Math 31 Calculus II   Course Information   Spring 2017

Time and Meeting Place: Tu Th 9:35–10:50, Fletcher 112
Instructor: Professor Jim Hoste, B205, x73258, jhoste@pitzer.edu
Website: http://pzacad.pitzer.edu/~jhoste/HosteWebPages/Courses/Math31/main.html
Office Hours: M 1:30-2:30; W 1-2; Th 3-4, and by appointment.
Text: We'll use multiple texts. These will include:

- Calculus I, J. Marsden and A. Weinstein
  http://www.cds.caltech.edu/~marsden/volume/Calculus/

- Calculus in Context
  http://math.smith.edu/~callahan/intromine.html

- Paul's Online Math Notes
  http://tutorial.math.lamar.edu/Classes/CalcII/SeriesIntro.aspx

Prerequsites: Completion of Math 30 with grade of C or better, a score of 4 or 5 on Calculus AB or BC exam, or a suitable score on the mathematics placement exam.

1. **Course Overview:** This course will focus on two topics: infinite series as well as techniques and applications of integration. We will mostly cover Chapters 7–12 of Marsden and Weinstein as well as bring in materials from other sources as well.

2. **Learning Outcomes:** After taking this course, the successful student should be able to:

   - set up integrals representing arc lengths, areas, volumes, and centers of mass,
   - compute a variety of definite and indefinite integrals using different methods, such as substitution, integration by parts, and partial fractions,
   - apply various tests to determine if a series is convergent or divergent,
   - compute the Taylor series for a given function and derive its domain of convergence,
   - use Taylor series to approximate a variety of functions.

3. **Course Work:** There will be regular homework assignments due at nearly each class meeting. Homework and due dates will be posted on the class website. LATE HOMEWORK WILL NOT BE ACCEPTED (except in the case of illness, personal emergencies, etc.). There will be two midterm exams, the first on February 20, and the second on April 3. THERE WILL BE NO MAKE-UP EXAMS. A final exam will be given at the regularly scheduled time given in the Claremont Schedule of Finals, namely, Friday, May 11, 2-5 pm.

4. **Grading:**

coursework	weight
Homework	10%
2 Midterm Exams	27.5% each
Final Exam	35%

grading scale	
90–100%	at least an A
80–90%	at least a B
65–80%	at least a C
50–65%	at least a D
0–50%	F

5. **Calculators** Students should have a calculator and know how to use it. Additionally, we will make use of *Mathematica*. This software can be obtained for free from Pitzer IT. Send mail to `help@pitzer.edu` to request getting the software. Calculators and computers will not be needed, and will not be allowed, on exams.

6. **Accommodations for students with disabilities** At Pitzer we strive to provide an accessible learning experience for all students. If you anticipate or experience physical or academic barriers based on a documented access/disability need, you are welcome to contact Pitzer Academic Support Services at `academicsupport@pitzer.edu` to explore reasonable accomodation.