

**Math 1172 Calculus II Winter 2015
Course Outline**

Instructor: Dr. Elcim Elgun

Office: RB 2018

Phone: (807)-346-7869

Office Hours: Mondays and Wednesdays 1.00-2.00 pm & 4.00-5.00 pm or by appointment

Email: eelgun@lakeheadu.ca

Lectures:

Math 1172 WA: MWF 11.30 am - 12.30 pm in BB 1075

Math 1172 WB: MWF 8.30 am - 9.30 am in UC 0050

Laboratory:

Math 1172 L-W1 Lab F 3.30 pm - 4.30 pm in RB 1042

In the first half of the Lab hours we will solve more examples/problems on the course material. In the second half you will ask your questions about the course material and the homework problems to your instructor. No new material will be covered.

Required Textbook:

Calculus: one and several variables by Salas, Hille and Etgen, 10th edition. (We will cover Chapters 6-7-8 and 11-12.)

Grade Distribution:

Your final grade will be computed as follows:

Assignments: 15 %, Midterm Exam: 35 %, Final Exam: 50 %.

Syllabus:

- Some applications of the integral: area, volume, centroid, work (will be covered in Weeks 1 and 2 of the term, contains the material from Chapter 6 of the Textbook).
- The trascendental functions: one-to-one functions, inverse functions, logarithms, exponentials, inverse trigonometric functions, hyperbolic functions. (will be covered in Weeks 2 and 3 of the term, contains the material from Chapter 7 of the Textbook).
- Techniques of integration: integration by parts, integration of trigonometric functions, integration by trigonometric substitutions, partial- fractions, numerical integration. (will be covered in Weeks 4, 5 and 6 of the term, contains the material from Chapter 8 of the Textbook).
- Sequences, Indeterminate forms, Improper integrals: sequences, limit of sequences, indeterminate forms, improper integrals.(will be covered in Weeks 7, 8 and 9 of the term, contains the material from Chapter 11 of the Textbook).
- Infinite series: infinite series, the integral test, the comparison test, the limit comparison test, the root test, the ratio test, absolute and conditional convergence, alternating series, Taylor polynomials and Taylor series, power series, differentiation and integration of series(will be covered in Weeks 10, 11 and 12 of the term, contains the material from Chapter 12 of the Textbook).

Assignments:

A set of homework problems will be assigned every week on the course website (see MyCourseLink). The assignments are due Monday afternoons 5 pm. Assignments should be dropped in the Math 1172 Assignment Box on the second floor of Ryan Building before the due time. Late assignments will not be marked under any circumstances.

Midterm:

The midterm exam will be written on February 27th, 2015, at 3.30 pm (Week 7 of Lectures). The place will be announced on the course website. The exam will be closed book with no calculators or other aids allowed. No make-up test is provided for any student who misses writing the midterm exam at the scheduled time. If there is a legitimate (documented) reason, the final grade will be calculated on the basis of the final exam. Otherwise, a grade of 0% for the missed exam will be given. The material the midterm exam will cover will be announced in class and on the course website.

Final Exam:

Date: To be announced. The final exam period is April 10-23, 2015. You will need a minimum of 7 graded assignments in order to take the final exam.

Academic Dishonesty : All cases of academic dishonesty will be dealt with according to the Universitys Code of Student Behavior and Disciplinary Procedures, copies of which are available from the Registrar.