STAT/ECON 474 Game Theory
Midterm 2 Study Guide

- The second midterm is on Tuesday November 21.

- The exam will cover Chapters 8–11 and 13: extensive games, extensive games with imperfect information, subgame perfect equilibrium, Bayesian games, Bayes-Nash equilibrium, signaling games, perfect Bayesian equilibrium, finite and infinitely repeated games.

- There is a reading guide on the webpage explaining which material your are responsible for in each chapter.

  `http://www.math.uic.edu/∼marker/stat473-F17/reading.html`

- You will have the full 75 minutes for the exam, but I expect most will finish in an hour or less.

- There is a week-by-week syllabus on the webpage:

  `http://www.math.uic.edu/∼marker/stat473-F17/wtw.html`

- **Office Hours** :

  - Monday 11/13: No office hours
  - Wednesday 11/15 1:30-3:30
  - Monday 11/20 2:30-4:30

- **Most** of the exam problems will be similar to the problem sets and practice problems, but there may also be several short answer questions like the ones on earlier exams.

Sample Short Answer Questions:

1) Give complete definitions of Bayes-Nash equilibria.

2) Decide if the following are TRUE or FALSE. If FALSE give an example showing the statement is FALSE.

a) Let G be a game with a unique Nash equilibrium (a^*, b^*) If G is repeated T times, then the only possible subgame perfect equilibrium is if (a^*, b^*) is repeated each time.

b) In an extensive game of perfect information, any Nash equilibrium in the strategic form of the game is a subgame perfect equilibrium.