

The Hong Kong University of Science and Technology

UG Course Syllabus

[Course Title] **Fluid Mechanics**

[Course Code] **CIVL 2510**

[No. of Credits] 3 Credits

[Pre-requisites] MATH 2011

[Co-requisites] CIVL 2110

Name: Mohamed S Ghidaoui

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Office Hours: 3:30-4:30 pm, Monday, Room 3569, Lift 27/28. Also, Ghidaoui will lead all key tutorials related to problem sets and exams.

Course Description

An introduction to the mechanics of fluids, including fluid statics, kinematics and fundamental equations of fluid flow, laminar and turbulent flow, boundary layers and applications in the design of hydraulic structures.

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:

Lab reports 16%: evaluates students' experimental skills, participation in the lab, and report writing abilities.

Homework assignments 20%: assess students' understanding of fundamental principles, their application and ability to justify assumptions.

Mid-term (24%) and Final exams (40%): evaluate students' ability to apply the knowledge gained in class to solve engineering problems, make and justify assumptions. Students may also be presented with a problem solution and asked to assess its validity, the assumptions made, and suggest improvements or corrections to enhance the solution.

Texts and Materials

Frank M White, Fluid Mechanics, (An SI Units Edition is preferred)

Lecture notes provided by M S Ghidaoui.

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.