

# Calculus II (Math 173-001) — Spring, 2013

**Location and Time:** Bouillon 102, MTWThF, 8:00-8:50 am

**Instructor:** Dr. Dan Curtis

**Office:** 107a Bouillon

**Office Hours:** MWF 2:00-4:00 pm or by appointment.

**CWU e-mail:** curtiswd@cwu.edu

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**Final Exam:** Tuesday, June 4, 8:00-10:00 am

**Textbook:** Calculus, Single Variable by Hughes-Hallett, et al, 5th Edition. **The textbook is required.**

**Calculator:** A graphing calculator will be useful for this course. Some more advanced calculators can now do both differentiation and integration. However, in this course you will learn methods for doing things by hand and will have to do them by hand on exams.

**Course Content:** The course will cover material from chapters 5, 6, 7, and 8 of the text. You should read the book. The examples in the text will supplement those given in class and the discussion and examples given in the text will provide reinforcement for material presented in class.

**Classwork and Homework:** You are expected to attend class daily. **Homework** will be assigned but not graded. Some time will be available during class to discuss the homework problems and your instructor is available during office hours. Use will be made of graphing calculators during class, on homework, and on exams (but note the comment made above).

**Course Prerequisites:** Calculus I is a formal prerequisite for this course. You must know the basic rules for differentiation: sum rule, product rule, quotient rule and chain rule. You must also know the formulas for the derivatives of the basic functions, including powers, roots, exponentials, logarithms, trigonometric and inverse trigonometric functions (arcsin, arccos, and arctan).

**Learner Outcomes:** Upon successful completion of this course, the student will be able to:

- work with the concept of definite integral and use basic properties of integrals;
- discuss how integrals can be approximated by Riemann sums and by other numerical approximation schemes;
- formulate and solve problems involving the various interpretations of the integral as displacement, area, volume, work, density, center of mass, probability distributions and densities;
- use the concept of antiderivative and apply it to solving problems;
- use the Fundamental Theorem of Calculus
- use analytical methods for constructing antiderivatives, including integration by parts, various substitution methods, and the method of partial fractions;

**Grading:** Your course grade will be determined by the following:

1. Three 100-point, in-class exams. The dates of these exams are found on the **Course Schedule** part of this syllabus. Only your best two scores will count, that is, your lowest score will be dropped.
2. A final exam worth 100 points. (The final exam cannot be dropped.)

A perfect score on each of the above categories would result in a total of 300 points. Your course grade will be determined by the percentage  $p$  of these points you earn, according the following scale.

$90 \leq p$	A	$65 \leq p < 77.5$	C
$89 \leq p < 90$	A-	$64 \leq p < 65$	C-
$87.5 \leq p < 89$	B+	$62.5 \leq p < 64$	D+
$80 \leq p < 87.5$	B	$50 \leq p < 62.5$	D
$79 \leq p < 80$	B-	$p < 50$	F
$77.5 \leq p < 79$	C+		

**Policy on Missed Exams:** No makeup exams will be given. If you miss an exam, it will be the one you drop. You must take the final to pass the course (that is, you can't drop the final.)

**Course Schedule (48 class days)**

<b>Date</b>	<b>Class Activity</b>	<b>Date</b>	<b>Class Activity</b>
03/25		05/06	
03/26	Classes begin	05/07	
03/27		05/08	
03/28		05/09	
03/29		05/10	
04/01		05/13	
04/02		05/14	
04/03		05/15	
04/04		05/16	
04/05		05/17	
04/08		05/20	
04/09		05/21	
04/10		05/22	
04/11	Exam 1	05/23	Exam 3
04/12		05/24	
04/15		05/27	HOLIDAY: Memorial Day
04/16		05/28	
04/17		05/29	
04/18		05/30	
04/19		05/31	Last day of classes
04/22		06/03	Prof. Dev. Day
04/23		06/04	Final Exam: 8:00-10:00 am
04/24		06/05	
04/25		06/06	
04/26		06/07	
04/29			
04/30			
05/01			
05/02	Exam 2		
05/03			