CIVL 1100 – Discovering Civil and Environmental Engineering

School:	**School of Engineering**
Subject Area:	**Civil and Environmental Engineering**
Course Credit:	**3**
Instructor:	**LAM Kit Ming, LEUNG Anthony, LO Irene Man Chi**
Pre-requisite/co-requisite:	**Nil**

Notes:

- The syllabi provided here is for reference only and may be subject to changes and adjustments as determined by the course instructors.

The Hong Kong University of Science and Technology

UG Course Syllabus

Course Title: Discovering Civil and Environmental Engineering

Course Code: CIVl1100

No. of Credits: 3

Any pre-/co-requisites: N/A

Name: Professor Kit Ming Lam, Professor Irene Lo, Professor Anthony Leung (course coordinator)

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Office Hours: 9 – 10 am (Monday), Room 3582

Course Description

A general overview of civil and environmental engineering, infrastructure development and engineering ethics is provided. The course includes both lectures and laboratory sessions, where the laboratory sessions are primarily directed to students who require the development of feasible conceptual solutions for the analysis and design of the basic problems in structural, geotechnical and environmental engineering.

Intended Learning Outcomes (ILOs)

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

1. Demonstrate a broad overview of civil and environmental engineering, including details of their major disciplines, importance and challenges through lectures
2. Demonstrate an overview of history and future of infrastructure developments
3. Demonstrate an understanding of the role of civil and environmental engineers in our society and the fundamental principle of engineering ethics and civil engineers' obligations towards the public, employers and the profession
4. Demonstrate knowledge of basic physical concepts in structural, geotechnical and environmental engineering
5. Identify and analyze of the basic problems associated with the design of structural, geotechnical and environmental engineering
6. Develop feasible conceptual solutions for the analysis of the basic problems in structural, geotechnical and environmental engineering
7. Acquire and apply skills in written presentation of scientific and technical information

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:

Assessment Task	Contribution to Overall Course grade (%)	Due date
Assignments	18%	TBD
Group laboratory report	24%	TBD
Final examination	58%	To be assigned by ARO

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

Mapping of Course ILOs to Assessment Tasks

Assessed Task	Mapped ILOs	Explanation
Assignment	ILO1, ILO4, ILO5, ILO6	This assignment assesses students' understanding of the broad overview of civil engineering, in particular geotechnical engineering (ILO 1), basic concepts in soil mechanics (ILO4), the use of the basic concept to conduct slope design (ILO5) and develop conceptual solutions to land reclamation problems (ILO6).
Laboratory report	ILO4, ILO5, ILO7	This laboratory report assesses students' abilities to understand basic concepts in soil dynamics (ILO4) and the use of the basic concept to conduct engineering design against liquefaction problems (ILO5). It also assesses students' skills in written presentation of scientific and technical information (ILO7)
Final examination	ILO1, ILO2, ILO3, ILO4, ILO5, ILO6	The final examination will holistically evaluate students' general knowledge of civil & structural, environmental and geotechnical engineering concepts in the applications covered in the lectures.

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:

Grades	Short Description	Elaboration on subject grading description
A	Excellent Performance	Demonstrates a comprehensive grasp of subject matter, expertise in problem-solving, and significant creativity in thinking. Exhibits a high capacity for scholarship and collaboration, going beyond core requirements to achieve learning goals.
B	Good Performance	Shows good knowledge and understanding of the main subject matter, competence in problem-solving, and the ability to analyze

		and evaluate issues. Displays high motivation to learn and the ability to work effectively with others.
C	Satisfactory Performance	Possesses adequate knowledge of core subject matter, competence in dealing with familiar problems, and some capacity for analysis and critical thinking. Shows persistence and effort to achieve broadly defined learning goals.
D	Marginal Pass	Has threshold knowledge of core subject matter, potential to achieve key professional skills, and the ability to make basic judgments. Benefits from the course and has the potential to develop in the discipline.
F	Fail	Demonstrates insufficient understanding of the subject matter and lacks the necessary problem-solving skills. Shows limited ability to think critically or analytically and exhibits minimal effort towards achieving learning goals. Does not meet the threshold requirements for professional practice or development in the discipline.

Course AI Policy

Students are prohibited from using generative artificial intelligence to produce any materials or content related to the assessment task. Any use of such tool will lead to zero mark of the submission.

Communication and Feedback

Assessment marks for individual assessed tasks will be communicated via Canvas within two weeks of submission. Feedback on assignments will include the mistake made in the submission. Students who have further questions about the feedback including marks should consult the instructor and teaching assistants within five working days after the feedback is received.

Resubmission Policy

Students should submit all the assignments and laboratory reports according to the specified deadlines. Penalty of 20% mark reduction per day will be applied for any late submission. The penalty may be waived, should prior approval by the course instructors be sought BEFORE the submission deadlines.

Required Texts and Materials

N/A

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.