This course gives an introduction to game theory. Game theory is a tool for analyzing the strategic interactions between decision makers (or “players”). In these interactions the choices of any one “player” affects and is known to affect the outcome for other “players” too. The objectives of the course are (1) to introduce the main concepts and ideas of game theory in a relatively non-technical way and (2) to apply these ideas to a range of topics from economics and other social sciences.

EXAMS AND GRADING
The final grade will be based on a midterm (25%), a final exam (35%), four homework assignments (20%), and six quizzes (20%). The midterm exam will be given in the regular class on Thursday 15 March. Makeup exams will only be given in cases of verifiable medical excuse or other very good reasons. There will be no makeups for quizzes; instead the quiz component will be based on the four best quizzes.

READINGS
Textbook (available from Food for Thought Books):
Earlier editions can be used but problems will be assigned from the 3rd edition.
The text will be supplemented by a small number of readings and lecture notes posted on the class website.

OUTLINE
We’ll cover chapters 1-7, and 11-13 of Dixit & Skeath in reasonable detail. The coverage of the remaining chapters will be more selective. The choice of topics from these later chapters will depend on student interests.
Preliminary plan:

Jan 23, 28  Introduction, general setup and terminology (chapters 1-2)
Jan 30, Feb 4  Games with sequential moves (chapter 3)
Feb 6, 11  Games with simultaneous moves (chapter 4)
Feb 13, 19  Continuous strategies (chapter 5)
Feb 20, 25  Combining sequential and simultaneous moves (chapter 6)
Feb 27, Mar 4, 6, 11  Mixed strategies (chapter 7-8)
Mar 13  Midterm review
Spring break
Mar 25, 27  Repeated prisoners’ dilemma (chapter 11)
Apr 1, 3  Collective action games (chapter 12)
Apr 8, 10, 17  Evolutionary games (chapter 13)
Apr 22, 24, 29, May 1  Selected topics from chapters 9-10 and 14-18.