The Hong Kong University of Science and Technology

UG Course Syllabus Template

E-Commerce Technology and Applications

IEDA 3302

3 credits

Pre-requisite: COMP 1021 OR COMP 1022P OR COMP 1022Q

Schedule: WeFr 01:30PM - 02:50PM

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Office Hours: Open, by appointment

Course Description

A significant portion of modern commercial activity is dependent on electronic commerce. In this course, students will gain familiarity with common e-commerce business models and get an understanding of how and when they are used. The course will cover important enabling technologies, including basics of internet communication, security, clouds, as well as low level technology enabling functions such as localization and tracking. Several important applications in various sectors of industry, including visualization and analysis as well as ELogistics will be introduced.

Intended Learning Outcomes (ILOs)

By the end of this course, students should be able to:

1	Understand the different e-commerce business models
2	Understand the functioning and implementation of internet security
3	Understand the basics of web crawling for data collection
4	Be able to use simple techniques for visualization
5	Understand the basics of regression and its use in Ecommerce and analysis
6	Understand fundamental analytics tools for Ecommerce firms, including clustering, classification.

Assessment and Grading

This course will be assessed using criterion-referencing and grades will not be assigned using a curve. Detailed rubrics for each assignment are provided below, outlining the criteria used for evaluation.

Assessments:

HW: 10%, Exam 1: 30%, Project: 30% (25% for work + 5% for presentation), Exam 2: 30%

Assessment Task	Contribution to Overall Course grade (%)	Due date
Exam 1	30%	1/11/2024 *
HW	10%	Every 2 weeks *
Group Project	30%	2/12/2024 *
Exam 2	30%	12/12/2024

^{*} Assessment marks for individual assessed tasks will be released within two weeks of the due date.

Mapping of Course ILOs to Assessment Tasks

[add to/delete table as appropriate]

Assessed Task	Mapped ILOs	Explanation
HW	ILO 1-6	Homework will be assigned for all topics along the term, and all of these will be assessed. They cover all ILOs
Exam 1	ILO-1, ILO 2, ILO-4	The topics covered in the first 6 weeks will be covered in Exam 1
Project	ILO-1 ~ ILO-6	Projects require using all the tools taught in class.
Exam 2	ILO-3, ILO-5, ILO-6	Topics covered in class after the first 6 weeks will be covered by Exam 2.

Grading Rubrics

[Detailed rubrics for each assignment will be provided. These rubrics clearly outline the criteria used for evaluation. Students can refer to these rubrics to understand how their work will be assessed.]

Final Grade Descriptors:

[As appropriate to the course and aligned with university standards]

Grades	Short Description	Elaboration on subject grading description
А	Excellent Performance	Demonstrates a comprehensive grasp of all topics, and can solve real-world problems using python programming and involving a subset of the tools taught in class. Can work well in a team.
В	Good Performance Shows good knowledge and understanding of the major topics and can solve some simpler problems, making sound logical conclusions.	
С	Shows some understanding of all topics at a basic level. Can solve moderately complex problems by programming workable solutions, with some collaborative help or guidance.	

D	Marginal Pass	Has an understanding of the key topics and tools, can understand when to use the tool if facing typical problems; can explain at a basic level the results of the solvers.
F Fail		Was unable to demonstrate insufficient understanding of the subject matter and lacks the necessary problem-solving skills via the exams and project.

Course Al Policy

Allowed to use any resource available of the internet, including copilot, chatGPT, Kaggle Colab etc; all sources must be provided as references.

Communication and Feedback

Assessment marks for individual assessed tasks will be communicated via Canvas within two weeks of submission. Feedback on assignments will include [specific details, e.g., strengths, areas for improvement]. Students who have further questions about the feedback including marks should consult the instructor within five working days after the feedback is received.

Resubmission Policy

Late HW: 10% deduction per day of delay, until up to 7 days after due date. After that, HW is graded but not scored.

Resubmission not allowed in general.

Required Texts and Materials

All materials required will be provided as notes and references. There is no text book.

Academic Integrity

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