

RONALD WENDNER

Office hours: Mon 1:00 – 3:00 p.m.

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## **320.412 INFORMATION ECONOMICS (KS, 2h)**

TUE 11:00 – 12:30, SR 15.4B (F4)

### **1. PREREQUISITES**

320.111 Applied microeconomics, 320.313 Mathematics for microeconomics, 320.312 Consumption and production, 320.314 Imperfect competition and welfare. In particular, I assume familiarity with basic concepts in game theory and in microeconomics as offered by undergraduate microeconomics textbooks such as Nicholson and Snyder, *Microeconomic Theory: Basic Principles and Extensions*.

### **2. LITERATURE**

- Gibbons, R. (1992), *Game Theory for Applied Economists*, Princeton (NJ): Princeton University Press.
- Macho-Stadler, I., J.D. Pérez-Castrillo (2001), *An Introduction to the Economics of Information. Incentives and Contracts*, Oxford et al.: Oxford University Press.
- Jehle, G.A., P.J. Reny (2011), *Advanced Microeconomic Theory* (3<sup>rd</sup> edition), Harlow: Pearson Education Limited.
- Laffont, J.J., D. Martimort (2002), *The Theory of Incentives*, Princeton (NJ): Princeton University Press.

The course follows the textbooks closely. Please make sure you have access to the books.

### **RECOMMENDED READING**

At some points you might want to consult further books, and I recommend:

- Sydsaeter, K., P. Hammond (2006), *Essential Mathematics for Economic Analysis*, Harlow: Prentice-Hall Inc.
- Sydsaeter, K., P. Hammond, A. Seierstad, A. Strom (2006), *Further Mathematics for Economic Analysis*, Harlow: Prentice-Hall Inc.
- Wasserman, L. (2004), *All of Statistics. A Concise Course in Statistical Inference*, New York, Springer.
- Kreps, D.M. (1990), *Game Theory and Economic Modelling*, Oxford et al.: Oxford University Press.

### 3. TOPICS

- Getting started: Some probability theory, Bayes' theorem, von Neumann-Morgenstern utility
- Static games of complete information
- Dynamic games of complete information
- Games of incomplete information
- Sequential equilibrium
- Adverse selection (signaling games, pooling and separating equilibria, Intuitive criterion, screening games)
- Moral hazard

### 4. REQUIREMENTS & GRADING

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|------------------------------------------|------------|
| • <b>Active class participation</b>      | <b>10%</b> |
| • <b>Midterm Exam: November 19, 2013</b> | <b>40%</b> |
| • <b>Final Exam: January 21, 2014</b>    | <b>50%</b> |

*Grading.* 81-100 %: sehr gut (A), 71-80 %: gut (B), 61-70 %: befriedigend (C), 50-60 %: genügend (D), 1-49 % nicht genügend (F).

There is no possibility to earn additional marks after the final exam.

### 5. WHAT TO CONSIDER FOR MASTERING THE COURSE

(1) Our course is scheduled for the second year in the master program in economics. There are prerequisites in terms of both, microeconomic theory and mathematics. One implication is that it is not sufficient just to attend the lectures. Instead, during the semester, you are required to carefully read the textbook chapters we are dealing with.

(2) ECTS requirement:  $6 \text{ ECTS} = 6 \times 25 \text{ h} = 150 \text{ h} = 10 \text{ h work per week} = 8 \text{ h work/week}$  in addition to our weekly class. So, as a rule of thumb, if you invest 1 full day/week to study the material we learn, you can expect to pass the course well. Please, don't forget to take this time requirement into account when planning your semester.

(3) On our course website (<http://www.uni-graz.at/ronald.wendner>) I am offering the transparencies used as well as supplemental materials. These materials are written *for you*. You are supposed to carefully study them.

(4) Every question, both in class and during my office hours, is welcome. The more you ask, the more you will get out of the course, and the more you learn for your professional career.

(5) I advise you to join a learning-/discussion group with your colleagues – or create one yourself. Meet once a week to discuss the materials you learn in class.

(6) Feel free to check in on Monday during my office hours, and to ask questions to me.

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