

**COURSE SYLLABUS**  
**CRN: 81128 MTH 254-002**  
**CALCULUS IV**

**Instructor:** Robert de Dios

**Office:** Neuberger Hall NH-m330 Third floor mezzanine

**E-mail:** rdedios@pdx.edu please keep emails confined to D2L

**Office hours:** before class

**Class time and location:** MTWR 4:45-5:50 CH-171

**Prerequisite(s):** mth-252 (calc II), mth-261 (linear algebra).

**Final exam:** Thursday, August 16

**Time** 3:30-5:50

**Exams:** There will be two midterm exams (Dates TBA) based on homework and a cumulative final. Do not ask about a reschedule. **NO** make up exams, unless documented by doctor, legal document or other documented unavoidable situation.

**Required Textbook:** Calculus: Early Transcendentals, Rogaski, W.H. Freeman and Company, New York 2008

**Technology:** The use of a graphing calculator or a CAS (computer algebra system) will enhance or be necessary to complete some of the suggested exercises. Maple, Matlab, and Derive are available in the computer lab in NH 465. The schedule is available on the PSU website at [http://www.mth.pdx.edu/student\\_resources/labhours.asp](http://www.mth.pdx.edu/student_resources/labhours.asp).

**Topics covered:**

- Chapter 13: Calculus of Vecteded-Valued Functions
- Chapter 14: Differentiation in Several Variables
- Chapter 15: Multiple Integration
- Chapter 16: Line and Surface Integrals
- Chapter 17: Fundamental Theorems of Vector Analysis

**GRADES:**

- **Homework Assignments:** Homework consist of completing the suggested and mandatory exercises list and reading upcoming section(s). Homework will be assigned weekly. It is the students responsibility to complete all suggested exercises. No late homework will be accepted. I will take a pdf in email form before midnight due date only if I receive a hard copy by next class period.
- **Activities:** Small problems of my creation and theme will be given regularly.
- **Exams:** Exams will be based on material from the homework, quizzes and lecture.

Grading Structure.		
Homework	20%	( $\approx 7/8$ )
Activities	10%	random
Exam I	20%	( $\approx$ Ch.
Exam II	20%	( $\approx$ Ch.
Final Exam	30%	(Cumulative)

I reserve the right to change the weights of grading and structure, do not worry it will only work to your favor.

**Students with Disabilities:** Students with disabilities who may need accommodations please see me during office hours or email me.

Also contact: Disability Resource Center- Smith memorial Student Union Room 116  
 Phone: 503-725-4150  
 Email: drc@pdx.edu

**Other Resources:** Free tutoring will be available in the Math Atrium on the third floor Neuberger Hall starting the second week of the quarter. Also check in with Peer Tutoring and Resource Center, and there are always private tutors that the math office can recommend (\$\$).

## HELPFUL HINTS FOR SUCCESS

Learning Calculus requires a solid conceptual grasp of the material as well as technical proficiency. Effort is required in both areas, so be sure to read the material ahead of time, come to every class, and begin the homework early. A good rule of thumb is to study two hours for each hour spent in class. Proper preparation for the course requires a solid understanding of Calculus I and II. Those who do not have a strong background should immediately review the appropriate material.

**Read the Book:** It is expensive, so get the most value from it. Class time is limited and the book has many examples that will not be discussed. Make sure to read the relevant section(s) before lecture. Doing so will make the material much more accessible during lecture.

**Practice:** Complete all of the suggested exercises! To get started, follow the examples in the text and try doing them on your own with the book as a guideline. If a particular exercise is especially confusing, send me an email, stay for office hours, or speak up in class. Form Study Groups: One's peers are an excellent resource. People may be able to answer each other's questions or provide useful perspectives.

**Be Engaged:** Is part of the lecture confusing? Is a homework question particularly difficult? Are some concepts not clear? This is to be expected, and others will be in the same position, so speak up! Ask questions during lecture; ask your peers; email your instructor with questions. The more communication the better.

**Make Use of Office Hours:** Office hours are extra time for the student to directly engage with the instructor. This is the best time for individual instruction and advice. If a concept or technique is troublesome, take a few minutes after class to ask for some clarification. If one cannot stay for office hours another time can be arranged.