

Note: All Exams are during times different from our regular class meeting time and in rooms different from our regular classroom.

Week	Dates	Sections and Topics	Important Dates/Assignments
1	1/7 1/8 1/9 1/10 1/11	2.1 The Tangent and Velocity Problems Recitation and Review Equations of lines 2.2 The limit of a function Recitation and Quiz 1 2.3 Calculating limits	WebAssign Homework due 11:59 P.M. Sunday January 13
2	1/14 1/15 1/16 1/17 1/18	2.3 Calculating limits 2.5 Continuity /Intermediate Value Theorem Recitation and Practice 2.5 Continuity/Intermediate Value Theorem 2.6 Limits at Infinity (Note distinction between “DNE” and “infinite limit”) Recitation and Quiz 2 2.7 Derivatives and rates of change	WebAssign Homework due 11:59 P.M. Sunday January 20
3	1/21 1/22 1/23 1/24 1/25	Martin L. King, JR Day: No class Recitation and Practice 2.8 Derivatives as a function Review for Test 1 3.1 Derivative of polynomials	<b>Comprehensive Block Test 1:</b> Thursday January 24, 5:00 to 6:30 P.M.  WebAssign Homework due 11:59 P.M. Sunday January 27
4	1/28 1/29 1/30 1/31 2/1	3.2 The Product and Quotient Rules Recitation and Practice 3.2 The Product and Quotient Rules Recitation, Brief Review of Trigonometry and Quiz 3 3.3 Derivatives of Trigonometric Functions	WebAssign Homework due 11:59 P.M. Sunday February 3
5	2/4 2/5 2/6 2/7 2/8	3.4 Chain Rule Recitation and Practice 3.4 Chain Rule Recitation and Quiz 4 3.5 Implicit Differentiation	WebAssign Homework due 11:59 P.M. Sunday February 10
6	2/11 2/12 2/13 2/14 2/15	3.6 Derivatives of Logarithmic Functions Recitation and Review of exponential and logarithmic functions 3.8 Exponential Growth and Decay (light discussion) 3.9 Related Rates Recitation and Quiz 5 3.9 Related Rates	WebAssign Homework due 11:59 P.M. Sunday February 17
7	2/18 2/19 2/20 2/21 2/22	3.10 Linear Approximation and Differential (differentials lightly discussed) Review and Practice 4.1 Maximum and Minimum Values Review for Test 2 4.2 Mean Value Theorem	<b>Comprehensive Block Test 2:</b> Thursday February 21 5:00 to 6:30 P.M.  WebAssign Homework due 11:59 P.M. Sunday February 24
8	2/25 2/26 2/27 2/28 3/1	4.3 How derivatives affect the shape of a graph Recitation and Practice 4.3 How derivatives affect the shape of a graph Recitation and Quiz 6 4.4 Indeterminate Forms and l'Hospital's rule	WebAssign Homework due 11:59 P.M. Sunday March 3
9	3/4 3/5 3/6 3/7 3/8	4.5 Summary of curve sketching (incorporates material from section 4.3) Recitation and Practice 4.7 Optimization Problems Recitation and Quiz 7 4.7 Optimization Problems	Quiz 7 Friday March 8  WebAssign Homework due 11:59 P.M. Sunday March 10
10	3/11 3/12 3/13 3/14 3/15	4.9 Antiderivatives Recitation and Practice 5.1 Areas and Distances Review for Test 3 5.1 Areas and Distances	<b>Comprehensive Block Test 3:</b> Thursday March 14, 5:00 to 6:30 P.M.  WebAssign Homework due 11:59 P.M. Sunday March 17  <i>Last Day to withdraw: Friday March 15</i>
11	3/18 3/19 3/20 3/20 3/21	Spring Break : no class Spring Break : no class Spring Break : no class Spring Break : no class Spring Break : no class	

12	3/25 3/26 3/27 3/28 3/29	5.2 The Definite Integral Recitation and Practice 5.3 Fundamental Theorem of Calculus Recitation and Quiz 8 5.4 Indefinite Integrals and Net Change Theorem	WebAssign Homework due 11:59 P.M. Sunday March 31
13	4/1 4/2 4/3 4/4 4/5	5.5 The substitution Rule Recitation and Practice 5.5 The substitution Rule 6.1 Areas between curves Recitation and Quiz 9 6.1 Areas between curves 6.2 Volumes	WebAssign Homework due 11:59 P.M. Sunday April 7
14	4/8 4/9 4/10 4/11 4/12	6.2 Volumes 6.3 Volumes by Cylindrical Shells Recitation and Practice 6.3 Volumes by Cylindrical Shells Review for Test 4 6.4 Work	<b>Comprehensive Block Test 4:</b> Thursday April 11, 5:00 to 6:30 P.M.  WebAssign Homework due 11:59 P.M. Sunday April 14
15	4/15 4/16 4/17 4/18 4/19	6.5 Averages Review for block comprehensive final exam Review for block comprehensive final exam Review for block comprehensive final exam Review for block comprehensive final exam	
16		Final Exam Week (April 20 – April 25)	<b>Day and Time of Block Final Exam: TBA</b>

*The instructor reserves the right to amend or correct this course schedule as necessary.*

**Calculus I**, 15-Math-1061-001  
Spring Semester, 2012-2013  
Time: (M-R) 8:00 – 8:55 A.M.  
Room: 120 of Building 60 West Charlton

**Instructor:** Roger Chalkley  
**Office:** French Hall 4504  
**Office and Voice Mail Phone:** 556-4074  
**Email:** Roger.Chalkley@uc.edu  
**Office Hours:** Monday, Wednesday, Friday 9:00-10:00 A.M. and Tuesday, Thursday 11:00-11:50 A.M.

**Text:** Calculus Early Transcendentals, 7<sup>th</sup> edition by J. Stewart

**Prerequisite:** At least a C- in Precalculus or Foundations for Scientific Calculus, or a minimum score of 700 on the Math Placement Test.

**Exit criteria:** You must have at least a C- grade in Calculus I to take Calculus II

**General Education:** This course was designed following the guidelines of the University of Cincinnati General Education Program. It satisfies, or partially satisfies, the Quantitative Reasoning distribution requirement.

**Course Description:** This is the first part of a three-semester sequence of course on calculus (Math 1061, 1062, 2063). The focus of this course is on the process and application of differentiation of basic algebraic functions, such as polynomials and rational functions, and transcendental functions, such as exponential, logarithmic and trigonometric functions. This course also includes an introduction to techniques of integration and their application.

**Learning Outcomes:** At the completion of this course successful students will be able to:

1. evaluate and interpret limits of basic algebraic and transcendental functions.
2. evaluate and interpret differentiation of basic algebraic and transcendental functions.
3. use the definitions and theorems, associated with derivatives, to construct graphs, solve related rates problems and solve optimization problems that involve basic algebraic and transcendental functions.
4. evaluate and interpret the integration of basic algebraic and transcendental functions.
5. use the definitions and theorems, associated with integration, to solve area, volume, work and average problems that involve basic algebraic and transcendental functions.

**Withdrawals:** The last date to withdraw, without academic penalty, is Friday March 15.

**Academic Integrity:** The University Rules, including the Student Code of Conduct, and other documented policies of the department, college, and university related to academic integrity will be enforced. Any violation of these regulations, including acts of plagiarism or cheating, will be dealt with on an individual basis according to the severity of the misconduct.

**Attendance:** For your success in this course, it is important not to miss classes. An attendance sheet will be passed out at each class for you to sign.

**Tips for success:** Preview (scan for 10-15 minutes) each day's course material before coming to class. Go through the material in the book. Do the assigned homework problems. Seek help immediately if you are having trouble. Study the practice problems for the tests (which will be posted on Blackboard) prior to the tests, and use the solution keys to check your work. If you miss class for any reason, then you should immediately find time to catch up.

**Special Needs:** If you have any special needs related to your participation in this course, including identified visual impairment, hearing impairment, physical impairment, communication disorder, and/or specific learning disability that may influence your performance in this course, you should meet with the instructor to arrange for reasonable provisions to ensure an equitable opportunity to meet all the requirements of this course. At the discretion of the instructor, some accommodations may require prior approval by Disability Services.

**Mathematics Learning Center(MLC):** The MLC is located in French Hall West, Room 2133. It is free and experienced tutors will help on a first-come-first-serve basis. Spring Semester Hours, beginning Monday January 14, are: M - H: 9 am - 8 pm, F: 9 am - 4 pm, and Sat: Noon - 4 pm.

**Exams & Grades:** There will be four 90-minute comprehensive common semester tests, one common final exam, 9 quizzes, and at least 13 homework assignments. Your final percent grade will be computed using the below point system.

1. 90-minute common exams: 100 points each, a total of 400 points
2. Common final exam: 250 points
3. Quizzes: 70 points
4. Homework assignments: 30 points

The conversions from numerical grades to letter grades will be posted on Blackboard after each test. The conversion from numerical grade (percent of 750 points earned during the semester) will be posted on Blackboard at the end of the semester.

**Common Exam Dates:** The dates and times for common semester tests, which will take place in a room different from our regular classroom, are:

Test #1: Thursday January 24, 5:00 pm - 6:30 pm in room TBA

Test #2: Thursday February 21, 5:00 pm - 6:30 pm in room TBA

Test #3: Thursday March 14, 5:00 pm - 6:30 pm in room TBA

Test #4: Thursday April 11, 5:00 pm - 6:30 pm in room TBA

**Final Exam:** It will be during exam week, but not during the time posted through One Stop. The date and time of the block comprehensive final exam will be announced in class and on Blackboard sometime after March 11.

If you cannot take a test on one of the scheduled days, then come to see me immediately. Students registered with Disability Services should arrange to take the common 90-minute tests on the scheduled day and cannot leave the testing room before 5:30 pm. The same principle applies to the common final exam.

**Calculator Policy:** No technology/calculators will be required or permitted during the common tests or the final exam. Cell-phones, MP3, and other communication devices are also prohibited.

**Make-up Policy:** There will be no make-ups for missed homework or quizzes. Your lowest weekly homework grade and your lowest quiz grade, however, will be dropped. There generally will be no make-ups for the 90-minute common tests and a zero score will be assigned for a missed exam. If you cannot take a test on one of the scheduled days, then see me immediately. Under the following circumstances, your final exam score will be weighted to replace the first missed test score provided you provide documentation of the illness or emergency:

- Documented health or serious family problem
- Documented university business (e.g. UC sports team practice)
- Documented conflict with another UC class
- Documented unavoidable work conflict, documented by a written statement from the employer.

**Homework Assignments:** Your graded homework assignments consist, primarily, of weekly WebAssign problems. The due dates for the WebAssign homework (all due dates are on Sunday) can be found on the Course Schedule. A link to WebAssign and your WebAssign class key can be found through the Assignment button on our course Blackboard site. Any additional graded homework assignments will be announced in class and also posted in the Assignment button on our course Blackboard site.