

Prefix	Number	Gerta	Course Title	BSC	LRSC	NDSCS	WSC	DCB	DSU	MASU	MISU	NDSU	UND	VCSU	SBC	TMCC	UTTC
BIOL	213		General Pathology	2		3											
BIOL	215/315		Genetics/Lab				3/1		3/1	4	3	3/1	3	4			
BIOL	220/220L	ND:LABSC	Anatomy & Physiology I/Lab	3/1	4	3/1	3/1	4		4	4	3/1		4	4	4	
BIOL	221/221L	ND:LABSC	Anatomy & Physiology II/Lab	3/1	4	3/1	3/1	4		4	4	3/1		4		4	
BIOL	230	ND:SCI/ND:LABSC	Ecology				3/1	4									3
BIOL	250/250L	ND:LABSC	Survey of Tropical Biology/Lab	3/1													
BIOL	251/251L		Community Ecology/Lab	3/1													
BIOL	260		Kinesiology L/L				3/1										
MICR	202/202L	ND:LABSC	Microbiology/Lab	3/1		3/1	3/1	4				2/1					
BOT	170/170L	ND:LABSC	Plant Form and Diversity	3/1													

*Note: Students are highly encouraged to complete BOTH Biol 150 and Biol 151 prior to transfer to avoid difficulty.

BIOL 102 Introduction to Aquarium Keeping

Introduction to Aquarium Keeping will explore the types of aquaria, aquarium equipment and maintenance, plants and animals for the aquarium, and how to troubleshoot problems aquarium keepers may face.

BIOL 108 Beginning Birding

This course is an introduction to the fascinating world of birds. Students will become familiar with the tools of birding such as binoculars, spotting scopes, field guides, and multimedia references. The course will also focus on characteristics of bird families and the identification of individual species before we go out in the field. The last portion of the class will concentrate on locating and identifying birds in their natural habitats. Optional field trips will be offered for student participation.

BIOL 109 The Living World

This is an introductory level biology course that has no lab. The class is not for biology majors. Includes: Basic concepts in Biology, Natural History, Sociobiology, Human Bio-Social Interaction.

BIOL 111/111L Concepts of Biology/Lab

Concepts of Biology is an introductory level non-majors transferable class. It is designed to meet the requirements of a Lab Science.

1. Basic science literacy, possibly including superficial coverage of cell biology, ecology, human anatomy and physiology, evolution, genetics, and environmental biology.
2. Understanding how science informs cultural perspectives.
3. Understanding the relationship among levels of biological information.
4. Understanding the unity and diversity of life forms.
5. Comprehending methods of inquiry and technology and the applications for society.
6. Integrating knowledge and ideas in science.
7. Understanding and utilizing scientific knowledge.

BIOL 115/115L Concepts of Anatomy and Physiology

One-semester course that integrates the structure and function of the human body. Course includes lab.

BIOL 120 College Biology

Introduction to cellular and molecular biology, genetics, evolution, and ecology.

BIOL 124/124L Environmental Science/Lab

Relation of humans to their environment.

1. Understanding basic principles of Natural Resource Management.
2. Understand the human cause of current environmental problems and possible solutions.
3. Population demography
4. Sustainable practices
5. Applying principles of ecology that are associated with the study of the environmental science.
6. Learn to apply critical thinking in environmental science.
7. Using the scientific method of inquiry to inform environmental science perspectives.

BIOL 126/126L Human Biology

Consideration of selected problems in human biology.

BIOL 142 General Microbiology

A survey of microbial cell biology, microbial genetics, microbial interaction with humans, and the impact of microorganisms on the environment.

BIOL 150/150L General Biology I/Lab

A two-semester sequenced study of the fundamental topics of biology, with an emphasis on cellular biology.

1. Understand cellular and viral structure and function.
2. Understand fundamental biochemical principles.
3. Understand rudimentary classical genetics.
4. Understand rudimentary molecular genetics and have a familiarity with various DNA technologies.
5. Use knowledge about mechanisms of cellular and molecular processes.

BIOL 151/151L General Biology II/Lab

A two-semester sequenced study of the fundamental topics of biology, with an emphasis on organismal biology.

1. Describe the unity and diversity of life, including structure and function and how this relates to the environment.
2. Describe how life (or life forms) has (have) changed and adapted over time.
3. Understand basic evolution and evolutionary processes.
4. Develop an understanding of ecology.

BIOL 154/54L General Biology III: Intro to Botany

Introduction to the biology of plants emphasizing evolution and diversity, plant anatomy and development, water and mineral nutrition, photosynthesis, and plant ecology.

BIOL 170/170L General Zoology/Lab

A survey of the animal kingdom, from simple to complex. Major invertebrate and vertebrate animal groups will be covered with emphasis on structure, function, life history characteristics and evolutionary advancements of each. Topics of animal ecology, with emphasis on regional species, concludes the course. Prerequisites exist.

BIOL 202/L-302/L Microbiology/Lab

A general survey on the morphology and physiology of selected microbes with major emphasis on the medical aspects of bacteria, viruses, and fungi to humans. Prerequisite: CHEM 131; Co-requisite: Microbiology Lab. This course and MICR

202 are equivalent.

1. Gain an appreciation of the diversity of microbes; in the context of this course, “microbes” include diverse organisms, e.g., viruses, bacteria, fungi, protists, and small worms.
2. Describe the structure and function of microbes.
3. Understanding diagnostic tests and procedures used to identify microbes.
4. Understanding the relationship between microbes, disease and the disease process.
5. The role of microbes in microbial ecology.
6. Understand the roles of microbes in community health.

BIOL 211/211L Human Anatomy/Lab

Structure of the human body including histology and morphology of the skeletal, muscular, digestive, nervous, urinary, reproductive, circulatory, respiratory, and endocrine systems. Corequisite: BIOL 221 lab.

BIOL 212/212L Human Physiology/Lab

Covers the normal structure and function of the cell, tissues, organs and organ systems including the muscular, skeletal, cardiovascular, gastrointestinal, nervous, endocrine, excretory, and reproductive systems. Prerequisite: BIOL 211, CHEM 131 or equivalent.

BIOL 213 General Pathology

A general overview of the disease process and the mechanisms by which the human body copes with disease. Also a survey of the more common diseases affecting various body systems.

BIOL 215/315 Genetics/Lab

Study of the basis of heredity with emphasis on structure and function of DNA and Mendelian Genetics.

1. Understanding molecular genetics.
2. Understanding and solving problems in Mendelian (classical) inheritance.
3. Have a familiarity with genetic technologies.
4. Understanding population genetics and evolution.

5. Develop an appreciation for the relationship of genetics to other disciplines, e.g., biochemistry, ethics, economics, and medicine

BIOL 220/220L Anatomy & Physiology I/Lab

Study of structure and function of human body.

1. Students understand the organization of the body from simple to complex, from the chemical level to the system level and the inter-relationships between them.
2. Students gain an understanding of the role and importance of passive and active processes, membrane potentials, and feedback systems have in maintaining homeostasis
3. Understand diagnostic treatments, procedures and technology used to identify and treat human disease and disorders.
4. Understand disease mechanisms in each system.
5. Understand the chemical basis of life and the anatomy and physiology of cells and tissues.
6. Understand body structure and function.
7. Understand the link between homeostatic imbalance and disease.
8. Organ systems that can be covered include musculoskeletal, respiratory, circulatory, nervous, integumentary, endocrine, lymphatic, digestive, reproductive, and urinary.

BIOL 221/221L Anatomy & Physiology II/Lab

Study of structure and function of human body.

1. Students gain a more thorough understanding of the inter-relationships and organizational hierarchy among the systems of the body.
2. Students will gain a more thorough understanding of role of feedback systems, osmosis/diffusion, electrolyte balance, acidosis/alkalosis in maintaining homeostasis.
3. Diagnostic procedures
4. Treatments of disease
5. Organ systems that can be covered include musculoskeletal, respiratory, circulatory, nervous, integumentary, endocrine, lymphatic, digestive, reproductive, and urinary.

BIOL 230 Ecology

A study of terrestrial and aquatic succession from communities through biomes. Basic concepts of the interrelationships of grassland, desert, arctic and marine environments.

BIOL 250/250L Survey of Tropical Biology/Lab

This course will survey the basic concepts of tropical biology and it will provide the student with a sound foundation in tropical ecosystems and biodiversity. This course will include formal lectures and laboratory field work in a tropical setting and when taken with BIOL 296L, it satisfies a four credit lab science requirement. The lecture topics will include tropical plant adaptations and defenses, tropical invertebrate and vertebrate diversity and conservation issues. Special emphasis will be given to comparing the differences between tropical areas and temperate zone. This course is intended for any student regardless of major or background and there are no prerequisites. Instructor's approval required for admission. Corequisite: BIOL 296L.

BIOL 251/251L Community Ecology/Lab

This course will introduce basic ecological concepts; describe the ecological structure, patterns, processes, and interactions of the major Everglades communities and their organisms; and discuss human influences on these and nearby communities. Prerequisite: Instructor's approval; BIOL 150 and 151 recommended. Corequisite: BIOL 251L The laboratory consists of fieldwork in the Everglades and surrounding ecosystems, including sawgrass prairies, tropical hardwood forests, mangrove swamps, and marine communities. Students will measure and analyze several biotic and abiotic factors and relate these to observed differences in community structure. Corequisite: BIOL 251

BIOL 260 Kinesiology L/L

In-depth study of the musculoskeletal system. Biomechanics of normal and abnormal posture, gait patterns, and body mechanics are presented. Basic evaluative techniques are learned. Prerequisite: BIOL 220 and 221.

MICR 202/202L Microbiology/Lab

A study of the characteristics and importance of microorganisms with emphasis on their identification, control and relationships to health and disease. This course and BIOL 302 are equivalent.

BOT 170/170L Plant Form and Diversity

Survey of plants and plant-like organisms, with emphasis on the structure and function of vascular plants. Prerequisites.

Fish and Wildlife

Prefix	Number	Gerta	Course Title	DCB
FWLD	121	ND:LABSC	Introduction to Fish and Wildlife Management	3
FWLD	122	ND:LABSC	Wildlife and Fisheries Techniques	3

FWLD	243	ND:LABSC	Ornithology	4
FWLD	258		Field Studies-Wildlife	1-3

FWLD 121 Introduction to Fish and Wildlife Management

Field and laboratory methods used in game management. Census methods, history of management in legislation, law enforcement, and careers in wildlife management.

FWLD 122 Wildlife and Fisheries Techniques

Provide a basic understanding of the biological principles involved in wildlife management. Upland game, waterfowl, big game, fisheries and non-game.

FWLD 243 Ornithology

An introduction to the biology, classification and identification of birds. Students will be required to use binoculars in this class and must provide this equipment on their own.

FWLD 258 Field Studies-Wildlife

An intensive examination of a research topic in wildlife. The subject of investigation is designed to meet the specific needs of individual students on an independent study basis.

The following individuals are leaders for this discipline. Those marked with an asterisk (*) are chairs.

Name	Institution	Email Address	Phone Number
Eric Bless	BSC	eric.bless@bismarckstate.edu	701-224-5411
DeShawn Lawrence	CCCC	Deshawn.lawrence@littlehoop.edu	701-766-1342
Larry Brooks	DCB	larry.brooks@dakotacollege.edu	701-228-5457
Shubham Datta	DCB	shubham.datta@dakotacollege.edu	701-228-5463
Chuck Lura	DCB	chuck.lura@dakotacollege.edu	701-228-5472
Craig Whippo	DSU	Craig.whippo@dickinsonstate.edu	701-483-2115

Shaun Prince	LRSC	shaun.prince@lrsc.edu	701-662-7650
Joseph Mehus	MaSU	joseph.mehus@mayvillestate.edu	701-788-4802
Alexandra Deufel	MiSU	alexandra.deufel@minotstateu.edu	701-858-3115
Shannon King	NDSCS	shannon.king@ndscs.edu	701-671-2296
Marie Gordon	NDSU	marie.gordon@ndsu.edu	701-231-6430
Lisa Montplaisir	NDSU	lisa.montplaisir@ndsu.edu	701-231-6155
Wendy Reed	NDSU	wendy.reed@ndsu.edu	701-231-5921
Lisa Johnson	NDUS	lisa.a.johnson@ndus.edu	701-328-4143
Jen Janecek-Hartman	NHSC	jjanec@nhsc.edu	701-627-8049
Melody Azure	SBC	melody.azure@sittingbull.edu	701-854-8020
Terri Martin-Parisien	TMCC	tmartinparisien@tm.edu	701-477-7862 ext. 2961
Jeff Carmichael	UND	jeffrey.carmichael@und.edu	701-777-4666
Charles Gitter	UTTC	cgitter@uttc.edu	701-255-3285 x3101
Andre DeLorme	VCSU	andre.delorme@vcsu.edu	701-845-7573
Susan Zimmerman	WSC	s.zimmerman@willistonstate.edu	701-774-4232

[Click here to email everyone](#) on the above list.

[Director of Academic Affairs](#)