Math 3336 – 23034 (Fall 2018)  
Discrete Mathematics  
Course Syllabus

Instructor: Eric Platt  
Email: eplatt@math.uh.edu  
Course Homepage: https://www.math.uh.edu/~eplatt/  
Lecture Location: SEC 101  
Lecture Time: Tuesday and Thursday 11:30AM to 1:00PM  
Office Location: PGH 611  
Office Hours: Monday through Thursday 1:30PM to 4:00PM, or by appointment

Prerequisites: MATH 2331, or MATH 2431 or equivalent  

Course Description  
This course will provide a rigorous treatment of logic, proofs, set theory, functions, and a collection of other fields built upon this foundation such as the study of algorithms.

Students enrolled in the course are expected to attend lectures, complete assignments, and take the exams.

Course Policies  
The following policies may be amended in the future, if so they will be announced in advance in lecture and on the website. Additional information may be contained and updated on the website.

Grading  
• Weekly Homework 20%  
• 3 Midterm exams 20% each  
• Final Exam 20%

Assignments  
Homework assignments will be assigned on the Thursday of the week, and due on the next Thursday unless otherwise specified.

Homework assignments will be primarily composed of problems from the text. Assignments will be graded by completion and selected problems. Illegible work will be skipped and not counted.

Assignments may be worked on in groups, but the work should demonstrate the understanding of the individual student.

Late assignments will not be accepted without prior notice via email to the instructor with an acceptable explanation. Extensions may at times be given for the due dates of assignments.

The lowest 2 assignment scores will be dropped. This will cover the occasional absence or other circumstances.

Exams  
• Exam #1: September 27th  
• Exam #2: November 1st  
• Exam #3: November 29th  
• Final Exam: December 7th

The score from the final exam can replace that of the lowest scored midterm if higher.
**Additional Policies**

Students are expected to attend lectures as much as possible. If you cannot attend for two or more consecutive lectures please contact me.

An incomplete grade, or a make up for an exam will only be offered under limited circumstances such as medical emergencies.

At the end of the course if your grade is currently at a B+ or higher you may visit me in my office and discuss the possibility of increasing the grade by one step. This will depend on if you have consistently attended lectures and can demonstrate mastery of certain material.

If there are any concerns please email me or visit me during my office hours.

**Email Communication**

It is expected that students check their email sufficiently often. Please be professional in the composition of emails.

Please see [https://www.math.uh.edu/~tomforde/Email-Etiquette.html](https://www.math.uh.edu/~tomforde/Email-Etiquette.html)

**Honor Policy**

All students of the class are expected to adhere to the Academic Honesty Policy as described in the UH Undergraduate Catalog.

Cases of academic dishonesty will result in zero scores for the given cases, as well as being reported to the department.

Academic dishonesty includes, but is not limited to:

*Plagiarism; Cheating; Unauthorized group work; Fabrication, Falsification, and Misrepresentation; Stealing and Abuse of Academic Materials; Complicity in Academic Dishonesty; Academic Misconduct.*
Course Topics List

Due to how the course progresses the following outline may change.

Chapter 1: The Foundations: Logic and Proofs
Chapter 2: Basic Structures: Sets, Functions, Sequences, Sums, and Matrices
     Sections 2.1-2.5

- First Exam -

Chapter 3: Algorithms
     Sections 3.1-3.3
Chapter 4: Number Theory and Cryptography
     Sections 4.1-4.4, 4.6
Chapter 5: Inductions and Recursion
     Sections 5.1-5.4
Chapter 6: The Basics of Counting
     Sections 6.1-6.5

- Second Exam -

Chapter 8: Advanced Counting Techniques
     Sections 8.1-8.2
Chapter 9: Relations
Chapter 10: Graphs
     Sections 10.1-10.5

- Third Exam -