**Course Description:**

Economics 81 is an advanced course on the economics of information. The focus of the course is a rigorous mathematical treatment of moral hazard, adverse selection, and signaling. Applications to labor markets, corporate governance, financial markets, and insurance will be discussed.

*Prerequisites:* Economics 20 and 21; Mathematics 8

**Course Grading:**

There a midterm exam given in class on **Wednesday, October 18**, and a final exam during exam period. The midterm will count for 25% of the grade and the final will count for 50%. The remaining 25% of the grade is based on class participation. Although there are no graded problem sets, students are expected to complete all assigned problems in a timely manner as preparation for the exams. Problems will be assigned at the end of most class periods. Discussions of these problems constitute the class participation grade. With the instructor’s permission, students who submit an acceptable proposal for original research may substitute that paper for the final exam. Proposals are due **Wednesday, October 25**. All other students must take the final exam.

**Reading:**


Journal articles (listed after the outline) to be distributed.

**Additional Information:**

**Class Meetings:** Silsby 310, MWF 11:15 a.m. - 12:20 p.m. (x-period Tu 12 - 12:50 p.m.)

**Class Materials:** All handouts are accessible at: www.dartmouth.edu/~econ81

**Honor Principle:** You may work together on problems prepared for class, but each student must be prepared to present the solutions to the problem individually. All exams are to be done without collaboration of any kind.

**Equal Access:** I encourage students with disabilities, including “invisible” disabilities like chronic illnesses, learning disabilities, and psychiatric disabilities, to discuss with me after class or during my office hours appropriate accommodations that might be helpful to them. Such discussions must precede any exams on which special accommodations are needed.
Preliminary Course Outline:

1. Introduction and Review
   Lecture 1: [W 09/20] Overview (MP 1-14)
   Lectures 3-4: [Tu 09/26*, W 09/27] Symmetric Information (MP 17-33)

2. Moral Hazard
   Lectures 5-6: [F 09/29, M 10/02] Basic Model with Two Effort Levels (MP 37-46, 57-62)
   Lecture 7: [Tu 10/03*] Extension to Continuous Effort (MP 47-51, 63-64)
   Lecture 8: [W 10/04] Relative Performance Evaluation (Holmstrom [BJE 1982])
   Lecture 9: [F 10/06] Strategic Interactions (MP 56; Aggarwal and Samwick [JF 1999a])
   Lectures 10: [Tu 10/10*] Application to Executive Compensation (MP 66-67, Aggarwal and Samwick [NBER WP 1999b])
   Lecture 11: [W 10/11] Tournaments (MP 87-92; Green and Stokey [JPE 1983])
   Lecture 12: [F 10/13] Further Extensions and Exercises (MP 92-100)

3. First Midterm
   Lecture 13: [M 10/16] Review
   Lecture 14: [W 10/18] Midterm Exam

4. Adverse Selection
   Lectures 15-16: [F 10/20, M 10/23] Basic Model with Two Types (MP 103-116)
   Lecture 18: [M 10/30] Competition Among Principals (MP 117-126)
   Lecture 19: [Tu 10/31*] Application to Insurance (MP 142-149)
   Lecture 20: [W 11/01] Adverse Selection with a Continuum of Types (MP 127-134)
   Lecture 21: [M 11/06] Application to Credit Markets (Stiglitz and Weiss [AER 1981])
   Lecture 23: [F 11/10] Dynamic Adverse Selection (MP 176-179, Laffont and Tirole [ReSTUD 1990])
5. Signaling

Lectures 24-25: [M 11/13, Tu 11/14*] Basic Model (MP 183-198)


Lecture 27: [F 11/17] Application to Dividends (Bernheim and Wantz [AER 1995])


6. Final Exam

Review Session (during Reading Period)

Final Exam (during Exam Period)

Journal Articles to be Distributed


