

The Hong Kong University of Science and Technology

UG Course Syllabus Template

[Foundation of Mathematics]

[Math 2001]

[No. of credit: 2]

[No pre-requisites]

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Office Hours: [16:30-17:30 Wednesday, Lo Ka Chung Building, IAS, room 2022]

Course Description

[The course covers Sets theory, number theory, Analysis over the real number, algebra, topology.]

Intended Learning Outcomes (ILOs)

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

1. Make clear mathematical statements. Write rigorous proof of Mathematical problem.
2. Have a rough understanding of the topics of modern Mathematics.
3. Have the ability to use Latex to write mathematical articles.
4. Be able to give a presentation about Mathematics. Explain Mathematical subjects clearly.

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:

[List specific assessed tasks, exams, quizzes, their weightage, and due dates; perhaps, add a summary table as below, to precede the details for each assessment.]

| Assessment Task | Contribution to Overall Course grade (%) | Due date |
|-------------------|--|----------|
| Mid-Term | No | |
| Group project | 20% | |
| Exercise | 40% | |
| Final examination | 40% | |

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

Mapping of Course ILOs to Assessment Tasks

No

Grading Rubrics

[Exercise + final exam + group project. Average of the Exercise scores plus the final scores Plus the group project. Determine the rank by scores.]

Final Grade Descriptors:

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

| Grades | Short Description | Elaboration on subject grading description |
|--------|--------------------------|---|
| A | Excellent Performance | [Example: 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 | [Example: 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 | [Example: 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 | [Example: 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 | [Example: 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

[No]

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

[On time.]

Required Texts and Materials

[Lecture by the instructor.]

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.

[Optional] Additional Resources

[No]