MATH 241 Vector CALCULUS Spring 2018

Meeting Information:

• Lecture time and location: TTH 1:15PM-2:30PM, LC115

Information

Instructor: Professor. Xiaofeng Yang

Email: xfyang@math.sc.edu Office Location: LC 317C

Office Hours: TTH 1:10PM-2:40PM or by appointment

Teaching assistant: TBA (@math.sc.edu)

Textbook:

Thomas Calculus, Early Transcendentals, 13 th edition

Course webpage

type "www.math.sc.edu/~xfyang", click on Teaching. [or click this Link for the Course v

Learning Outcomes: Students will master concepts and solve problems based upon the topics covered in the course, including the following: vectors and basic operations on them, including dot and cross products; vector-valued functions and their integration and differentiation; functions of several variables and their maximization, differentiation and integration; vector fields; line and path integrals; Green's theorem.

Prerequisites:

C or better in Math 142 or qualification on placement exam.

Chapters Covered:

Chapter 12: 12.1-12.5

Chapter 13: 13.1-13.4 [and parts of 13.5 if time permits] Chapter 14: 14.1 -14.7 [and parts of 14.8 if time permits]

Chapter 15: 15.1 - 15.7 Chapter 16: 16.1 - 16.4

Grades

Quizzes (10%)(drop 2 lowest scores)

Exam 1 (17.5%)

Exam 2 (17.5%)

Exam 3 (17.5%)

Final (37.5%)

90-100:A; 86-89:B+; 80-85:B; 76-79:C+; 70-75:C; 66-69:D+; 60-65:D; 0-59:F

Homework and Quiz

Homework will be assigned weekly (usually Thursday or Friday), on the **course** website www.math.sc.edu/xfyang/teaching_index.html. Although homework will not be collected, you are supposed to do them all. REMEMBER: the more problems you do, the better you understand the material. Students are encouraged to work together on homework sets. There will be approximately one quiz per week in Thursday's class, and no quiz during the exam weeks. There are 2-5 short questions in one quiz and around 10-25 minutes (subject to change with the difficulty).

Two lowest quiz grades will be dropped from the final grade calculation. Notice: Quiz questions will be (mostly) chosen from homeworks or very similar to the homeworks. No quiz on the first week and exam week.

Exams

There will be three midterm exams and a comprehensive final exam. The exams are "closed book" with no books, no notes, no graphing calculators, no labtop comptuer or equivalent technology, etc. Picture I.D. is required and must be presented upon request. There will be no make-up exams without documentation of a university approved excuse. For example, if you are sick on an exam day, I expect to receive an e-mail letting me know you will be missing the exam, and a doctor's note upon your return. If you know in advance that you will not be able to take an exam on the prescribed date, please see me at least one week in advance in order to make other arrangements.

Notice: If you have any questions/confusions about any questions, including the grading mistakes/typos about the quiz/midterms, feel free to consult with the instructor.

Calculators

Calculators are not allowed during tests or quizzes. However, calculators(/computers) are useful learning devices and you are encour- aged to use them outside of class to explore the material and check your answers.

Attendance and Academic Honesty

Attendance at every class meeting is important and expected. By statistics, students may miss up to 10% of the class meetings (around 4 times) can have their grades lowered. Anyone caught cheating or turning in work that is not their own will be dealt with according to University policies.

Bonus points policy: The only class bonus will be depend on the attendence rates, If your attendence is more than 80%, you will get 3 bonus points for final grade; 60%-80%, 2 bonus points; 30%-60%, 0 bonus points; less than 30%, -2 bonus points.