CS390 Computational Game Theory and Mechanism Design June 30, 2013

Handout 1: Course Information

Instructor: Jing Chen *Teaching Assistant: Tao Xiao*

Prerequisites

Discrete mathematics and elementary probability theory.

Instructor: Jing Chen.

TA: Tao Xiao. wto31415926@gmail.com.

TA Hours: By appointment.

Website

Announcements, problem sets and most other materials are available at

`http://zhiyuan.sjtu.edu.cn/courses/287`.

Email List

Please send an email to the TA with subject "CS390: YOUR NAME". You will be placed on the course email list for announcements related to this course.

Grading Policy

The grade will be based on four parts.

1. Homework (60%)

   You should expect 6 problem sets, corresponding to the first 6 lectures, with 3 problems each. Problem sets will be released after each lecture, and due in class in one week. Late submission will not be accepted. You are free to collaborate with other students, but you must individually write your solution and you must specify for each problem the names of your collaborators. Additionally, you may use published books or papers, provided that you acknowledge all sources used.

   You can either type your solution using Latex or hand-write it, but 5 bonus points will be added to your final grade if you type ALL your solutions (note: final grade no higher than 100). Latex template will be provided, and the TA will give a brief tutorial on Latex at the end of the 1st lecture.

2. Solution presentation (15%)

   Starting from the 3rd lecture we will have a presentation session in each lecture, where 3 students will respectively present their solution for the 3 problems just due.

In total we'll have 18 problems, and you need to sign-up beforehand, with 2 or 3 students for each problem. Students in a group should prepare their presentation together, and the presenter will be selected ad-hoc by the instructor. Students in the same group will receive the same score for this part. (Note: the first problem may not be the easiest, and earlier problem sets may not be easier then later ones.)

3. Lecture notes (15%)

   You are required to scribe notes once for the course. We will have 17 classes in total, 2 classes in each lecture except the 2nd one which will have 3 classes. Each class will need 2 or 3 scribers, and you need to sign-up beforehand. Scribers for the same class should work together in preparing the notes, but you may acknowledge at the end of the notes on who write which part. Scribers for the same class may not necessarily get the same score, depending on how the work is done. The notes will be due in 48 hours after the lecture. You MUST type your notes using Latex. Templates will be provided.

4. Class participation (10%)

Suggested Textbooks

M. J. Osborne and A. Rubinstein. *A course in game theory.* MIT Press, 1994.

N. Nisan, T. Roughgarden, E. Tardos, and V. Vazirani (eds). *Algorithmic game theory.* Cambridge University Press, 2007. (Available at `http://www.cambridge.org/journals/nisan/downloads/Nisan_Non-printable.pdf`.)