Registration for “Advanced Topics in Economics: Game Theory and Economic Applications”

SPSE will accept registration for the above course during the third course registration period starting from tomorrow until 17:00 on April 13. Please see page 2 for the course syllabus.

Eligibility : SPSE senior students or above

How to register: Please email to ssk@list.waseda.jp. Title of the e-mail should be “Registration for Advanced Topics in Economics: Game Theory and Economic Applications”. Make sure to write your name and Student ID number.

Note : 1. Your application will be invalid if there is any course registration error such as credits limitation error or time conflict with other registered courses.
   2. If the number of students who register for this course exceeds the prescribed quota, permission to register will be decided by lottery.
### Academic Year

2019

### Professor

KORIYAMA, Yukio

### Year to be taken

3rd grade or more

### Credit(s)

2

### Course Name

Advanced Topics in Economics: Game Theory and Economic Applications

### Timetable

Summer Quarter

Wednesday 5-6 period

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### Course Description

We study how game-theoretical concepts are applied to the analysis of strategic interaction between multiple decision makers. We focus on application to the “design” aspect in the analysis of economic phenomena, using the approaches from the classical mechanism design to the political institutional design. The principle idea is to see how we can set up the rules in the society so that desirable properties, such as efficiency, stability, fairness, equality, and strategy-proofness, are satisfied. As the incentive of the individual decision maker is determined as a function of the rules, designing a rule requires to understand the impact of the incentives on the decision makers’ behavior. The students will see how game-theoretical concepts are applied to the real-life examples in the areas such as public economics, market design, political economy, social choice and voting.

### Objectives

Each student is expected to give a pitch at the end of the course. A proposal based on an original idea of game-theoretical analysis should be presented, using the analytical tools studied during the course. By the end, students are expected to be confident in applying the concepts acquired in the course to practical examples. Class participation has a heavy weight in the evaluation and all students are expected to actively participate in class discussions.

### Preparation and Review

Basic knowledge in linear algebra and analysis is necessary. Some fundamental knowledge in microeconomics would be helpful, but not required.

### Course Schedule

- 6/12/2019 Introduction
- 6/12/2019 Game Theory 1: Normal-form games
- 6/19/2019 Game Theory 2: Extensive-form games
- 6/19/2019 Game Theory 3: Asymmetric information
6/26/2019 Economic application 1: Public good provision
6/26/2019 Economic application 2: Commitment
7/3/2019 Students’ presentation
7/3/2019 Market design: auction, matching
7/10/2019 Social Choice Theory
7/10/2019 Political Economy 1: Voting
7/17/2019 Political Economy 2: Institutional design
7/17/2019 Political Economy 3: Collective decision making
7/24/2019 Pitch 1
7/24/2019 Pitch 2
7/31/2019 Review session

教科書 Textbook(s)


参考文献 Reference Book(s)


成績評価方法 Evaluation

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<thead>
<tr>
<th>試験 Examination(s)</th>
<th>割合 Percent(%)</th>
<th>評価基準 Description</th>
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</thead>
<tbody>
<tr>
<td>Report(s)</td>
<td>30</td>
<td>Report about the pitch</td>
</tr>
<tr>
<td>Class Participation</td>
<td>40</td>
<td>Class participation and presentation</td>
</tr>
<tr>
<td>Other</td>
<td>30</td>
<td>Pitch</td>
</tr>
</tbody>
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備考・関連 URL Note