# BACHELOR OF SCIENCE WITH A COMPREHENSIVE MAJOR IN RANGELAND MANAGEMENT

A student must complete the following Core Requirements in addition to an option and the Essential Studies requirements.

A minimum cumulative GPA of at Least 2.50 is required in the rangeland management Core Requirements and option. The GPA will be calculated by using all accepted previous college/university coursework used for the rangeland management Core Requirements and option, as well as coursework from CSC.

Code	Title	Credits
<b>Essential Studies</b>	(http://catalog.csc.edu/	/undergraduate/essential-
studies-program/	)	

Core Requirements			
AGRI 110	AGRICULTURE SEMINAR I	1	
AGRI 132	INTRODUCTION TO ANIMAL SCIENCE	3	
AGRI 141	INTRO TO PLANT SCIENCE	3	
AGRI 234	PRINCIPLES OF ANIMAL NUTRITION	3	
AGRI 242	PRINCIPLES OF RANGELAND AND FORAGE MANAGEMENT	3	
AGRI 245 & 245L	PRINCIPLES OF SOIL SCI and PRIN OF SOIL SCI LAB	4	
AGRI 334	VEGETATION MANIPULATION PRACTICES	3	
AGRI 348	RANGELAND HYDROLOGY	3	
AGRI 339 & 339L	RANGE PLANT IDENTIFICATION and RANGE PLANT IDENTIFICATION LAB	3	
AGRI 350	RANGELAND UNGULATE PRODUCTION	3	
or AGRI 357	GRAZING ECOLOGY		
AGRI 410	AGRICULTURE SEMINAR II	1	
AGRI 428	HABITAT INVENTORY & ANALYSIS	3	
& 428L	and HABITAT INVENTORY AND ANALYSIS LAB		
AGRI 430	LAND RESOURCE MANAGEMENT PLANNING	3	
Select one of the	following options:	18-21	
Rangeland Eco	ology (p. 1)		
Rangeland Fire	e Management (p. 1)		
Rangeland Livestock Management (p. 2)			
Rangeland Wildlife Management (p. 2)			
Rangeland Equine Management (p. 2)			

## **Rangeland Ecology Option**

**Total Credits** 

A student must complete the following program in addition to the Core and the Essential Studies requirements.

54-57

Code	Title	Credits
Core Requiremen	ts	36
AGRI 235	INTRODUCTION TO WILDLIFE MANAGEMENT	3
AGRI 357	GRAZING ECOLOGY	3
AGRI 436	RANGELAND & FIRE ECOLOGY	3
BIOL 336 & 336L	GENERAL ECOLOGY and GENERAL ECOLOGY LAB	3

or AGRI 399	RANGELAND ECOSYSTEM FIELD STUDY	
BIOL 337	ENVIRONMENTAL MANAGEMENT	3
GEOS 322	INTRODUCTION TO GIS	3
Select one of the	following:	3
BIOL 347 & 347L	CRYPTOGAMIC BOTANY and CRYPTOGAMIC BOTANY LABORATORY	
BIOL 431 & 431L	ENTOMOLOGY and ENTOMOLOGY LAB	
BIOL 438 & 438L	TAXONOMY OF PLANTS and TAXONOMY OF PLANTS LAB	
BIOL 439 & 439L	PLANT PHYSIOLOGY and PLANT PHYSIOLOGY LAB	
BIOL 447 & 447L	PLANT PHYLOGENY and PLANT PHYLOGENY LABORATORY	
Total Credits		57

#### **Recommended Electives**

In order to enhance employment opportunities, the following elective courses are recommended:

Code	Title C	Credits
AGRI 221	FARM AND RANCH MANAGEMENT	3
AGRI 330	AGRICULTURAL ECONOMICS AND AGRIBUSINES	SS 3
AGRI 411	CONSERVATION BIOLOGY	3
AGRI 420	RANGELAND SHORT COURSE	2
AGRI 451	HUMAN DIMENSIONS OF WILDLIFE MANAGEMENT	3

or at the University of Nebraska – Lincoln courses in Natural Resource Policy, Watershed Management, Principles of Forestry, Disturbed Land Reclamation, and Remote Sensing/GIS

## **Rangeland Fire Management Option**

This program is designed for students who will complete two years at Casper College, or other two-year schools with a similar curriculum, and who will then transfer to Chadron State College to complete a Bachelor of Science degree in Rangeland Management. A student must complete the following program in addition to the Core and the CSC Essential Studies Requirements. See an agriculture advisor on the Chadron State College campus for the courses to be taken at Chadron State College.

Code	Title	Credits
Core Requirement	ts	36
FIRE 1810	INTRODUCTION TO WILDLAND FIRE FIGHTING	1 3
FIRE 1818	WILDLAND LEADERSHIP 1	3
FIRE 1830	INTERMEDIATE WILDLAND FIRE BEHAVIOR 1	3
AGRI 436	RANGELAND & FIRE ECOLOGY	3
Upper Division Ele	ectives	
Select six credits	from the following:	6
AGRI 325	RANGELAND WILDLIFE MANAGEMENT	
AGRI 420	RANGELAND SHORT COURSE	
AGRI 444	GRASS SYSTEMATICS	
BIOL 336	GENERAL ECOLOGY	
& 336L	and GENERAL ECOLOGY LAB	
BIOL 337	ENVIRONMENTAL MANAGEMENT	
GEOS 322	INTRODUCTION TO GIS	
Total Credits		54

<sup>1</sup> Classes with the FIRE prefix here are only available at Casper College.

See Essential Studies transfers for electives to take at Casper College to meet the Essential Studies required by CSC. See Applied Sciences transfers for courses at Casper College that would meet some of the core requirements. A maximum total of 66 transfer course credits will be applied towards the CSC Bachelor of Science degree. For further information see the Additional Information for Transfer Students section of the CSC Undergraduate Catalog (www.csc.edu/admissions/transfer/quides.csc (http://www.csc.edu/admissions/transfer/quides.csc)).

## **Rangeland Livestock Management Option**

A student must complete the following program in addition to the Core and the Essential Studies requirements.

Code	Title		
Core Requiremen	ts	36	
AGRI 333 & 333L	RUMINANT PRODUCTION and RUMINANT PRODUCTION LAB		
AGRI 337	APPLIED ANIMAL NUTRITION	3	
AGRI 440	RANGE LIVESTOCK REPRODUCTION	3	
AGRI 447	ANIMAL BREEDING AND GENETICS	3	
Animal Science E	Elective		
Select one of the	following:	3-4	
AGRI 221	FARM AND RANCH MANAGEMENT		
AGRI 338	LIVESTOCK EVALUATION		
AGRI 357	GRAZING ECOLOGY		
AGRI 427 & 427L	ANIMAL ANATOMY & PHYSIOLOGY and ANIMAL ANATOMY & PHYSIOLOGY LAB		
Business Elective			
Select one of the	following:	3	
ACTG 241	ACCOUNTING PRINCIPLES I		
ECON 231	MACROECONOMICS		
ECON 232	MICROECONOMICS		
AGRI 330	AGRICULTURAL ECONOMICS AND AGRIBUSINE	ESS	
AGRI/ECON 423	AGRICULTURAL POLICY		
FIN 330	PRINCIPLES OF FINANCE		
Total Credits		55-56	

#### **Recommended Electives**

In order to enhance employment opportunities, the following elective courses are recommended:

Code	Title	Credits
AGRI 335	HORSE PRODUCTION	3
AGRI 420	RANGELAND SHORT COURSE	2
AGRI 436	RANGELAND & FIRE ECOLOGY	3
AGRI 451	HUMAN DIMENSIONS OF WILDLIFE MANAGEMENT	3
GEOS 322	INTRODUCTION TO GIS	3

## Rangeland Wildlife Management Option

A student must complete the following program in addition to the Core and the Essential Studies requirements.

Code	Title	Credits
Core Requiremen	ts	36
AGRI 235	INTRODUCTION TO WILDLIFE MANAGEMENT	3
AGRI 325	RANGELAND WILDLIFE MANAGEMENT	3
AGRI 426	WILDLIFE RESEARCH AND MANAGEMENT TECHNIQUES	3
AGRI 435	WILDLIFE MANAGEMENT PRACTICUM	3
AGRI 445 & 445L	MAMMALOGY and MAMMALOGY LAB	3
AGRI 451	HUMAN DIMENSIONS OF WILDLIFE MANAGEMENT	3
BIOL 401 & 401L	ORNITHOLOGY and ORNITHOLOGY LAB	3
Total Credits		57

#### **Recommended Electives**

To enhance employment potential, students are recommended to take courses from the following:

Code	Title	Credits
AGRI 324	WILDLIFE AND LIVESTOCK DISEASE MANAGEMENT	3
AGRI 427 & 427L	ANIMAL ANATOMY & PHYSIOLOGY and ANIMAL ANATOMY & PHYSIOLOGY LAB	4
AGRI 436	RANGELAND & FIRE ECOLOGY	3
GEOS 322	INTRODUCTION TO GIS	3
MATH 138	APPLIED CALCULUS	3
MATH 232	APPLIED STATISTICS	3
BIOL 244 & 244L	ZOOLOGY and ZOOLOGY LABORATORY	4
BIOL 337	ENVIRONMENTAL MANAGEMENT	3
BIOL 343 & 343L	PARASITOLOGY and PARASITOLOGY LAB	3
AGRI 399	RANGELAND ECOSYSTEM FIELD STUDY	3
BIOL 427	BIOLOGY OF POPULATIONS	3
BIOL 431 & 431L	ENTOMOLOGY and ENTOMOLOGY LAB	3
BIOL 444 & 444L	FRESHWATER ECOLOGY and FRESHWATER ECOLOGY LABORATORY	3
AGRI 411	CONSERVATION BIOLOGY	3

## **Rangeland Equine Management Option**

A student must complete the following program in addition to the Core and Essential Studies requirements.

Code	Title	Credits	
Core Requirement	ts	36	
AGRI 329	AGRICULTURAL MARKETING	3	
AGRI 221	FARM AND RANCH MANAGEMENT	3	
AGRI 335	HORSE PRODUCTION	3	
AGRI 346 & 346L	EQUINE COMMUNICATIONS I and EQUINE COMMUNICATIONS I LAB	3	
AGRI 347 & 347L	EQUINE COMMUNICATIONS II and EQUINE COMMUNICATIONS II LAB	3	
AGRI 429	EQUINE INDUSTRY APPLIED FIELD STUDIES	3	
Animal Science Elective			

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AGRI 447 Total Credits	ANIMAL BREEDING AND GENETICS	
AGRI 390	INTERNSHIP IN AGRICULTURE/RANGE MANAGEMENT	
AGRI 357	GRAZING ECOLOGY	
AGRI 337	APPLIED ANIMAL NUTRITION	
AGRI 324	WILDLIFE AND LIVESTOCK DISEASE MANAGEMENT	
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