General course information

ENM140, Game theory and rationality 2016

Welcome to the course in game theory and rationality!

This document contains general information about the course. Make sure to read it carefully. The course does not have an exam, but a number of other compulsory tasks which are all summarized in this document.

To stay updated on course news and to find further instructions relating to assignments, seminars, and the project work, please see the course homepage:
http://studycas.com/c/courses/gtr.

Document change log
2 november 2016: Moved oral presentations of projects to the A block, 12 and 14 December.

Contents

1 Course webpages

Most information is found at http://studycas.com/c/courses/gtr.

Ping Pong is used (1) for submission of assignments, projects, etc, and (2) for distribution of some course literature (including seminar materials):
https://pingpong.chalmers.se/courseId/7447/content.do?id=3303890

2 Teachers

Kristian Lindgren (Examiner, lecturer, project supervisor)
kristian.lindgren[at]chalmers.se

Rasmus Einarsson (Teaching assistant, project supervisor)
rasmus.einarsson[at]chalmers.se

3 Lectures and seminars

The schedule is in TimeEdit.

Lectures and seminars are held each week on

- Monday at 10:00–11:45

- Wednesday at 10:00–11:45

- Wednesday at 13:15–15:00

The lectures are held in room FL51 (Physics building), with two exceptions: On Wednesday, Nov. 2, 10:00–11:45, we will be in EL41 (EDIT building floor 4) and on Wednesday, Dec. 7, 13:15–15:00, we will be in MC.

Two sessions for project presentations (of preliminary results) are scheduled in the last week: Monday, Dec. 12, 08:00–09:45, Wednesday, Dec. 14, 15:15-17:00.

4 Literature and video lectures

The main course book is Kevin Leyton-Brown and Yoav Shoham, *Essentials of Game Theory: A Concise, Multidisciplinary Introduction* (2008).

The book can be downloaded free of charge through Chalmers' library: direct link.

Selected chapters and examples may be distributed from Herbert Gintis, *Game Theory Evolving: A Problem-Centered Introduction to Modeling Strategic Interaction* (Second Edition, 2009)". The book is available as ebook at Chalmers' library (direct link here).

A few pages from each chapter are also available on Gintis' own web page.

Other literature will be provided through the Documents section on Ping Pong.

The following video lectures in game theory may be worth checking out:
https://www.youtube.com/user/gametheoryonline/featured

5   Assignments

There are three individual assignments in the course:

1. Formulate a game idea as possible basis for a project

2. Design and implement strategies for a game tournament

3. Explain basic concepts in game theory

Instructions for these are given in separate documents on the course homepage. The deadlines are listed in Section 8.1 below.

6   Student-led seminars

Each student will lead a 45-minute seminar together with a group of 2-3 other students. Everyone must take active part in the work. There are 12 student-led seminars. Detailed instructions are given in a separate document on the course homepage. For deadlines, see Section 8.1 below.

7   Project

A major part of the course (40-50%; 80-100 h) is a game theory project, involving modelling, simulation and analysis of a model selected by the project group. Note: These groups are not necessarily identical to the seminar groups (as there may be up to 18 project groups). Detailed instructions are given in a separate document on the course homepage. The deadlines are listed in Section 8.1 below.

8   Grading and compulsory attendance

To get a passing grade you need to complete the compulsory course components:

-   Attendance on at least 2/3 (67%) of the lectures.

-   The three individual assignments.

-   Two peer-review duties (Assignment 3 and Draft project report).

- The student-led seminars; you need to lead one and attend at least 8 of the 12.

- Oral presentation of preliminary project results; attendance of a minimum of 50% of the presentations.

- Project report, including the contribution report. All groups must submit a draft report and peer review one other group's draft.

The final grade is decided based the project work as it is presented in the final report together with the contribution report. Late hand-in of the report can not give more than the lowest passing grade. Insufficient reports are given one more chance for revision (to be handed in no later than Febr. 17, 2017), but only to get the chance for the lowest passing grade.

Assignments, peer-reviews, presentations, etc need to be done in time. If there are very special reasons a separate examination may be possible to arrange. If you have such a need, please let us know as soon as possible.

8.1   Summary of deadlines

Assignment 1: Game idea

Submit no later than Monday 7 November, 18:00.

Assignment 2: Algorithm competition

Submit no later than Monday 14 November, 18:00.

Assignment 3: Game theoretic concepts

- Submit your draft version no later than Friday 25 November, 18:00.

- Submit feedback to another student no later than Friday 2 December, 18:00.

- Submit your updated version later than Friday 9 December, 18:00.

Student-led seminars

Submit the literature and reading guide for your seminar no later than five days before the seminar. This means:

- If your seminar is on a Monday, submit the materials the Wednesday before.

- If your seminar is on a Wednesday, submit the materials the Friday before.

Project work

- Join a project group and submit project idea by Monday 21 November 2016, 23:59.

- Give oral presentation of your project and preliminary results 12 or 14 December, 2016.

- Submit a draft version of the report no later than Wednesday 4 January 2017, 18:00.

- Submit feedback to another group no later than Monday 9 January 2017, 18:00.

- Submit your final project report no later than Friday 13 January 2017, 18:00.