

## **Economics 4340: Game Theory** **Fall 2011**

**Instructor:** Oksana Loginova, 333 Professional Bldg, (573)882-4229, loginovao@missouri.edu, office hours on Wednesdays 1-2pm.

**Teaching assistant:** Chenhang Zeng, 223 Professional Bldg, czvd7@mail.mizzou.edu, office hours on Mondays 2-4pm.

**Class time and location:** Tuesday/Thursday 9:30-10:45pm, 307 Strickland Hall.

**Course description:** This course is an introduction to the theory of games, a set of tools used widely in economics to study situations in which decision-makers (consumers, firms, politicians, governments, etc.) interact. The course introduces the basic theory, emphasizing the concepts. A variety of applications will be discussed, mostly in economics, but also in other disciplines.

**Textbook:** Avinash Dixit, Susan Skeath, and David H. Reiley, *Games of Strategy*, 3rd edition.

**Course requirements and grading:** There will be a number of homework assignments, two midterm exams (September 22 and October 27) and a final exam (Wednesday, December 14, 10am-12pm). All exams will be of the problem-solving type. Your grades will depend on your performance on the homework assignments (15%), the midterm exams (25% each) and the final exam (35%).

**Make-up exams:** Make-up exams will generally not be given. A request for alternative arrangements must be in writing and must be accompanied by appropriate documentation for not taking the scheduled exam.

**Academic honesty:** The MU policy on academic honesty will be strictly implemented. Any academic dishonest action will be reported to the university.

**Disabilities:** If you have special needs as addressed by the Americans with Disabilities Act and need assistance, please notify the Office of Disability Services, A048 Brady Commons, (573)882-4696. Reasonable efforts will be made to accommodate your special needs.

### **Major topics:**

1. Concepts and Techniques (Chapters 3–8)
  - sequential-move games
  - simultaneous-move games
  - pure and mixed strategies
2. Classes of Games and Strategies (Chapters 9–12)
  - signaling
  - strategic moves
  - repeated games
  - collective action
3. Applications (Chapters 16, 18)
  - voting
  - bargaining