MAJOR
The Fisheries and Wildlife Sciences degree (B.A., or B.S.) prepares you for careers in wildlife and fisheries management with state and federal agencies, conservation organizations, graduate school, and in environmental consulting. Graduates are qualified for federal positions with agencies such as the U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Environmental Protection Agency, U.S. Geological Survey and others. Common conservation organizations include Ducks Unlimited, Pheasants Forever, Delta Waterfowl, and The Nature Conservancy. The degree also prepares you for higher academic degrees. The curriculum allows you to meet the certification requirements of the American Fisheries Society and The Wildlife Society. You have the choice of majoring in the Fisheries Option, Wildlife Option or both.

PRACTICAL EXPERIENCE
Multiple field trips involving hands-on experience are taken in all fisheries and wildlife classes. Faculty strongly encourage students to get summer work experience through fisheries and wildlife internships, and actively help students obtain those summer positions. Most students have worked for the U.S. Fish and Wildlife Service, Northern Prairie Wildlife Research Center, or for the North Dakota Game and Fish Department. Internships provide you with great practical experience and make our graduates more competitive in the job market. Guest lecturers from various agencies often visit classrooms to lecture on management issues or discuss employment opportunities.

SCHOLARSHIPS
- Dr. Donald C. and Marjorie Meredith Scholarship
  Total $12,000 available
  Designed to award Math or Science majors
- Great Plains Fisheries Workers Association Scholarship
- Audber James Hansen Memorial Scholarship

QUOTES:
“My favorite memory at VCSU was when my Intro to Fisheries and Wildlife class traveled to South Dakota to band ducks. VCSU does a great job using these kinds of real-life, hands-on activities to take education beyond the classroom and into the real world.”
  ~Candace Kraft, Jamestown ND

FACILITIES AND RESOURCES
The Rhoades Science Center is making room for you with a $10.3 million expansion and renovation that is scheduled for completion in 2013. Our labs include state-of-the-art terrestrial and aquatic biology labs. Students have access to:
- A fully equipped Aquatic Macroinvertebrate Lab
- A fully equipped Necropsy Lab
- Fisheries and Wildlife Conservation Club
- Prairie Waters Education and Research Center
- Two Pontoon boats for Fisheries and Limnology field trips
- Sheyenne River only 75 yards from the science building for hands on lab opportunities
- Lake Ashtabula Reservoir and other area lakes
- Great hunting and fishing opportunities
- Biology faculty have connections with many area agencies such as:
  USFWS Wetland Management District – Valley City,
  USFWS Fish Hatchery – Valley City, USGS Northern
  Prairie Wildlife Research Center – Jamestown,
  North Dakota Game and Fish Department

WHAT IS AROUND VCSU?
VCSU, which is nestled in the middle of farm country, is located minutes from wetlands, rivers, and prairie, making for some phenomenal hunting and fishing. If your travels take you out of VCSU, you are an hour from the lakes of Minnesota and 4 hours from the breath taking badlands of western North Dakota. With these scenic options nearby the classroom is often reached by foot.

TECHNOLOGY
- Notebook computers with DVD burners and multimedia capabilities
- Digital cameras, video cameras, and other peripherals
- Blackboard online learning environments
- Global Information Systems (GIS) training

LEARNING OUTCOMES
After a student completes the Fisheries and Wildlife Science Program he or she should be able to:
1. Demonstrate a fundamental knowledge of the major concepts in Biology and Fisheries and Wildlife science.
2. Exhibit critical thinking skills by applying the scientific method to solve problems.
3. Exhibit the ability to read and communicate in a scientific style.
4. Analyze the consequences of activities on themselves and his/her environment.
5. Prepare students for entry level natural resource positions
Fisheries and Wildlife Science
Composite Major

LEARNING OUTCOMES
After a student completes the Fisheries and Wildlife Science Program he or she should be able to:

1. Demonstrate a fundamental knowledge of the major concepts in Biology and Fisheries and Wildlife science.
2. Exhibit critical thinking skills by applying the scientific method to solve problems.
3. Exhibit the ability to read and communicate in a scientific style.
4. Analyze the consequences of activities on themselves and his/her environment.
5. Prepare students for entry level natural resource positions and/or graduate school.

ABILITIES
Problem Solving Obtain, organize, and interpret information to provide creative, critical solutions
Collaboration Ability to work with others
Global Awareness Recognize relationships
Communication Ability to convey information and knowledge
Technology Use, understand, and implement to provide solutions in an information society.

General Education Requirements 40 Hours
Communication & Collaboration 9 Hrs
ENGL 110 College Composition I
ENGL 120 College Composition II
or ENGL 125 Intro to Professional Wrtg
COMM 110 Fund of Public Speaking
or COMM 212 Interpersonal Comm
or COMM 216 Intercultural Comm

Problem Solving 13 Hrs
Mathematics - 3 crs (Select one course)
MATH 103 College Algebra
MATH 104 Finite Mathematics
MATH 107 Precalculus
MATH 165 Calculus I
Lab Science - 10 crs (Select two courses)
CHEM 116 Intro to Organic & Biochem
CHEM 121 General Chemistry

Technology 3 Hrs
(Select one course)
CIS 170 Intro to Computer Info Systems
CSCI 127 Intro Java; CSCI 160 Intro Struct

Wellness 2 Hrs
HPER 100 Concepts Fitness & Wellness

For degree and graduation requirements see pages 39-40.

Department Chair
Andre DeLorme, Ph.D.
Rhoades Science Center 203D
(701) 845-7573

Aesthetic Engagement 6 Hrs
Literacies - 3 crs (Select one course)
ENGL 220, 225, 241, 242, 261, 262
HUM 201 Civil Thought, & Lit Heritage
SPAN 201 2nd Yr I; SPAN 202 2nd Yr II
THEA 110 Intro Theatre; THEA 161 Acting I
Art & Music - 3 crs (Select one course)
ART 110 Introduction to Visual Arts
HUM 202 Fine Arts & Aesthetics
MUS 100 Music Appreciation
MUS 101 Music Fundamentals
MUS 207 History of Rock’n’Roll

Global Awareness & Effective Citizen 6 Hrs
(Select two courses)
COMM 112 Under Media; COMM 114 Human;
ENGL 201 Prin Micro; ECON 202 Prin Macro
GEOG 111 Human Geog
HIST 103, 104, 211, 212, 260, 267, 270
POLS 115 Amer Gov; POLS 116 State Gov
PSYC 111 Intro Psych
SOC 110 Intro to Soc; SOC 111 Intro Anthro

Additional General Education 2 Hrs
Select one additional course from the area of
Aesthetic Engagement or Global Awareness
or
ART 112 (3), ART 231 (3), ART 281 (3), GEOG 111 (2), MUS 104 (1), MUS 105 (1), MUS 131 (1), MUS 141 (1), PHYS 275 (1), THEA 201 (1-3)

Required Courses 34 Hours
BIOI 121 Intro to Fish & Wildlife Sciences 4
BIOI 122 Fisheries & Wildlife Techniques 4
BIOI 150 General Biology 4
BIOI 151 General Biology 4
BIOI 170 General Zoology 4
BIOI 311 Botany 4
BIOI 360 Environ Law & Regulations 3
BIOI 375 Conservation Biology 4
BIOI 430 Hum Dimen in Fish & Wildlife 3
Students must complete required courses as listed above and the course work listed under Concentration A and/or B, C

Concentration A - Fisheries Focus 40 Hrs
Required 32 Hrs
BIOI 347 Aquatic Entomology 4
BIOI 367 Ichthyology 4
BIOI 412 Fisheries Management 4
BIOI 470 Limnology 4
BIOI 440 Biostatistics & Exp Design 4
CHEM 122 General Chemistry 4
CHEM 146 Applied Calculus I 4
ENGL 410 Professional Writing 3
or COMM 200 Intro to Media Writing 3
or COMM 314 Public Relations 3
Electives 8 Hrs
BIOI 315 Genetics 4
BIOI 410 Field Ecology 4
BIOI 455 Introduction to GIS 4
GEOL 300 Environmental Earth Science 4
ENVT 270 Water Res Mgmt (DCB) 4
BIOI 497 Internship 4

Concentration B - Wildlife Focus 39 Hrs
Required 39 Hrs
RNG 236 Intro to Range Mgmt (DCB) 4
BIOI 312 Botany (BOT 212 @ DCB) 4
BIOI 343 Ornithology 4
BIOI 355 Mammalogy 4
BIOI 367 Ichthyology 4
BIOI 410 Field Ecology 4
BIOI 411 Wildlife Management 4
BIOI 440 Biostatistics & Exp Design 4
BIOI 455 Introduction to GIS 4
MATH 146 Applied Calculus I 4
ENGL 410 Professional Writing 3
or COMM 200 Intro to Media Writing 3
or COMM 314 Public Relations 3

Total Major Requirement Concentration B 73 Hrs
Concentration C - Conservation Law
Enforcement Focus 38 Hrs
Required 38 Hrs
BIOI 343 Ornithology 4
BIOI 355 Mammalogy 4
BIOI 367 Ichthyology 4
BIOI 410 Field Ecology 4
BIOI 455 Introduction to GIS 4
SOC/POLS 252 Intro to Criminal Justice 3
SOC 390 Criminology & Delinquency 3
POLS 116 State and Local Government 3
POLS 376 U.S. Constitution: Civil Lib 3
Select two of the following
ENGL 410 Professional Writing 3
COMM 200 Intro to Media Writing 3
COMM 314 Public Relations 3

Total Major Required Concentration C 72 Hrs
Total General Education 40 Hrs
Total Major Requirement 73 Hrs
Total Credits Needed to Graduate 120 Hrs