

Spring 2014

MATH 201: Calculus I
Section 001

4 credit hours

Instructor:	Dr. Kristen Abernathy		Instructor's Teaching Schedule:	MWF 9:30-10:45 MWF 11:00-12:15 TR 9:30-10:45
Office:	Bancroft 148			
Office Phone:	803-323-4681		Office Hours:	W 1:30-3:30 F 12:30-1:30 And by appointment
Math Department:	803-323-2175			
Campus Email:	abernathyk@winthrop.edu			

The instructor reserves the right to make modifications to this syllabus. Students will be notified in class & by email.

A complete syllabus and schedule is available at: www.winthrop.edu/cas/math/syllabus.

Determination of Grade

Write-ups (15%) In addition to regularly assigned homework from each section, you will be asked to turn in a written solution to an assigned problem. The purpose of this write-up will be to demonstrate the correct mathematical skills in problem solving, as well as a correct explanation of the steps taken to solve the problem. These write-ups will focus on writing a clear and logically sound argument. Assigned write-ups for the week will be collected each Monday. Late assignments will be accepted up to one week after the original due date; after one week, ten points will be deducted for each week past due.

Project (10%) To supplement the material on derivatives, there will be a writing project associated with this topic. You may work in groups of two or three and you will be given two weeks to complete the project. The project will be assigned at the conclusion of chapter 2 (around 2/20). Each group will receive a handout describing the expectations for the project.

Tests (60%) There will be four in-class tests as listed on the attached schedule. You are expected to take the tests and the final exam at the scheduled time. Make-up tests are not given. An unexcused absence will result in the grade of zero for any missed test. Excused absences from tests will be dealt with at the end of the term and may depend on individual circumstances. Anticipated absences should be reported and verified in advance; emergency absences must be verified within one week after returning to class. Any questions concerning grading of tests must also be resolved within one week after the tests are returned.

Final Exam (15%) The cumulative final exam is scheduled for Tuesday, May 6, 2014, 11:30 AM.

Letter Grade Determination:

92-100 A	90-91.99 A-	87-89.99 B+	82-86.99 B	80-81.99 B-
77-79.99 C+	72-76.99 C	70-71.99 C-	67-69.99 D+	62-66.99 D
60-61.99 D-				

Text, Materials, and Resources

- Required Text: **Calculus Early Transcendentals 10E Chp 1-5 f/Winthrop**: Edition: 10th; ISBN: 9781118477878 by Anton
 - Students planning to take MATH201 and/or MATH202 only can choose to purchase the text materials in sections at a reduced cost.
 - Students planning to take MATH301 should purchase full text to reduce overall textbook costs.
 - A full color version of the textbook is on reserve at the Dacus Library.
- MATH201 students are expected to have a scientific calculator.
- Students are encouraged to use office hours as a way to receive extra help.
- The Mathematics Tutorial Center information is available at: www.winthrop.edu/mtc.
- Winthrop's Academic Success Center is a free resource for all undergraduate students seeking to perform their best academically. The ASC offers a variety of personalized and structured resources that help students achieve academic excellence, such as tutoring, academic skill development (test taking strategies, time management counseling, and study techniques), and group/individual study spaces. The ASC is located on the first floor of Dinkins, Suite 106. Tutoring for this specific course is offered through the office. If you wish to request a tutor, you must attend ONE Tutee Seminar, offered every Friday until March 14th. Please contact the ASC at 803-323-3929 or success@winthrop.edu if you have any questions. For more information on ASC services, please visit www.winthrop.edu/success.

Course Policies

1. Winthrop University is dedicated to providing access to education. If you have a disability and require specific accommodations to complete this course, contact the Office of Disability Services (ODS) at 323-3290. Once you have your official notice of accommodations from the Office of Disability Services, please inform me as early as possible in the semester.
2. Review the student code of conduct for university policies on academic misconduct. Academic misconduct will not be tolerated and will result in a failing grade on the assignment and/or in the course. The full handbook is available online at: (<http://www2.winthrop.edu/studentaffairs/handbook/StudentHandbook.pdf>)
3. All electronic devices (including cell phones) other than a calculator should be set to silent and kept in your book bag or purse throughout class time unless otherwise instructed.
4. Students may not use cell phones, MP3 players, or other electronic devices in place of a calculator. Students may not share calculators during quizzes, tests, or the final exam. Any student caught using an unapproved electronic device during a quiz, test, or the final exam will receive a grade of zero on that assessment and the incidence will be reported to the Dean of Students.
5. A grade of C or better in MATH201 is required to enroll in MATH202.
6. Students required to take MATH104 as a co-requisite, must drop MATH201 if MATH104 is dropped.

Attendance Policy

The University Attendance policy as stated in the 2013-2014 catalog (http://www2.winthrop.edu/recandreg/pdf/catalogs/13_14/AcadRegs.pdf): if a student's absences in a course total 25 percent or more of the class meetings for the course, the student will receive a grade of N if the student withdraws from the course before the withdrawal deadline; after that date, unless warranted by documented extenuating circumstances as described in the previous section, a grade of F or U shall be assigned.

SU Deadline: T 1/28
Spring Break: M 3/17 to F 3/21

Course Withdraw Date: W 3/12
Final Exam: T 5/6 11:30 am

Course Goals and Alignment with the General Education Goals

The course meets the Quantitative Reasoning requirement through the following goal alignment. Further when not used as the QR requirement, this course meets the Logic, Language, and Semiotics requirement through activities and requirements that require students to: (1) use logic and mathematical information to draw reasonable conclusions and (2) use the symbols and language of mathematics to communicate about problems and present solutions.

Course Goals/SLO	General Education Goals	University Level Competencies
Apply derivatives and integrations to real life problems	<ul style="list-style-type: none"> Analyze and use a variety of information gathering techniques Identify sound and unsound reasoning. Make valid inferences from data. Solve mathematical problems of the type necessary for living in today's and tomorrow's world. Understand that quantitative analysis is important to almost every endeavor of humankind. Understand the concept and application of quantitative relationships. 	<p>Competency 1 Winthrop graduates think critically and solve problems. Winthrop University graduates reason logically, evaluate and use evidence, and solve problems. They seek out and assess relevant information from multiple viewpoints to form well-reasoned conclusions. Winthrop graduates consider the full context and consequences of their decisions and continually reexamine their own critical thinking process, including the strengths and weaknesses of their arguments.</p> <p>Competency 3 Winthrop graduates understand the interconnected nature of the world and the time in which they live. Winthrop University graduates comprehend the historical, social, and global contexts of their disciplines and their lives. They also recognize how their chosen area of study is inextricably linked to other fields. Winthrop graduates collaborate with members of diverse academic, professional, and cultural communities as informed and engaged citizens.</p>
Use calculus to analyze graphs of functions and to determine extreme values of functions.		
Use derivatives to solve optimization problems and problems involving rates of change.		
Demonstrate an understanding of what calculus is and how it compares with pre-calculus.		
Use limits to investigate the concept of derivatives via slopes of tangent lines to graphs.		
Use limits to investigate the concept of integration.		

For purposes of departmental and touchstone program assessment of student learning in this course, sections of the final exam may be tabulated for all students. Individual tests and course grades may also be used as an indication of progress toward the above goals.

SCHEDULE

Date	In Class	HW
M 1/13	1.1	1-9 (odd), 13,14,17-25 (odd)
W 1/15	1.2	1,2,3-43 (odd)
F 1/17	1.3	1-39 odd, 43, 47, 51-58
W 1/22	1.5	5,7,9,11-21 (odd),29,31,47,52
F 1/24	1.6	1-15 (odd), 20, 21, 61, 63, 67
M 1/27	2.1	
W 1/29	2.1	1, 4, 7-21 (odd), 27, 29
F 1/31	2.2	1-29 (odd), 39-41 (odd), 45-49 (odd)
M 2/3	REVIEW	
W 2/5	TEST 1	
F 2/7	2.3	1-25 (odd), 33-47 (odd), 51-61 (odd), 65-69 (odd)
M 2/10	2.4	1-23 (odd), 27-41 (odd)
W 2/12	2.5	1-29 (odd), 31-41 (odd)
F 2/14	2.6	1-57 (odd), 61-65 (odd), 71-79 (odd), 83
M 2/17	3.1	1-31 (odd), 37, 43
W 2/19	3.2	1-43 (odd), 49-57 (odd)
F 2/20	3.3	15-61 (odd), 71-79 (odd)
M 2/24	3.4	
W 2/26	3.4	1-29 (odd), 45
F 2/28	3.5	1 (a,c), 3, 23-33 (odd), 43-49 (odd), 55, 59, 63
M 3/3	3.6	7-47 (odd)
W 3/5	REVIEW	
F 3/7	TEST 2	
M 3/10	4.1	1-39 (odd), 57, 71
W 3/12	4.2	1-59 (odd)
F 3/14	4.4	1-27 (odd), 43, 47, 49, 55
M 3/24	4.5	1,3,5,9,11,19,21,23,25,31,37,55
W 3/26	4.6	3,9,11,17,19,21,25,27,33,35,40
F 3/28	4.7	1-7 (odd),27,29,41
M 3/31	4.8	1-7 (odd),15,19,21,25,27,41
W 4/2	REVIEW	
F 4/4	TEST 3	
M 4/7	5.2	9-27 (odd),37,39,43,45,47-57 (odd)
W 4/9	5.3	1-59 (odd),63,67,69,71,75,77
F 4/11	5.5	
M 4/14	5.5	13-31 (odd),35
W 4/16	5.6	5,7,9,13-39 (odd),45-51 (odd),57,59-65 (odd)
F 4/18	5.7	5-17 (odd),23,25,33-45 (odd)
M 4/21	5.8	3-11 (odd),31
W 4/23	REVIEW	
F 4/25	TEST 4	
M 4/28	REVIEW FOR FINAL	