# Econ420

# **Economics of Information**

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## The deadline for withdrawing is March 29<sup>th</sup>.

The only text that you have to purchase is the third edition of my book *Incentives: Motivation and the Economics of information*. **The first or second edition will not do**.

### The final grade will be based on

Term test 1 written on Feb. 19 from 9am to 9:50am (worth 25 points) Term test 2 written on March 19 from 9am to 9:50am (worth 25 points) Term test 3 written on April 16 from 9am to 9:50am (worth 25 points) The final examination written on May 18, from 9am to 10:40am (worth 25 points) **The dates and times are provisional and might be changed before January 27**.

**THE TESTS** Each of the four exams will be posted on Blackboard at 9am on the date set aside, and taken off that site when time expires. Each will be *noncumulative*, and hence will only examine you on material that I have discussed in lectures since the previous test. You will submit your answers on paper, and email them to me as a pdf file. (The first lecture will tell you more about that process.)

### **GRADE BRACKETS:**

A minus: 90 – 93	A: > 93	
B minus: 80 – 83	B: 83.1 – 86.9	B plus: 87 – 89.9
C minus: 65 – 69.9	C: 70 – 74.9	C plus: 75 – 79.9
D minus: 50 – 54.9	D: 55 – 59.9	D plus: 60 – 64.9

**TIME-ZONE DISPARITY**: I need to know if you will be spending the spring term in a time zone that is behind, or ahead of, the time in Williamsburg by more than two hours. If that applies to you please contact me by email before January 27<sup>th</sup> to let me know what time zone you are in.

**PROBLEM SETS** There are eleven problem sets which will be placed, one at a time, in the *Assignments* folder on Blackboard. I will post the solutions for each shortly after I present the economic theory with which the problem set deals. I will not collect and grade your own solutions, but you have ample incentive to work hard on them before I supply my answers: The problem sets help you learn the principles of economics on which you will be tested. Ignoring them is almost a guarantee that you will not earn a decent grade for the course. The problem sets help you learn the economic theory, and the tests examine you on those theories. *Use your lecture notes as a guide to what I consider most important, and hence as a guide to the topics on which you will likely to be tested. Use the problem sets as a guide to how you will be tested.* 

**OFFICE HOURS** My online version of "office hours" is a file called *Questions and Answers* which will be the first item in the *Assignments* folder. When you are struggling with a specific problem set send me an email asking for help. I will send you my answer by email. Those questions and answers will constitute the *Questions and Answers* document. It will not use the names of the students who submit questions.

**THE LECTURES** I will record my lectures and store them on Blackboard. They will accumulate faster than you need to listen to them. I want you to determine the pace at which you consult them. Each lecture be given a title that will bear the topic and the date on which I would giving the lecture if you and I were in the classroom and I were following the Monday-Wednesday-Friday schedule set by the college. That will allow you to determine if you are falling behind in viewing lectures.

### PATH TO THE LECTURES

Go to *Blackboard* and select this course Select *Tools*, which is the third item on the left under the course name Select *Panopto content*, where the lectures are stored.

### **Course Outline**

- INTRODUCTION TO THE COURSE (Read pages 1 40)
   Asymmetric information (Section 1.1 of Chapter 1)
   Taxi! (Section 1.2 of Chapter 1)
   Picking a Winner (Section 1.3 of Chapter 1)
   Efficiency (Section 1.4 of Chapter 1)
   Equilibrium (Pages 41 40)
- MARKETABLE POLLUTION RIGHTS (Read pages 72 75, and 155 166) Maximizing a quadratic (Section 2.1 of Chapter 2) Marketable pollution rights (Section 3.2 of Chapter 3)
- AUCTIONS (pages 120-1; 358–366; 367–374; 387–394; 397–408; 410, and 413–421) Introduction (Section 6.1 of Chapter 6) Uniform probability distribution (Section 2.6.5 of Chapter 2) The Vickrey auction (Section 6.2.1 of Chapter 6) Four basic auction mechanisms (Section 6.3 of Chapter 6 but skip 6.3.4) Revenue equivalence (Section 6.4 of Chapter 6 but skip 6.4.2 and 6.4.6) Applications (Section 6.5 of Chapter 6) Interdependent values (Section 6.6 of Chapter 6)
- REVELATION OF PREFERENCES (Read pages 424 449)
   Voting schemes (Section 7.1 of Chapter 7)
   Preference revelation in general (Section 7.2 of Chapter 7)

The last two topics are on the next (and last) page.

5. MATCHING (Read pages 505 - 537 and 544 - 568)
Advisors and advisees (Section 9.1 of Chapter 9)
College admissions (Section 9.2 of Chapter 9)
Allocating dormitory rooms (Section 9.4 of Chapter 9)
Top Trading Cycle Algorithm (Section 9.5.1 of Chapter 9)
Kidney transplants (Sections 9.5.2 and 9.5.3 of Chapter 9)
Lung transplants (Section 9.6 of Chapter 9)

6. THE LABOR MARKET (Read pages 321 – 333) Job market signaling (Section 5.6 of Chapter 5 but skip pooling equilibria)