

Foundations of Higher Mathematics (Math 358)

Spring 1999

Instructor: Brian Heck

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Office Hours: 8:30-9:30am;10:30-11:30am MWF

8:30-11:30am TTH

Text: Foundations of Higher Mathematics (3rd ed.) by Fletcher & Patty

Grading Policy:

2 Tests (100 points each).....	200 points
Mid-Term Exam.....	150 points
Problem Sets.....	100 points
Final Exam	<u>200 points</u>
	650 points

Grading Scale:

A	585 - 650 points
B	520 - 584 points
C	455 - 519 points
D	390 - 454 points
F	below 390 points

Tests/Final Exam: We will have 2 tests, a mid-term exam and a final exam. The tentative dates are included in this syllabus, but I will let you at least a week in advance exactly when each test will be. If you are going to be absent on a test day, you may take the exam early. However, if you do not let me know in advance, you will not be allowed to make up the test. The mid-term exam and the final exam will both be comprehensive.

Problem Sets: Homework is a very necessary part of this course. You cannot learn something if you do not practice it. There is especially true of mathematics. Therefore, I will pick up sets of homework problems 4 times throughout the semester. I will announce in advance when each set is due, and which problems are due.

Attendance: I will not include attendance as part of your course grade. I do, however, expect you to attend everyday. If you miss any class, it is your responsibility to meet with me (if necessary) and catch up on the material you missed. I will take roll everyday simply as a documenting procedure.

Overview: We will cover parts of Chapters 1, 2, 3, 4, 5, 6 and 7 in our text. Topics covered include (but are not limited to) logic, theorem proving, mathematical induction, set theory, equivalence relations and recursion, number theory, and graph theory. On the final exam, you will be responsible for all of the material we covered throughout the semester. I will be more than happy to help you succeed in this course, but it will take effort on your part. I believe that if you (1) come to class, (2) do your homework and (3) ask questions when confused, you will do very well in this class. It is a very good course, and after you finish it you will be well prepared for whatever math course you might take next.

Important Dates:

Final Date to Add Courses – Friday, January 22

Final Date to Drop Courses Without a "W" – Friday, January 22

Final Date to Drop Courses With a "W" - Friday, March 19

Below is a listing of the sections we will be covering this semester. Also, the tentative dates of our 2 exams and mid-term exam are listed. These may change if we fall behind or get ahead, but I will let you know at least a week before we have a test. If you have extra time, we may cover additional topics.

Chapter 1: Sections 1-6

TEST #1

Friday, February 12

Chapter 2: Sections 1-3

Chapter 3: Sections 1,2

Mid-Term Exam

Friday, March 12

Chapter 3: Sections 3-5

Chapter 4: Sections 1-5

Chapter 6: Section 4

TEST #2

Friday, April 16

Chapter 5: Sections 1, 5

Chapter 7: Sections 1, 4, 5