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COURSE OUTLINE WINTER 2012

1. Math 253, Calculus II

Lecture/Time: L03 – T,TR 9:30-10:45
Instructor: Cristian Rios

Office/Phone/Email: MS 546. 220-3221 <u>crios@ucalgary.ca</u>

Labs: B17 W 13:00-13:50 MS 371 Vadori, N

B18 W 13:00-13:50 MS 325 Prosser, G B19 F 10:00-10:50 MS 371 Vadori, N B20 F 10:00-10:50 MS 325 TBA

Blackboard.ucalgary.ca course name: MATH 253 L03 - (Winter 2012) - Calculus II

2. Prerequisites: Mathematics 249 or 251 or 281 or Applied Mathematics 217. (see Section 3.5C of Faculty of Science www.ucalgary.ca/pubs/calendar/current/sc-3-5.html and Course Descriptions: www.ucalgary.ca/pubs/calendar/current/course-desc-main.html)

3. Grading: The University policy on grading and related matters is described in sections F.1 and F.2 of the online University Calendar. In determining the overall grade in the course, the following weights will be used:

Assignments [10] 10 %

Midterm Tests [2] 40 % (Feb. 16 and March 15)
Final Exam 50 % (To be scheduled by the Registrar)

The various components above will be assigned a percentage score and will be combined with the indicated weights to produce an overall percentage in the course. The conversion table between course percentage and letter grade will be provided at least one week before the withdrawal deadline.

A passing grade in the Final Examination is essential for an overall grade of C- or better.

- **4. Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this matter are found in the Faculty of Science area of the Calendar in section 3.6: www.ucalgary.ca/pubs/calendar/current/sc-3-6.html. It is the student's responsibility to be familiar with these regulations. See also www.ucalgary.ca/pubs/calendar/current/e-3.html.
- 5. There are no class exercises held outside of class hours for this course.

 REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME ACTIVITY. If you have a conflict with any out of class time activity, please inform your instructor at least one week in advance of the activity so that other arrangements may be made for you.
- **6. Textbook**: James Stewart, Single Variable Calculus: Early Trans HYBRID (SOFT BOUND BOOK, WITH FULL YOUBOOK & EWA ACCESS), Thompson, Brooks/Cole, 7th edition.
- 7. Examination Policy: No calculators, notes, or any other aids allowed. Students should also read the Calendar, Section G, on Examinations: www.ucalgary.ca/pubs/calendar/current/g.html
- 8. OTHER IMPORTANT INFORMATION FOR STUDENTS:
- (a) ACADEMIC MISCONDUCT (cheating, plagiarism, or any other form) is a very serious offence that will be dealt with rigorously in all cases. A single offence may lead to disciplinary probation or suspension or expulsion. The Faculty of Science follows a zero tolerance policy regarding dishonesty. Please read the sections of the University Calendar under K. Student Misconduct (http://www.ucalgary.ca/pubs/calendar/current/k.html) to inform yourself of definitions, processes and penalties.
- (b) ASSEMBLY POINTS in case of emergency during class time. Be sure to FAMILIARIZE YOURSELF with the information at http://www.ucalgary.ca/emergencyplan/assemblypoints.
- (c) ACADEMIC ACCOMMODATION POLICY. Students with documentable disabilities are referred to the following links: Calendar entry on students with disabilities: http://www.ucalgary.ca/pubs/calendar/current/b-1.html
 Disability Resource Centre: http://www.ucalgary.ca/drc/

- (d) SAFEWALK: Campus Security will escort individuals day or night (http://www.ucalgary.ca/security/safewalk/). Call 220-5333 for assistance. Use any campus phone, emergency phone or the yellow phones located at most parking lot pay booths.
- (e) FREEDOM OF INFORMATION AND PRIVACY: This course is conducted in accordance with the Freedom of Information and Protection of Privacy Act (FOIPP). As one consequence, students should identify themselves on all written work by placing their name on the front page and their ID number on each subsequent page. For more information see also http://www.ucalgary.ca/secretariat/privacy.
- (f) STUDENT UNION INFORMATION: VP Academic Phone: 220-3911 Email: suvpaca@ucagary.ca@ucagary.ca.

 SU Faculty Rep. Phone: 220-3913 Email: sciencerep@su.ucalgary.ca Website http://www.su.ucalgary.ca/provost/students/ombuds

 Student Ombudsman: http://www.ucalgary.ca/provost/students/ombuds
- (g) INTERNET and ELECTRONIC COMMUNICATION DEVICE Information. You can assume that in all classes that you attend, your cell phone should be turned off. Also, communication with other individuals, via laptop computers, Blackberries or other devices connectable to the Internet is not allowed in class time unless specifically permitted by the instructor. If you violate this policy you may be asked to leave the classroom. Repeated abuse may result in a charge of misconduct.

Approximate schedule:

Week	Date Date	Topic	Events
1	Jan. 9 - 13	1.5 Exponential functions.	
		1.6 Inverse functions & Logarithms.	
3	Jan. 16 – 20	3.11 Hyperbolic functions.	HW 1 (1.5, 1.6, 3.11) due Jan. 22.
		7.1 Integration by parts.	
3	Jan. 23 – 27	7.2 Trigonometric Integrals.	HW 2 (7.1, 7.2) due Jan. 29
		7.3 Trigonometric substitution.	
4	Jan. 30 – Feb. 3	7.4 Partial fractions.	HW 3 (7.3, 7.4) due Feb. 5
		7.5 Strategies for integration.	
5	Feb. 6 – 10	7.8 Improper integrals.	HW 4 (7.5, 7.8) due Feb. 12
		6.1 Areas between curves (review).	
6	Feb. 13 - 17	6.2 Volumes.	Midterm 1, Thursday Feb. 16.
	Feb. 20 – 24		Reading week. No lectures.
			HW 5 (6.1, 6.2) due Feb. 24.
7	Feb. 27 – Mar. 2	6.3 Volumes by cylindrical shells.	HW 6 (6.3, 8.1) due Mar. 4
		8.1 Arc length.	
8	March 5 – 9	8.2 Surface area (of an area of revolution).	HW 7 (8.2, 9.1) due Mar. 11
		9.1 Modelling with differential equations.	
9	March 12 – 16	9.3 Separable differential equations.	Midterm 2, Thursday March 15.
10	March 19 – 23	9.5 First order linear DE's.	HW 8 (9.3, 9.5) due Mar. 25.
		Second order linear DE's with constant	
		coefficients.	
11	March 26 – 30	Second order linear DE's with constant	HW 9 (Second order DE's) due April
		coefficients.	1.
12	April 2 – 6	Taylor polynomials.	No lectures April 6.
			HW 10 (TBA) due April 9.
13	April 9 – 13	Review.	End of term.
	April 16 – 25		Final Exam period.