

ENR 3300- INTRODUCTION TO FORESTRY, FISHERIES, AND WILDLIFE

Course Syllabus

Fall Semester 2023

MWF 9:10am —10:05am

Howlett Hall 164

INSTRUCTORS

Dr. Roger A. Williams, Associate Professor, Forestry

Room: 367C Kottman Hall

Phone: 946-5698

Email: williams.1577@osu.edu

Office hours: By appointment

Dr. Christopher M. Tonra, Associate professor, Wildlife

Office: 352 W. Dodridge St., Schiermeier Olentangy River Wetland Research Park

Phone: 292-9838

Email: tonra.1@osu.edu

Office hours: By appointment

Dr. Bishnu Chandra Poudel, Visiting Scholar

Department of Forestry and Wood Technology,, Linnaeus University, Växjö, Sweden

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TEACHING ASSISTANT

Ashani Hangawatte, ENR Doctoral Student, Ecosystem and Wildlife Health

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COURSE DESCRIPTION

This course is an introduction to the basic elements of forestry, fisheries, and wildlife (FFW) ecology and management. It provides students with a comprehensive and integrated introduction to the problems, concepts and strategies that make these disciplines similar, as well as establishing important differences between them. It has also been organized to provide an introduction to non-majors who may not have the opportunity to take further courses in these fields.

COURSE OBJECTIVES

After successful completion of ENR 3300, students will be able to:

- Discuss the objectives and limitations of forestry, fisheries, and wildlife management.
- Explain basic ecological concepts and apply them to problems in forestry, fisheries, and wildlife management.
- Explain how ecosystems function to support forestry, fisheries and wildlife populations and communities, both separately and together.
- Explain the structure and dynamics of populations and communities in relation to sustaining resource production and biological diversity.
- Discuss allocation and use of forestry, fisheries, and wildlife resources to satisfy competing societal needs and explain how systems can be manipulated to meet those needs.
- Understand and explain the integration of the three disciplines of forestry, fisheries, and wildlife.

COURSE GRADING:

The following is the breakdown of how this course will be evaluated:

<u>Graded item</u>	<u>% of Total Grade</u>
Quizzes	15%
Midterm Examination #1	25%
Midterm Examination #2	25%
<u>Final Examination</u>	<u>35%</u>
Total Percentage	100 %

<u>Letter Grade</u>	<u>Percent</u>	<u>Letter Grade</u>	<u>Percent</u>
A	93-100 %	C	73-75 %
A –	89-92 %	C –	69-72 %
B +	86-88 %	D +	66-68 %
B	83-85 %	D	60-65 %
B –	79-82 %	E	<60 %
C +	76-78 %		

Final Course Grade Assessment

The Carmen course grading system will be used to record your grades so that you can keep track of your progress in the course. However, the Carmen course grading system will NOT be used to determine and assign final course grades. Your final course grade will be determined by the following formula:

$$\begin{aligned}
 \text{Final Course Grade} = & \quad [(\text{Quiz Grade}) \times (0.15)] + \\
 & + [(\text{Midterm \#1 Grade}) \times 0.25] + [(\text{Midterm \#2 Grade}) \times 0.25] \\
 & + [(\text{Final Exam Grade}) \times (0.35)]
 \end{aligned}$$

Quiz Grade Assessment

There is a total of 10 quizzes given in the course for a total of 5 points for each quiz. The quizzes are administered in-person at the end of the class session. The lowest quiz grade will be dropped. If you have duplicate lowest quiz scores, only one of those will be dropped. The quiz grade will be determined as follows:

$$\text{Final Quiz Grade} = (\text{Total Quiz Points Achieved} / \text{total possible points}) \times 100$$

Exam Grade Assessments

Midterm and final exams are administered in-person. The two midterm exams each consist of 50 multiple-choice and true/false questions and cover the lectures indicated in the course outline. The final exam consists of 100 multiple-choice, true/false questions and is a comprehensive exam.

COURSE ASSIGNMENTS

Quizzes:

Quizzes will be administered unannounced in class, and will consist of 5 multiple choice questions, each question worth 1 point. Quizzes will be displayed on the overhead screen at the end of a lecture; students will be asked to take out a sheet of paper, write the question numbers 1 through 5 and write the letter

corresponding to the correct answer for each question. Students will place their quiz response paper in the drop box as they exit the classroom. Be sure to write your first and last name on the quiz paper.

Midterm Exams:

Midterm exams will be administered in-person during the indicated class time in the regular classroom (Howlett Hall 164), consists of 50 multiple-choice, true/false questions, and covers the class material indicated in the course outline. Exam questions will come from lectures and quiz material. On the days the midterm is given, that will be the only class activity for that day (no lectures).

Final Exam:

The final exam will be administered in-person during the indicated date and time in the syllabus, consists of 100 multiple-choice, true/false questions, is comprehensive, and is administered in the regular class location (Howlett Hall 164).

CLASS CALENDAR

☐ = CLASS MEETING ☐ = NO CLASS MEETING
 9:10am – 10:05am
 164 Howlett Hall

AUGUST						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
20	21	22	23 First Day of Class	24	25	26
27	28	29	30	31		
SEPTEMBER						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4 Labor Day; NO CLASS	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25 Midterm #1 Howlett Hall 164	26	27	28	29	30
OCTOBER						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
1	2	3	4	5	6	7



8	9	10	11	12 Fall Break	13 Fall Break; NO CLASS	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30 Midterm #2 Howlett Hall 164	31				

NOVEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1	2	3	4
5	6	7	8	9	10 Veteran's Day NO CLASS	11
12	13	14	15	16	17	18
19	20	21	22 Thanksgiving	23 Break	24 No Class	25
26	27	28	29	30		

DECEMBER

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
					1	2
3	4	5	6 Last Day of Class	7	8	9
10	11 Final Exam 10:00am – 11:45am 164 Howlett Hall					

IMPORTANT DATES:

- August 23- First Day of Class
- September 4- No Class; Labor Day Holiday
- September 25- First Midterm Exam (9:10am – 10:05am; Howlett Hall 164; Lectures 1 – 13)



- October 13- No Class; Fall Break
- October 30- Second Midterm Exam (9:10am – 10:05am; Howlett Hall 164; Lectures 14 – 26)
- November 10- No Class; Veteran's Day
- November 22- No Class; Thanksgiving Holiday
- November 24- No Class; Thanksgiving Holiday
- December 6- Last Day of Class
- December 11- Final Exam (10:00am – 11:45am; Howlett Hall 164; Lectures 1 – 38)

COURSE OUTLINE

Date	Lecture No.	Topic	Instructor
Aug. 23	1	Introduction to Forestry, Fisheries, and Wildlife - the merge of disciplines	RW
25	2	What is a resource? What are natural resources?	RW
28	3	What is wildlife and wildlife management?	CT
30	4	The Current State of Wildlife	CT
Sep. 1	5	History of natural resources – Wildlife perspective	CT
Sep. 4	---	NO CLASS- Labor Day	---
Sep. 6	6	North American model of fish and wildlife conservation	CT
Sep. 8	7	What is a forest and the practice of forestry?	BP
Sep. 11	8	The current state of forests in the US	RW
Sep. 13	9	History of natural resources – Forestry perspective	BP
Sep. 15	10	Soil/plant relations and other abiotic factors; Silvics of forest species	BP
Sep. 18	11	Concepts of forests age distribution, biological/structural diversity	RW
Sep. 20	12	Disturbances and forest succession	BP
Sep. 22	13	The current state of fisheries with a historical perspective	EB
Sep. 25	---	Midterm #1- Lectures 1 – 13; 164 Howlett Hall	---
Sep. 27	14	Forest population growth and carrying capacity	BP
Sep. 29	15	Population Growth and Carrying Capacity of Wildlife and Fisheries	CT
Oct. 2	16	Ecological Succession in Wildlife and Fisheries	CT
Oct. 4	17	Endangered species management and population viability	CT
Oct. 6	18	Animal movement (migration, dispersal)	CT
Oct. 9	19	Wildland fire as a natural disturbance and the ecological functions	RW



Oct.	11	20	Wildland fire management	RW
Oct.	13	---	NO CLASS- Fall Break	---
Oct.	16	21	Ecological functions and processes in wetlands	AHA
Oct.	18	22	Methods to quantify the forest resource	BP
Oct.	20	23	Methods to quantify the wildlife resource	CT
Oct.	23	24	The Management and Harvesting of Fisheries	EB
Oct.	25	25	New and emerging technologies in wildlife and fisheries	CT
Oct.	27	26	Methods to quantify the fish resource	CT
Oct.	30	---	Midterm #2- Lectures 14 – 26; 164 Howlett Hall	---
Nov.	1	27	Harvest and sustained yield of wildlife	CT
Nov.	3	28	Commercial vs. non-commercial use of wildlife	CT
Nov.	6	29	Harvestable vs. non-harvestable species; consumptive vs. non-consumptive use	CT
Nov.	8	30	Silviculture/harvesting and sustained yield of forests	BP
Nov.	10	---	NO CLASS- Veteran's Day	
Nov.	13	31	Forest products – traditional and non-traditional	RW
Nov.	15	32	Economics in forestry, fisheries, and wildlife	RW
Nov.	17	33	Policy in forestry, fisheries and wildlife	CT
Nov.	20	34	Coarse vs. Fine filter management; Adaptive Management	RW
Nov.	22	---	NO CLASS- Thanksgiving	---
Nov.	24	---	NO CLASS- Thanksgiving	---
Nov.	27	35	Wildfire and the Wildland/Urban Interface	RW
Nov.	29	36	Wildland/Urban Interface - Urban ecology	CT
Dec.	1	37	Impacts of Climate Change on Natural Resources	CT
Dec.	4	38	Fragmentation of ecosystems- cause and effects	BP
Dec.	6	39	Case Study- Greater Yellowstone Ecosystem	RW
Dec.	11	---	FINAL EXAM- Lectures 1 – 38; 164 Howlett Hall	---

INSTRUCTORS:

RW = Dr. Roger Williams

CT = Dr. Chris Tonra

BP = Dr. Bishnu Poudel

EB = Mr. Eugene Bragg (guest lecturer)

AHA = Ms. Ashani Hangawatte Appuhamillage (TA)

POLICIES AND RESOURCES

General Class Policies

Assignments, including exams, are due on the due date posted. The only exceptions will be in extreme cases, as determined by instructors, and the instructors must be contacted ahead of time regarding the nature of the problem if at all possible. All personal information/situations will be kept extremely confidential. If you experience any problems or have any questions you should contact either Dr. Tonra or Dr. Williams at the contact information listed on the first page of this syllabus.

Academic Misconduct

It is the responsibility of the Committee on Academic Misconduct to investigate or establish procedures for the investigation of all reported cases of student academic misconduct. The term "academic misconduct" includes all forms of student academic misconduct wherever committed; illustrated by, but not limited to, cases of plagiarism and dishonest practices in connection with examinations. Instructors shall report all instances of alleged academic misconduct to the committee (Faculty Rule 3335-5-487). For additional information, see the Code of Student Conduct at <http://studentconduct.osu.edu>. The instructors in this course will first investigate any academic misconduct before reporting to the committee.

Disabilities Statement

The university strives to make all learning experiences as accessible as possible. In light of the current pandemic, students seeking to request COVID-related accommodations may do so through the university's request process, managed by Student Life Disability Services. If you anticipate or experience academic barriers based on your disability (including mental health, chronic, or temporary medical conditions), please let me know immediately so that we can privately discuss options. To establish reasonable accommodations, I may request that you register with Student Life Disability Services. After registration, make arrangements with instructors as soon as possible to discuss your accommodations so that they may be implemented in a timely fashion. SLDS contact information: slds@osu.edu; 614-292-3307; slds.osu.edu; 098 Baker Hall, 113 W. 12th Avenue.

Grievances

According to University Policies, if you have a problem with this class, you should seek to resolve the grievance concerning a grade or academic practice by speaking first with the instructor or professor. Then, if necessary, take your case to the department chairperson, college dean or associate dean, and to the provost, in that order. Specific procedures are outlined in Faculty Rule 3335-7-23. Grievances against graduate, research, and teaching assistants should be submitted first to the supervising instructor, then to the chairperson of the assistant's department.

Counseling Services/Mental Health

As a student you may experience a range of issues that can cause barriers to learning, such as strained relationships, increased anxiety, alcohol/drug problems, feeling down, difficulty concentrating and/or lack of motivation. These mental health concerns or stressful events may lead to diminished academic performance or reduce a student's ability to participate in daily activities. The Ohio State University offers services to assist you with addressing these and other concerns you may be experiencing. If you or someone you know are suffering from any of the aforementioned conditions, you can learn more about the broad range of confidential mental health services available on campus via the Office of Student Life Counseling and Consultation Services (CCS) by visiting ccs.osu.edu or calling (614) 292- 5766. CCS is located on the 4th Floor of the Yountkin Success Center and 10th Floor of Lincoln Tower. You can reach an on-call counselor when CCS is closed at (614) 292-5766 and 24 hour emergency help is also available through the 24/7 National Prevention Hotline at 1-(800)-273-TALK or at suicidepreventionlifeline.org. David Wirt, wirt.9@osu.edu, is the CFAES embedded mental health counselor. He is available for new consultations and to establish routine care. To schedule with David, please call 614-292-5766. Students should mention their affiliation with CFAES when setting up a phone screening.

Creating an Environment Free From Harassment, Discrimination, and Sexual Misconduct



The Ohio State University is committed to building and maintaining a community to reflect diversity and to improve opportunities for all. All Buckeyes have the right to be free from harassment, discrimination, and sexual misconduct. Ohio State does not discriminate on the basis of age, ancestry, color, disability, ethnicity, gender, gender identity or expression, genetic information, HIV/AIDS status, military status, national origin, pregnancy (childbirth, false pregnancy, termination of pregnancy, or recovery therefrom), race, religion, sex, sexual orientation, or protected veteran status, or any other bases under the law, in its activities, academic programs, admission, and employment. Members of the university community also have the right to be free from all forms of sexual misconduct: sexual harassment, sexual assault, relationship violence, stalking, and sexual exploitation.

To report harassment, discrimination, sexual misconduct, or retaliation and/or seek confidential and non-confidential resources and supportive measures, contact the Office of Institutional Equity:

1. Online reporting form at equity.osu.edu,
2. Call 614-247-5838 or TTY 614-688-8605,
3. Or Email equity@osu.edu

The university is committed to stopping sexual misconduct, preventing its recurrence, eliminating any hostile environment, and remedying its discriminatory effects. All university employees have reporting responsibilities to the Office of Institutional Equity to ensure the university can take appropriate action:

- All university employees, except those exempted by legal privilege of confidentiality or expressly identified as a confidential reporter, have an obligation to report incidents of sexual assault immediately.
- The following employees have an obligation to report all other forms of sexual misconduct as soon as practicable but at most within five workdays of becoming aware of such information: 1. Any human resource professional (HRP); 2. Anyone who supervises faculty, staff, students, or volunteers; 3. Chair/director; and 4. Faculty member.

This course adheres to The Principles of Community adopted by the College of Food, Agricultural, and Environmental Sciences. These principles are located on the Carmen site for this course; and can also be found at <https://go.osu.edu/principlesofcommunity>. For additional information on Diversity, Equity, and Inclusion in CFAES, contact the CFAES Office for Diversity, Equity, and Inclusion (<https://equityandinclusion.cfaes.ohio-state.edu/>). If you have been a victim of or a witness to a bias incident, you can report it online and anonymously (if you choose) at <https://studentlife.osu.edu/bias/report-a-bias-incident.aspx>.