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**COURSE INFORMATION**  
**MATH 1230 – Calculus II**

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This course picks up where Math 1210 left off. In this course we will learn about integration, applications of integration, techniques of integration, infinite series, and polar coordinates (among other things).

Time	Class: Mon., Wed., Fri. 8:30-9:30 Lab: Fri. 10:30-11:30
Place	Class: BB 1075 Lab: BB 1075
Instructor	Adam Van Tuyl Office: RB 2015 Office Hours: Mon. and Wed. 2:30-3:30
Text	<i>Calculus: Early Transcendental Functions</i> (4th Edition) by Larson, Hostetler, and Edwards.
Email	<a href="mailto:avantuyl@sleeeet.lakeheadu.ca">avantuyl@sleeeet.lakeheadu.ca</a>
Web Page	<a href="http://flash.lakeheadu.ca/~avantuyl/courses/2007_winter_math1230.html">http://flash.lakeheadu.ca/~avantuyl/courses/2007_winter_math1230.html</a>

**Contact Information.** The best way to get a hold of me is via email. The class webpage is also a good source of information. I update the webpage after every class.

**Outline.** The following is rough guide of the sections we will cover (subject to some change):

- Chapter 5.4-5.9 – Integration.
- Chapter 6.1-6.2 – Differential Equations.
- Chapter 7.1-7.6 – Applications of Integration.
- Chapter 8.1-8.8 – Integration Techniques.
- Chapter 9.1-9.10 – Infinite Series.
- Chapter 10.1-10.4 – Polar Coordinates.

**Marking Scheme.** The evaluation is composed of three components.

**1. Homework (15%)** A homework assignment will be given out every Wednesday. It will be due the following Wednesday in class. There will be 9 homework assignments per semester. The homework assignment with the lowest grade will not be counted. The solutions will be posted on ERES, the electronic reserve of Lakehead Library, once the assignments have been handed in (a link will be available on the class webpage).

All of the homework questions (with some possible exceptions) will be taken from the text book. Exercises will be marked out of 2 or 4 points, depending upon the level of difficulty.

Questions out of 2 points will be graded as follows:

[2 pts] Near perfect or perfect solution. A near perfect solution is a solution that is correct up to the final stage with possible mistake or sign error at the last step.

[1 pt] The solution shows some of the needed ideas, but fails to have the final solution.

[0 pts] Little or no progress is made toward the solution.

Questions out of 4 points will be graded as follows:

[4 pts] Near perfect or perfect solution. A near perfect solution is a solution that is correct up to the final stage with possible mistake or sign error at the last step.

[3 pts] Most of the needed ideas are present, but misses a key point, or is poorly written.

[2 pt] The solution shows some of the needed ideas, but fails to have the final solution.

[1 pt] One or two initial steps are made.

[0 pts] Little or no progress is made toward the solution.

**Further notes on homework:**

- Every assignment must contain the course number, the assignment number, your name, and your student ID, and the instructor's name. (Every week, thousands of math assignments are turned in - make sure your assignment gets to the right person!)
- Homework must **always** be stapled together (no paper-clips, folding the pages, folders, etc. will be accepted). Failure to do this will result in **10 points deducted** from the assignment. (Paper-clipped assignments have the tendency to fall apart; assignments in folders make more work for the grader.)
- Late homework assignments **will not be accepted**. The solutions will be posted once the assignment is due.
- The copying of assignments will result in a mark of 0 for both assignments.
- Homework may be handed in early by either giving it to me or by placing it under my office door. Do **not** bring your assignment to the math office.
- Assignments will be handed back in the labs.

**2. Tests (2 Midterms, 25% each)** There will be two midterms. The dates of the midterms are (provisionally):

February 7, 2007 - Midterm 1

March 14, 2007 - Midterm 2

**3. Exams (Final Exam 35%)** A final exam will be given in April. The exam will be cumulative. The exact dates will be given later once the exam schedules are ready. A friendly piece of advice: do not book your plane ticket home until you are certain about the exam schedule. A flight is not an acceptable excuse for missing an exam.

**Class Policies.** Though attendance is not mandatory, I would appreciate the fact that you show up on time if you do decide to come to class.

**Changing Marks.** If you disagree and/or have a problem with a particular mark on an assignment or exam, please use the following procedure. First, check you assignment/exam against the solutions. If this does not clear up any problems, on the front of the assignment/exam, please write the question number you want re-graded, and why it should be re-graded. Then hand it back it in. I will then take a look at the assignment/exam and see if the mark needs to be adjusted. If there is simply an addition error with the marks, please hand it back in to me with the correct number at the top.

Exams and tests must be taken on the date assigned, except if there are medical or family emergencies. In these cases, notes will be required.

**Important Dates.**

Jan. 3, 2007 – Second semester classes begin

Feb. 7, 2007 – Midterm I

Feb. 19-23, 2007 – Reading Break

March 14, 2007 – Midterm II

April 3, 2007 – Second semester classes end

April 10-21, 2007 – Exams