



Faculty of Science
DEPARTMENT OF MATHEMATICS AND STATISTICS
Course Information Sheet

1. **Course:** AMAT 217 - Calculus for Engineers and Scientists - Fall 2004

<u>Lecture</u>	<u>Day/Time</u>	<u>Location</u>	<u>Instructor</u>	<u>Office</u>	<u>Phone</u>	<u>Email</u>
L01/05	MWF 9:00	ENE 241	P. Zvengrowski	MS430	220-7456	zvengrow@ucalgary.ca
L02/06	MWF 10:00	ENE 243	P. Zvengrowski	MS430	220-7456	zvengrow@ucalgary.ca
L03/07	MWF 15:00	ENE 243	E. Enns	MS548	220-6303	enns@math.ucalgary.ca
L04/08	MWF 13:00	ENA 103	M. Lamoureux	MS514	220-8214	mikel@math.ucalgary.ca

There are also TUTORIAL (LAB) sections scheduled for this course. Refer to your student schedule.

2. **Prerequisites:** 70% or better in Mathematics 30 or Pure Mathematics 30, and credit in Math 31.

NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined on page 199 of the 2004-2005 Calendar. **It is the students' responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.**

3. **Fee policy:** Students may withdraw from the course anytime until the last day of classes, **December 9**. However, there will be no refund of tuition fees if a student withdraws from the course after **September 21**.

4. **The University policy on grading and related matters** is described on pages 43-44 of the 2004-2005 Calendar. In determining the overall grade in the course, the following weights will be used:

Midterm Exam (1.5 hours)	30%
Quizzes (10 weekly tests)	20%
Final Exam (3 hours)	50%

There will be a final examination scheduled by the Registrar's Office. Quizzes are open book, while the midterm and final examinations are closed book. Calculators are **not** permitted during midterm and final exams. Students must obtain a passing grade on the final examination in order to obtain an overall final grade of "D" or better. There is no predetermined grade distribution for this course.

5. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this are outlined on page 200 of the 2004-2005 Calendar. It is the student's responsibility to be familiar with these regulations.

6. **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 2004-2005 University Calendar under the heading "Student Misconduct", pages 53-57.

See: <http://www.ucalgary.ca/honesty/>

7. There will be **one** out-of-class common midterm examination, which has been scheduled by the Faculty of Engineering for the **evening of Wednesday, October 20**. REGULARLY SCHEDULED CLASSES HAVE PRECEDENCE OVER ANY OUT-OF-CLASS-TIME-ACTIVITY. If you have a conflict with this scheduled exam, please inform your instructor at least one week in advance of the exam so other arrangements may be made.

- 8. Text:** *Calculus: a complete course*, by R.A. Adams, Addison-Wesley, 5th Edition. Additional resources are available on the web at http://wps.prenhall.com/ca_aw_adams_calculus_5
- 9. Calculators:** The use of calculators in the midterm exam or final examination is **not** permitted.
- 10. Homework:** Homework problems will be assigned weekly, with solutions available in the Student Solutions Manual. These problems are for practice only, and are not to be handed in for grading. Assignments can be found on the course webpage, at www.math.ucalgary.ca/~mikel
- 11. Quizzes:** There will be ten weekly quizzes, which will be graded and will make up 20% of your final grade. The quizzes will alternate between TUTORIAL QUIZZES, which are written on paper during your tutorial (lab) sections, and WEBWORK QUIZZES, which are done on the computer via the internet. You **MUST** have access to a computer with a web browser and internet connection in order to complete these online quizzes. Such computers are available in the Info Commons at the University of Calgary. The WEBWORK QUIZZES may be accessed via the course webpage, at www.math.ucalgary.ca/~mikel and have specific DEADLINES for completion.

Mathematics is learned by DOING, not by observing. The homework and quizzes are one way of ensuring that each student gets some practice in calculus before attempting the midterm and final exams. It is our experience that students who do not practice with the homework assignments will not be prepared for the quizzes and exams, and usually will not pass the course.

11. Calendar

Week	Date	Section in Text	Quizzes and tests
1	Sep 08 – 10	1.1, 1.2, 1.3, 1.4	No quiz
2	Sep 13 – 17	2.1, 2.2, 2.3	
3	Sep 20 – 24	2.4, 2.5, 2.6	
4	Sep 27 – Oct 1	2.7, 2.8, 2.9, 2.10	
5	Oct 4 – 8	3.1, 3.2, 3.3, 3.4	
6	Oct 11 – 15	3.5, 3.6	No classes on Thanksgiving Mon, Oct 11
7	Oct 18 – 22	4.1, 4.2, 4.3	No quiz / Midterm on Wed evening, Oct 20.
8	Oct 25 – 29	4.4, 4.5, 4.6	
9	Nov 1 – 5	4.7, 4.9, 5.1	
10	Nov 8 – 12	5.2, 5.3	No quiz / No classes on Nov 11, 12 (Reading Days)
11	Nov 15 – 19	5.4, 5.5, 5.6	
12	Nov 22 – 26	5.7, 6.6, 6.7	
13	Nov 29 – Dec 3	7.1, 7.2, 7.3	
14	Dec 6 – Dec 9	8.1, 8.2	No quiz / Thursday is last day of classes

NOTES:

- The section numbers refer to the text by Adams. Some departures from this schedule may occur.
- There are no quizzes in weeks 1, 7, 10, 14. Your TA will direct you to in-class quizzes, or online quizzes as appropriate.
- The midterm exam on week 7 will cover the first three chapters.
- Many students find the second half of this course much more difficult than the first. Be prepared to put in extra work towards the end of the semester in order to succeed.
- You should prepare for each lecture by reading the text, and prepare for quizzes by attempting the exercises in the text. Be sure to get as much practice and try as many exercises as possible. *Mathematics is not a spectator sport!* Answers to odd-numbered questions are in the back of the book. By the end of each week, you should have mastered the sections of the text indicated on the course calendar. The lectures will not necessarily cover all topics in complete detail; they should guide you in the study of your text. Similarly, your tutorial instructor should help you diagnose your difficulties and teach you how to overcome them.