

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

This degree is designed to serve those health professions that do not require a completed baccalaureate degree upon admission the opportunity to earn a bachelor's degree upon successful completion of one or two years of an upper-division or graduate professional program. This degree is not intended to replace a bachelor's degree in a specific health profession; therefore, student consultation with their Chadron State College advisor regarding the appropriateness of this degree is important.

To be eligible for this degree, each student must successfully completed the following requirements. The student is responsible for proving these conditions exist:

- 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 (which may include courses beyond those specifically required below),
- the Essential Studies requirements as subsequently listed.
- one or two years of an appropriately accredited professional health program. That professional program must meet the following requirements:
  - The professional program must be appropriately accredited for the health professions program being offered.
  - The professional program(s) attended must require, at minimum, 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 will include sufficient undergraduate upper division (300 level or above) or graduate level coursework to meet the requirements for this program.
  - The professional program cannot offer a concurrent baccalaureate degree for the same coursework.
  - General Health Care Option: A student with eighteen months or more of professional education in a field not listed may request review to obtain specific permission and approval of the Department Chair and the Dean of Business, Mathematics and Natural Science. Chadron State College will determine the appropriate application of credits for each professional program listed by each applicant.

A student that wishes to complete this degree should place their contact information on record in the health professions office. The student should complete their graduation request prior to leaving Chadron State College or when successful completion of the required portion of their professional school is evident. The student will need to request that their professional school send an official transcript back to Chadron State

College, documenting successful completion of the required portion of their professional school program.

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, and the coursework necessary to meet graduation requirements. Transfer students with an Associate's Degree can petition to waive the essential studies course requirements but may need to complete specific essential studies pre-requisites for their professional program.

Code	Title	Credits
Essential Studies ( <a href="http://catalog.csc.edu/undergraduate/essential-studies-program/">http://catalog.csc.edu/undergraduate/essential-studies-program/</a> )		
<b>Core Requirements</b>		
Select 4 credits of the following (see degree option for specific requirements):		4
BIOL 240 & 240L	ANATOMY AND PHYSIOLOGY I and ANATOMY AND PHYSIOLOGY I LABORATORY	
BIOL 339 & 339L	COMPARATIVE ANATOMY AND PHYSIOLOGY and COMPARATIVE ANATOMY AND PHYSIOLOGY LABORATORY	
BIOL 340 & 340L	HUMAN ANATOMY and GROSS HUMAN ANATOMY LABORATORY	
Select 4 credits of the following (See degree option for specific requirements):		4
CHEM 131 & 131L	COLLEGE CHEMISTRY I and COLLEGE CHEMISTRY I LABORATORY	
CHEM 140 & 140L	SURVEY OF CHEMISTRY and SURVEY OF CHEMISTRY LAB	
PHYS 151 & 151L	COLLEGE PHYSICS I and COLLEGE PHYSICS I LABORATORY	4
Select one of the following options:		36-45
General Health Care (p. 1)		
Pre-Chiropractic Medicine (p. 2)		
Pre-Optometry (p. 3)		
Pre-Pharmacy (p. 3)		
Pre-Veterinary Medicine (p. 4)		
Radiologic Technology (p. 4)		
<b>Total Credits</b>		<b>48-57</b>

## General Health Care Option<sup>1</sup>

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 25-34 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 (select with Advisor to ensure meet professional program prerequisite requirements)		12
BIOL 101 & 101L	GENERAL BIOLOGY I and GENERAL BIOLOGY I LABORATORY	4
BIOL 102 & 102L	GENERAL BIOLOGY II and GENERAL BIOLOGY II LABORATORY	4
BIOL 499	BIOLOGY CAPSTONE	3
Program Electives (see above paragraph) <sup>1</sup>		25-34
<b>Total Credits</b>		<b>48-57</b>

<sup>1</sup> 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 232	APPLIED STATISTICS	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
<b>Total Credits</b>		<b>24</b>

- Minimum undergraduate course credits - 90 credits, of which at least 30 must be from Chadron State College
- Minimum course credits from accredited 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 Doctor of Chiropractic program.

### Professional Program Prerequisites <sup>2</sup>

Code	Title	Credits
Core Requirements (must complete BIOL 340/340L and CHEM 131/131L):		12
BIOL 101 & 101L	GENERAL BIOLOGY I and GENERAL BIOLOGY I LABORATORY	4

BIOL 102 & 102L	GENERAL BIOLOGY II and GENERAL BIOLOGY II 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 132 & 132L	COLLEGE CHEMISTRY II and COLLEGE CHEMISTRY II LABORATORY	4
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 335 & 335L	BIOCHEMISTRY I and BIOCHEMISTRY LABORATORY	4
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
Electives		10
<b>Total Credits</b>		<b>57</b>

<sup>2</sup> Prerequisite courses vary between professional schools; please consult the websites of the professional schools to which you plan to apply and discuss with 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 TECHNICAL WRITING 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 232	APPLIED STATISTICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one course		3
Outcome 8		
PSYC 131	INTRODUCTION TO PSYCHOLOGICAL SCIENCES	3
Outcome 10 or 11		
Select one course		3
<b>Total Credits</b>		<b>24</b>

- Minimum undergraduate course credits - 90 credits, of which at least 30 must be from Chadron State College
- One year in an accredited professional program in Chiropractic Medicine – 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 Doctor of Optometry program.

### Professional Program Prerequisites<sup>3</sup>

Code	Title	Credits
Core Requirements (must complete BIOL 340/340L and CHEM 131/131L):		12
BIOL 101 & 101L	GENERAL BIOLOGY I and GENERAL BIOLOGY I LABORATORY	4
BIOL 102 & 102L	GENERAL BIOLOGY II and GENERAL BIOLOGY II 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 132 & 132L	COLLEGE CHEMISTRY II and COLLEGE CHEMISTRY II LABORATORY	4
CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
Select 3-4 credits of the following:		3-4
CHEM 334 & 334L	ORGANIC CHEMISTRY II and ORGANIC CHEMISTRY II LABORATORY	
BIOL 449	MOLECULAR BIOLOGY OF THE CELL	
CHEM 335 & 335L	BIOCHEMISTRY I and BIOCHEMISTRY LABORATORY	4
PHYS 152 & 152L	COLLEGE PHYSICS II and COLLEGE PHYS II LAB	4
Program Electives from BIOL or CHEM		3
<b>Total Credits</b>		<b>53-54</b>

<sup>3</sup> Prerequisite courses vary between professional schools; please consult the websites of the professional schools to which you plan to apply and discuss with 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 TECHNICAL WRITING is recommended. Many schools also require a calculus course. 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 232	APPLIED STATISTICS	3
Outcome 6 (Covered in the core)		
Outcome 7		

Select one course		3
Outcome 8		
PSYC 131	INTRODUCTION TO PSYCHOLOGICAL SCIENCES	3
Outcome 10 or 11		
Select one course		3
<b>Total Credits</b>		<b>24</b>

- Minimum undergraduate course credits - 90 credits, of which at least 30 must be from Chadron State College
- One year of an accredited professional program in Optometry – 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<sup>4</sup>

Code	Title	Credits
Core Requirements (must complete either BIOL 240/240L or BIOL 340/340L, and CHEM 131/131L):		12
BIOL 101 & 101L	GENERAL BIOLOGY I and GENERAL BIOLOGY I LABORATORY	4
BIOL 102 & 102L	GENERAL BIOLOGY II and GENERAL BIOLOGY II LABORATORY	4
BIOL 332 & 332L	GENETICS and GENETICS LABORATORY	4
Select 4 credits of the following:		4
BIOL 242 & 242L	ANATOMY AND PHYSIOLOGY II and ANATOMY AND PHYSIOLOGY II LABORATORY	
BIOL 342 & 342L	HUMAN PHYSIOLOGY and HUMAN PHYSIOLOGY LABORATORY	
Select 3-4 credits of the following:		3-4
BIOL 241 & 241L	MICROBIOLOGY and MICROBIOLOGY LABORATORY	
BIOL 449	MOLECULAR BIOLOGY OF THE CELL	
BIOL 499	BIOLOGY CAPSTONE	3
CHEM 132 & 132L	COLLEGE CHEMISTRY II and COLLEGE CHEMISTRY II LABORATORY	4
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 I and BIOCHEMISTRY LABORATORY	4
MATH 151	CALCULUS I	5
<b>Total Credits</b>		<b>55-56</b>

<sup>4</sup> Prerequisite courses vary between professional schools; please consult the websites of the professional schools to which you plan to apply and discuss with 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 TECHNICAL WRITING is recommended. Many schools require additional mathematics as well.

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 232	APPLIED STATISTICS	3
Outcome 6 (Covered in the core)		
Outcome 7		
Select one course - PHIL 336 recommended		3
Outcome 8		
Select one course - PSYC 131 is recommended		3
Outcome 10 or 11		
Select one course		3
<b>Total Credits</b>		<b>24</b>

- Minimum undergraduate course credits - 85 credits, of which at least 30 must be from Chadron State College
- One year in an accredited professional program in Pharmacy – Graduate Course Credits - 35 credits
- Minimum total - 120 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 Doctor of Veterinary Medicine degree program. 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 is recommended).

### Professional Program Prerequisites<sup>5</sup>

Code	Title	Credits
Core Requirements (must complete BIOL 339/339L and CHEM 131/131L):		12
BIOL 101 & 101L	GENERAL BIOLOGY I and GENERAL BIOLOGY I LABORATORY	4
BIOL 102 & 102L	GENERAL BIOLOGY II and GENERAL BIOLOGY II LABORATORY	4
BIOL 241 & 241L	MICROBIOLOGY and MICROBIOLOGY LABORATORY	4
BIOL 332 & 332L	GENETICS and GENETICS LABORATORY	4
BIOL 435 & 435L	MAMMALOGY and MAMMALOGY LAB	3
BIOL 499	BIOLOGY CAPSTONE	3
CHEM 132 & 132L	COLLEGE CHEMISTRY II and COLLEGE CHEMISTRY II LABORATORY	4

CHEM 333 & 333L	ORGANIC CHEMISTRY I and ORGANIC CHEMISTRY I LABORATORY	4
CHEM 335	BIOCHEMISTRY I	3
Electives from AGRI, BIOL, CHEM, or PHYS, to be selected with advisor		12
<b>Total Credits</b>		<b>57</b>

<sup>5</sup> Prerequisite courses vary between professional schools; please consult the websites of the professional schools to which you plan to apply and discuss with 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 TECHNICAL WRITING 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 232	APPLIED STATISTICS	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
<b>Total Credits</b>		<b>24</b>

- Minimum undergraduate course credits - 90 credits, of which at least 30 must be from Chadron State College
- One year in an accredited professional program in Veterinary Medicine - Graduate Course Credits - 30 credits
- Minimum total - 120 credits

## Radiologic Technology Option<sup>6</sup>

Students must complete the core requirements, the courses listed below, and a two-year program in an accredited Radiologic Technology program, which has at least one year at the junior level or above.

Code	Title	Credits
Core Requirements (must select either BIOL 240/240L or BIOL 340/340L, and CHEM 140/140L)		12
BIOL 101 & 101L	GENERAL BIOLOGY I and GENERAL BIOLOGY I LABORATORY	4
BIOL 132	MEDICAL TERMINOLOGY	2
Select 4 credits of the following:		4
BIOL 242 & 242L	ANATOMY AND PHYSIOLOGY II and ANATOMY AND PHYSIOLOGY II LABORATORY	

BIOL 342 & 342L	HUMAN PHYSIOLOGY and HUMAN PHYSIOLOGY LABORATORY	
BIOL 390	INTERNSHIP IN BIOLOGY (May be completed during professional school - see advisor)	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
Select 3 credits of the following:		3
ENG 136	TOPICS IN WRITING	
ENG 137	TECHNICAL WRITING	
<b>Total Credits</b>		<b>39</b>

<sup>6</sup> Prerequisite courses vary between professional schools; please consult the websites of the professional schools to which you plan to apply and discuss with 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		6
FYI 169	FIRST-YEAR INQUIRY	
Select one 6 course credit or two 3 course credits		
Outcome 2		3
ENG 135	RHETORIC AND WRITING	
Outcome 3		3
Select one CA course		
Outcome 4		3
Select one course - MATH 142 or other, not to duplicate MATH 232		
Outcome 6 (Covered in the core)		
Outcome 7		3
Select one course		
Outcome 8		3
PSYC 131	INTRODUCTION TO PSYCHOLOGICAL SCIENCES	
Outcome 10 or 11		3
Select one course		
<b>Total Credits</b>		<b>24</b>

- Minimum undergraduate course credits - 63 credits, of which at least 30 must be from Chadron State College
- Two years at an accredited Radiological Technologist Program - at least 57 credits
- Minimum total - 120 credits