



THE HONG KONG
POLYTECHNIC UNIVERSITY
香港理工大學



PolyU 理大商學院
Business School
Innovation-driven Education and Scholarship

School of
**ACCOUNTING
& FINANCE**
會計及金融學院

Week 1: Course Introduction and Schedule

AF3214 Python Programming for Accounting and Finance

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School of Accounting and Finance
The Hong Kong Polytechnic University

R508, 8:30 am – 11:20 am, Wednesdays, Semester 2, AY 2024-25

**This course is not solely about coding.
It's about your decision mentality.
Coding helps you to make decisions more
effectively.**

Course Related

- **Best way of contact:** vincent.zhuang@polyu.edu.hk
- **Office hour:** by appointment (on-demand Zoom/at my office)
- **Teaching Assistants:**
 - Miss Qile Zhu (katherine-qile.zhu@polyu.edu.hk)
 - Miss Yingyu Zhong (ying-yu.zhong@polyu.edu.hk)
- **Course materials:** check Blackboard and emails from time to time
- **Assessments:**
 - 70% Continuous Assessment:
 - ☐ 30% Quiz, 20% Assignment, 20% Midterm.
 - 30% Final Exam:
 - ☐ One laptop & one AR approved calculator are allowed.
 - All assessments are Open Book Open Computer and Open Internet.
 - **Using generative AI tools is generally allowed under university regulations.**
Honour Declaration required for assignment, midterm, and final exam.

Course Related - Cont'd

- **70% Continuous Assessment:**

- **No** attendance check. **No** bonus points unless otherwise stated.
- Quiz 30%:
 - **One** in-class quiz from any week of Week 6–Week 13.
 - Announcement will be made *1 day before*. No make-up quiz whatsoever.
 - Individual, no group (*60 mins*).
 - Quiz type: paper **and online mix**; some amount of coding is expected.
- Individual Assignment 20%:
 - **One** assignment, release in week 7-8, due in Week 12.
 - **Selected** assignments will be invited for presentations in Week 13 (*bonus*).
- Midterm 20%:
 - All requirements same as the final exam.
 - In week **5**, two hours.
 - Cover **everything** from Week 1 to Week 4
 - Late assessment will be granted case-by-case after document verification by AF Associate Head (Teaching) and your BBA programme director.

Course Related - Cont'd

• 30% Final Exam:

- No cell phone of any kind. No smart watch, iPad, or earphone of any kind.
- No WeChat, WhatsApp, Telegram, Messenger, Signal, or any other instant messaging apps during the final exam. No Email.
- Open Book Open Computer and Open Internet.
- Cover everything from Week 1 to Week 13.
- Three hours.
- Paper based.
- One laptop and One AR approved calculator are allowed.
- Please bring your own power adaptor. It's your own responsibility to make sure your laptop can operate normally during the entire final exam.
- Late assessment will be granted case-by-case after document verification by AF Associate Head (Teaching) and your BBA programme director.

Course Related - Cont'd

- **Textbooks (Recommended but not required):**

1. *Algorithmic Trading and DMA: An introduction to direct access trading strategies*, Latest Edition, Barry Johnson, 4Myeloma Press.
2. *How to Think Like a Computer Scientist-Learning with Python*, by Allen Downey, Jeff Elkner and Chris Meyers. Green Tea Press
(<https://greenteapress.com/wp/learning-with-python/>)
3. *Python for Finance: Apply powerful finance models and quantitative analysis with Python*, 2nd Edition, by Yuxing Yan

- **Computer, Zoom, Eating:**

- Each student is *recommended* to bring *his/her* laptop to the classroom. A Python demo session will be arranged *after* selected lectures, if possible.
- No concurrent Zoom session. Recordings will be uploaded after each class.
- having breakfast for a morning class is reasonable, but...**please be considerate for everyone's health and hygiene:**
- **No PolyU canteen food in the classroom, especially from VA or Commu** 🤢

Course Related - Cont'd

- **Honor Code:**

It is your responsibility to understand the honor code. To avoid any confusion, below are several aspects I want to emphasize:

- You are not allowed to collaborate on individual quizzes and exams.
- Regarding group work: You must have a full understanding of any material submitted with your name on it. It is an honor code violation if you are not completely familiar with the contents of a document bearing your name.
- Individual work must be based on your own understanding at the time of submission. I encourage you to work in groups, but individual work you submit must be your own.
- You must cite your sources. In written work you must
 - provide complete citations for your sources, if any
 - place in quotation marks any non-trivial portion that is taken directly from a source
 - offer citation for any graphs or tables that are taken from another source.

Failure to adhere to these standards is a potential violation of the honor code and may be deemed plagiarism.

One-minute video: <https://www.polyu.edu.hk/ar/academic-integrity/what-is/>

Please refer to The Office of General University Requirements (OGUR)'s webpage for the Academic Integrity: <https://www.polyu.edu.hk/ogur/academic-integrity/>

Schedule

Weeks	Dates (Wednesdays) 8:30am – 11:20am	Topics (<i>tentative, subject to change according to progress</i>)
Week 1	15 January 2025	Course Introduction; Assessment; Topics; Q&A; Python bootcamp 1
Week 2	22 January 2025	Python bootcamp 2
Week *	29 January 2025	No Class due to Lunar New Year Break
Week 3	5 February 2025	Python bootcamp 3
Week 4	12 February 2025	Python bootcamp 4; Introduction to Database Systems
Week 5	19 February 2025	Midterm
Week 6	26 February 2025	Introduction to Scientific Computing with Python; Web Protocols, Rest APIs, Access Data on the Internet with Python;
Week 7	5 March 2025	Market Microstructure, Algo Trading, and Direct Market Access [<i>take home</i>] Risk Measures and Measuring Algorithms Performance with Python 1
Week 8	12 March 2025	Risk Measures and Measuring Algorithms Performance with Python 2
Week 9	19 March 2025	Machine Learning in Accounting and Finance
Week 10	26 March 2025	Textual Analysis & LLM in Accounting and Finance 1
Week 11	2 April 2025	Textual Analysis & LLM in Accounting and Finance 2 Data Ethics
Week 12	9 April 2025	Selected Lecture: Poker Economics <i>or</i> Tokenization
Week 13	16 April 2025	Selected Lecture cont'd; Assignment Presentation; Final Exam Review

One In-class Quiz from Week 6–Week 13.

Now you can drop the
course if you have to.

Q&A