Course Description: The purpose of this course is to provide you with an overview of experimental economics and behavioral economics. We will discuss the methods and the tools frequently used in economics experiments, as well as some of the key concepts, results, and contributions of experimental economics, behavioral economics, and neuroeconomics. We will explore the experimental design of previous experiments, and you will learn how to critically assess other experiments as well as design your own.

Prerequisites: ECNS 201S: Principles of Microeconomics.

Books:


- John Coates, *The Hour Between Dog and Wolf: How Risk Taking Transforms Us, Body and Mond*

Course Website: Moodle
**Grading Policy:** Your final course grade will be determined as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two Article Quasi-Referee Reports</td>
<td>20%</td>
</tr>
<tr>
<td>Research Proposal:</td>
<td>40%</td>
</tr>
<tr>
<td>Annotated Bibliography</td>
<td>10%</td>
</tr>
<tr>
<td>Research Question &amp; Motivation</td>
<td>7.5%</td>
</tr>
<tr>
<td>Literature Review</td>
<td>7.5%</td>
</tr>
<tr>
<td>Proposal</td>
<td>15%</td>
</tr>
<tr>
<td>Participation</td>
<td>5%</td>
</tr>
<tr>
<td>Completion of CITI Human Subjects Protection Course</td>
<td>5%</td>
</tr>
<tr>
<td>Midterm Exam (Wednesday, 03/15/17)</td>
<td>15%</td>
</tr>
<tr>
<td>Final Exam (Wednesday, 05/10/17 at 10:10 am)</td>
<td>15%</td>
</tr>
</tbody>
</table>

**Due Dates**

- Referee Reports: 1st review due by 02/8/2017; 2nd due by 03/1/2017
- Annotated Bibliography – 02/17/2017
- Research Question & Motivation – 03/10/2017
- Completion of Human Subjects Protection Course – 03/17/2017
- Proposal Literature Review – 03/31/2017
- Research Proposal – 04/28/2017

**Graduate-level credit:** Students taking this course for graduate-level credit will be required to present their research proposal in class during the last two weeks of the semester. The presentation will be worth 10% of the grade. The midterm weight will be reduced to 5% for these students.

**Exams:** **Do not take this class if you know that you cannot make one of the scheduled exams.** In the case of a missed midterm due to emergency situations, the student may be allowed to complete a make-up exam provided I am notified as soon as possible and verification of the emergency is provided to me by phone or email, no later than 24 hours after an exam.

**Students with Disabilities:** If you are a student with a disability who will require reasonable program modifications in this course, please meet with Disability Services for Students
in Lommasson 154 for assistance in developing a plan to address program modifications. If you are already working with Disability Services arrange to meet with me during my office hours to discuss reasonable modifications that may be necessary. For more information, visit the Disability Services website at http://www.umt.edu/disability.

**Drops and Credit/No-Credit**: The University has deadlines and policies applicable to dropping the course and changing your grading option. Request to make changes must be in accordance with University policy and deadlines. **In accordance with University policy, students taking the course credit/no credit must earn a D- or better to receive credit.**

**Academic Integrity**: All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University. All students need to be familiar with the Student Conduct Code. The Code is available for review online at http://life.umt.edu/vpsa/student_conduct.php.

**Outline of Course Material**: The following is a tentative schedule of lectures and associated readings. **Additional readings (and potentially topics) will be assigned throughout the course. The schedule should be viewed as tentative and may be subject to change throughout the term.**

**Part I: Introduction**

- Why do Experiments?
  - **Smith**, “Economics in the Laboratory”

- Institutional Review Board for the Protection of Human Subjects in Research

- Tools
  - Vecon Lab @ http://veconlab.econ.virginia.edu

- Market Experiments
- Pit Market
- Double-Auction

- Experiment: Vecon Lab, Double Auction

**Part II: Coordination, Bargaining, and Trust**

- Competition, Coordination, and Guessing (The Beauty Contest)
  - **Van Huyck et al.**, “Tacit Coordination Games, Strategic Uncertainty, and Coordination Failure,” *American Economic Review*, 1989
  - Experiment: Vecon Lab, Prisoner’s Dilemma, Coordination, and Beauty Contest

- The Dictator Game

- The Ultimatum Game
  - **Kagel, Chung & Moser**, “Fairness in Ultimatum Games with Asymmetric Information and Asymmetric Payoffs,” *Games and Economic Behavior*, 1996
  - Experiment: Vecon Lab, Ultimatum Game

- Trust, Reciprocity, and Principal-Agent Games
- Cox, “How to Identify Trust and Reciprocity,” *Games and Economic Behavior*, 2004
- Charness, Frechette, & Kagel, “How Robust is Laboratory Gift Exchange?,” *Experimental Economics*, 2004
- Experiment: Vecon Lab, Gift Exchange, Trust Game, Principal-Agent Game

- Randomized Strategies
  - Experiment: Vecon Lab, Matching Pennies and Battle of the Sexes

**Part III: Choice under Uncertainty—Expected Utility Theory and Prospect Theory**


- Experiment: Vecon Lab, Lottery Games

**Part IV: Behavioral Economics**

- Humans v. Econs
  - *Nudge*, p. 1-39

- What is Behavioral Economics?

- Preferences Revealed, Constructed, Discovered, or Learned?

- Heuristics and Biases

- The Affect of Emotions on Economic Decisions

- The Endowment Effect

- Dynamic Inconsistency and Commitment Mechanisms
  - Thaler & Sunstein, *Nudge*, p. 40-52

- The Hot-Hand and Gambler’s Fallacies

**Part V: Neuroeconomics**

- **Coates**, The Hour Between Dog and Wolf

**Part VI: Field Experiments**

Students who successfully complete this course will:

1. Understand experimental design

2. Understand why economists use economics experiments

3. Be aware of Institutional Review Board requirements for conducting experiments using human subjects

4. Be familiar with some of the common tools and tasks that experimental economists use to conduct experiments, such as, the dictator game, the ultimatum game, the beauty contests, and instruments to measure risk and competitive preferences

5. Be familiar with some important empirical regularities found in economics experiments, for example: risk aversion, ambiguity aversion, loss aversion, and unstable preferences.

6. Be able to effectively critique an economics experiment