**Experimental Economics**

**Peking University HSBC Business School**

**Instructor**: David Ong

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**Class Hours**: Mon & Thur 3:30-5:20pm

**Classroom**: C319

**Office Hours**: Mon-Thursday 4:00pm-5:00pm by appointment.

**Teaching Assistant**: Yu Yang

**1. Course Overview and Objectives**

This is a research orientated course. The goal of which is to generate papers that will get us into international conferences and good journals. It will be run largely like a workshop, where I will first lecture about the basics, then help you find some topic to work on for your presentations. The first presentation will be a literature review. The presentation of the literature review is a chance for you to check and complete your understanding. The 2nd will be a design of an experiment. There is no content restriction for possible presentation topics. There is a methodological restriction for your 2nd presentation: it must be a design of an experiment. Thus, you could present on a theoretical paper in finance for your 1st presentation, and then talk about your experimental design based upon that paper in your 2nd presentation.

The first part of this course will cover the basics of experimental design, which should be useful not just for the thesis, but also for designing randomized trials in marketing, management and finance. After the basics, if there is time before your presentations, I will cover some more subtle issues in experimental design in my own research. Among my lab experiments, these will include: strategic and nonstrategic altruism, gender differences in altruism and competitiveness, “competitive altruism”, competing through other people (tiger moms and tiger wives), and gender differences in the exercise of power. Among field experiments, these will include discrimination in China, choice overload, online price dispersion and insider trading. See the attached files “Research Interests in Order of Priority”.

### Prerequisites:

The course has no formal prerequisites.

**2. Course Work and Grading**

There will be no exams. 80% of the course grade will be based on presentations: 5% for the topic, abstract, and list of papers for bibliography, 35% for the literature review and 40% for the actual experimental design. You can work in groups, if we have enough people. The literature review part of the paper must be submitted to me the day before your presentation. They will then be distributed to the class. The papers on your literature review must be submitted 3 days before your presentation so that others may read it. Your design must be submitted 1 day before your presentation.

Since this is a research orientated course. The beginning of research is questioning and independent thinking. Your participation is important for your learning. To encourage you to speak up, I will give you points for questions and comments in class. About 20% will be based on class participation. 15% of this will likely be based upon quizzes to check for basic understanding of the material.

Class attendance and participation 5%

Midterm Quiz 15%

Presentation 1 35%

Presentation 2 40%

**3. Course Materials**

My lecture notes, which will be distributed before every lecture.

**4. Class Schedule or Topics Covered**

1. Why do we need (controlled) experiments?
2. Why learn experimental economics?
3. Why do experiments?
4. Establishing causation
5. Experiments and simulations
6. Experiments and surveys
7. Two kinds of experiments
8. Criticism of experimental economics
9. Formulating an experimental Idea
10. Theory in experiments
11. Description and theory
12. Comparative static results
13. Mechanics of experimental design
14. Reporting ex-post theories
15. Incorporating theory into experimental design
16. Experimental design
17. Instructions
18. Paying subjects
19. Between and within subject designs
20. Eliciting choice
21. Randomness
22. Validity
23. Randomization
24. Nuisance and focus variables
25. Losing independence
26. Checks on methodology
27. When surveys can be relied upon
28. Common pitfalls (Holt)
29. Psychological biases
30. Common drivers of behavior
31. Checklist for experimental design
32. Field experiments
33. Forms of causation
34. Inferences from observables
35. Common confusions
36. Ways of dealing with experimenter demand

**Attendance**

I’m not usually particular about attendance, since attention is what really matters, and it’s really the students responsibility if they want to learn. However, past experience suggests that if a student misses classes, the quality of their class participation will be poor, and their presentations will be a big waste of time for everyone. Therefore, attendance is mandatory. Materials covered during excused absence needs to be made up ; I will test you on what you missed. Any unexcused absence or more than 3 excused absences can result in dismissal from the course.

**Doing Well in the Course**

Research is risky, and the quality of an idea can be hard to judge at the beginning. Furthermore, it’s hard to come up with something interesting if it’s not fun. Thus, a lot of your grade will depend on things that merely require diligence ,e.g., attendance and class participation.

If your attend, participate, and make an honest effort with your presentations, then, you will definitely pass, and are likely to do ok, e.g., have a grade >80%. Two students who have failed in the past had poor attendance, did terrible presentations, and one even plagiarized.

This course is easy for students who are interested, hard for those who are not, but want an easy credit. Uninterested students tend to choose poorly matched topics, which is difficult to do for most people even if they were interested. They do not pay attention in class, believing that they can just memorize the notes for a simple quiz. But, the things in the quiz are easy to understand, but hard to memorize. They also think they can just ramble through presentations. This will get them into trouble, because I am intensely curious and very logical. I will ask many many questions until I feel I understand what you say.

**Rules for Course**

Here are things that I've come to expect from students in my classes. I'm sure that you know most of these things already, but I thought I would explain it all at once to avoid case by case corrections.

Turn off cell phones in class and during our office hours. Laptop computers must be closed. I will give you notes, so there is no need for them. You are required to pay attention in class regardless of whether I or a student is presenting. To encourage you to pay attention and participate, I will often ask you questions. Lack of attention will likely attract my attention and therefore, questions.

I will likely be quite free with office hours. However, I will ask that you make notes during and after discussion so I don’t have to repeat things, then to send me the notes through email so we have a permanent record.