The Hong Kong University of Science and Technology (Guangzhou)

UG Course Syllabus

[Course Title] **Economic Theory for FinTech**

[Course Code] **FTEC3310**

[No. of Credits] **3**

[Any pre-/co-requisites] **UFUG 1103 OR UFUG 1106; UFUG 2103**

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Office Hours: Thursdays 16:50 - 17:50 and 20:50 – 21:50 @ W1 408 (Please check the availability and book in KLMS before coming)

2.Lecture Day, Time, and Venue

Th 06:00PM - 08:50PM Rm 102, W1

【The above information is subject to the latest updates on Canvas.】

Course Description

This course offers a rigorous and analytical exploration of fundamental ideas in economics. It emphasizes the use of formal reasoning and quantitative tools to understand economic behavior, market outcomes, and broader economic dynamics. Special attention is given to the evolving role of financial technology and its implications for markets, institutions, and policy.

Intended Learning Outcomes (ILOs)

By the end of the course, students will be able to:

1. Explain core economic theories relevant to FinTech.
2. Apply analytical tools to evaluate technology's impact on markets and institutions.
3. Analyze FinTech through an economic lens.
4. Assess real-world cases using theoretical frameworks.
5. Formulate and present independent research with clarity and rigor.
6. Provide constructive feedback on peers' work.

Assessment and Grading

Assessments:

Assessment Task	Contribution to Overall Course grade (%)	Due date
3 Problem Sets	25%	Announced on Canvas
Individual Project	25%	Week 9
Presentation on the Project	15%	Last two weeks
Discussion on Another Student's Project	15%	Last two weeks
Quiz	20%	Week 7

Mapping of Course ILOs to Assessment Tasks

Assessed Task	Mapped ILOs
Problem Sets	ILO1, ILO2, ILO3
Project	ILO2, ILO3, ILO4, ILO5
Presentation	ILO3, ILO5
Discussion	ILO6
Quiz	ILO1, ILO4

Final Grade Descriptors:

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	Consistently performing at an exceptionally high standard for this level. Has a deep understanding of the knowledge and skills associated with this subject.
B	Good Performance	Consistently performing at a high standard for this level. Has a strong understanding of the knowledge and skills associated with this subject.
C	Satisfactory Performance	Working at a good standard for this level. Gaining many of the knowledge and skills associated with this subject.
D	Marginal Pass	Working at a fair standard for this level. Gaining some of the knowledge and skills associated with this subject.
F	Fail	Is currently struggling to master the core skills and understanding associated with this subject at this level.

Course AI Policy

Students are encouraged to use **AI tools** (e.g., DeepSeek, ChatGPT, coding assistants, or other generative AI platforms) to support their learning in this course. Appropriate uses include brainstorming research ideas, drafting project outlines, checking mathematical reasoning, or improving clarity of written work.

However, AI is a **supplementary tool**, not a substitute for your own understanding and analysis. Students are responsible for verifying the accuracy of AI-generated content and for demonstrating independent, critical engagement with the course material.

Important: AI use is **not permitted** on the in-class **quiz (Week 7)**, which must be completed individually without external assistance.

Communication and Feedback

We use Canvas to release assessment marks and most feedback.

Resubmission Policy

None.

Required Texts and Materials

No mandatory texts or materials. Recommended references are listed below.

Agrawal, A., Gans, J. and Goldfarb, A. (2022). *Power and Prediction: The Disruptive Economics of Artificial Intelligence*. Boston, MA: Harvard Business Review Press.

- *Explores how advances in artificial intelligence reshape economic decision-making and market dynamics.*

Greenbaum, S.I., Thakor, A.V. and Boot, A.W.A. (2019). *Contemporary Financial Intermediation.* 4th edn. London: Academic Press.

- *Provides a comprehensive overview of modern financial intermediation.*

Harvey, C.R., Ramachandran, A. and Santoro, J. (2021). *DeFi and the Future of Finance*. Hoboken, NJ: John Wiley & Sons.

- *Provides an accessible yet rigorous overview of decentralized finance.*

Kreps, D.M. (2019). *Microeconomics for Managers.* 2nd edn. Princeton, NJ: Princeton University Press.

- *Provides a rigorous and accessible treatment of economic theory.*

Mankiw, N.G. (2024). *Principles of Economics.* 10th edn. Boston, MA: Cengage Learning.

- *Provides a comprehensive introduction to fundamental economic concepts.*

Russell, S. and Norvig, P. (2021). *Artificial Intelligence: A Modern Approach.* 4th edn. Boston, MA: Pearson.

- *Provides a comprehensive introduction to the theory and practice of intelligent systems.*

Academic Integrity

Students are expected to adhere to the university's academic integrity policy. Students are expected to uphold HKUST(GZ)'s Academic Honor Code and to maintain the highest standards of academic integrity. The University has zero tolerance of academic misconduct. Please refer to Regulations for Academic Integrity and Student Conduct for the University's definition of plagiarism and ways to avoid cheating and plagiarism.