Course Information

Instructor: Jake Zhao

Office: PHBS 653

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Office Hours: Thursday, 3:30pm – 5:30pm, or by appointment

Teaching Assistant:

T.B.A.

Classes:

Lectures: Tuesday and Friday, 10:30am – 12:20pm

Room: PHBS 225

1. Course Description

1.1 Context

Course overview:

This course is structured to provide a rigorous introduction to the study of Python and programming techniques in general. Various applications of the Python programming language will be explored. There will be some flexibility of the curriculum based on student background.

Prerequisites:

Calculus, linear algebra, and statistics will be helpful.

1.2 Textbooks and Reading Materials

Required text:

Lecture notes and supplemental materials will be provided to students through the course management system (Course name: Python, Password: anaconda).

Recommended text:

The QuantEcon website can be used as a reference.

2. Learning Outcomes

2.1 Intended Learning Outcomes

Learning Goals	Objectives	Assessment
1. Our graduates will be effective communicators.	1.1. Our students will produce quality business and research-oriented documents.	Problem sets
	1.2. Students are able to professionally present their ideas and also logically explain and defend their argument.	Problem sets, exams
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.	Class participation
4. Our graduates will have a global perspective.	4.1. Students will have an international exposure.	Lectures
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.	Lectures, problem sets, exams
	5.2. Our students will be prepared to face problems in various business settings and find solutions.	Lectures, problem sets, exams
	5.3. Our students will demonstrate competency in critical thinking.	Lectures, problem sets, exams

2.2 Course specific objectives

This course is meant to provide a solid foundation for and develop students' interest in the further application of the python programming language. In addition, the analytical and computational methods learned in this class may aid students in thesis writing and future research in various topics related to economics and finance.

2.3 Assessment/Grading Details

Component	Weight
Problem sets	10%
Midterm	40%
Final	50%

Homework: There will be multiple problem sets which will be graded with coarse granularity and mostly based on effort. Students are permitted to work in small groups but each person must turn in separate solutions.

Midterm: The midterm date will be announced at a later date with at least a one-week notice.

Final: The final is scheduled on Tuesday, November 12 at 9-11am. The final is cumulative but will focus on the second half of the course.

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

Weeks 1-2 – Introduction to Python

Weeks 3-4 – Applications to economics and finance

Weeks 5-6 – General applications of Python

Week 7 – Numerical techniques

Weeks 8-9 – Estimation techniques