M236 (Calculus Lab II) Spring, 2004

INSTRUCTOR: Dr. Hundley OFFICE: Olin 234 OFFICE HOURS: 10AM M,T,Th Feel free to schedule an alternative time to meet if you can't make these hours. Otherwise, if my door is open, feel free to come in. You can also email me anytime. OFFICE PHONE: 527-5151 EMAIL: hundledr@whitman.edu WWW: http://people.whitman.edu/~hundledr/courses/M236.html Please bookmark the class page!

1. Overview:

This course is a follow-up to Calc Lab I- I will expect you to already know the basics of using LaTeX, Maple, and Emacs so you know how to do a basic write-up. Remember that there are handouts available on the web if you forget how to do certain things (like inserting figures).

Now that you have had three semesters of Calculus, we will consider some things that we might have missed the first time around. We will also try to look at "the big picture" so that you see the recurring themes. The topics we'll discuss:

- Representation and Approximation of Functions
 - Lab 1: Power series and Approximations
 - Lab 2: Fourier series and Approximations
- Lab 3: The Hyperbolic Functions
- Lab 4: Numbers and Functions in the Complex Plane
- Lab 5: The Derivative in Calculus I-III
- Lab 6: The Integral in Calculus III

These labs will probably involve more mathematics and less technical writing, so we won't have any re-writes. The handout for each lab will specify what to turn in, but if you are at all unsure, please ask!

- 2. Grading: Your grade will be based on the written reports you turn in. There will be no exams in this course. You will turn in 6 reports overall- The first 5 will each be 16% of the total grade, the final lab (being a little more advanced, you'll also have an extra week) will be 20% of the overall grade.
- 3. Group Work: You will do your assignments collaboratively. Groups may not be more than three people, and we will rotate after each lab. It is your responsibility to make sure that your partner contributes fairly to the project.
- 4. **Plagarism:** Your write ups should be completely your own. You may consult textbooks and/or the internet- but be sure to cite your source (you may use footnotes for this).
- 5. Late Work: Late reports will NOT be accepted, so pay close attention to the due dates- they are on every other Monday.

6. Other items:

- (a) If you have a learning disability that will require special arrangements for you, I would be happy to do that- You will need to inform me as soon as possible if this is the case.
- (b) Absences: I will not take attendance, but you are expected to come to class and work with your partner. If you need to miss class or an appointment with your partner, please do them (and me!) the courtesy of an email.

HOMEWORK/LAB SCHEDULE

Subject to Change

Week	Dates	General Topic		
1	JAN 20-23	Lab 1: Power Series		
2	JAN 26-30	Continue to work on Lab 1 (Lab 1 DUE ON MONDAY, FEB 2)		
3	FEB 2-6	Lab 2: Fourier Series		
4	FEB 9-13	Continue to work on Lab 2 (Lab 2 DUE ON TUESDAY, FEB 17)		
5	FEB 16-20	Lab 3: The Hyperbolic Functions		
6	FEB 23-27	Continue to work on Lab 3 (Lab 3 DUE ON MONDAY, MAR 1)		
7	MAR 1-5	Lab 4: Functions In The Complex Plane		
8	MAR 8-12	Continue to work on Lab 4 Lab 4 Due before you leave for Break!		
		Spring Break!		
9	MAR 29-APR 2	Lab 5: The Derivative In Calc I-III		
10	APR 5-9	Continue to work on Lab 5 Lab 5 DUE ON MONDAY, APR 12		
11	APR 12-16	Lab 6: The Integral in Calc III		
12	APR 19-23	Continue to work on Lab 6		
13	APR 26-30	Continue to work on Lab 6		
14	MAY 3-7	Lab 6 is due at our last class session.		

Generally, each lab will run according to the following schedule:

Sun	Mon	Tue	Wed	Thur	Fri	Sat
			LAB GIVEN			
			OPEN WEEK			
	LAB DUE					