

MATH 142-011 Calculus II - Spring 2018

Recitation M 9:40am-10:30am LeConte 121

Lecture TR 11:40am-12:55pm LeConte 113

Maple Lab F 9:40am-10:30am LeConte 102

Lecture Instructor: Rade Musulin

Email: musulin@math.sc.edu

Office: LeConte 122A

Office Hours: Mondays 3:00pm-4:30pm, Wednesdays 3:00pm-4:30pm, or by appointment.

Maple Lab and Recitation Leader: Bailey Thomas Hall

Email: baileyth@email.sc.edu

Office: LeConte 122A

Prerequisites: C or better in MATH 141.

Student Learning Outcomes: A student who successfully completes Calculus II (MATH 142) should continue to:

- (1) Develop as an independent learner with the ability to approach problems from a conceptual viewpoint.
- (2) Utilize more than one idea in a single problem, and to apply appropriate calculus skills to problems in context.
- (3) Master concepts and gain skills needed to solve problems related to techniques of integration, sequences and series, Taylor polynomials and series, parametric and polar coordinate curves.

Required Materials:

- **Textbook:** Thomas' Calculus: Early Transcendentals (13th ed), Thomas, Weir, and Hass, Pearson, 2014.
- **Graphing Calculator:** The calculator must NOT have a CAS, preferably a TI83 or TI-84. Use of a calculator with CAS or a phone calculator is cheating. So: NO TI-Inspire, NO TI-89, NO TI-92, etc.
- **Online MyMathLab:** You will also need an access code for <http://www.MyMathLab.com>, the online homework software. To register for our class the Course ID will be provided in class. Access to MyMathLab is required for this course. However, since the online system comes with an eBook, the textbook itself is optional.

Course Policies and Expectations:

- (1) **Participation:** Participants are expected to attend every class meeting and to get involved in the discussion. We will learn much more if we explore the mathematics together. All participants are expected to show respect to other students, the instructors, and any guests who may be visiting the class during the year. Out-of-class participation is also expected, so read the text and other materials; get to know the other students in class; exchange phone numbers; work together on assignments; and give each other moral support.
- (2) **Cell Phones:** Make sure that your cell phone is off and away during our sessions.
- (3) **Attendance:** Attendance is taken daily in lecture, lab, and recitation; any more than six absences will be considered excessive. Students who miss an excessive number of classes before the drop deadline may be dropped from the course. Your attendance will be considered in borderline grade cases.
- (4) **Academic Integrity:** I expect you to familiarize yourself with the Honor Code found in the current student handbook. Keep in mind that "Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline." Honor Code: <http://www.housing.sc.edu/academicintegrity/honorcode.html>.

- (5) **Students with Disabilities:** Students who would like to request accommodations for disabilities must talk to me as soon as possible. Students must register with the Office of Student Disability Services before I can make any accommodations.
- (6) **Make-Up Policy:** Do not miss any exam unless it is an emergency **and** you have **documentation** to verify its emergency status. *Note that the instructor decides what counts as an emergency.* **If** you contact me **before** the exam under documented emergency conditions, then you **may** be allowed to take the exam **if** we can find a time for you to take it **before three days after** the missed exam. If you do not contact me before the exam, then you will **not** be allowed to take the exam and you will receive a **zero** on that exam. The tentative exam dates are listed on the last page. Do **not** schedule a flight or other plans conflicting with any listed exam date. Travel plans do **not** constitute an emergency; you will receive a **zero** on an exam missed because of travel plans.
- (7) **Show all of your work:** In general, you will receive *no credit for just an answer, even if it is correct.* Your ability to understand and use ideas from class are more important than correct answers.

Grading: Your grade will be determined by three in-class tests, one cumulative final exam, an overall Maple lab grade, and homework. Homework will be assigned on a regular basis, and due regularly. Your overall Calculus II grade will be determined as follows:

<i>Assignment</i>	<i>Percent of Course Grade</i>
Homework	15% total
Overall Maple Lab Grade	15%
Test 1	15%
Test 2	15%
Test 3	15%
Final Exam	25%

Letter grades will be assigned on the standard 10-point scale, with a “plus” will be awarded for being in the top 3% of the letter range (**see chart below**), with the exception of an A+, which is not given at USC. Final Grades are rounded to the nearest integer. See the chart:

<i>Numerical</i>	<i>Letter</i>		
90% and up	A		
80%-86.999%	B	87%-89.999%	B+
70%-76.999%	C	77%-79.999%	C+
60%-66.999%	D	67%-69.999%	D+
59.999% and below	F		

ADA: If you have a documented disability, have the Office of Student Disability Services email me as soon as possible concerning accommodations you need and they will be provided.

Help for this course:

- My Office Hours are for you to come ask me questions. Outside of scheduled office hours, I am willing to meet by appointment: just let me know what time(s) work for you and we’ll work something out.
- Feel free to email me (**musulin@math.sc.edu**) whenever you need.
- Student Success Center Resources: The Student Success Center offers **free one-on-one, drop-in, and online tutoring**, as well as **Peer Success Consultations**. To make an appointment for one-on-one tutoring, or for more information about SSC services, see <http://www.sc.edu/success/index.htm>.

Tentative Schedule for MATH 142-011 - Spring 2018.

Date	Section	Title
Tuesday, January 16, 2018	5.4, 5.5	The Fundamental Theorem of Calculus, Indefinite Integrals and the Substitution Method
Thursday, January 18, 2018	5.6, 8.1	Definite Integral Substitutions and the Area Between Curves, Using Basic Integration Formulas
Tuesday, January 23, 2018	8.2	Integration by Parts
Thursday, January 25, 2018	8.3	Trigonometric Integrals
Tuesday, January 30, 2018	8.4	Trigonometric Substitutions
Thursday, February 1, 2018	8.5	Integration of Rational Functions by Partial Fractions
Tuesday, February 6, 2018	8.5	Integration of Rational Functions by Partial Fractions
Thursday, February 8, 2018	8.8	Improper Integrals
Tuesday, February 13, 2018	Review	Review
Thursday, February 15, 2018	Test 1	5.4, 5.5, 5.6, 8.1, 8.2, 8.3, 8.4, 8.5, 8.7, 8.8
Tuesday, February 20, 2018	10.1	Sequences
Thursday, February 22, 2018	10.2	Infinite Series
Tuesday, February 27, 2018	10.3	The Integral Test
Thursday, March 1, 2018	10.4	Comparison Tests
Tuesday, March 6, 2018	10.5	Absolute Convergence; The Ratio and Root Tests
Thursday, March 8, 2018	10.6	Alternating Series and Conditional Convergence
Tuesday, March 20, 2018	Review	Review
Thursday, March 22, 2018	Test 2	10.1, 10.2, 10.3, 10.4, 10.5, 10.6
Tuesday, March 27, 2018	10.7	Power Series
Thursday, March 29, 2018	10.8	Taylor and Maclaurin Series
Tuesday, April 3, 2018	10.9	Convergence of Taylor Series
Thursday, April 5, 2018	10.10	The Binomial Series and Applications of Taylor Series
Tuesday, April 10, 2018	11.1	Parametrizations of Plane Curves
Thursday, April 12, 2018	11.2	Calculus with Parametric Curves
Tuesday, April 17, 2018	Review	Review
Thursday, April 19, 2018	Test 3	10.7, 10.8, 10.9, 10.10, 11.1, 11.2
Tuesday, April 24, 2018	11.3, 11.4	Polar Coordinates, Graphing Polar Coordinate Equations
Thursday, April 26, 2018	11.5	Areas and Lengths in Polar Coordinates
Thursday, May 3, 2018	Final Exam	Final Exam Comprehensive at 12:30pm

Important Dates:

- Dr. Martin Luther King, Jr. Service Day (no classes) - Monday, January 15, 2018
- Last day to change/drop a course without a grade of “W” being recorded - Monday, January 22, 2018
- Last day to drop a course or withdraw without a grade of “WF” being recorded - Friday, March 9, 2018
- Spring Break (no classes) - Sunday, March 11, 2018 - Sunday, March 18, 2018
- Last Day of Classes - Monday, April 30, 2018