



Course Prefix/Number/Title: BIOL 122 – Wildlife & Fisheries Techniques

Number of Credits: 4 credits

Course Description: Provide a basic understanding of the biological principles, field, and laboratory techniques involved in research and management of non-game and game wildlife and fish species and their habitat.

Pre/Co-requisites: None

Course Objectives: A) To develop a basic methodology of providing sound management plans for a variety of birds, mammals, and fish species,

B) Community, habitat, and ecosystem management approach to integrated management plans,

C) Develop philosophies for seasonal requirements for resident and migratory species, and

D) Develop basic requirements for warm and cold-water species of fish.

Instructor: Jonathan Tofteland and Janelle Green **Office:** N/A

Office hours: Contact me anytime

Contact phone: 701-201-0703 or 701-720-5871

E-mail: Jonathan.tofteland@dakotacollege.edu

Lecture/Lab Schedule: Tues 8:00-9:55/ LAB: TH. 8:00-9:55 Labs in this course require some travel to field labs as outlined in the syllabus. These labs are required as part of the course and occur on a yearly basis with professionals in the field. The schedule of labs is subject to change as required by weather or other circumstances. To pass the course Lecture and Lab attendance are required.

Students will possibly attend 2023 NDCTWS between 8-10 February and Dakota Chapter American Fisheries Society February 21-23rd.

Textbook: 1. The Wildlife Techniques Manual: Volume 1: Research. Volume 2: Management, 7th Edition Johns Hopkins University Press ISBN: 978-1421401591. (Text is not required but recommended for Wildlife majors.)

Course Requirements: Comprehensive Wildlife/Fisheries Conservation Plan

Research assignment 100 pts.

Weekly quizzes each 20 pts.

Weekly lab exercises each 20 pts.

laboratory practical quizzes 150pts.

Attendance/participation ~50pts

Grading schedule:

90-100% = A

80-89% = B

70-79% = C

69-79% = D

<60% = F

Field Trips: TBD. Students may need to travel to various field sites as part of the lab curriculum.

Tentative Course Outline:

A. A brief history of wildlife management. Landmark legislation. Some successes in managing wildlife.

B. Population ecology. Food and cover. Animal behavior and wildlife management. Ecosystems and natural communities.

C. Wildlife diseases. Predators and predation. Ethics of hunting/trapping- a brief historical approach. Wildlife and water. Wetland classification.

D. Wildlife and soils. Wildlife and farmland. Wildlife and rangelands. Forest management practices.

E. Exotic wildlife – problems and prevention. Nongame and endangered wildlife. Economics of wildlife. Wildlife as a public trust.

F. Big game biology. Big game species and civilization.

G. Fisheries management. Freshwater ecology and physical parameters. Management techniques.

H. Law enforcement methodology and techniques.

General Education Competency/Goal # 1: Identifies the interrelationships between humans and their environment

Department Learning Outcomes (LO): 2. Applies scientific methods of inquiry

Student Email Policy:

Dakota College at Bottineau is increasingly dependent upon email as an official form of communication. A student's campus-assigned email address will be the only one recognized by the Campus for official mailings. The liability for missing or not acting upon important information conveyed via campus email rests with the student.

Classroom Policies:

All students will respect the classroom environment which will allow for maximum interaction between students and the professor.

Lab policies: Labs in this class are a privilege. Violation of school procedures regarding student conduct will not be tolerated. Many of the labs are all day field trips and you will be exempt from other classes. However, this does not exempt you from the work that is missed for those classes. All missed work from classes missed because of FWLD 122 lab will be made up per arrangements with the other instructors. Students that violate this will miss out on future field trips. Labs are repeated around the same time each year.

Academic Integrity:

According to the DCB Student Handbook, students are responsible for submitting their own work. Students who cooperate on oral or written examinations or work without authorization share the responsibility for violation of academic principles, and the students are subject to disciplinary action even when one of the students is not enrolled in the course where the violation occurred. The Code detailed in the Academic Honesty/Dishonesty section of the Student Handbook will serve as the guideline for cases where cheating, plagiarism or other academic improprieties have occurred.

All students will do their own, original work on reports, laboratory assignments, and essays. Any student caught cheating on an exam or quiz will be reprimanded the first time. If it happens again, the student will drop the class.

Disabilities and Special Needs:

Students with disabilities or special needs (academic or otherwise) are encouraged to contact the instructor and Disability Support Services.