SYLLABUS
MATH 141-Y04/Y05: FALL 2017

ANN CLIFTON
UNIVERSITY OF SOUTH CAROLINA

Welcome to Math 141

Math 141: Calculus I is the first course in the calculus sequence. The beginning of the course will quickly review material from precalculus. We will then discuss functions, limits of functions, and derivatives and their applications. The second half of the course will concentrate on an introduction to integrals, the Fundamental Theorem of Calculus, and applications of derivatives and integrals.

Contact Information

E-mail:	aclifton@math.sc.edu; Please use your University email for correspondence. The spam system is very strict and I rarely receive emails from @gmail, @yahoo, or similar accounts. You are welcome to email me any time with questions and I will do my best to respond within 24 hours (48 on weekends).
Office:	LeConte 400G.
Office Hours:	Monday 7:00pm-8:00pm, Tuesday/Thursday 1:00pm-2:30pm. These are open office hours/help sessions - Feel free to drop by with questions! Other times are available by appointment; email first, please. There may be some days that I will have to adjust my office hours. In that case, I will send an email announcement, make an announcement in class, and post the change on Blackboard.
Teaching Assistant:	Harsh Mehta, hmehta@math.sc.edu
SI Leader:	Marley Perlstein, marleyp@email.sc.edu

Course Information

Lectures:	Monday/Wednesday, 5:30-6:45 pm in LeConte, Room 412.
Recitations:	Section Y04: Tuesday, 4:25 pm - 5:15 pm in LeConte 405, Section Y05: Tuesday, 6:00 pm - 6:50 pm in LeConte 405.
Lab:	Section Y04: Thursday, 4:25 pm - 5:15 pm in LeConte 303A, Section Y05: Thursday, 6:00 pm - 6:50 pm in LeConte 303A.
Pre-Requisites:	Qualification through the Math Placement Test or a grade of **C** or better in MATH 112, 115, or 116.
Learning Outcomes:	Upon successful completion of this course, students should be able to: 1) Demonstrate understanding of the following concepts: Limits and Continuity of Functions, The Derivative, Applications of the Derivative: Study of Graphs, Minima-Maxima, Mean Value Theorem, The Integral, The Fundamental Theorem of Calculus, 2) Compute derivatives and basic integrals, 3) Apply these concepts to modeling real life problems at the usual level of first semester calculus.

Date: August 28, 2017.

Course Information (cont'd)

Required Text: *Thomas' Calculus: Early Transcendentals,* 13/e, Thomas, Weir, and Hass, Pearson, 2014. ISBN (for Value Pack MML code+Text from Pearson Store): 1323157131. **MyMathLab is required for this course.** With access to MML, you do not have to purchase a hard copy of the text since it includes an online version.

Course Website: The syllabus, course outline, notes, handouts, and course announcements will be posted on the course webpage: `http://people.math.sc.edu/aclifton/teaching.html`.

Coursework

Homework: Regular homework assignments will be posted on MyMathLab. The course keys will be announced in class. *Use the key for the section you are registered for! Otherwise your grades will be lost.* Technical difficulties are always possible when working with computers so plan ahead and get your online homework done early! Late work will not be accepted and you are solely responsible for ensuring that these assignments are completed on time. Do not leave these assignments until the last minute.
Additionally, homework from the book will be assigned at the end of every section and students are encouraged to complete (or at the very least attempt) every assignment. Book assignments and solutions are posted on the course webpage.

Quizzes: Quizzes will be given weekly and will be based on the homework for the most recent sections covered. Quizzes will generally be 1-3 problems and should take between 10-15 minutes at the end of class. Questions will be a combination of short answer questions, multiple choice questions, and applications. You will be graded based on a completely correct solution - not just the final answer. All steps must be correct for full credit. **No make-up quizzes will be given.**
The lowest quiz grade will be dropped at the end of the semester.

Exams: There will be three in class exams. **No make up exams will be given.** If you miss one exam, your final exam grade will replace the missing exam grade. This policy is intended only for exams missed due to illness, accidents, etc. It does **NOT** mean that your lowest exam grade will be dropped or replaced. Any further missed exams will receive a zero. **Phones and graphing calculators will not be allowed on exams.**
Exam 1: Wednesday, October 4
Exam 2: Wednesday, November 1
Exam 3: Wednesday, November 29

Final Exam: There will be a 2.5 hour cumulative final exam on **Monday, December 11 from 4:00-6:30pm**.

Grading

Scale: Grades will be assigned on the following scale:

A:	90-100%	C:	70-75.9%
B+:	86-89.9%,	D+:	66-69.9%
B:	80-85.9%,	D:	60-65.9%
C+:	76-79.9%,	F:	<60%

Weights: Final grades will be calculated with the following weights:

Maple Lab/Recitation:	75 points (12%)
Quizzes:	50 points (8%)
MML Homework:	50 points (8%)
Exams:	100 pts each (16% each)
Final Exam:	150 points (24%)
Total:	625 points (100%)

Expectations

Academic Integrity: Students are expected to act in accordance with the *University of South Carolina Honor Code*, which can be found here: `https://www.sa.sc.edu/academicintegrity/honor-code-policy-information/`. **Any breach of the Honor Code will result in an F for the course.**

Attendance: Students are obligated to complete all assigned work promptly, to attend class regularly, and to participate in whatever class discussion may occur. The following events or circumstances are potentially excusable absences:
∘ Participation in an authorized University activity (such as musical performances, academic competitions, or varsity athletic events in which the student plays a formal role in a University sanctioned event),
∘ required participation in military duties,
∘ mandatory admission interviews for professional or graduate school which cannot be rescheduled,
∘ participation in legal proceedings or administrative duties that require a student's presence,
∘ death or major illness in a student's immediate family,
∘ illness of a dependent family member,
∘ religious holy day if listed on `www.interfaithcalendar.org`,
∘ illness that is too severe or contagious for the student to attend class,
∘ weather-related emergencies.
See `http://bulletin.sc.edu/content.php?catoid=52&navoid=1280#Attendance_Policy`

FAQ: **How much time should I be spending on Math 141 each week?** A full-time job is considered 40 hours per week and a full-time student is considered to have a class schedule of 15 hours per week. If you subtract 15 hours of class time from the 40 hours, that leaves 25 hours of studying per week. 3/15=1/5 of 25 hours is 5 hours of studying Math 141, outside of class time per week.
Warning: If your last math class was several years ago or if your prerequisite math skills are weak, then you may need to spend considerably more time on this class in order to be successful! If you are spending much more than 5 hours per week on this course, please come see me during office hours.

Additional Help: There are Teaching Assistants available to answer your questions in the Math Tutoring Center in LeConte College room 105. The hours will be posted on the door. This is an excellent resource! Try to form a study group to study and learn with; it really works for some people. We also have an SI Leader for this class! Our SI will be available to answer questions during their SI sessions. Please speak to them or visit `http://www.sc.edu/success/siforstudents.html` for more information. The TA for this class will have weekly office hours and is available to answer your questions. Don't forget about me! I am available during office hours and by appointment to answer any question you may have. The Academic Success Center website has additional information on resources available to students.

Disclaimer: I will try not to make changes to the syllabus during the course of the semester. However, if changes are necessary, then they will be announced both in class and on Blackboard and the revised syllabus will be posted on Blackboard.

Important Dates and Deadlines

Event	Date
Faculty Reporting Date	Aug. 16, Wednesday
New Student Convocation	Aug. 23, Wednesday
Classes Begin	Aug. 24, Thursday
Last day to change/drop a course without a grade of "W" being recorded (Part of Term 30)	Aug. 30, Wednesday
Labor Day Holiday (no classes)	Sept. 4, Monday
Last day to apply for December graduation	**Graduation Application Deadline**
Last day to drop a course or withdraw without a grade of "WF" being recorded (Part of Term 30)	Oct. 16, Monday
Midpoint in Semester	Oct. 16, Monday
Fall Break (no classes)	Oct. 19 – 20, Thursday - Friday
Thanksgiving Recess (no classes)	Nov. 22 – 26, Wednesday – Sunday
Last Day of Classes	Dec. 8, Friday
Reading Day	Dec. 9, Saturday
Final Examinations (includes exams on Saturday)	Dec. 11 – 18, Monday - Monday
Commencement Exercises in Columbia	Dec. 18, Monday

The Final Exam Schedule can be found here: `http://sc.edu/about/offices_and_divisions/registrar/final_exams/final-exams-spring-2017.php`.

The following is an outline of topics to be covered this semester. The sections covered for each exam are subject to change.

Section	Topic
1.1	Functions
1.2&1.3	Combining Functions & Trig functions
1.5&1.6	Exponential Functions & Inverse Functions
2.1	Rates of Change & Tangents
2.2&2.3	Limit of a Function & Limit Laws
2.4&2.5	One-Sided Limits & Continuity
2.6	Limits Involving Infinity
3.1	Derivative at a Point
3.2	Derivative as a Function
	Review
	Test 1
3.3	Derivative Rules
3.5	Derivatives of Trig Functions
3.6	Chain Rule
3.7	Implicit Differentiation
3.8&3.9	Derivatives of Inverse Functions, Logarithms, and Inverse Trig Functions
3.10	Related Rates
4.1	Extreme Values
4.2	Mean Value Theorem
4.3	First Derivative Test
4.4	Concavity & Curve Sketching
4.5	Indeterminate Forms & L'Hôpital's Rule
	Review
	Test 2
4.6	Optimization
4.8	Antiderivatives
5.1	Area & Estimating with Finite Sums
5.2&5.3	Riemann Sums & The Definite Integral
5.4	Fundamental Theorem of Calculus
5.5	Indefinite Integrals & the Substitution Method
5.6	Definite Integral Substitutions & Area Between Curves
6.1	Disk & Washer Method
	Review
	Test 3
6.2	Shell Method
	Review
	Review