ECON 403: Health Economics       Spring 2013

Professor: Joe Sabia
Office: AH 4194
Office Hours: TTH: 12:30pm-2:00pm (or by appointment)
Class Time/Location: TTH 11:00am-12:15pm AH 4176
Email: jsabia@mail.sdsu.edu
Phone: 619-594-2407

Course Content

This course will apply microeconomic principles to the study of health, health behaviors and health policy. Specifically, we will explore the demand for health, medical care, and insurance by consumers, the supply of physician services, managed care, health-related social insurance (e.g. Medicare and Medicaid), and the effect of health on economic well-being. The course will focus on how private incentives affect agents’ decision-making and the social welfare implications of those decisions.

Reading Material

The assigned textbook for the class is:


In addition, other reading assignments—usually in the form of academic journal articles—will be given during the course of the semester. These articles will be posted to Blackboard in pdf format. Readings should be completed before the class in which they are discussed. Lectures will assume familiarity with intermediate microeconomic concepts as well as some basic econometrics. You should consult microeconomics and econometrics textbooks for background material as necessary. The appendix chapters to the main text for this course also provide a helpful review.

*Note: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.*

Academic Integrity

Students are obliged to follow Student Conduct Procedures from the Center for Student Rights and Responsibilities, available at the following website: [http://csrr.sdsu.edu](http://csrr.sdsu.edu). In this course, unless specifically and explicitly instructed otherwise, all assignments should be done individually. Individually means without the assistance of classmates or anyone else; for clarification of problems, students should seek help from the instructor. While you may speak
with classmates about problem set questions, you must write up your answers individually and may not copy from classmates. Violations of academic integrity (plagiarism, cheating, etc.) will be vigorously pursued. Possible punishments include, but are not limited to, a zero for the assignment, an F for the course, and/or referral to the Center for Student Rights and Responsibilities for judicial proceedings.

Prelims, Problem Sets, and Point Allocations

There will be a midterm, a final, four problem sets, and a paper. The grading structure is as follows:

<table>
<thead>
<tr>
<th>Assignment</th>
<th>Date</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem Set #1</td>
<td>February 7</td>
<td>100</td>
</tr>
<tr>
<td>Problem Set #2</td>
<td>March 5</td>
<td>100</td>
</tr>
<tr>
<td>Midterm</td>
<td>March 7</td>
<td>300</td>
</tr>
<tr>
<td>Problem Set #3</td>
<td>March 28</td>
<td>100</td>
</tr>
<tr>
<td>Paper Due</td>
<td>April 25</td>
<td>100</td>
</tr>
<tr>
<td>Problem Set #4</td>
<td>May 7</td>
<td>100</td>
</tr>
<tr>
<td>Final</td>
<td>May 14 (10:30AM-12:30PM)</td>
<td>300</td>
</tr>
</tbody>
</table>

Grades are assigned as follows (in terms of % of total points):

- A  >= 93%
- A- 90-92.9
- B+ 87-89.9
- B  83-86.9
- B- 80-82.9
- C+ 77-79.9
- C  73-76.9
- C- 70-72.9
- D  65-69.9
- F  < 65%

Policy on Exams and Problem Sets

Ex-ante permission to miss the midterm (and have the final exam reweighted) will be granted only under the most extenuating circumstances. Extensions on problem sets will not be granted, again unless there are extenuating circumstances. If you believe that a question was graded incorrectly, you will be asked to submit a written document explaining the reason the grading is incorrect. If your rationale for a re-grade is deemed to be grossly incorrect by the instructor, you may have additional points deducted from your score. Late problem sets will not be accepted — they must be handed in at the start of class on their due dates.

Policy on Paper
The requirement for this paper is to analyze, from an economics perspective, a health policy reform proposed or enacted by a state between 1992 and 2012. The paper is due in class on April 25. There are no exceptions to this deadline. Any late papers will receive a zero. We will discuss the requirements for the paper in class and there will be a handout detailing what is expected.

FERPA

The Federal Family Educational Rights and Privacy Act gives students privacy rights with regard to educational records. FERPA allows disclosure of directory information without a student’s consent unless the student has advised the registrar in writing that he or she wishes to restrict access to this information. If you have requested that your directory information not be disclosed, please let me know, so I will not disclose your information to other persons.

Course Outline

I. Introduction to Health Economics
   a. What is a health economist?
   b. What types of questions do health economists investigate?
   c. What types of decisions do health policymakers or private actors make that reflect economic tradeoffs?
   d. Objectives of public health officials vs economists
      i. Maximize health or social welfare?
      ii. The socially optimal production of health
   e. Positive vs. Normative analysis of health questions
   f. Research in Health Economics
      i. Non-experimental design vs. Quasi-experimental (Natural) experiments vs. Social experiments
   g. Why a separate field of health economics?
   h. Health care vs Medical care
      i. Stylized facts about Health care

II. The Demand for Health, Medical Care, and Other Health Inputs
   - Grossman Model (1972)
   - Marginal efficiency of capital
   - Exogenous shocks to the demand for health
      o Role of education and its effect on health production
   - Empirical studies on health production and the factors that affect the production of health
      o Gredtham et al. (1999) Factors that affect QALYs
      o Kenkel (1995) Should you eat breakfast?
      o Ruhm (2000) Are recessions good for your health?
      o Carpenter and Dobkin (2009) Effect of alcohol consumption on mortality
      o Anderson, Rees, and Sabia (2012) Medical marijuana and suicide
- The Demand for Medical Care
  - Price elasticities of various medical services
  - Time costs
  - Effect of education on the demand for medical care
- The Demand for Cigarettes
  - Cigarette demand and optimal taxation
  - Rational addiction vs Time-inconsistent preferences
  - Viscusi (1990) Cigarette health information
  - Effects of cigarette taxes on youth smoking
    - Carpenter and Cook (2008): Participation
    - DeCicca, Kenkel and Mathios (2008): Initiation vs. Cessation
    - Hansen, Rees, and Sabia (2013): Social market
  - Effects of changes in minimum legal purchasing age
    - Hansen, Rees, and Sabia (2011): smoking by younger smokers
    - Yan (2009): child health
- The Demand for Alcohol
  - Carpenter (2004): Zero tolerance drunk driving laws
  - Efficient policies: beer taxes or zero tolerance laws?
  - Carpenter and Dokin (2011): alcohol and crime
  - Anderson, Hansen, and Rees (2013): medical marijuana laws and drunk driving

III. Insurance
- Demand for Insurance
  - Risk aversion
- Supply for Insurance
  - Moral hazard
- Community rating versus experience rating in insurance arrangements
- Some approaches to deal with moral hazard
  - Deductibles and copayments
  - Reimbursements of less than 100% for services
  - Managed care
  - Stop-loss provisions
- Some approaches to deal with adverse selection
  - Positive selection
  - Pre-existing conditions
  - Extract hidden information from consumers
- Employer-based health insurance
  - Origins
  - Social benefits and Costs
  - COBRA of 1985
  - HIPAA of 1996
- Designing Optimal Insurance Contracts
  - Blomqvist study
- Effect of insurance on other forms of health care
IV. Managed Care
- Health Maintenance Organization
- Preferred Provider Organization
- Point of Service Plan
- Theoretical effects of HMOs vs Traditional Indemnity Plans on Use of Medical Services and Patient Health
- Challenges faced by empirical researchers
  o Selection bias
  o How do we overcome this empirically?
- Effects of HMOs on:
  o Screening
  o Medical treatment for heart disease & cancer
  o Hospital stays
  o Doctors visits
  o Health outcomes
  o Patient satisfaction
  o Cost

V. The Supply of Health: Physicians as Health Care Providers
- Patient-physician relationship as principal-agent problem
- What market structure categorizes the market for physician services?
- Price discrimination vs Pure monopoly
- Altruism by doctors
  o Cullen and Ohsfelt
  o Medicaid patients?
- Physician-Induced Demand (PID)
  o McGuire Model
  o Gruber and Owings (1996)
  o Hillman et al. (1990)
- Reimbursement policies and physician incentives
  o Capitation pay
  o Salaries and revenue sharing
    ▪ Gaynor and Gertler (1995)
- Medical malpractice and defensive medicine
  o Causes and consequences
  o Policy reforms

VI. Social Insurance Programs and Pharmaceuticals
- Medicare: Program for the Aged (and some disabled and dying)
  o Part A: Hospitals
  o Part B: Non-Hospital Medical Care
    ▪ Increased role of HMOs
  o Part C: Medicare Advantage
  o Part D: Prescription Drugs
    ▪ Donut Hole
- Affordable Care Act
  - Medicaid: Program for the Poor
    o Reimbursement policies
    o Amendments
    o State authority
    o SCHIP
  - Pharmaceuticals
    o Incentives for Innovation versus Monopoly Pricing
    o FDA approval policies
      ▪ Type I vs Type II error
    o Generic drugs
    o Over the counter versus prescription medication

VII. The Effect of Health on Economic Well-Being
a. The effect of health shocks on socioeconomic status
   i. Currie (2009): “Healthy, Wealthy, and Wise”: child health and adult economic well-being
   ii. Fletcher (2008): Depression and educational attainment
   iii. Fletcher (2012): ADHD and educational performance
   iv. Cawley (2004): Effect of obesity on wages
   vi. Explanation for differing findings?
   vii. Rees and Sabia (2010): Effect of migraine headache on education and wages
   viii. Fletcher (2012): Effect of asthma on human capital and earnings
   ix. Sabia, Dills, and DeSimone (2013): Effect of sexual violence on earnings
b. The effect of health behaviors on socioeconomic status
   i. Sabia and Rees (2012): Number of sex partners/timing at first sexual intercourse and educational attainment
   ii. DeSimone (2002): Effect of drug use on employment