

## COURSE OUTLINE

### Math 202: Intermediate Calculus for CSC and EOS

#### Instructor

**Instructor** Tom (William) Thompson

**Research Area** Nonlinear Partial Differential Equations.

**Email** wthomps@uvic.ca<sup>1</sup>

**Phone** 250-721-7458 (office phone) (Use only in case of emergency)

**Office** David Turpin Building A553

#### General Course Information

**Number of Units** 1.5

**Pre-requisites** MATH 101

#### Course Material and Online Resources

**Textbooks (Required)** .

1. **Thomas** *Calculus Early Transcendentals* by M.D. Weir, J. Hass  
(Thirteenth Edition)
2. *A First Course in Differential Equations with Modeling Applications*  
by Dennis G Zill (10th edition, 2013)

**Course webpage** I will provide course information on the CourseSpaces webpage.  
(<http://coursespaces.uvic.ca>). You can log onto the Math 202 course webpage using  
your netlink ID.

**Calculator (Required)** Only the **Sharp EL-510R**, **Sharp EL-510RN** or **Sharp EL-510RNB** can be used for the midterm tests and final exam.

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<sup>1</sup>[Due to the large number of students that we teach, it is often impossible to answer every email quickly. For this reason, if you use email to make an appointment with us, please give us at least 24 hours. It is also very hard to use email for technical questions. Please use our office hours or Math and Stats Assistance Centre for technical questions. We will do our best to help you.]



## Lecture Hours

Section A01 [22085]: MTh 1:00 - 2:20pm DTB A110

## Tutorial Hours

Section T01 [22086]: T 3:30 - 4:20pm DTB A120

## Office Hours and Assistance

To be decided...

**Other Help** The Mathematics & Statistics Assistance Centre is a large space where students can go to work, on their own or in groups, and to discuss math & stats problems. The Centre is staffed with talented Teaching Assistants who are happy to discuss primarily first and second year course material with you. Please see <http://www.math.uvic.ca/~msassist/index.html> for more information.

**Math Club** Students in Undergraduate Mathematics and Statistics (SUMS) was founded in 2014 as the reincarnation of a previous undergraduate course union that had been inactive for a few years. Please see <http://www.uvic.ca/science/math-statistics/undergraduate/sums/index.php> for more information.

## Topics to be covered

1. Vectors, Curves and Surfaces in Space (Textbook 1: Chapter 12)
2. Partial Differentiation (Textbook 1: Chapter 14)
3. Taylor's Theorem for Functions of Several Variables (Textbook 1: Chapter 14)
4. Directional Derivatives and the Gradient Vector (Textbook 1: Chapter 14)
5. First-order Differential Equations and Applications (Textbook 2: Chapters 1, 2, 3)
6. Higher-Order Linear Differential Equations (Textbook 2: Chapter 4)
7. Cauchy-Euler Equations (Textbook 2: Chapter 4)
8. The Laplace Transform and Its Applications (Textbook 2: Chapter 7)



## Evaluation and Grading

Your final percentage grade will be computed according to the following scheme.

Component	Date	Weight
Assignment 1	Jan. 26	4%
Assignment 2	Feb. 23	4%
Assignment 3	Mar. 9	4%
Midterm Test 1	Feb. 9	14%
Midterm Test 2	Mar. 20	14%
Final Examination	TBA	60%

**You must pass the final exam to pass the course.**

## Homework

Problems related to the material covered in the class will be assigned every lecture throughout the term. Students are strongly advised to do them diligently and check their solutions before the next lecture. This homework will not be collected for marking but it is expected that you will do all of it!

Throughout the term we will do 3 assignments that you will hand in for marks.

## Midterm Tests

There are two 45-minute midterm tests given in class. Regardless of the reason, **there will be no make-up midterm tests**. If you miss a midterm test due to illness, accident, or family affliction, you should notify your instructor upon returning to classes, and provide a written request to be excused as well as supporting documentation. In such cases, the weight for this midterm test will be assigned to the other midterm test.

The assignments and midterm tests will be returned in tutorial, or can be claimed in office hours. Any term work that is not collected by the end of the final exam period will be recycled. If you have a question or concern about an assigned mark, you need to bring it to your instructor's attention within seven calendar days of the date when it is returned in class.

## Final exam:

The 3-hour final examination will be scheduled by Records to occur during the final examination period (Apr. 7 - 25, 2017).

**Accessibility** Students with diverse learning styles and needs are welcome in this course.

In particular, if you have a disability/health consideration that may require accommodations, please feel free to approach me and/or the Resource Centre for Students with a Disability (RCSD) as soon as possible. The RCSD staff are available by appointment



to assess specific needs, provide referrals and arrange appropriate accommodations <http://rcsd.uvic.ca/>. The sooner you let us know your needs the quicker we can assist you in achieving your learning goals in this course.

**Grading** Percentage scores will be converted to letter grades according to the university-wide standard table (<http://web.uvic.ca/calendar2016-05/undergrad/info/regulations/grading.html>).

**Final Examination** Off-schedule final examinations (i.e., deferred examinations) are given only in accordance with the university policy as outlined in the Calendar. If you are unable to write a final examination due to illness, accident or family affliction, please refer to the following webpages for detailed instructions how to proceed: <http://web.uvic.ca/calendar2016-09/undergrad/info/regulations/exams.html> and <http://web.uvic.ca/calendar2016-09/undergrad/info/regulations/concessions.html>. Students are **strongly advised not to make plans for travel or employment during the final examination period** as special arrangements will not be made for examinations that conflict with such plans.

**Supplemental Examinations.** The Department of Mathematics and Statistics does not award ‘E’ grades or offer Supplemental Examinations in any of its courses.

**Use of Emails** Your instructor might have many students from multiple courses, which makes managing emails a serious challenge. To reduce unnecessary emails, make sure that your question is not answered in the course outline or other course materials. Also make sure that email is the most appropriate medium for your question: for many courses, detailed mathematical questions are difficult to typeset and therefore should be asked in office hours instead. Email is also not the appropriate medium for grade disputes.

## Policies and Ethics

**Attendance** The university Calendar states ‘Students are expected to attend all classes in which they are enrolled.’ (see <http://web.uvic.ca/calendar2016-09/undergrad/info/regulations/attendance.html>). Our courses are conducted on that basis. If you miss an announcement (information concerning midterms, corrections to assignment, etc.) because you did not attend class, you must accept the consequences of not having learned of the change.

**Guidelines on Religious Observances** Where classes or examinations are scheduled on the holy days of a religion, students may notify their instructors, at least two weeks in advance, of their intention to observe the holy day(s) by absenting themselves from classes or examinations. Instructors will provide reasonable opportunities for such students to make up work or missed examinations.

**Missing work** Regardless of the reason, there will be no make-up work. If you miss a midterm or assignment due to illness, accident, or family affliction, you should notify me as soon as possible, and provide a written request to be excused as well



as supporting documentation. In such cases, your percentage allocation for missed midterm, or assignment will be divided evenly among those you did write.

**Academic Integrity** Academic integrity is intellectual honesty and responsibility for academic work that you submit individual or group work. It involves commitment to the values of honesty, trust, and responsibility. It is expected that students will respect these ethical values in all activities related to learning, teaching, research, and service. Therefore, plagiarism and other acts against academic integrity are serious academic offenses.

**The responsibility of the institution**

Instructors and academic units have the responsibility to ensure that standards of academic honesty are met. By doing so, the institution recognizes students for their hard work and assures them that other students do not have an unfair advantage through cheating on essays, exams, and projects.

**The responsibility of the student**

Plagiarism sometimes occurs due to a misunderstanding regarding the rules of academic integrity, but it is the responsibility of the student to know them. If you are unsure about the standards for citations or for referencing your sources, ask your instructor. Depending on the severity of the case, penalties include a warning, a failing grade, a record on the students transcript, or a suspension.

It is your responsibility to understand the University's policy on academic integrity:

<http://web.uvic.ca/calendar2016-09/undergrad/info/regulations/academic-integrity.html>

## Important Scheduling Information

Classes begin - Monday, January 4th, 2017

Drop (100% Fee Reduction) - January 17, 2017

Last Day to Add Courses - January 20, 2017

Drop (50% Fee Reduction) - February 7, 2017

Reading Break (no classes) - February 13 - 17, 2017

Academic Drop Date - February 28, 2017

Last day of classes - Monday, April 4, 2017

Examination period - April 7 - 25, 2017



**Course Schedule (Dates are approximate)**

<b>Week of</b>	<b>Lecture</b>
4/01/17	Textbook 1: §12.1
9/01/17	Textbook 1: §12.2 - 12.4
16/01/17	Textbook 1: §12.5
23/01/17	Textbook 1: §14.1 - 14.3
30/01/17	Textbook 1: §14.4, 14.5
6/02/17	Textbook 1: §14.6, 14.7
13/02/17	Reading Break - No classes
20/02/17	Textbook 2: §1.1, 1.2, 2.2
27/02/17	Textbook 2: §2.3, 2.4, 3.1
6/03/17	Textbook 2: §4.1.1, 4.1.2, 4.1.3, 4.2, 4.3
13/02/17	Textbook 2: §4.4, 4.5
20/03/17	Textbook 2: §4.6, 4.7
27/03/17	Textbook 2: §7.1, 7.2
3/04/17	Textbook 1: §14.8, 14.9

