Advanced Calculus, Math 322
Fall 2012
Bryan Smith

1   Introduction

This class is the continuation of Advanced Calculus I (Math 321). This means you should now be skilled at presenting written proofs and feeling comfortable with deciding how to to "solve" a problem stated in the format used by the textbook. Our primary goal for the semester is to finish the development of Taylor Series (Chapter 8) and to extend our understanding of differential and integral calculus to higher dimensions.

With such a small class, the most efficient way to proceed is to have a "seminar" structure. This means there will be fewer lectures and much more discussion of topics. In order for this to work well, everyone must keep up with the reading and take careful note of those aspects of the material that are easily understood and those that need to have more discussion.

2   Course Information

2.1   Textbook

The textbook is *Advanced Calculus, Second Edition*, Patrick M. Fitzpatrick, American Mathematical Society, ©2006.

2.2   Basic Information

You can find information pertinent to all of my classes at the link below and, once there, information specific to this class by clicking on the Math 322 link.

    http://math.ups.edu/~bryans/ [?]

2.2.1   Logistics

Bryan Smith	TH 390D	879-3562	bryans[at]ups.edu
Math 181	TH 383	M, F	11:00-11:50am
	TH 391	T, Th	11:30-11:20am
Office Hours		Mon	12:00-12:50pm
		Tue	10:00-11:20am
		Thu	10:30-11:20am
		Other	By Appointment

2.3   Examinations

As long as everyone keeps up with the "seminar" structure there will be no need for examinations. I reserve the right to implement exams if it is necessary to stimulate more involvement in the class.

Final Examination

The final examination is scheduled for

Friday May 11, 2012 4:00-6:00 P.M.

See above for more on the existence of exams.

2.4 Homework

A seminar structure requires us all to be working homework problems and to present important ones to the rest of the class. These presentations will always entail a written solution and possibly an oral component when there are subtleties to discuss.

As with exams, I reserve the right to start requiring written solutions to homework problems which will be graded.

2.5 Project

Depending on how much of the material we manage to cover there might be oral projects involving topics that spark your interest.

2.6 Course Information Updates

If you wish, I will post (and update) a grade report on your current standing in the class on my university web page.

To have your information posted you need to print your name, the date, the class (MATH 322), and a code on a sheet of paper. Then sign the paper and physically hand it to me. The code is to be a sequence of up to 23 symbols I can type on a keyboard.

2.7 Total Points

Problems	TBD%
Examinations	TBD%
Project	TBD%

2.8 Emergency Response Information

Please review university emergency preparedness and response procedures posted at `http://www.pugetsound.edu/emergency/`. There is a link on the university home page. Familiarize yourself with hall exit doors and the designated gathering area for your class and laboratory buildings.

If building evacuation becomes necessary (e.g. earthquake), meet your instructor at the designated gathering area so she/he can account for your presence. Then wait for further instructions. Do not return to the building or classroom until advised by a university emergency response representative.

If confronted by an act of violence, be prepared to make quick decisions to protect your safety. Flee the area by running away from the source of danger if you can safely do so. If this is not possible, shelter in place by securing classroom or lab doors and windows, closing blinds, and turning off room lights. Stay low, away from doors and windows, and as close to the interior hallway walls as possible. Wait for further instructions.