

Course Information Sheet

Applied Mathematics 307

Fall 2007

1. **Course:** Amat 307 - Differential Equations for Engineers.

<u>Lecture</u>	<u>Time</u>	<u>Room</u>	<u>Instructor</u>	<u>Office</u>	<u>Phone</u>	<u>Email</u>
L01	MWF 9:00	ENE 241	P. Zvengrowski	MS 430	220-7456	zvengrow@ucalgary.ca
L02	MWF 10:00	ENE 243	W. Liao	MS 530	220-3946	wliao@ucalgary.ca
L03	MWF 15:00	ENE 241	I. Karabash	MS 590	220-7346	karabash@ucalgary.ca
L04	MWF 14:00	KNB 132	D. Holland	MS 374	220-3941	dholland@ucalgary.ca

2. **Prerequisites:** Amat 219 and Math 221 **Co-requisite:** None

NOTE: The Faculty of Science policy on pre- and co-requisite checking is outlined in the current University Calendar (see <http://www.ucalgary.ca/pubs/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responsibility to ensure that they have the pre- and co-requisites for the course, and if they do not they will be withdrawn from the course without notice.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. **The University policy on grading and related matters** is described in the current University Calendar, Academic Standings. In determining the overall grade in the course, the following weights will be used:

WebWork Assignments (10)	20%
Midterm Exam (90 Minutes)	30%
Final Exam (3 hours)	50%

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

4. **Fee Policy:** After the last day to drop/add courses, there will be no refund of tuition fees if a student withdraws from a course, courses or the session.
5. **Academic Accommodations:** It is the student's responsibility to request academic accommodations. A student with a documented disability who may require academic accommodation must register with the Disability Resource Centre to be eligible for formal academic accommodation. DRC registered students are required to discuss their needs with the instructor no later than fourteen (14) days after the start of this course.
6. **Missed Components of Term Work.** The regulations of the Faculty of Science pertaining to this are outlined in the current University Calendar, Faculty of Science. It is the student's responsibility to be familiar with these regulations.
7. **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 current University Calendar. See: <http://www.ucalgary.ca/honesty/>
8. There will be **one** out-of-class common midterm examination, which has been scheduled for the **evening of Thursday, November 1**. 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.
9. **Text:** The textbook is: **Elementary Differential Equations and Boundary Value Problems**, by Boyce & DiPrima, 8th Edition. Some course material is found in **Calculus: A Complete Course**, by Adams, 6th edition
10. **Calculator Policy:** The use of calculators in the midterm exam or final examination is **not** permitted.
11. **Homework:** Homework assignments will be given (approximately) weekly. These are to be completed using the computer homework system WEBWORK which can be accessed at <http://math.ucalgary.ca/webwork>. Each student will have an account and the assignments can be done from any computer with web access. Your username and password will be the same as your Campus IT username and password. Your answers to the assignment questions will be checked and marked (by the computer) on a right/wrong basis. We will give more details about the system and how to use it during the term.

12. **Course Webpage:** The course homepage can be found at:
<http://blackboard.ucalgary.ca>

13. **Schedule:**

<u>Week</u>	<u>Date</u>	<u>Sections</u>	<u>Notes</u>
1	Sept. 10 - 14	1.2, 1.3, 2.1	No Tutorials
2	Sept. 17 - 21	2.1, 2.2, 2.3, 2.4	
3	Sept. 24 - 28	2.4 (Bernoulli), 2.6, 3.1	
4	Oct. 1 - 5	3.2, 3.3, 3.4	
5	Oct. 8 - 12	3.5, 3.6	No Class Oct. 8, No Tutorials
6	Oct. 15 - 19	3.7, 4.1, 4.2	
7	Oct. 22 - 26	6.1, 6.2, 6.3	
8	Oct. 29 - Nov. 2	6.4, 7.1, 7.2, 7.4	Midterm Exam Nov. 1 (evening)
9	Nov. 5 - 9	7.5, 7.6, 7.7	
10	Nov. 12 - 16	7.8, 7.9	No Class Nov. 12, No Tutorials
11	Nov. 19 - 23	9.1*, 9.2*, 9.3*	
12	Nov. 26 - 30	9.4*, 9.5*, 9.6*	
13	Dec. 3 - 7	5.1, 5.2, Review	

* These sections are from Adams, Calculus: A Complete Course, 6th edition.

Notes:

1. The section numbers (other than weeks 11, 12) refer to the course textbook by Boyce and DiPrima. Departures from the schedule may take place.
2. The Midterm Exam is scheduled for Thursday, November 1, 6:30 - 8:00 pm. The exam is closed book and calculators are not allowed.
3. By the end of each week, you should have mastered the sections of the text indicated on the course schedule and the corresponding assignment. You should prepare for each lecture by reading the text and for each tutorial by attempting to do as many exercises as possible in advance. Math is like weight-lifting – the more reps you do, the stronger you get! In addition to the assigned WEBWORK problems there are many problems in the textbook that you can try. The answers to the odd numbered exercises are given in the back of the book, so we recommend that you try these first. Your lectures will not necessarily cover all everything in detail; they should guide you in the study of the text. Similarly, your tutorial instructor should help you diagnose your difficulties and teach you how to overcome them.