

## **Economics 4340: Game Theory Fall 2009**

**Instructor:** Oksana Loginova, 333 Professional Bldg, (573)882-4229, loginovao@missouri.edu

**Grader:** Chenhang Zeng, czvd7@mizzou.edu

**Office Hours:** Tuesday/Thursday 11am-12pm and 2-3pm

**Class Time and Location:** Tuesday/Thursday 9:30-10:45, 223 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 24 and October 29) and a final exam (Monday, Dec 14, 1-3pm). 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