## Calculus III, Section 003

#### MATH-2953-003 (3 credit hours) Fall Semester, 2012

Class Room and Class Times: Room 3250 of the Campus Recreation Center Monday, Wednesday, and Friday at 10:10-11:05 a.m. except for September 3 (Labor Day) November 12 (Veteran's Day) and November 23 (Thanksgiving Holiday)

From Monday, August 27 through Friday, December 7, 2012 and the Final Examination on Wednesday, December 12 at 8:00-10:00 a.m. in Room 3250

Teacher: Roger Chalkley Office: Room 4504, French Hall West Office Hours: 11:15 a.m. - 12:30 p.m. on Monday, Wednesday, Friday Phone: (513) 556-4074

Textbook: Calculus – Early Transcendentals, seventh edition, 2012, by James Stewart, Brooks/Cole, Belmont, CA

List of Subject Matter: See the next page for sections and problems from Chapters 11 through 13.

**Testing and Grading Policy:** There will be three 55-minute examinations as well as a number of quizzes and a 2-hour final examination. Each 55-minute exam will be graded on a basis of 100 points and count as 1/6 of your final grade; collectively, the quizzes will count at 1/6 of your grade; and the final examination will count as 1/3 of your grade.

**Examination 1** - Friday, September 21, 10:10-11:05 a.m. **Examination 2** - Friday, October 19, 10:10-11:05 a.m. **Examination 3** - Friday, November 16, 10:10-11:05 a.m.

#### Final Exam: Wednesday, December 12 at 8:00-10:00 a.m. in Room 3250

Partial credit on tests is awarded only for work that is mostly correct except for one on two minor errors. You will not be given partial credit for attempting to solve a problem by an incorrect method. You must show your work on the tests. A correct answer without the accompanying correct work will receive no credit; an incorrect final answer accompanied by mostly correct work will receive substantial credit. Also, it is the responsibility of each student to arrange the work in a logical manner and to write legibly. Remember, when your paper is graded, the grade is based on the work shown, not what was intended or implied.

Grade of W: Friday- November 2 is the last day to withdraw from the class and receive a grade of W.

The Mathematics Learning Center is located in French Hall West, Room 2133. It is a free, walk-in, mathematics tutoring center for all University of Cincinnati students. The tutoring hours are: Monday - Thursday 9am -8pm; Friday 9am-4pm; Saturday Noon - 4pm.

Students can get help at the Mathematics Learning Center for all basic mathematics courses through Differential Equations.

http://www.artsci.uc.edu/collegedepts/math/learning\_center/

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### Section

11.1 Sequences
11.2 Series
11.3 Integral Test, etc.
11.4 Comparison Tests
11.5 Alternating Series
11.6 Absolute Convergence etc.
11.7 Strategy
11.8 Power Series
11.9 Representations
11.10 Taylor and etc.

Skip Section 11.11.

**12.1 Coordinate Systems** 

12.2 Vectors12.3 The Dot Product

**12.4 The Cross Product** 

12.5 Equations of Lines etc. 12.6 Cylinders and etc.

13.1 Vector Functions etc.13.2 Derivatives and etc.13.3 Arc Length etc.13.4 Motion in Space

Homework Problems (that begin at indicated page)

- p. 700: odd 1-17, odd 23-51.
  p. 711: 5, 7, odd 15-63.
  p. 720: odd 3-33.
  p. 726: odd 3-31, 37.
  p. 731: odd 3-19, 23.
  p. 737: odd 3-37.
  p. 740: odd 1-37.
  p. 745: odd 3-29.
  p. 751: odd 3-19, 25.
  p. 765: 5, 13, 15, 25, 27, 49, 55, 57, 63, 65, 67, 69.
- p. 790: 3, 5, 7, 13, 15, 17, 21, 27, 33, 37, 41.
  p. 798: 3, 5, odd 13-29.
  p. 806: odd 1-19, 23, 27, 29, 31, 33, 39, 41, 61, 63.
  p. 814: 3, 7, 9, 11, 13, 16, 17, 19, 31, 33, 35, 37.
  p. 824: odd 3-37.
  p. 832: 3, 5, 7, 21-28.
  p. 845: odd 1-13.
  p. 852: odd 3-25 and odd 35-41.
  p. 860: 1, 2, 3, 4, 5, 6, 17, 19.
- p. 870: 3, 5, 7, 9, 11, 13, 15, 19, 21, 22.