WL 220 Introduction to Wildlife and Management (3) (Major Requirements)		
Major Requirements			**70-81**	**Major Requirements**			**63-74**
BIOL 153-153L General Biology II & Lab (4) OR BOT 201-201L General Botany & Lab (3) OR NRM 200-200L Animal Diversity & Lab (3)			3-4	BIOL 153-153L General Biology II & Lab (4) OR BOT 201-201L General Botany & Lab (3) OR NRM 200-200L Animal Diversity & Lab (3)			3-4
BIOL 371 Genetics (3) OR BIOL 202-202L Genetics and Organismal Biology & Lab (4)			3-4	BIOL 371 Genetics (3) OR BIOL 202-202L Genetics and Organismal Biology & Lab (4)			3-4
CHEM 106-106L (4) AND CHEM 108-108L (5) OR CHEM 112-112L (4) AND CHEM 326-326L (4)			8-9	CHEM 106-106L (4) AND CHEM 108-108L (5) OR CHEM 112-112L (4) AND CHEM 326-326L (4)			8-9
CEE 434 Hydrology (3) OR CHEM 328-328L Organic Chemistry II & Lab (4) OR PS 213-213L Soils & Lab (3) OR PS 243 Principles of Geology (3)			3-4	CEE 434 Hydrology (3) OR CHEM 328-328L Organic Chemistry II & Lab (4) OR PS 213-213L Soils & Lab (3) OR PS 243 Principles of Geology (3)			3-4
ENGL	379	Technical Communication	3	ENGL	379	Technical Communication	3
NRM	110	Introduction to Natural Resource Management	3	~~NRM~~	~~110~~	~~Introduction to Natural Resource Management~~	~~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 Management Techniques	3	NRM	230	Natural Resource Management Techniques	3
NRM	282-282L	Natural Resource Statistics & Lab	3	NRM	282-282L	Natural Resource Statistics & Lab	3
NRM/ BIOL	311	Principles of Ecology	3	NRM/ BIOL	311	Principles of Ecology	3
RANG	374-374L	Natural Resource Habitat Conservation Mgmt & Restoration & Lab	4	~~RANG~~	~~374-374L~~	~~Natural Resource Habitat Conservation Mgmt & Restoration & Lab~~	~~4~~
WL	220	Introduction to Wildlife	3	WL	220	Introduction to Wildlife	3
WL	411	Principles of Wildlife Management	3	WL	411	Principles of Wildlife Management	3
WL	412	Principles of Fisheries Management	3	WL	412	Principles of Fisheries Management	3
Botany Requirement- Select one of the following: BOT 301-301L Plant Systematics (3) BOT 405-405L Grasses & Grasslike Plants & Lab (3) BOT 415-415L Aquatic Plants & Lab (3) BOT 419-419L Plant Ecology & Lab (3) RANG 210-210L Range Plant Identification & Lab (2) RANG 400 Judging Teams S01 (1)			1-3	*Botany Requirement*- Select one of the following: BOT 301-301L Plant Systematics (3) BOT 405-405L Grasses & Grasslike Plants & Lab (3) BOT 415-415L Aquatic Plants & Lab (3) BOT 419-419L Plant Ecology & Lab (3) RANG 210-210L Range Plant Identification & Lab (2) RANG 400 Judging Teams S01 (1)			1-3
Take three of the following: WL 355-355L Mammalogy & Lab (3) WL 363-363L Ornithology & Lab (4) WL 367-367L Ichthyology & Lab (3) WL 418-418L Ecology of Aquatic Invertebrates (3) WL 434-434L Herpetology & Lab (3,0)			8-11	Take three of the following: WL 355-355L Mammalogy & Lab (3) WL 363-363L Ornithology & Lab (4) WL 367-367L Ichthyology & Lab (3) WL 418-418L Ecology of Aquatic Invertebrates (3) WL 434-434L Herpetology & Lab (3,0)			8-11
Take three of the following: EES 425-425L Disturbance & Restoration Ecology & Lab (4) EES 430-430L Biological Invasions & Lab NRM 450-450L Freshwater Monitoring & Assessment & Lab (3) NRM 464 Ecosystem Ecology (3) NRM 466-466L Ecotoxicology and Contaminants & Lab (3) NRM 482-482L NRM Biometry (3) RANG 321 Wildland Ecosystems (3) WL 415-415L Upland Game Ecology & Management (3) WL 417-417L Large Mammal Ecology & Management & Lab (3) WL 419-419L Waterfowl Ecology & Management & Lab (3) WL 421 Grassland Fire Ecology (3) WL 429-429L Ecology of Fishes & Habitat & Lab (3) WL 431-431L Advanced Fisheries Management & Lab (3)			8-10	Take three of the following: BIOL 373 Evolution (3) EES 425-425L Disturbance & Restoration Ecology & Lab (4) EES 430-430L Biological Invasions & Lab NRM 450-450L Freshwater Monitoring & Assessment & Lab (3) NRM 464 Ecosystem Ecology (3) NRM 466-466L Ecotoxicology and Contaminants & Lab (3) NRM 482-482L NRM Biometry (2) RANG 321 Wildland Ecosystems (3) RANG 374-374L Habitat Conservation and Management & Lab (3) WL 415-415L Upland Game Ecology & Management (3) WL 417-417L Large Mammal Ecology & Management & Lab (3) WL 419-419L Waterfowl Ecology & Management & Lab (3) WL 421 Grassland Fire Ecology (3) WL 429-429L Ecology of Fishes & Habitat & Lab (3) WL 431-431L Advanced Fisheries Management & Lab (3)			8-10
Human Dimensions Requirement - Complete two classes, one required & one elective, from the following courses: Required: WL 430 Human Dimensions in Natural Resource Management (3) Electives: NRM 300 Laws & Public Policies in Natural Resource Management (3) WL 420 Wildlife Law & Enforcement (3)			6	*Human Dimensions Requirement* - Complete two classes, one required & one elective, from the following courses: Required: WL 430 Human Dimensions in Natural Resource Management (3) Electives: NRM 300 Laws & Public Policies in Natural Resource Management (3) WL 420 Wildlife Law & Enforcement (3)			6

Existing Curriculum				*Proposed Curriculum (Highlight Changes)*			
Pref	Num	Title	Cr Hrs	Pref	Num	Title	Cr Hrs
Electives			**7-19**	**Electives**			**12-23**
Summary of Credits for Wildlife and Fisheries Sciences (B.S.)							
System General Requirements			**31-32**	**System General Requirements**			**32**
College Requirements			**0**	**College Requirements**			**2**
Major Requirements			**70-81**	**Major Requirements**			**63-74**
Electives			**7-19**	**Electives**			**12-23**
Total number of hours required for major			70-81	Total number of hours required for major			70-81
Total number of hours required for degree			120	Total number of hours required for degree			120

7. Explanation of the Change:

BIOL 101 Biology Survey I (3 cr.) (SGR 6) was removed to align with recent decisions to standardize prerequisites for common courses. NRM 110 Introduction to Natural Resource Management (3 cr.) was determined to overlap with other courses within NRM majors, and thus was eliminated as a requirement. BIOL 373 Evolution (3 cr.) was added as a choice in the Advanced Management Electives. In addition, RANG 374 Natural Resource Habitat Conservation Mgmt & Restoration & Lab was moved to a choice in the Advanced Management Electives to give students more flexibility in choosing upper level courses.