

Game Theory and Institutions (Econ 412) Syllabus

1 Course Information

Course: ECON 412 - Game Theory and Institutions

Section: 002

Prerequisites: ECON 306 or permission of instructor

Meeting Time: Wednesdays 7:20pm-10:00pm

Location: Krug Hall 242

Instructor: Anna B. Faria

Email: asanch17@gmu.edu

Office Hours: by appointment (please contact me via email)

Note: I will not reply to non-GMU emails (please refer to Subsection 5.1 for more information).

2 Course Description

The objective of this course is to provide students the basic game theoretical tools for understanding institutional solutions to problems of social cooperation. In the first half of the course, we will focus on broad game theory concepts. Although game theory application is nearly endless, in the second half of the course we will apply the game theoretical concepts specifically to the study of institutions.

3 Grading

Your final grade will consist of your performance in the following assessments:

Quizzes	35%
Homework	10%
Midterm	25%
Final	30%

3.1 Grading Scale

A	93% - 100%	C+	77% - 80%
A-	90% - 93%	C	73% - 77%
B+	87% - 90%	C-	70% - 73%
B	83% - 87%	D	60% - 70%
B-	80% - 83%	F	0% - 60%

3.2 Quizzes

I will give 9 closed-book quizzes throughout the semester. Your 7 highest scores will count towards your final grade. Quiz grades go from 0 to 5. You will have 20 minutes at the beginning of class to complete the quiz. Each quiz will consist of 2 to 3 questions relating to the material covered in the previous lecture and in the assigned readings for that week.

3.3 Homework

There will be 5 homework assignments throughout the semester. All assignments will count towards your final grade. I will grade your homework in the following manner: if you turn in shoddy work, you will receive 1 point. For well done work, even if incorrect, you will receive 2 points. I should be able to follow your reasoning throughout the exercise. All written answers must be in black or blue pen or typed. All final numerical answers must also be in black or blue pen or typed, while your numerical reasoning may be done in pencil. For game trees, you can use Gambit, a free and easy to use software. You can download it at <http://gambit.sourceforge.net/>.

3.4 Midterm

The midterm will be held on October 15 at the end of the class period. You will have 75 minutes to complete the exam. The midterm will cover the Game Theory material of the course. All written answers must be in black or blue pen. All final numerical answers must also be in black or blue pen, while your numerical reasoning may be done in pencil.

3.5 Final Exam

The final exam will be held on December 10 at 7:30pm to 10:15pm in Krug Hall 242. The final exam will cover the entire course material, with a focus on the application of game theory principles to institutional analysis. All written answers must be in black or blue pen. All final numerical answers must also be in black or blue pen, while your numerical reasoning may be done in pencil.

4 Instructor Policies

4.1 Attendance

Attendance, while not mandatory, is highly suggested. Some quiz and exams questions will come from the lecture and class discussions. You will sign in at the beginning of class for my records.

4.2 Classroom Behavior and Participation

Much like attendance, participation is not mandatory, but highly suggested. If you do not participate, it will not affect your grades negatively, but insightful input could help your final grade.

This may come to you as a surprise, but you are allowed to use electronic devices in the classroom, provided that you do not disturb the class. Inappropriate chatting and other class disturbing behavior will lead to grade penalties. No electronics or study materials allowed during exams.

5 University Policies

5.1 Mason Email Account

Students must use their MasonLive email account to receive important University information, including messages related to this class. I cannot guarantee that I will receive your non-Mason email and for that reason will disregard all non-Mason communication attempts. If you have sent me an email and did not receive a response within 48 hours, please do not hesitate to email me again.

5.2 Add and Drop Deadlines

- Last Day to Add: September 2, 2014
- Last Day to Drop: September 26, 2014
- Selective Withdrawal Period: September 29 - October 17, 2014

5.3 Office of Disability Services

If you are a student with a disability and you need academic accommodations, please see me and contact the Office of Disability Services (ODS) at 993-2474, <http://ods.gmu.edu>. All academic accommodations must be arranged through the ODS.

5.4 Honor Code

All George Mason University students have agreed to abide by the letter and the spirit of the Honor Code. All violations of the Honor Code will be reported to the Honor Committee for review. This includes, for example, cheating, copying someone else's work, and plagiarism. If you believe your behavior may be a violation of the Honor Code, please refer to <http://oai.gmu.edu/the-mason-honor-code> for more information.

6 Course Readings

The required books for this class are:

- Avinash K. Dixit, Susan Skeath, and David H. Reiley Jr.'s "Games of Strategy" Third Edition (2009)
- Avinash K. Dixit and Barry J. Nalebuff's "The Art of Strategy: A Game Theorist's Guide to Success in Business and Life" (2010)
- William Easterly's "The Tyranny of Experts: Economists, Dictators, and the Forgotten Rights of the Poor" (2014)

All other assigned reading materials are available through the online GMU library databases at library.gmu.edu.

7 Course Outline and Readings

Please read the introduction and the first two chapters of "The Art of Strategy" for August 27. I will post a tentative course outline for the rest of the semester on Blackboard before our first class meeting.