CIS 160 Summer 2018

Mathematical Foundations of Computer Science

Course Information

Instructors:

• Professor: Max Mintz
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• Teaching Assistants: TBA
  - Offices: TBA
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Class Schedule:

• Lectures: Monday 13:00-15:00, Tuesday 13:00-15:00, Wednesday 14:00-15:00, Thursday 13:00-15:00, & Friday 14:00-15:00; Room: DRLB A6

• Preliminary Exams, Quizzes, and Lectures: Wednesday 13:00-14:00, & Friday 13:00-14:00; Room: DRLB A6

Preliminary & Final Examination Schedule:

• Preliminary Examination I, Wednesday 6 June, 13:00-13:50, DRLB A6

• Preliminary Examination II, Wednesday 20 June, 13:00-13:50, DRLB A6

• Final Examination (Parts I & II), Wednesday 27 June, 13:00-15:00, DRLB A6

• NB: Makeup preliminary & final examinations will only be given for verified medical reasons. All makeup examinations are oral.
Weekly Quizzes:

There will be twice-weekly written quizzes lasting 10-15 minutes. The quizzes are scheduled on Wednesdays and Fridays in recitation on the days where there are no preliminary or final examinations. The purpose of the quizzes is to aid students in keeping current on the homework and lecture material. The subject material of the quizzes will be taken from the homework assignments and lectures. The tentative quiz schedule is: 23 May, 25 May, 30 May, 1 June, 8 June, 13 June, 15 June, & 22 June. No makeup quizzes will be given.

Examination Policy:

- NB: All preliminary examinations and quizzes are closed-book examinations. No written notes, personal assistants, or calculators are permitted.

Written Assignments Policy:

- Written assignments (problem sets) will be given weekly during lecture and recitation. The problems will vary in difficulty and will be designed to reinforce and augment the material in the lectures and texts.
  - Assignments include: analytical work, derivations, proofs, algorithms, and computer program implementations.

- The assignments will be collected and graded. Late submissions will not be accepted.

- Problem set solutions may be discussed during lectures.

- You are permitted to discuss the homework problems with other class members with the following limitations. These discussions are to be limited to high-level concepts. You are not permitted to copy or share written work or implementation details. It is understood that the work that you submit may be based on these discussions but has not been either copied directly from another student’s paper nor is it, in part or in whole, the product of impermissible collaboration.

- All written work must be neat, well-organized, and include sufficient explanations in the delineation of the solutions. Messy, poorly organized, or illegible material will not be graded.

- Each homework set will be graded based on the following grade levels: E (excellent), S (satisfactory), U (unsatisfactory), NC (no credit).
Grading Policy:

- The final course grade will be based entirely on the two preliminary examinations, the aggregate quiz scores, the comprehensive two-hour final examination, and the homework assignments. No exemptions from examinations will be made. The final grade will be based on the following units: (1) the eight quizzes; (2) prelim I; (3) prelim II; (4) the final exam, part I; and (5) the final exam, part II. The sum of these five components will constitute 90% of the final course grade. The remaining 10% of the final course grade will be based on the aggregate homework scores.

Texts:

- In lieu of a required text, Lecture Notes will be distributed in class throughout the semester.

CIS 160 Course Topics:

1. Number Theory
2. Set Theory
3. Relations
4. Functions
5. Combinatorics
6. Graph Theory