
MATH 199H / 399H GAME THEORY

Instructor: Breeann Flesch, PhD

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Course Description:

A nontechnical introduction to the mathematical theory of games. Topics include analysis of popular games, two-person matrix games and combinatorial games. Applications to other fields, including economics and political science, will be emphasized.

Office Hours:

Monday 2:00 - 3:00
Tuesdays 10:00-11:00
Wednesday 11:00 - 12:00
Thursdays 10:00-12:00

You do not need to make an appointment to come to office hours. At times other than my listed office hours, you are welcome and encouraged to call or email me with questions about the course. If you have scheduling conflicts with my office hours and would like further help, please let me know.

Course Materials:

- 3-ring binder to organize course handouts and materials
- Access to Moodle: <http://online.wou.edu/>. You should automatically be enrolled in the Moodle course if you successfully enrolled in the course.
- Scientific Calculator

Expected Learning Outcomes:

- Apply game-theoretic analysis, both formally and intuitively, to two-person matrix games and combinatorial games.
- Demonstrate understanding of strategic interactions among people or organizations in order to maximize their own payoffs
- Recognize and model strategic situations in a variety fields, including economics and political science

Course Policies

ATTENDANCE: Attendance is absolutely important to be successful in this course. If you miss class, you are responsible for the missed material and there will be no opportunities to make-up daily in-class assignments.

CLASSROOM BEHAVIOR: Please refer to the Standards of Conduct in the WOU catalog. In particular, please read http://www.wou.edu/las/natsci_math/math/academicdishonesty.php

GRADING:

- **Written Homework** – Written homework will be assigned and collected weekly. There will often be different homework assignments for MTH 199H and MTH 399H students. It is imperative for your success in the class that you work the homework as assigned and keep up with your study of the material. Written homework assignments will be due at the beginning of the designated class. *No late homework will be accepted under any circumstances.*
- **In-class work** – Each week one or more in-class activities will be assigned. Often these will be due by the end of the class period. At times it will be possible to work in groups, but you should be prepared to work individually. It is imperative that you are in class and actively participating to be successful in this class. Your lowest score will be dropped.
- **Exams** – There will be two exams for this class. There will be different exams for MTH 199H and MTH 399H students. Makeup exams are generally not given. If you must miss an exam due to a documented emergency or a documented university sanctioned absence from class please inform me ASAP. Cell phones may not be used as calculators during an exam and must be turned off.
- **Project(s)** – There will be a project (or two) closer to the end of the term. More details are forthcoming.
- **Grades** – The standard grading scale will be used with each component worth approximately:

Component	%
Written Homework	$9 \times 3\% = 27\%$
In-class work	23%
Exams	$2 \times 15\% = 30\%$
Project(s)	20%

RESOURCES:

- **WOLF CONNECT SYSTEM (WCS)**: If the instructor determines your performance in this class is placing you at academic risk, you may be referred to Western's Student Success Specialist. The specialist will offer to work with you to address issues and develop a student success strategy. Regardless of whether a referral has or has not been made, you are ultimately responsible for tracking your own progress in this course. If you would like to meet with a specialist regarding any academic struggles you are experiencing, please contact the Academic Advising and Learning Center at 503-838-8428.
- **INCOMPLETES**: An Incomplete can only be granted for a student who is passing a class and has a documented emergency that prevents them from completing the course, after Friday of the seventh week of class, which is the last day for dropping a course with W grade.
- **LEARNING DISABILITIES**: If you have a documented learning disability, please talk to me during the first few days of class; I will be more than happy to accommodate you in any way that I can. If you have a documented disability that requires academic accommodations or auxiliary aids at Western Oregon University, please contact the Office of Disability Services (ODS). ODS is located in the APSC, Room 405, Phone 503-838-8250 V/TTY or email at ODS@wou.edu.
- **VETERANS AND ACTIVE MILITARY PERSONNEL**: Veterans and Active Military Personnel with special circumstances are welcome and encouraged to communicate these, in advance if possible, to the instructor.