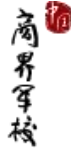




PHBS
北京大学汇丰商学院



Econ 588 Statistics Module 1, 2025

Course Information

Instructor: Lingxiao Zhao, PhD, Assistant Professor of Finance,

Peking University HSBC Business School

Office: PHBS Building, Room 613

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Office Hour: Tuesday & Friday 8:30-10:00am;
Wednesday 9:30-10:30am

Teaching Assistant: Xihe Yan, PhD candidate

Peking University HSBC Business School

Classes:

Lectures: Tuesday & Friday 10:30-12:20am

Venue: PHBS Building, Room

Course Website:

1. Course Description

1.1 Context

This course will cover the fundamentals of theoretical statistics. We will cover Chapters 1-10 from the textbook [W] All of Statistics: A Concise Course in Statistical Inference by Larry A. Wasserman plus some supplementary material. This course is excellent preparation for advanced work in statistics and machine learning.

1.2 Textbooks and Reading Materials

[W] All of Statistics: A Concise Course in Statistical Inference by Larry A. Wasserman

[CB] Statistical Inference by George Casella and Roger L. Berger

2. Learning Outcomes

2.1 Intended Learning Outcomes

2.2 Course specific objectives

2.3 Assessment/Grading Details

Attendance: 10%
Homework: 10%
Midterm Exam: 35%
Final Exam: 45%

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.

AI tools requirements:

Using AI tools to complete assignments or assessments without the approval of the course instructor will be regarded as an act of academic dishonesty. Depending on the severity of the situation, penalties will be implemented in accordance with the provisions of the Peking University Graduate Student Handbook.

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

3. Topics, Teaching and Assessment Schedule

Note: All schedules are tentative.

Week 1-5: Probability Theory

[W] Ch1-5
[CB] Ch2.3 (moment generating functions) Ch5.5-5.6 (generating random sample)

Week 5-9: Statistical Inference

[W] Ch6: Intro
[W] Ch9 Parametric Inference [CB] Ch6 Point Estimation
[W] Ch10 and [CB] Ch7 Hypothesis Testing
If time allowed: [W] Ch11 (Bayes)

Midterm Exam: (TBD)

Final Exam: Exam scheduled by MA and PHD office 114