

SYLLABUS FOR MATH 241, SECTION 004, VECTOR CALCULUS

Instructor. Daniel Dix

Office Hours. MWF 10:00-11:00 am; no appointments are needed. If these times don't work students are encouraged to see me before or after class, email me or call my office, to set up appointments which fit our individual schedules.

Office, Phone, E-Mail. LeConte 400E, 777-7525, dix@math.sc.edu

Course Web-Page. <http://www.math.sc.edu/~dix/teach/241.s13.html>.

Class Time and Room. MWF 12:20 pm–1:10 pm, LC405.

Prerequisites. C or better in Math 142 or placement in Math 241.

Text. *Calculus, Early Transcendentals* by J. Stewart, 6th edition, Cengage Learning, 2009.

Material to be covered, Learning Outcomes. Chapters 12 through 16. Students will master concepts and solve problems based upon

- (1) vector algebra, geometry of three-dimensional space;
- (2) lines, planes, and curves in space;
- (3) polar, cylindrical, and spherical coordinate systems;
- (4) partial differentiation, max-min theory;
- (5) multiple and iterated integration, line integrals, and Green's theorem in the plane.

Homework, Notebooks. Homework problems will be assigned at every class meeting. Two or three problems will be designated to be collected at the beginning of the next class. These will be graded and returned. No late homework accepted. A few of the lowest homework grades will be dropped.

Written solutions of all assigned homework problems will be assembled into a three-part notebook, the relevant section of which will be turned in at the beginning of each in-class exam. These notebooks will be graded and returned with the exams.

Quizzes. 10-15 minute quizzes will be given at the beginning of class about once a week. No makeup quizzes will be given. A few of the lowest quiz grades will be dropped.

Exams. There will be three exams given during class on the following dates:

- (1) Wednesday, Feb. 13. (The drop date is Monday, March 4.)
- (2) Friday, Mar. 22.
- (3) Monday, Apr. 22.

Policy on Missed Exams. No makeup exams will be given unless the student contacts the instructor **prior** to the beginning of the scheduled exam time and provides proof of a medical or other emergency as an excuse.

Final Exam. There will be a two hour comprehensive final exam given on Thursday, May. 2, at 12:30 pm in the class room. It will cover everything, including the material discussed on the last two class meetings.

Grading System. Your final score (out of 100 total points) for the course will be computed as follows:

- (1) Homework average will count 10%.
- (2) Average of three homework notebook grades will count 10%.
- (3) Quiz average will count 10%.
- (4) Average of three hour exam scores will count 45%.
- (5) Final exam will count 25%.

There will be no “curve”. From this 100 point figure your grade will be determined by the scale:
A: 90–100 B: 80–89 C: 65–79 D: 50–65 F: 0–49