

## COURSE OUTLINE

### WINTER 2012

#### 1. Math 253, Calculus II

<u>Lec</u>	<u>Day</u>	<u>Time</u>	<u>Instructor</u>	<u>Office</u>	<u>Phone</u>	<u>Email</u>	<u>Office Hours</u>
L02	MWF	12:00	Gilad Gour	MS 436	220-3939	<a href="mailto:gour@ucalgary.ca">gour@ucalgary.ca</a>	By appointment

**Blackboard.ucalgary.ca course name:** [MATH 253 L02 - \(Winter 2012\) - 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](http://www.ucalgary.ca/pubs/calendar/current/sc-3-5.html)  
and Course Descriptions: [www.ucalgary.ca/pubs/calendar/current/course-desc-main.html](http://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:

<i>Assignments</i>	[10]	10 %
<i>Midterm Tests</i>	[2]	40 % (Feb. 15 and March 14)
<i>Final Exam</i>		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](http://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](http://www.ucalgary.ca/pubs/calendar/current/e-3.html).

5. **There will be no out-of-class activity in 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, 7<sup>th</sup> 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](http://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:** [suypaca@ucalgary.ca](mailto:suypaca@ucalgary.ca).  
 SU Faculty Rep. **Phone:** 220-3913 **Email:** [sciencerep@su.ucalgary.ca](mailto:sciencerep@su.ucalgary.ca) **Website** <http://www.su.ucalgary.ca/>  
 Student Ombudsman: <http://www.ucalgary.ca/provosti/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	Topic	Events
1	Jan. 9 - 13	1.5 Exponential functions. 1.6 Inverse functions & Logarithms.	
3	Jan. 16 – 20	3.11 Hyperbolic functions. 7.1 Integration by parts.	HW 1 (1.5, 1.6, 3.11) due Jan. 22.
3	Jan. 23 – 27	7.2 Trigonometric Integrals. 7.3 Trigonometric substitution.	HW 2 (7.1, 7.2) due Jan. 29
4	Jan. 30 – Feb. 3	7.4 Partial fractions. 7.5 Strategies for integration.	HW 3 (7.3, 7.4) due Feb. 5
5	Feb. 6 – 10	7.8 Improper integrals. 6.1 Areas between curves (review).	HW 4 (7.5, 7.8) due Feb. 12
6	Feb. 13 - 17 Feb. 20 – 24	6.2 Volumes.	Midterm 1, Wednesday Feb. 15. Reading week. No lectures. HW 5 (6.1, 6.2) due Feb. 24.
7	Feb. 27 – Mar. 2	6.3 Volumes by cylindrical shells. 8.1 Arc length.	HW 6 (6.3, 8.1) due Mar. 4
8	March 5 – 9	8.2 Surface area (of an area of revolution). 9.1 Modelling with differential equations.	HW 7 (8.2, 9.1) due Mar. 11
9	March 12 – 16	9.3 Separable differential equations.	Midterm 2, Wednesday March 14.
10	March 19 – 23	9.5 First order linear DE's. Second order linear DE's with constant coefficients.	HW 8 (9.3, 9.5) due Mar. 25.
11	March 26 – 30	Second order linear DE's with constant coefficients.	HW 9 (Second order DE's) due April 1.
12	April 2 – 6	Taylor polynomials.	No lectures April 6. HW 10 (TBA) due April 9.
13	April 9 – 13 April 16 – 25	Review.	End of term. Final Exam period.