# FORS 320 Forest and Resource Economics, Spring 2023

Instructor:	Dr. Robert Sonora
Class Meeting:	12:30 - 1:50
Office:	Ghallager Business 232
Office hours:	Tuesday 2:00-3:00 pm and by appointment

#### Zoom room

#### **Office Hours**

I will hold office hours immediately after Tuesday's class. If that doesn't work, we can do so by appointment, use email to arrange. All office hours will be conducted via Zoom.

# Course description

This course will enable students to identify, critique, and apply the appropriate economic techniques to support decision making about the allocation of scarce resources, as well as the management of forests for timber and other use and non-use resources. The course is designed with the perspectives and needs for understanding the economic analysis of resource use. As such, the stress of the course is to understand the underlying economics that can be used to understand the economic forces that impact natural resources, and forests in particular.

# Learning Outcomes

- 1. Understand the appropriate economic analyses to be conducted under a variety of resource allocation decision conditions;
- 2. Understand when and why markets may fail to efficiently allocate forest resources in a variety of contexts;
- 3. Ability to recommend economic policies top correct market failures;
- 4. Be familiar with various non-market valuation techniques and know how to interpret nonmarket valuation literature; and
- 5. Utilize economic tools to estimate economically optimal forest rotations.

# **Required textbooks**

- Shapiro, MacDonald, and Greenlaw (2022). Principles of Economics 3e, free from openstax.org. Required readings from this text will be <u>wavy underlined</u>, suggested chapters will be <u>double</u> <u>underlined</u>.
- Field, B.C. (2016). *Natural Resource Economics: An Introduction*, 3rd Ed. Waveland Press, Inc. ISBN: 1-4786-2780-8. Also available on: Kindle, eText, Google Play, and Vital Source

If you need some additional economics assistance, you can check out MIT's YouTube channel: **MIT Principles of Economics**. Sure it was recorded in 2011, but rest assured, not much has changed at the principles levels since.

## **Class Outline**

Note, I may not ask you to read an entire chapter, just a section, these will denoted, for example, as "Ch. 4.2". This schedule is *not* written in stone, and is subject to change.

Week of	Topic		
Jan 16	Ch. 1 - Issues in Natural Resource Economics		
	Ch 2 Choice in a World of Scarcity		
Jan 23†	Ch. 2 - Natural resources and the economy	(PS1: 1, 2, 4)	
Jan $30^{\dagger}$	Forestry Economics: Outside speaker(s)		
Feb $6^{\dagger}$	Ch. 3 - Willingness to pay/demand, PS1 due	(PS1: 2-4)	
Feb $13$	Ch. 4 - Costs/supply	(PS2: 1 - 3)	
Feb $20$	Ch. 5 - Efficiency, sustainability, and financial mar-	(PS2: 1, 3, 4)	
	kets, PS2 due		
	Ch. 3.4/3.5 - Price ceilings/floors & cons/prod surplus		
	CH. 4.2 - Demand and supply in financial markets		
	also Khan academy		
Feb 27	Exam 1 on Thursday		
Mar 6	Ch. 6 - Markets and efficiency	(PS3: 2, 3, 5)	
Mar $13^{\dagger}$	Ch. 7 Public policy for natural resources, PS3 due	(PS3: 1, 2, 3)	
Mar 20	Spring break		
Mar $27\ddagger$	Ch. 8 - Principles of analysis	(PS4: 3, 4, 5)	
Apr $3$	Ch. 9 - Valuing natural resources, PS4 due	(PS4: 1, 5, 6)	
Apr 10	Exam 2 on Thursday		
Apr 17	Ch. 12 - Forest economics	(PS5: 3-6)	
Apr $24$	Ch. 14 - Land economics $and/or$ resources and finan-	(PS5: 4, 5)	
	cial markets		
May 1	Ch. 17 – Outdoor recreation, PS5 due	(PS5: 2, 4, 5)	

"PS" stands for problem set and the end of chapter "Questions for further discussion" to be answered.

I will have miss a couple classes this semester due to prior obligations. Most will occur at the beginning of the semester, so the material will still be relatively straightforward. For those classes, I will arrange for an outsider speaker or give some extra exercises. Weeks where I will be out of class are indicated with a '†'

# Grading

#### Exams

Exam 3 will be cumulative, as you will be asked to use the tools/analysis from the course up to that point.

#### Problem sets

Problem sets will be questions from the end of the chapter, "Questions for further discussion". I grade on effort and will provide answers when . Answers can be uploaded via moodle and must be done by the due date and time – upload window will close.

## Quizzes

Quizzes are unannounced and will be given during the class period and are closed book. Barring sickness or advance notice, there will be no make ups available. Quizzes will be taken on-line.

#### Grade distribution

How graded	% of Grade
Quizzes (5)	20%
Problem Sets $(5)$	20%
Exam 1	20%
Exam 2	20%
Exam 3	20%

# Course guidelines and policies

## Student Conduct Code

The Student Conduct Code at the University of Montana embodies and promotes honesty, integrity, accountability, rights, and responsibilities associated with constructive citizenship in our academic community. This Code describes expected standards of behavior for all students, including academic conduct and general conduct, and it outlines students' rights, responsibilities, and the campus processes for adjudicating alleged violations.

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students are expected to understand their rights and responsibilities provided under the Student Conduct Code

## Attendance

Students are expected to attend all class meetings and complete all assignments. Brief and occasional absences for reasons of illness, injury, family emergency, and religious observance may be excused at the instructors discretion. Absences related to participation in a University sponsored activity will be excused as long as proper notification is provided (University sponsored activities include for example, field trips, ASUM service, music or drama performances, and intercollegiate athletics.). Excused absences also include military service or mandatory public service.

## Course withdrawal and other important dates

Use this link for a list of official Dates and Deadlines for 2021 Spring Semester. Responsibility is upon the students to know the dates for withdrawal and other relevant registration issues.

## **Disability modifications**

The University of Montana assures equal access to instruction through collaboration between students with disabilities, instructors, and Disability Services for Students. If you think you may have a disability adversely affecting your academic performance, and you have not already registered with Disability Services, please contact Disability Services in Lommasson Center 154 or call 406.243.2243. I will work with you and Disability Services to provide an appropriate modification.