

COURSE: MATH ANALYSIS III (MATH 6)

SEMESTER: FALL 1999

INSTRUCTOR: C. L. Graves

OFFICE: FEM-4D

PHONE: 638-3641 ext. 3215

OFFICE HOURS: M W F 9:00 - 9:50 AM

~~M 2:40 - 3:30 PM~~ CB.

or by appointment

TEXT: Calculus With Analytic Geometry, Volume Three, Sixth Edition, Howard Anton.

OBJECTIVES: This is a course in Vector Analysis and Calculus for functions of more than one variable. The student will learn three dimensional representations of vectors, lines and planes; the calculus of vector-valued functions; partial differentiation and applications; and multiple integration and applications. The course will end with several topics from vector calculus: fields, line integrals, Green's and Stokes' Theorems.

EXAMS: Four or five exams plus a final exam, all exams equally weighted. The lowest of the exam scores will be dropped. There will be no make-up exams without prior approval.

HOMEWORK: Homework will be assigned every day. It is crucial to your success in the class that you do the homework. Homework will be collected on a random schedule. Late homework will not receive a grade.

GRADING: Based on exam scores (lowest dropped) and homework. Homework for the semester is worth 10% of the grade, exam scores 90%.

Scale: 87% A

77% B

65% C

50% D

ATTENDANCE: In accordance with RC policy, attendance is mandatory. A student may be dropped after eight absences unless special arrangements have been made.

DROP DATE: Friday, October 15, is the last day to drop this class and not receive a letter grade.

HOLIDAYS: Monday, Sept. 6, Labor Day

Thursday - Friday, Nov. 25-26, Thanksgiving Holidays

FINAL: Wednesday, Dec. 15, 8:00 - 10:00 AM

Assignments (Anton 6/E)

CHAPTER 13

- 13.1 3,5,7,11,13,15,21,25,27,29,40
- 13.2 1,3,5,7,9,11,13,15acf,17,23,29
- 13.3 1,4,8,10,13,15,22,23,33,34,35
- 13.4 3,5,7,9,11,13,15,17,21,25,31
- 13.5 3,5,9,12,15,19,23,25,27,29,31,37,39,45,47(hard)
- 13.6 3,5,11,15,17,19,20,23,25,35,37,39,41,43

CHAPTER 14

- 14.1 3,7,11,16,40,43,47
- 14.2 5,11,17,18,20b,23,25,29,31,41,42,43,44,51,53
- 14.3 3,5,9,12,39
- 14.4 3,4,5,7,9,15
- 14.5 5,7,11,17,21,33,39,41,48
- 14.6 3,7,11,16,17,25,29,31,35,43,55,59,62

CHAPTER 15

- 15.1 1,3,7,15,18,19,23,27,37
- 15.2 15,20,23,25,27
- 15.3 7,10,11,17,21,25,30,39,43,47,51,83
- 15.4 1,3,8,11,13,21,25,27
- 15.5 1,5,7,17,19,21
- 15.6 5,7,9,11,13,17,27,29,35,40,43,45
- 15.7 3,7,13,17,24,27,31,41,53a,c,e,55,57,59,64
- 15.8 11,13,15,21,27,29,31,39,44(hard)
- 15.9 5,9,1,18,23,28

CHAPTER 16

- 16.1 3,7,11,15,21,24
- 16.2 3,7,11,13,17,35,41,43,47,55
- 16.3 13,15,21,25,34,35
- 16.4 -
- 16.5 5,6,11,15,16,17,22,23a
- 16.6 7,9,18,19,23
- Intro to cylindrical and spherical coordinates
- 16.7 7,9,12,25

CHAPTER 17

- 17.1 1,5,7,11,13,16,
- 17.2 7,10,11,12,25,26
- 17.3 4,5,11,12,18