

## Badawi-MTH213-Syllabus

MTH 213: Fall 2024, MW: 11—12:15, Nab 09, TR: 11—12:15, Nab 09

Ayman Badawi, and Office Hours: Nab 262, from 13 to 14:15 MW, and T from 14:30 to 15:30. Others are available by appointment. Email me at [abadawi@aus.edu](mailto:abadawi@aus.edu).

Weekly quizzes (every Wed, 20%), Exam one (25%, October 14(M, W) and Oct 16 (T, R), in class), Exam 2(25%, November 25(M, W) and November 27 (T, R), in class), and Final (30%, TBA): no make-up quizzes or exams. The lowest score on a quiz will be dropped.

We will cover basic number theory, logic, direct proof, proof by contradiction, proof by induction, counting, pigeonhole principle, the complexity of codes, sets, functions, relations (partial and equivalence), and basic graph theory.

**Required:** Badawi- Class- Notes, materials on I-Learn, essential old quizzes, notes, and exams on the MTH 213 webpage: <https://ayman-badawi.com/MTH213.html> . See the official syllabus for optional sources.

$A \geq 93$ ,  $89 \leq A^- < 93$ ,  $86 \leq B^+ < 89$ ,  $81 \leq B < 86$ ,  $78 \leq B^- < 81$ ,  $73 \leq C^+ < 78$ ,

$68 \leq C < 73$ ,  $62 \leq C^- < 68$ ,  $50 \leq D < 62$ ,  $F < 50$ .

**It is considered an academic integrity violation to represent the output of a generative artificial intelligence tool as your own work.**