



Fisheries and Wildlife Science

About this Composite Major

The Fisheries and Wildlife Sciences degree (B.A. or B.S.) prepares students for careers in natural resource management with state and federal agencies, and conservation organizations. 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 Concentration, Wildlife Concentration, Conservation Law Enforcement Concentration, or a combination of these three concentrations.

Meet a Student



“Valley City does a very good job in the fisheries and wildlife program making sure kids have the hands on experience they need. That prepared me for internships and future jobs.” - Amy (Doll) Gebhard; fisheries biologist with South Dakota Game, Fish and Parks

“The focus is on mentoring and preparing students not only to have the academic knowledge base to be a professional, but to outline the steps needed to end up where you want to end up. You could become a scientist, or be on the ground managing a landscape.” - Kyle McLean,

PhD, Research Ecologist with USGS Northern Prairie Wildlife Research Center

Career and Summer Internship Opportunities



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. VCSU biology faculty have connections with many area agencies including:

- North Dakota Game and Fish Department
- U.S. Fish and Wildlife Services
- North Dakota Parks and Recreation
- U.S. Army Corps of Engineers
- USGS Northern Prairie Wildlife Research Center

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.



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Get Involved in your Major



Both the VCSU Student Chapter of the Wildlife Society and the American Fisheries Society Student Subunit are active organizations that schedule outings and field trips. Prairie Waters Education and Research Center is a short drive away from campus. VCSU, nestled in the middle of farm country, is located minutes from wetlands, rivers, and prairie, making for phenomenal hunting and fishing. The lakes of Minnesota are one hour away, and the breathtaking badlands of western North Dakota are four hours away. With these scenic options nearby, the classroom is often reached by foot.

Practical Experience



VCSU is uniquely positioned for students in this major to thrive with the Sheyenne River only 75 yards from the science building for hands-on lab opportunities. The program has two pontoon boats and a 20-foot sampling boat for Fisheries and Limnology field trips at Lake Ashtabula Reservoir and other area lakes. The Rhoades Science Center houses state-of-the-art terrestrial and aquatic biology labs, along with fully equipped aquatic macroinvertebrate and necropsy labs.



Contact Information

Department Chair

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Faculty Contacts

Dr. Bob Anderson, bob.anderson@vcsu.edu, (701) 845-7338

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Campus Location

Rhoades Science Center 203

Schedule your visit today!

<http://visit.vcsu.edu/>

(701) 845-7101 or (800) 532-8641



**Learn more
about
studying
Fisheries
and Wildlife
at Valley
City State
University**



Fisheries Concentration



The Fisheries and Wildlife Sciences degree (B.S.) with a Fisheries focus prepares students for careers as fisheries professionals with state and federal agencies, conservation organizations, environmental consulting, and graduate school.

Graduates are qualified for federal positions with agencies such as the U.S. Fish and Wildlife Service, U.S. Forest Service, Natural Resources Conservation Service, U.S. Geological Survey and others. The degree also prepares you for higher academic degrees, and about 15% of graduates go on to earn a Master's degree. Students majoring in the Fisheries Concentration meet the certification requirements of The American Fisheries Society as an Associate Fisheries Professional upon graduation.

Hands-on experience is a major component of all Fisheries courses at VCSU and is applied in both laboratory and field settings. In addition, students are encouraged to seek real-world experience through volunteering and summer employment opportunities with fisheries professionals. This real-world experience in professional settings increases VCSU graduates' marketability when entering the workforce.

VCSU faculty use established relationships with multiple state and Federal agencies to aid students in acquiring summer employment. In addition, faculty members often offer summer employment opportunities in aquatic research to current students.

Contact Information

Faculty Contacts

Dr. Casey Williams, casey.williams@vcsu.edu, (701) 845-7457

Campus Location

Rhoades Science Center 203, (701) 845-7452

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Career Opportunities

- Fisheries Biologist
- Natural Resources Technician
- Environmental Scientist
- Public Outreach Biologist

Plan of Study - Fisheries Concentration

First Year

Fall	Credits	Spring	Credits
BIOL 121	4	BIOL 122	4
BIOL 150	4	BIOL 151	4
CIS 170 (Gen Ed)	3	COMM 110 (Gen Ed)	3
ENGL 110 (Gen Ed)	3	ENGL 125 (Gen Ed)	3
UNIV 150	1	HPER 100	2
15		16	

Second Year

Fall	Credits	Spring	Credits
BIOL 347	4	BIOL 170	4
BIOL 367	4	BIOL 412	4
Lab Science (Gen Ed)	4	Directed Elective	4
MATH 210	3	Social Science (Gen Ed)	3
15		15	

Third Year

Fall	Credits	Spring	Credits
BIOL 375	4	BIOL 360	3
BIOL 470	4	BIOL 455	4
Literacies (Gen Ed)	3	BIOL 315	4
Social Science (Gen Ed)	3	Elective	3
14		14	

Fourth Year

Fall	Credits	Spring	Credits
Art and Music (Gen Ed)	3	Additional Humanities or Social Science (Gen Ed)	2
BIOL 410	4	BIOL 430	3
BIOL 491	2	BIOL 440	4
COMM Elective	3	Directed Electives (BIOL)	3
BIOL 312	4	Elective	3
16		15	

Total Credits 120



Wildlife Concentration



The Fisheries and Wildlife Sciences degree (B.S.) with a Wildlife Concentration prepares students for careers in natural resources with state and federal agencies, conservation organizations, environmental consulting, and graduate school.

Graduates are qualified for federal positions with agencies such as the U.S. Fish and Wildlife Service, U.S. Forest Service, National Park Service, Natural Resources Conservation Service, U.S. Geological Survey and others. State agencies that graduates commonly work for include the North Dakota Game and Fish Department, North Dakota Parks and Recreation, and the North Dakota Forest Service. Non-profit conservation organizations include Ducks Unlimited, Pheasants Forever, Delta Waterfowl, and The Nature Conservancy.

The degree also prepares you for higher academic degrees. On average 15% of our graduates go on to earn a Master's degree. Students majoring in the Wildlife focus meet the certification requirements of The Wildlife Society as an Associate Wildlife Biologist upon graduation.

Multiple field trips involving hands-on experience are taken in all wildlife courses. Faculty strongly encourage students to obtain summer work experience through summer internships. Internships provide students with great practical experience and make VCSU graduates more competitive in the job market. Each summer around 50 students have an internship in some area of natural resources.

VCSU faculty have a close working relationship with multiple state and Federal agencies, which enables students to get hands-on experience through field trips while also networking with professionals.

Contact Information

Faculty Contacts

Dr. Bob Anderson, bob.anderson@vcsu.edu, (701) 845-7338

Campus Location

Rhoades Science Center 203, (701) 845-7452

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Career Opportunities

- Wildlife biologist or Technician
- Refuge Manager
- Environmental Consultant
- Habitat Biologist
- Public Outreach Biologist
- Rangeland Manager or Land Manager

Plan of Study - Wildlife Concentration

First Year

Fall	Credits	Spring	Credits
BIOL 121	4	BIOL 122	4
BIOL 150	4	BIOL 151	4
CIS 170 (Gen Ed)	3	COMM 110 (Gen Ed)	3
ENGL 110 (Gen Ed)	3	ENGL 125 (Gen Ed)	3
UNIV 150	1	HPER 100	2
15		16	

Second Year

Fall	Credits	Spring	Credits
BIOL 312	4	BIOL 170	4
BIOL 355	4	BIOL 315	4
Lab Science (Gen Ed)	4	BIOL 311	4
MATH 210	3	Social Science (Gen Ed)	3
15		15	

Third Year

Fall	Credits	Spring	Credits
BIOL 375	4	BIOL 343	4
BIOL 336	4	BIOL 360	3
GEOL 315	4	BIOL 440	4
Literacies (Gen Ed)	3	BIOL 455	4
15		15	

Fourth Year

Fall	Credits	Spring	Credits
BIOL 410	4	Additional Humanities or Social Science (Gen Ed)	2
BIOL 411	4	BIOL 430	3
COMM Elective	3	BIOL 491	2
Art and Music (Gen Ed)	3	Directed Elective	4
		Elective	4
14		15	

Total Credits 120



Conservation Law Concentration



The Fisheries and Wildlife Sciences degree (B.S.) with a Conservation Law Enforcement Concentration prepares students for law enforcement careers related to natural resource protection with state and federal agencies.

The most commonly held position with this focus is that of a Game Warden or Conservation Officer.

Game Wardens are certified peace officers that dedicate their careers to enforcing laws related to natural resources. Game wardens may also be called conservation officers, game protectors, wildlife control agents, wildlife officers, and special agents.

The U.S. Fish and Wildlife Service has Federal Wardens that are called Special Agents or Wildlife Inspectors, and often Refuge Managers also carry out law enforcement duties. Wildlife inspectors are responsible for ensuring that all wildlife shipments coming in and out of the country comply with federal laws. Graduates are also qualified for positions as Park Rangers with agencies such as the North Dakota Parks and Recreation Department and the National Park Service. In addition, this focus should benefit you in any natural resource position where you have some enforcement duty as part of your job. Each agency has specific training requirements related to law enforcement. The Federal system will send employees through the Federal Law Enforcement Training Center. North Dakota Game and Fish Department will send newly hired Game Wardens through the ND Peace Officer Training Program.

Multiple field trips involving hands-on experience are taken in all wildlife and fisheries courses. Faculty strongly encourage students to obtain summer work experience through summer internships, and to do a ride-along with a ND Game Warden.

Contact Information

Faculty Contacts

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Career Opportunities

- Game Warden
- Conservation Officer
- Park Ranger
- Wildlife Inspector

Plan of Study - Conservation Law Concentration

First Year

Fall	Credits	Spring	Credits
BIOL 121	4	BIOL 122	4
BIOL 150	4	BIOL 151	4
CIS 170 (Gen Ed)	3	SOC (Gen Ed)	3
ENGL 110 (Gen Ed)	3	ENGL 125 (Gen Ed)	3
UNIV 150	1	HPER 100	2
15		16	

Second Year

Fall	Credits	Spring	Credits
BIOL 355	4	BIOL 170	4
Lab Science (Gen Ed)	4	CJ 390	3
CJ 201	3	COMM 110	3
BIOL 312	4	MATH 107 (Gen Ed)	4
15		14	

Third Year

Fall	Credits	Spring	Credits
BIOL 375	4	BIOL 343	4
BIOL 367	4	BIOL 360	3
POLS 116	3	BIOL 455	4
BIOL 280	4	Literacies (Gen Ed)	3
15		14	

Fourth Year

Fall	Credits	Spring	Credits
BIOL 410	4	Additional Humanities or Social Science (Gen Ed)	2
BIOL 491	2	BIOL 430	3
COMM Elective	3	BIOL 315	4
POLS 376	3	COMM Elective	3
Elective	4	Art and Music (Gen Ed)	3
16		15	

Total Credits 120

Please note: This plan is intended for general information only. Students are strongly encouraged to meet with their academic advisor each semester before registration.



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. Be prepared for entry-level natural resource positions and/or graduate school.