Market Design  
ECO 3933, Section 2  
Fall 2012

Tuesday & Thursday, 11:00am-12:15pm, 202 Bellamy

Instructor:  
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Office: 278 Bellamy  
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Office hours: 10:30-11:00, Tue & Thu, or by appointment

Course Description and Objective:

ECO 3933: Market Design. In this course, we will study the use of market-based mechanisms to allocate resources. The material will include an introduction to two-sided matching markets, auctions, market-based regulation, and online marketplaces. Our focus will be on the design of institutions for different resource allocation problems in the real world.

Course prerequisites and requirements:

ECO 2013 (Principles of Macroeconomics) and ECO 2023 (Principles of Microeconomics)  
Strong mathematical skills are useful but not necessary

Textbook:

There is no required textbook for the course, however, there will be assigned readings throughout the course.

In addition, the following texts will be useful reference material if you are interested in further study:


Assessment:

Midsemester exam (30%)  
  • In class, October 11th (10/11/12)

Group project/presentation (30%)
• 5 groups (5 – 6 students each)
• 1 topic per group (spectrum auctions; timber auctions; electricity markets; tradable permits; online auctions)
• 40 – 50 min presentation covering:
  o Introduction of the market/environment
  o The major players in the markets
  o Historical market structure (if applicable)
  o Unique features of the market
  o Benefits of an auction mechanism
• These can be prepared using one or more of the suggested readings for the relevant topic

Term research paper (40%)
• 10 – 12 pages discussing aspects of market design in any industry (more details to follow)

Course Schedule

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<tr>
<th>Class Dates</th>
<th>Topics</th>
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<tr>
<td>1. 08/28, 08/30</td>
<td>Course details; Introduction</td>
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<td>Market design</td>
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<td>2. 09/04, 09/06</td>
<td><strong>Auctions</strong></td>
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<td>Single-unit auctions</td>
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<td>3. 09/11, 09/13</td>
<td><strong>Auctions</strong></td>
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<td>Common value auctions</td>
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<td>4. 09/18, 09/20</td>
<td><strong>Auctions</strong></td>
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<td>Multi-unit auctions</td>
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<td>5. 09/25, 09/27</td>
<td><strong>Applications</strong></td>
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<td>Spectrum auctions <em>(Group Presentation 1)</em></td>
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<td>6. 10/02, 10/04</td>
<td><strong>Applications</strong></td>
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<td>Timber auctions <em>(Group Presentation 2)</em></td>
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<td>7. 10/09, 10/11*</td>
<td><strong>Applications</strong></td>
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<td>Electricity markets <em>(Group Presentation 3)</em></td>
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<td><em>MIDSEMESTER EXAM (10/11 IN CLASS)</em></td>
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<td>8. 10/16, 10/18</td>
<td><strong>Applications</strong></td>
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<td>Tradable permit auctions <em>(Group Presentation 4)</em></td>
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<td>9. 10/23, 10/25</td>
<td><strong>Applications</strong></td>
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<td>Online auctions – eBay <em>(Group Presentation 5)</em></td>
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<td>10. 10/30, 11/01</td>
<td><strong>Two-sided matching markets</strong></td>
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<td>Introduction</td>
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11. 11/06, 11/08  
Two-sided matching markets
National Resident Matching Program

12. 11/13, 11/15  
Two-sided matching markets
School choice

13. 11/20  
Two-sided matching markets
School choice

14. 11/27, 11/29  
Two-sided matching markets
Kidney exchange

15. 12/04, 12/06  
Two-sided matching markets
Kidney exchange; other topics in matching

TERM PAPER DUE 12/11 BY 5:00 PM

Suggested Readings & Materials (the * indicates highly recommended)

Week 1


Week 2

Krishna (2002). *Auction Theory*, Academic Press, Ch. 1, 2, 3


Week 3


Week 4


Week 5


Week 6


Week 7


Week 8


Gayer & Horowitz (2006), *Market-based Approaches to Environmental Regulation*, Ch. 1, 2

Week 9


**Weeks 10 and 11**


**Weeks 12 and 13**


**Weeks 14 and 15**


**University Attendance Policy:**
Excused absences include documented illness, deaths in the family and other documented crises, call to active military duty or jury duty, religious holy days, and official University activities. These absences will be accommodated in a way that does not arbitrarily penalize students who have a valid excuse. Consideration will also be given to students whose dependent children experience serious illness.

**Academic Honor Policy:**
The Florida State University Academic Honor Policy outlines the University’s expectations for the integrity of students’ academic work, the procedures for resolving alleged violations of those expectations, and the rights and responsibilities of students and faculty members throughout the process. Students are responsible for reading the Academic Honor Policy and for living up to their pledge to “. . . be honest and truthful and . . . [to] strive for personal and institutional integrity at Florida State University.” (Florida State University Academic Honor Policy, found at [http://dof.fsu.edu/honorpolicy.htm](http://dof.fsu.edu/honorpolicy.htm).)

**Americans With Disabilities Act:**
Students with disabilities needing academic accommodation should:
1. register with and provide documentation to the Student Disability Resource Center; and
2. bring a letter to the instructor indicating the need for accommodation and what type. This should be done during the first week of class.
This syllabus and other class materials are available in alternative format upon request.

For more information about services available to FSU students with disabilities, contact the:

Student Disability Resource Center
874 Traditions Way
108 Student Services Building
Florida State University
Tallahassee, FL 32306-4167
(850) 644-9566 (voice)
(850) 644-8504 (TDD)
sdrc@admin.fsu.edu
[http://www.disabilitycenter.fsu.edu/](http://www.disabilitycenter.fsu.edu/)

**Syllabus Change Policy**
"Except for changes that substantially affect implementation of the evaluation (grading) statement, this syllabus is a guide for the course and is subject to change with advance notice.”