

*Welcome to*  
**MATH 2111 - Ordinary differential equations**  
*Fall term 2015*

**INSTRUCTOR:** Dr. Monica Ilie

- **Contact info:** RB 2019 ★ ph: 766-7224 ★ *milie@lakeheadu.ca*
- **Office hours:** Monday/Wednesday 1:30-2:30 (or by appointment)

**COURSE OBJECTIVES**

At the end of this course you will be able to translate various real life problems from biology, chemistry, physics into diverse mathematical models that involve ordinary differential equations. Then, using the tools developed in the first part of the course you will be able to recognize the type of ordinary differential equation that needs solving and choose a proper method of solving it. You will have a good grasp of what is a general solution and what is a particular solution to an ordinary differential equation.

This course provides a large catalog of differential equations with their methods as well as applications to real world problems, all possible with a solid grasp of calculus methods, integration and differentiation. As a result, your calculus skills will also be improved by using them every day.

**COURSE INFORMATION:**

- **Class time:** Monday/Wednesday 10:00-11:15 (RC 1001)
- **Required Textbook:** *Differential equations with boundary value problems* by Dennis G. Zill and Warren S. Wright, 8th edition.
- **Website:** <http://flash.lakeheadu.ca/milie/Math2111.html>
- **Grading:** Your final grade will be the *higher* of the two grading schemes below:

<b>Grading Scheme 1</b>	Assignments	Quizzes	Midterm	Final Exam
	10%	5%	30%	55%

<b>Grading Scheme 2</b>	Assignments	Quizzes	Final Exam
	10%	5%	85%

- **Midterm:** Wednesday October 21, 2015 (in class)

**SYLLABUS**

The topics to be covered are, tentatively the following: Chapter 1: 1.1-1.3; Chapter 2: 2.2-2.5; Chapter 3: 3.1, 3.2; Chapter 4: 4.1-4.7; Chapter 5: 5.1-5.2; Chapters 6: 6.1-6.4 (time permitting)

## ASSIGNMENTS

Homework assignments are given as topics are covered in class. The assignments are to be deposited in the assignment box marked **Math 2111** on the second floor foyer of the Ryan Building. Every assignment must contain the course number, the assignment number, your name, and your student ID, and the instructors name. Homework must always be stapled together (no paper-clips, folding the pages, folders, etc. will be accepted). **Late** assignments will **not** be accepted.

## QUIZZES

Quizzes will be administered at the end of class, will be short (5 min) with one or two multiple choice questions, testing the material covered the week before. There will be approximately 10 quizzes, each worth 1%. The best 6 quizzes out of the possible 10 will count toward your fulfillment of the course requirements and the rest of them will count as bonus points (max of 3%).

## MISSED EXAM POLICIES

If you miss the midterm for a legitimate reason which you can document (e.g. doctor's note), the weight of the midterm will be *transferred* to the final exam. There will be no make-up exams! **The documented proof of absence should be provided to me no later than 10 days after the exam was written.**

*A friendly piece of advice:* don't book your plane ticket home until the exam schedule is published. A booked flight is not an acceptable excuse for missing an exam.

## 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 your 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.

## LECTURE POLICIES

Attendance is not mandatory; however, it is strongly recommended that you come to class. I would appreciate the fact that you show up on time if you do decide to come to class. Arriving late disturbs both me and your fellow classmates.

**IMPORTANT DATES: Friday, September 25, 2015:** final date for registration

**Friday, November 6, 2015:** last date for course withdrawal without academic penalty

**December 20, 2015:** contingency date (all exams that are missed by the closure of the university during the exam period, due to unforeseen circumstances, will be rescheduled this day)