

THE DEGREE OF BACHELOR OF SCIENCE WITH A COMPREHENSIVE MAJOR IN HEALTH SCIENCES

This degree provides health professionals an opportunity to earn a bachelor's degree. This degree is not intended to replace a bachelor's degree in a specific health profession; therefore, consultation with their advisor at Chadron State College regarding the appropriateness of this degree for each student is important.

To be eligible for this degree, each student must have successfully completed one or more of the following in an appropriately accredited professional program:

1. A student with eighteen months or more of professional education in a field not listed above may earn this degree by requesting specific permission and approval of the Program Liaison/Department Chair and the Dean of Business, Math and Science. Chadron State College will determine the appropriate application of credits for each professional program listed by each applicant.
2. The professional program(s) attended must require a high school diploma or equivalent as an entrance requirement and have at least 25% of the training program as academic work in the classroom. The remaining 75% can be clinical training. The professional program should also be at the upper division (300 level or above) or graduate level, and not concurrently offer a baccalaureate degree. The student is responsible for proving these conditions exist.
3. To earn this degree the student must complete
 - at least 30 course credits of Chadron State College credit before or after the professional program of studies,
 - the comprehensive major as subsequently described,
 - 40 upper division course credits,
 - 120 college course credits, and
 - the Essential Studies requirements as subsequently listed.

Should the professional program component not total 30 course credits the student must earn additional Chadron State College credits at the upper division level to meet the 120 total credit minimum.
4. A student that wishes to complete this degree should have their advisor place their contact information on record in the health professions office. This information will be used to contact the student towards the end of their first year of professional school to set up transfer credits back to Chadron State College and to provide the application for graduation from Chadron State College.

Admission requirements to a professional program and thus graduation requirements may change between the date a catalog is published and the date a student may expect to be graduated. Therefore, each student must consult with their advisor and the professional school(s) of their choice at least once each calendar year for the latest requirements.

Each student must complete the core requirements, one option, and essential studies courses specified. Transfer students with an Associate's Degree can petition the Health Professions Advisory Board to

waive the essential studies course requirements. The application can be obtained from the Health Professions Director.

Code	Title	Credits
Essential Studies (http://catalog.csc.edu/undergraduate/essential-studies-program/)		
Core Requirements		
Select one of the following: (Please see note below regarding selection)		4
BIOL 240 & 240L	ANATOMY AND PHYSIOLOGY I and GROSS HUMAN ANATOMY LABORATORY ¹	
BIOL 339 & 339L	COMPARATIVE ANATOMY AND PHYSIOLOGY and COMPARATIVE ANATOMY AND PHYSIOLOGY LABORATORY	
BIOL 340 & 340L	HUMAN ANATOMY and GROSS HUMAN ANATOMY LABORATORY ¹	
Select one of the following: (Please see note below regarding selection)		4
CHEM 131 & 131L	COLLEGE CHEMISTRY I and COLLEGE CHEMISTRY I LAB ^{2,3}	
CHEM 140 & 140L	SURVEY OF CHEMISTRY and SURVEY OF CHEMISTRY LAB ^{2,3}	
PHYS 151 & 151L	COLLEGE PHYSICS I and COLLEGE PHYSICS I LAB	4
Select one of the following options:		
General Health Care (p. 1)		
Pre-Chiropractic Medicine (p. 2)		
Pre-Optometry (p. 2)		
Pre-Pharmacy (p. 3)		
Pre-Veterinary Medicine (p. 4)		
Radiologic Technology (p. 4)		
¹	1. Pre-chiropractic medicine, pre-optometry, and pre-pharmacy must take BIOL 340 HUMAN ANATOMY/BIOL 340L GROSS HUMAN ANATOMY LABORATORY. 2. Radiologic Technology must take BIOL 240 ANATOMY AND PHYSIOLOGY I/BIOL 240L GROSS HUMAN ANATOMY LABORATORY. 3. Pre-veterinary medicine students must take BIOL 339 COMPARATIVE ANATOMY AND PHYSIOLOGY/ BIOL 339L COMPARATIVE ANATOMY AND PHYSIOLOGY LABORATORY.	
²	1. Pre-chiropractic medicine, pre-optometry, pre-pharmacy, and pre-veterinary medicine must take CHEM 131 COLLEGE CHEMISTRY I/ CHEM 131L COLLEGE CHEMISTRY I LABORATORY 2. Radiography should take CHEM 140 SURVEY OF CHEMISTRY/ CHEM 140L SURVEY OF CHEMISTRY LABORATORY	

General Health Care Option

The General Health Care Option of the Health Sciences Degree is available only to students pursuing a career choice for which an option is not described. The selected professional program must meet the standards as listed in the beginning information for the Health Sciences Degree. The elective courses for this option will be selected by the student and the student's advisor at Chadron State College. The student and their advisors must fill out the program of study form. The Program courses selected for this option must total 18-34 course credits. The courses selected will typically be in the science and mathematics areas but can be from other disciplines if it best serves the needs of the student. The completed degree plan must be approved by the student's

advisor and the department chair. Both the advisor and the department chair should keep a copy of the plan of study on file.

Code	Title	Credits
Core Requirements		12
BIOL 138 & 138L	GENERAL BIOLOGY: BOTANY and GENERAL BIOLOGY: BOTANY LABORATORY	4
BIOL 139 & 139L	GENERAL BIOLOGY: ZOOLOGY and GENERAL BIOLOGY: ZOOLOGY LABORATORY	4
BIOL 499	BIOLOGY CAPSTONE	3
Program Electives (see above paragraph)		18-34
Total Credits		41-57

⁵ Prerequisite courses vary between professional schools; please consult your advisor to determine which courses must be taken to meet the requirements at your chosen professional school.

Essential Studies Courses

Code	Title	Credits
Outcome 1		
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		6
Outcome 2		
ENG 135	RHETORIC AND WRITING	3
Outcome 3		
Select one course		3
Outcome 4		
MATH 135	PRE-CALCULUS MATHEMATICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one course		3
Outcome 8		
Select one course		3
Outcome 10 or 11		
Select one course		3
Total Credits		24

- Minimum course credits through CSC - 90 credits
- Minimum course credits from professional program – Upper Division/ Graduate Course Credits - 30 credits
- Minimum total - 120 credits

Pre-Chiropractic Medicine Option

Students must complete the core requirements as well as the courses listed below; and one year of an appropriately accredited professional program in Chiropractic Medicine.

Professional Program Prerequisites ⁶

Code	Title	Credits
Core Requirements		12
BIOL 138 & 138L	GENERAL BIOLOGY: BOTANY and GENERAL BIOLOGY: BOTANY LABORATORY	4
BIOL 139 & 139L	GENERAL BIOLOGY: ZOOLOGY and GENERAL BIOLOGY: ZOOLOGY LABORATORY	4
BIOL 332 & 332L	GENETICS and GENETICS LABORATORY	4

BIOL 342 & 342L	HUMAN PHYSIOLOGY and HUMAN PHYSIOLOGY LABORATORY	4
BIOL 499	BIOLOGY CAPSTONE	3
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 335 & 335L	BIOCHEMISTRY and BIOCHEMISTRY LABORATORY	4
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
PSYC 131	INTRODUCTION TO PSYCHOLOGICAL SCIENCES	3
Electives		6
Total Credits		52

⁶ Prerequisite courses vary between professional schools; please consult your advisor to determine which courses must be taken to meet the requirements at your chosen professional school. Most schools require 6 credit hours of English, ENG 137 is recommended. Most schools require 3 credit hours of Psychology, PSYC 131 is recommended. Most schools require 3 credit hours of Statistics, MATH 232 is recommended. A business minor is recommended to be taken with this degree.

Essential Studies Courses

Code	Title	Credits
Outcome 1		
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		6
Outcome 2		
ENG 135	RHETORIC AND WRITING	3
Outcome 3		
CA 125	FUNDAMENTALS OF ORAL COMMUNICATION	3
Outcome 4		
MATH 135	PRE-CALCULUS MATHEMATICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one course		3
Outcome 8		
Select one course		3
Outcome 10 or 11		
Select one course		3
Total Credits		24

- Minimum course credits through CSC - 90 credits
- One year of a professional program in Chiropractic Medicine – Upper Division/Graduate Course Credits - 30 credits
- Minimum total - 120 credits

Pre-Optometry Option

Students must complete the core requirements as well as the courses listed below; and one year of an appropriately accredited professional program in Optometry.

Professional Program Prerequisites ⁷

Code	Title	Credits
Core Requirements		12
BIOL 138 & 138L	GENERAL BIOLOGY: BOTANY and GENERAL BIOLOGY: BOTANY LABORATORY	4
BIOL 139 & 139L	GENERAL BIOLOGY: ZOOLOGY and GENERAL BIOLOGY: ZOOLOGY LABORATORY	4
BIOL 241 & 241L	MICROBIOLOGY and MICROBIOLOGY LABORATORY	4
BIOL 342 & 342L	HUMAN PHYSIOLOGY and HUMAN PHYSIOLOGY LABORATORY	4
BIOL 499	BIOLOGY CAPSTONE	3
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 334 & 334L	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LABORATORY	4
CHEM 335 & 335L	BIOCHEMISTRY and BIOCHEMISTRY LABORATORY	4
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
PSYC 131	INTRODUCTION TO PSYCHOLOGICAL SCIENCES	3
PSYC 254	DEVELOPMENTAL PSYCHOLOGY	3
Total Credits		53

⁷ Prerequisite courses vary between professional schools; please consult your advisor to determine which courses must be taken to meet the requirements at your chosen professional school. Most schools require 6 credit hours of English, ENG 137 is recommended. Most schools require 3 credit hours of Statistics, MATH 232 is recommended. A business minor is recommended to be taken with this degree.

Essential Studies Courses

Code	Title	Credits
Outcome 1		
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		6
Outcome 2		
ENG 135	RHETORIC AND WRITING	3
Outcome 3		
Select one course		3
Outcome 4		
MATH 135	PRE-CALCULUS MATHEMATICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one course		3
Outcome 8		
Select one course		3
Outcome 10 or 11		
Select one course		3
Total Credits		24

- Minimum course credits through CSC - 90 credits
- One year of a professional program in Optometry – Upper Division/ Graduate Course Credits - 30 credits
- Minimum total - 120 credits

Pre-Pharmacy Option

Students must complete the core requirements as well as the courses listed below; and one year of an appropriately accredited professional Doctor of Pharmacy program.

Professional Program Prerequisites ⁸

Code	Title	Credits
Core Requirements		12
BIOL 138 & 138L	GENERAL BIOLOGY: BOTANY and GENERAL BIOLOGY: BOTANY LABORATORY	4
BIOL 139 & 139L	GENERAL BIOLOGY: ZOOLOGY and GENERAL BIOLOGY: ZOOLOGY LABORATORY	4
BIOL 332 & 332L	GENETICS and GENETICS LABORATORY	4
BIOL 342 & 342L	HUMAN PHYSIOLOGY and HUMAN PHYSIOLOGY LABORATORY	4
BIOL 449	MOLECULAR BIOLOGY OF THE CELL	3
BIOL 499	BIOLOGY CAPSTONE	3
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 334 & 334L	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LABORATORY	4
CHEM 335 & 335L	BIOCHEMISTRY and BIOCHEMISTRY LABORATORY	4
CHEM 341 & 341L	QUANTITATIVE ANALYSIS and QUANTITATIVE ANALYSIS LAB	4
MATH 232	APPLIED STATISTICS	3
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
Total Credits		57

⁸ Prerequisite courses vary between professional schools; please consult your advisor to determine which courses must be taken to meet the requirements at your chosen professional school. Most schools require 6 credit hours of English, ENG 137 is recommended. A business minor is recommended to be taken with this degree.

Essential Studies Courses

Code	Title	Credits
Outcome 1		
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		6
Outcome 2		
ENG 135	RHETORIC AND WRITING	3
Outcome 3		
CA 125	FUNDAMENTALS OF ORAL COMMUNICATION	3
Outcome 4		
MATH 135	PRE-CALCULUS MATHEMATICS	3
Outcome 6 (Covered in the core)		
Outcome 7		

Select one course	3
Outcome 8	
Select one course	3
Outcome 10 or 11	
Select one course	3
Total Credits	24

- Minimum course credits through CSC - 98 credits
- One year of a professional program in Pharmacy – Upper Division/ Graduate Course Credits - 30 credits
- Minimum total - 128 credits

Pre-Veterinary Medicine Option

Students interested in earning this degree from Chadron State College must complete the core requirements; the courses listed below and one year of an accredited professional program in veterinary medicine. Students interested in earning this degree should consult with their advisor as soon as possible as prerequisite courses vary widely between professional programs and some graduate programs require a completed bachelor's degree prior to admission (Biology Comprehensive major and an option recommended).

Professional Program Prerequisites⁹

Code	Title	Credits
Core Requirements		12
AGRI 132	INTRODUCTION TO ANIMAL SCIENCE	3
AGRI 234	PRINCIPLES OF ANIMAL NUTRITION	3
BIOL 138 & 138L	GENERAL BIOLOGY: BOTANY and GENERAL BIOLOGY: BOTANY LABORATORY	4
BIOL 139 & 139L	GENERAL BIOLOGY: ZOOLOGY and GENERAL BIOLOGY: ZOOLOGY LABORATORY	4
BIOL 332 & 332L	GENETICS and GENETICS LABORATORY	4
BIOL 435 & 435L	MAMMALOLOGY and MAMMALOLOGY LAB	3
BIOL 499	BIOLOGY CAPSTONE	3
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 334 & 334L	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LABORATORY	4
CHEM 335 & 335L	BIOCHEMISTRY and BIOCHEMISTRY LABORATORY	4
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
Electives		3-4
Total Credits		55-56

⁹ Prerequisite courses vary between professional schools; please consult your advisor to determine which courses must be taken to meet the requirements at your chosen professional school. Most schools require 6 credit hours of English, ENG 137 is recommended. Most schools require 3 credit hours of Statistics, MATH 232 is recommended. A business minor is recommended to be taken with this degree.

Essential Studies Courses

Code	Title	Credits
Outcome 1		
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		6
Outcome 2		
ENG 135	RHETORIC AND WRITING	3
Outcome 3		
Select one CA course		3
Outcome 4		
MATH 135	PRE-CALCULUS MATHEMATICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one course		3
Outcome 8		
Select one course		3
Outcome 10 or 11		
Select one course		3
Total Credits		24

- Minimum course credits through CSC - 92 credits
- One year at an accredited Veterinary School - 30 credits
- Minimum total - 120 credits
- Please check with the school you plan to attend for their admissions requirement.

Radiologic Technology Option¹⁰

Code	Title	Credits
Core Requirements		12
BIOL 132	MEDICAL TERMINOLOGY	2
BIOL 137 & 137L	PRINCIPLES OF CELLULAR SYSTEMS and PRINCIPLES OF CELL SYSTEMS LAB	4
BIOL 242 & 242L	ANATOMY AND PHYSIOLOGY II and HUMAN PHYSIOLOGY LABORATORY	4
BIS 200	INTRODUCTION TO COMPUTER APPLICATIONS	3
MATH 232	APPLIED STATISTICS	3
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
PSYC 131	INTRODUCTION TO PSYCHOLOGICAL SCIENCES	3
Total Credits		35

¹⁰ Prerequisite courses vary between professional schools; please consult your advisor to determine which courses must be taken to meet the requirements at your chosen professional school. Most schools require 6 credit hours of English, ENG 137 is recommended. BIOL 270: RADIOGRAPHIC ANATOMY is highly recommended.

Essential Studies Courses

Code	Title	Credits
Outcome 1		
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		6
Outcome 2		

ENG 135	RHETORIC AND WRITING	3
Outcome 3		
Select one CA course		3
Outcome 4		
MATH 135	PRE-CALCULUS MATHEMATICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one humanities course		3
Outcome 8		
Select one course		3
Outcome 10 or 11		
Select one course		3
Total Credits		24

- Minimum course credits through CSC - 69 credits
- Two years at an accredited Radiological Technologist Program - 51 credits
- Minimum total - 120 credits