

USC Marshall School of Business

GSBA 612 - Selected Issues in Economic Theory II

Syllabus – Spring 2022 – 16111R Tuesdays: 9:00am - 11:50 am HOH-114

Professor: Odilon Câmara
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Office Phone: (213) 740-7658
Email: ocamara@marshall.usc.edu
Office Hours: Thursdays from 10:00am to 11:00am (in-person at my office, HOH 822)
By appointment, I'm available for in-person office hours and Zoom office hours during other times.
*If necessary, we might need to move office hours and lectures to Zoom

Course Description

This class succeeds GSBA 602 (Selected Issues in Economic Theory I) and further investigates selected topics in methodology and research perspectives of economics. The class is built upon three pillars. First, we will cover the most useful general concepts of game theory. Second, we will examine how these concepts can be applied to address important questions in many different fields, such as finance, accounting, marketing and political economy. Third, it is crucial that throughout the entire semester the students must have a hands-on approach to the class. That is, students will continuously apply what they have learned and will develop modelling skills by replicating existing models, creating variations of these models, and developing their own models.

Learning Objectives

The three main learning objectives are the following:

- Learn methodological tools from Game Theory (equilibrium concepts, modeling tools, etc.)
- Learn how these tools are applied in different fields
- Apply these tools to study selected phenomena of interest (learn by doing)

Required Materials

All the required reading material will be posted on Blackboard. It will include lecture notes, slides, and journal articles. We will not follow a particular book. We will draw insights and resources from multiple sources.

Prerequisites and/or Recommended Preparation:

GSBA 602 (Selected Issues in Economic Theory I) is the main prerequisite for this class. I might wave this prerequisite for students who took an equivalent graduate level class in economics.

The class requires sufficient knowledge of basic tools from calculus, probability and statistics. The level of mathematics required is about the same as the one used in the GSBA 602 class. We will briefly review these tools along the semester.

Grading Detail

<u>ASSIGNMENTS</u>	<u>Points</u>	<u>% of Grade</u>
MIDTERM 1	20	20.0%
MIDTERM 2	20	20.0%
HOMEWORK	20	20.0%
PARTICIPATION	15	15.0%
PROJECT PRESENTATION	10	10.0%
FINAL PROJECT	15	15.0%
TOTAL	100	100.0%

MIDTERMS: Both midterms will be take-home exams. They will be given to you a few days before the due date. Midterm 1 is due Feb/18 @11:59pm and covers the material from weeks 1, 2, 3, 4 and 5. Midterm 2 is due Apr/01 @11:59pm and covers the material from weeks 6, 7, 8, 9 and 10.

HOMEWORK: We will have a homework due almost every week. Each weekly homework is short, only a few questions to practice what you have learned and to develop modeling skills. Your homework grade in the semester will be the average grade of the weekly homework. The homework questions and due dates will be posted on Blackboard.

PARTICIPATION: Up to 5 participation points will be given according to the student's engagement during regular lectures. Up to 10 participation points will be given according to the student's engagement during the presentations of other students in the final weeks of the semester.

PROJECT: Each student will prepare a paper proposal. The student will select a topic/question and will propose a model to study the question. The goals of this exercise are for the student to become more familiar with the early process of developing a tractable model to address a phenomenon, and for the student to practice using the modeling tools. We want the student to finish the semester with a sound proposal and tentative model, that could potentially be the starting point of a paper. Note that the goal is not to have a fully analyzed model by the end of the semester. The goal is to have a concrete idea with a thoughtful baseline model that could potentially become a paper later.

Students are encouraged to start thinking about questions and to start working on the project as early as possible. Students are encouraged to exchange ideas with classmates, but each student should have his own project.

The project will have three parts:

- 1) **Initial ideas:** during the first half of the semester, students should share their early ideas with me, so we can discuss if a question seems interesting and tractable. I will be available for one-on-one online meetings to discuss your ideas, or during regular office hours. Once a question is selected, the student can start working on the project. Students should select a question for their projects by March/11. This stage of the project is not graded.
- 2) **Presentation:** during the April 5 and 12 classes, students will present to the class their basic ideas and a tentative model. I will schedule the students' presentations during this period. Each student should argue why the selected question is relevant, present a very brief review of the related literature, and present a tentative model. The student does not need to fully solve the model: only present the core elements of the model and discuss possible approaches to solve and analyze the model. At this point, the participation of all students is very important, as we can give feedback and suggestions to improve all models. This stage of the

- project corresponds to 10% of the semester grade. Students will be graded according to the quality of their proposal and their oral presentation. At this point, students should also turn in a written first draft of their proposed model. This draft will not be graded but it will receive feedback from me.
- 3) Final Project: students will turn in a written final project in lieu of a final exam. The final project is the written version of the model proposal, incorporating as much as possible the feedback from the oral presentation. This written final project corresponds to 15% of the final grade and is due on May/10 @10:00am.

Final grades represent how you perform in the class relative to other students. Three items are considered when assigning final grades:

1. Your average weighted score as a percentage of the available points for all assignments (the points you receive divided by the number of points possible).
2. The overall average percentage score within the class.
3. Your ranking among all students in the class.

Collaboration policy

Students are permitted and encouraged to discuss with others their ideas for completing assignments; however, once a student begins writing the deliverable, all work must be individual and independent. Students may not seek help from anyone outside the class, including but not limited to former students of this course, friends and family, tutors, and online forums. Students may consult course materials and web resources. Students may not post anything related to the assignments outside of Blackboard. Failure to abide by the above guidelines may constitute a case of suspected plagiarism or cheating, which will be reported and investigated. Please see the “Academic Integrity and Conduct” section below for further details. For more information about unauthorized collaboration, visit <https://libraries.usc.edu/tutorial/academic-dishonesty> or http://lib-php.usc.edu/tutorials/academic-dishonesty/story_html5.html.

Assignment Submission Policy:

Assignments must be turned in on the due date/time electronically via Blackboard. Any assignment turned in late, even if by only a few minutes, might receive a grade deduction. Should your Internet break down on the due date, notify your instructor as soon as possible and submit when your service is restored. Even if your internet is down, in most cases, you can use your phone/data to send an explanation via email to your instructor. Late or not, however, you must complete all required assignments to pass this course.

Evaluation of Your Work:

You may regard each of your submissions as an “exam” in which you apply what you’ve learned according to the assignment. I will do my best to make my expectations for the various assignments clear and to evaluate them as fairly and objectively as I can. If you feel that an error has occurred in the grading of any assignment, you may, within one week of the date the assignment is returned to you, write me a memo in which you request that I re-evaluate the assignment. Attach the original assignment to the memo and explain fully and carefully why you think the assignment should be re-graded. Be aware that the re-evaluation process can result in three types of grade adjustments: positive, none, or negative.

COURSE CALENDAR (Tentative, subject to change)

Weeks	Topic (TENTATIVE)	Activities/Assignments	Due Date
Week 1: Jan/10-14	Introduction to Game Theory Static Games	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 2: Jan/17-21	Dynamic Games	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 3: Jan/24-28	Information	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 4: Jan/31-Feb/04	Incentives and Contracts	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 5: Feb/07-11	Review	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 6: Feb/14-18	Applications in Economics (Part 1) MIDTERM 1	<ul style="list-style-type: none"> Attend Synchronous Meeting on Feb/15 Take-home Midterm due on Fri Feb/18 @11:59pm 	Feb/18 @11:59pm
Week 7: Feb/21-25	Applications in Economics (Part 2)	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 8: Feb/28-Mar/04	Applications in Finance	<ul style="list-style-type: none"> Attend Synchronous Meeting 	
Week 9: Mar/07-11	Applications in Other Areas	<ul style="list-style-type: none"> Attend Synchronous Meeting Students should select a question for their projects by Mar/11 	Mar/11 @11:59pm
Mar/14-18	Spring Break		
Week 10: Mar/21-25	Review	<ul style="list-style-type: none"> Attend Synchronous Meeting 	

Weeks	Topic (TENTATIVE)	Activities/Assignments	Due Date
Week 11: Mar/28-Apr/01	More on Dynamic Models MIDTERM 2	<ul style="list-style-type: none"> • Attend Synchronous Meeting on Mar/29 • Take-home Midterm due on Fri Apr/01 @11:59pm 	Apr/01 @11:59pm
Week 12: Apr/04-08	Project Presentations	<ul style="list-style-type: none"> • Project presentation 	Apr/05 in class
Week 13: Apr/11-15	Project Presentations	<ul style="list-style-type: none"> • Project presentation 	Apr/12 in class
Week 14: Apr/18-22	Advanced Topics Part 1	<ul style="list-style-type: none"> • Attend Synchronous Meeting 	
Week 15: Apr/25-29	Advanced Topics Part 2	<ul style="list-style-type: none"> • Attend Synchronous Meeting 	
Final Exam:		<ul style="list-style-type: none"> • Final Project due on Tue May/10 @ 10:00am 	May/10 @10:00am

ADDITIONAL INFORMATION

Retention of Graded Coursework

Final exams and all other graded work which affected the course grade will be retained for one year after the end of the course *if* the graded work has not been returned to the student. If I returned a graded paper to you, it is your responsibility to file it.

Technology Policy

As a PhD student, you need to learn how to use an appropriate software to write scientific papers. Therefore, I will ask you to use an appropriate software to type your homework and mid-term answers, as well as your final project. You can use any software, and there are many free options available. Please let me know if you need help finding a software and getting started.

Class Conduct/Netiquette

Professionalism will be expected at all times. Because the university classroom is a place designed for the free exchange of ideas, we must show respect for one another in all circumstances. We will show respect for one another by exhibiting patience, courtesy, and professionalism in our exchanges. Appropriate language and restraint from verbal attacks upon those whose perspectives differ from your own is a requirement. Courtesy and kindness are the norm for those who participate in my class.

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in SCampus in Part B, Section 11, “Behavior Violating University Standards” policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in SCampus and university policies on Research and Scholarship Misconduct.

Students and Disability Accommodations:

USC welcomes students with disabilities into all of the University’s educational programs. The Office of Student Accessibility Services (OSAS) is responsible for the determination of appropriate accommodations for students who encounter disability-related barriers. Once a student has completed the OSAS process (registration, initial appointment, and submitted documentation) and accommodations are determined to be reasonable and appropriate, a Letter of Accommodation (LOA) will be available to generate for each course. The LOA must be given to each course instructor by the student and followed up with a discussion. This should be done as early in the semester as possible as accommodations are not retroactive. More information can be found at osas.usc.edu. You may contact OSAS at (213) 740-0776 or via email at osasfrontdesk@usc.edu.

Support Systems:

Counseling and Mental Health - (213) 740-9355 – 24/7 on call

studenthealth.usc.edu/counseling

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention.

National Suicide Prevention Lifeline - 1 (800) 273-8255 – 24/7 on call

suicidepreventionlifeline.org

Free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week.

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-9355(WELL), press “0” after hours – 24/7 on call

studenthealth.usc.edu/sexual-assault

Free and confidential therapy services, workshops, and training for situations related to gender-based harm.

Office for Equity, Equal Opportunity, and Title IX (EEO-TIX) - (213) 740-5086

eeotix.usc.edu

Information about how to get help or help someone affected by harassment or discrimination, rights of protected classes, reporting options, and additional resources for students, faculty, staff, visitors, and applicants.

Reporting Incidents of Bias or Harassment - (213) 740-5086 or (213) 821-8298

usc-advocate.symplicity.com/care_report

Avenue to report incidents of bias, hate crimes, and microaggressions to the Office for Equity, Equal Opportunity, and Title for appropriate investigation, supportive measures, and response.

The Office of Student Accessibility Services (OSAS) - (213) 740-0776

osas.usc.edu

OSAS ensures equal access for students with disabilities through providing academic accommodations and auxiliary aids in accordance with federal laws and university policy.

USC Campus Support and Intervention - (213) 821-4710

campussupport.usc.edu

Assists students and families in resolving complex personal, financial, and academic issues adversely affecting their success as a student.

Diversity, Equity and Inclusion - (213) 740-2101

diversity.usc.edu

Information on events, programs and training, the Provost's Diversity and Inclusion Council, Diversity Liaisons for each academic school, chronology, participation, and various resources for students.

USC Emergency - UPC: (213) 740-4321, HSC: (323) 442-1000 – 24/7 on call

dps.usc.edu, emergency.usc.edu

Emergency assistance and avenue to report a crime. Latest updates regarding safety, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible.

USC Department of Public Safety - UPC: (213) 740-6000, HSC: (323) 442-120 – 24/7 on call

dps.usc.edu

Non-emergency assistance or information.

Office of the Ombuds - (213) 821-9556 (UPC) / (323-442-0382 (HSC)

ombuds.usc.edu

A safe and confidential place to share your USC-related issues with a University Ombuds who will work with you to explore options or paths to manage your concern.

Occupational Therapy Faculty Practice - (323) 442-3340 or otfp@med.usc.edu

chan.usc.edu/otfp

Confidential Lifestyle Redesign services for USC students to support health promoting habits and routines that enhance quality of life and academic performance.

Emergency Preparedness/Course Continuity

In case of a declared emergency if travel to campus is not feasible, the *USC Emergency Information* web site (<http://emergency.usc.edu/>) will provide safety and other information, including electronic means by which instructors will conduct class using a combination of USC's Blackboard learning management system (blackboard.usc.edu), teleconferencing, and other technologies.