## Course description

1<sup>st</sup> class: Introduction:

What is game theory and Why we study it in economics?

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## Introduction:

This document explains how to deliver a lecture. I upload this description each class. So, please check the document of description at the beginning.

The online class of microeconomics II is given based on a text-based method to accommodating different Internet environments among the students and time differences. This is because some students may not be in Tokyo, yet.

The text-based method is not new. Indeed, the University of Liverpool in the U.K. offers a master's degree programs with concentrating on textbooks and assignments. I decided to adopt this method for the above reasons.

I will explain how to deliver the first class. Please follow the instruction:

## Class structure:

This class is given on text-based method. So, first of all, please get the textbook:

Geoffrey A. Jehle & Philip J. Reny, Advanced Microeconomic Theory 3rd eds.,
 Prentice Hall.

Each class provides a description (this), a handout, and sound files. In the first lecture, three sound files with a transcription are uploaded.

- Lecture 1.1: First message
- Lecture 1.2: Schedule and how to study
- Lecture 1.3: What is game theory?

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To get the ideas and motivations of the lecture, please listen to these files in sequence. After listening, please read the following pages.

Reading assignment: pp. 305-311 (Before 7.2.2)

The purpose of today's class is to study the following:

- What is game theory? And why do we study game theory in economics?
- What is noncooperative game theory?
- How to define strategic form games;
- The definitions of dominant strategies.

To read the above pages, please pay your attention to the following check list. Check list:

- 1. What are the components of strategic form games?
- 2. Can you distinguish dominant and dominated strategies?
- 3. Can you understand the iterative elimination of strictly/weakly dominated strategies?

After reading the textbook and understanding the topics, please try to answer the exercises in the textbook.:

Exercises: 7.3-7.5 in pp. 364—365. 7.3-7.4 in p. 364. (update: April 24)

I ask you to submit your answers through submission page of Lec. 1 page of Waseda moodle before 23:59 of Japan time, May 14. I put a discussion room in the 1st lecture page on Waseda moodle. It is great to discuss among students. I will explain in the 3rd lecture.

## Remark:

The textbook is well-explained. So when you do not understand some, please check definitions and try to make a simple example. Such trials are very useful, and you can get a true way of studying.