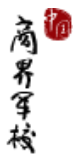# GEN501 (Finance) Research Methodology Module 2, 2021-2022

Course Information

Instructor: Steven Chong Xiao
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Office Hour: Wednesday & Thursday 2:00pm-4:00pm

Teaching Assistant:
Phone:
Email:

Classes:
Lectures: Monday 15:30-17:20
Venue: PHBS Building, Room

Course Website:
Course Management System

1. Course Description

1.1 Context

Course overview: This course surveys the common methodologies used in empirical finance research, with a focus on applications to corporate finance research. We will cover topics on how to raise a research question, develop hypotheses, perform a literature review, collect and process data, employ the right models to execute the analysis, and write up a paper. This course also provides students the ability to critically evaluate finance research.

Prerequisites: Students are required to have completed the prerequisite courses, as specified by PHBS.

1.2 Textbooks and Reading Materials
There is no required textbook for this course. Course materials including mostly journal articles and lecture notes will be disseminated throughout the course.

Reference book: "Mostly Harmless Econometrics" by Angrist and Pischke

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment (YES with details or NO)

1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Yes
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Yes
2. Our graduates will be skilled in team work and leadership.	2.1. Students will be able to lead and participate in group for projects, discussion, and presentation.	Yes
	2.2. Students will be able to apply leadership theories and related skills.	Yes
3. Our graduates will be trained in ethics.	3.1. In a case setting, students will use appropriate techniques to analyze business problems and identify the ethical aspects, provide a solution and defend it.	Yes, with respect to ethical practices in research
	3.2. Our students will practice ethics in the duration of the program.	Yes
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Yes
5. Our graduates will be skilled in problem-solving and critical thinking.	5.1. Our students will have a good understanding of fundamental theories in their fields.	Yes
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Yes
	5.3. Our students will demonstrate competency in critical thinking.	Yes

2.2 Course specific objectives

After the course, students should be able to:
1. Develop specific hypotheses and empirical predictions for a research question.
2. Design empirical models to test a proposed empirical prediction.
3. Understand the limitation of their empirical designs and possible alternative explanations from the empirical findings.
4. Position the findings in the related literature. Understand and articulate how the findings contribute to our understanding of the broader topic.

2.3 Assessment/Grading Details

Assessment	Weighting
Attendance	10%
Paper presentation and written report	30%
Coding assignments	60%
Total	**100%**

Attendance (10%): It is important that every student attends every class, arriving on time. Attendance will be taken at the **start** of every class, and anyone not present will be marked absent. If you **come late** or **leave early** the attendance will be marked as **absent**. Your first absence will be excused. But two or more absences, for any reason, may negatively impact your attendance grade.

Paper presentation and referee report (30%): I will assign students to groups and assign an academic article to each group. Starting from Session 3, there will be one to two group presentations in each class where the students to summarize the paper and provide a critical evaluation of the paper. The group will also submit a written report on the paper, which consists of no more than one

page for paper summary and no less than four pages for critical comments on the paper. The presentation and written report will each account for 15% of the final grade.

Coding assignments (60%): You will be asked to download data and write code to implement some of the tools taught in the course. These will include some basic empirical exercises, and replication of the main results existing papers. You are recommended to use Stata for the coding assignments. While I may do some demonstrations in the class, it is not my responsibility in this class to teach you how to code. Thus, you have to learn necessary coding skills by yourself to be able to implement the methodologies learnt in the class and do the coding assignments.

2.4 Academic Honesty and Plagiarism

It is important for a student's effort and credit to be recognized through class assessment. Credits earned for a student work due to efforts done by others are clearly unfair. Deliberate dishonesty is considered academic misconducts, which include plagiarism; cheating on assignments or examinations; engaging in unauthorized collaboration on academic work; taking, acquiring, or using test materials without faculty permission; submitting false or incomplete records of academic achievement; acting alone or in cooperation with another to falsify records or to obtain dishonestly grades, honors, awards, or professional endorsement; or altering, forging, or misusing a University academic record; or fabricating or falsifying of data, research procedures, or data analysis.

All assessments are subject to academic misconduct check. Misconduct check may include reproducing the assessment, providing a copy to another member of faculty, and/or communicate a copy of this assignment to the PHBS Discipline Committee. A suspected plagiarized document/assignment submitted to a plagiarism checking service may be kept in its database for future reference purpose.

Where violation is suspected, penalties will be implemented. The penalties for academic misconduct may include: deduction of honour points, a mark of zero on the assessment, a fail grade for the whole course, and reference of the matter to the Peking University Registrar.

For more information of plagiarism, please refer to *PHBS Student Handbook*.

3. Topics, Teaching and Assessment Schedule

Session	Date	Day of the week	Topics
1	22-Nov	1	Developing research questions and hypothesis
2	29-Nov	1	OLS
3	6-Dec	1	Causality and endogeneity
4	13-Dec	1	Panel data I
5	22-Dec	3	Panel data II
6	27-Dec	1	Instrumental variable
7	5-Jan	3	Natural experiment and difference-in-differences analysis
8	10-Jan	1	Natural experiment and difference-in-differences analysis
9	17-Jan	1	Matching