Syllabus for Math 141, Section H02
Fall 2022

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LeConte 115 (Eventually)

Course Description
MATH 141
Credits: 4
Functions, limits, derivatives, introduction to integrals, the Fundamental Theorem of Calculus, applications of derivatives and integrals. Three classroom hours and one laboratory hour per week.
Prerequisite: Qualification through either (a) a Math Assessment of Prerequisites (MAP) score of 142 or higher https://sc.edu/study/colleges_schools/artsandsciences/mathematics/study/math_placement/ or (b) a grade of C or better in Math 115.

Class Meetings: This is an in-person class. We will meet in person Mondays, Wednesdays, and Fridays. If you are unable to attend class because of quarantine or isolation, you may attend remotely via Microsoft Teams. (If you are well, you are expected to attend in person.)

Schedule:

Class Meetings —	MWF	9:40am-10:30am in CLHipp 534
Recitation	M	12:00pm-12:50pm in Gambrell 124
Skills Lab	F	10:50am-11:40am in LeConte 101 (Eventually)

Online — Microsoft Teams: Team Code **38fafyp**

Online: Class meetings will be streamed on MS Teams (http://teams.microsoft.com). Students are expected to attend class in person when they are well. Remote learning is available for emergency situations but should NOT be considered an alternate option for regularly attending class. **Students are strongly encouraged to maintain a notebook for the course.** You should take notes on important definitions, keep an organized copy of example problems, etc. Class handouts, worksheets, solutions, and printable fill-in notes will be posted on Blackboard (http://blackboard.sc.edu) under the Course Documents tab. Completed notes can be found in the Class Notebook in MS Teams or OneNote (http://onenote.com) in the Content Library. **Note:** Class lectures will not be recorded.

Text: Thomas, Weir, and Hass, *Thomas' Calculus, Early Transcendentals*, 15th Edition, Pearson, 2023.
Sections: 1.1-1.3, 1.6, 2.1-2.6, 3.1-3.3, 3.5-3.10, 4.1-4.6, 4.8, 5.1-5.6, 6.1-6.2 (If time allows)
MyMathLab will NOT be used for this course.

Attendance and Participation: Regular attendance and participation is expected. In accordance with University policy, a letter grade may be deducted for each 10% of classes missed (unexcused). **Withdrawal:** Any student wishing to withdraw from the class should do so by Wednesday, November 2. Students dropping after this date will receive a WF for the course.

Cell Phones/Laptops/Smart Watches: In accordance with CAS policy, I will ask that all cell phones be turned off (or at the very least be put on vibrate) during class. Also, please refrain from texting during class – it is disrespectful and distracting. **Your cell phone should not be out at any time during a test or quiz.** The use of any laptop during class is discouraged. Smart watches should not be worn on test or quiz days.

Calculators: Calculators may NOT be used on tests and quizzes unless otherwise noted.

Learning Outcomes: Upon successful completion of this course, students should be able to:

- Recall basic mathematical terms related to elementary algebraic, trigonometric, exponential, and logarithmic functions and express these terms in correct context.
- Evaluate basic limits and limits involving infinity. Recognize and evaluate limits that require L'Hopital's Rule.
- Apply the methods of calculus to solve derivatives involving power rule, exponential rule, logarithm rule, chain rule, product rule, quotient rule, trigonometric functions, inverse trigonometric functions, and implicit differentiation.
- Apply the methods of calculus to solve basic integrals and integrals involving integration by substitution.
- Employ knowledge of limits, derivatives, integrals, and the Fundamental Theorem of Calculus to describe functions, analyze graphs, and interpret data, and to solve applications involving maxima, minima, rates of change, and motion.
- Master applications of integration including area, volume by disks or washers, and volume by cylindrical shells. (If time allows.)

Tests: There will be three tests (during recitation) and cumulative final exam. The *tentative* dates for these are:

- Test 1: Monday, September 19 on Sections 1.1-1.3, 1.6, 2.1-2.6, 3.1-3.2
- Test 2: Monday, October 24 on Sections 3.3, 3.5-3.10, 4.1-4.4
- Test 3: Monday, November 21 on Sections 4.5-4.6, 4.8, 5.1-5.6, 6.1-6.2
- Final: Wednesday, December 7 at 9:00AM

Note: Monday, November 21 is the Monday before Thanksgiving. Do not make travel plans for this day – conflicting travel schedules will not be considered unless reservations have already been made. Make-up exams will be available in the event of **documented** illness/family emergency/quarantine. Those with acceptable excuses must contact me within 24 hours of the scheduled exam time to schedule a make-up. **Tests given in class must be made up in person.**

Testing: All tests will be administered in class.

- **Test Description:** All three tests and the final exam will be a combination of short answer questions and applications where you will work out math problems. You will be graded based on a completely correct solution – not just the final answer. All steps must be correct for full credit.

Suggested Problems: Suggested problems from the textbook will be given at the end of every section. Solutions to these problems will be posted on Blackboard under the Homework Solutions tab. Homework from the textbook will not be collected.

Worksheets: Graded worksheets will be assigned once a week and posted on Blackboard under Course Documents. It is the student's responsibility to print the worksheet, complete it, and properly upload it to their personal Worksheets folder in the Class Notebook in OneNote/Teams before the due date. Worksheets are due by 5pm on the due date. Solutions will be posted on Blackboard around 5:30pm. **Once solutions have been posted, late worksheets will not be accepted for any reason.**

- **Worksheet Description:** A typical worksheet is 4 pages. Questions are a combination of short answer questions and applications where you will work out math problems. You will be graded based on a completely correct solution - not just the final answer. All steps must be correct for full credit.
- **Worksheet Collaboration:** We will work together on worksheets during recitation on Mondays, but you should complete the worksheet **before** recitation. You are welcome (and encouraged!) to work together on the worksheets and seek out help from tutors, SI, and your instructor, however, you should NEVER copy another person's work or share your completed worksheet via email, Zoom, GroupMe, etc. If you are helping a fellow student, you should look at their work and try to help them find their errors. **The sharing of completed solutions is not working together – you are not helping!** Students who are working too closely with one another will be reminded, warned, and then reported to Academic Integrity.
- **Worksheet Submission:** Your worksheet must be submitted on the **Instructor-created worksheet submission page** in the student's worksheets folder in the COTEAM-RSANDERS-MATH-141-H02-FALL-2022 Class Notebook. If you cannot find this submission page or accidentally delete it, please contact the instructor. This page will be locked and read-only once solutions have been posted. If you cannot correctly

submit the worksheet, you may email it to sanders@math.sc.edu before the due date. If you want to verify that you have correctly submitted your worksheet, log into http://onenote.com from a desktop computer and see if you can see it there. If you cannot, please sync your notebook and try again.

- **Worksheet Grading:** Worksheets will be graded in OneNote and students will be able to see their scores by viewing the worksheet again in their personal folder once grading is complete. If you find a page that says "Not Submitted" instead, please contact the instructor – this usually happens when your notebook is not properly synced at the time of submission. Worksheets will typically be graded by Thursday. You should review your score and any grading notes before the quiz on Friday.

In-Class Quizzes: Quizzes will be given weekly during class and will be based on the homework. **The lowest 2 quiz or worksheet scores will be dropped regardless of excuse.** Make-up quizzes will only be available for students on the third missed assignment. Any student requesting a make-up must have a **documented excuse** and take the make-up as soon as possible. **Quizzes given in class must be made up in person.**

- **In-Class Quiz Description:** Quizzes will be given once a week during class and will be based on the most recent worksheet. Quizzes will be 3-5 problems and should take between 10-15 minutes at the end of class. Questions will be a combination of short answer questions and applications where you will work out math problems. You will be graded based on a completely correct solution – not just the final answer. All steps must be correct for full credit.

Skills Lab: The accompanying skills lab on Fridays will complement the material provided in the lectures. Students will work together in groups to complete lab assignments. If you are not in lab on Friday, you can find a copy of the Skills Lab on Blackboard. Do not forget to turn in your lab before 5pm on Friday!

- **Skills Lab Description:** A typical Skills Lab is 3-4 pages. Questions are a combination of short answer questions and applications where you will work out math problems. The lab is designed to give you extra practice on course topics. You will be graded based on completeness, so problems do NOT have to be completely correct to receive full credit.
- **Skills Lab Submission:** Your Skills Lab must be submitted on the **Instructor-created lab submission page** in the student's skills lab folder in the COTEAM-RSANDERS-MATH-141-H02-FALL-2022 Class Notebook. If you cannot find this submission page or accidentally delete it, please contact the instructor. This page will be locked and read-only once solutions have been posted. If you cannot correctly submit the lab, you may email it to sanders@math.sc.edu before the due date.

Typical Weekly Schedule: A typical week will look like this:

- **Wednesday** New Worksheet distributed via Blackboard.
- **Monday** Class
  Recitation – time to work together on worksheets.
- **Wednesday** Worksheet due by 5pm – submitted via OneNote.
  Solutions posted at 5:30pm in Blackboard.
- **Friday** Quiz during class.
  Skills Lab – time to work together on skills.
  Skills Lab due by 5pm – submitted via OneNote.

Gateways: These short 30-minute exams help you achieve mastery over basic calculus skills and assure you are prepared for future material. Practice gateway exams, which are available for each gateway, are key to preparation. **Please look at the practice problems before you attempt the test, itself!**

- **Practice version:** This test can be taken many times, anytime, anywhere, and won't require proctoring credentials. Results of these tests do not count towards grade.
- **Test version:** There are two official gateway tests, Gateway 1 test and Gateway 2 test, and results of these tests count towards your grade. The test version requires the students to enter the proctoring login credential (username: gateway, password: gateway) in order to avoid accidentally clicking the button, and also the students must click "Grade Test" in the bottom and enter the same proctoring login credential to receive a grade after they finish. **In order to pass a gateway test, the students must correctly answer all but 1 of the total problems within 30 minutes.** (You are allowed 2 graded submissions

per test as long as both are submitted within the single 30-minute window, so you may quickly correct and resubmit if you see your error.) For each of the two Gateway tests, students must take it within a given period of three weeks. You are allowed to retake once a week for up to 3 attempts. Students officially registered with SDRC will be allowed for 45 minutes to finish the test.

WebWork WebWork is an online homework system developed by the Mathematical Association of America. The location of our course https://webwork.math.sc.edu/webwork2/MATH141-FALL-2022-H01-H02/ There is no cost to you for its use. WebWork will be used only for gateway exams. Please see the Gateway Information for Students handout for more information.

Grading:

Skills Lab	50 pts (~8%)
Gateway Exams	50 pts (~8%)
Quizzes/Worksheets:	100 pts (~15%)
3 Tests:	100 pts each (~15% each)
Final Exam:	150 pts (~23%)
Total:	650 pts

Letter grades will be given according to the following scale:

A :	90-100%
B+:	85-89%
B :	80-84%
C+:	75-79%
C :	70-74%
D+:	65-69%
D :	60-64%
F :	below 60%

Additional Help: For (free!) additional assistance, visit the math lab. Due to the ongoing issues with LeConte, I am unsure of the current plan for the tutoring center. For more information about availability of tutors check the website https://sc.edu/study/colleges_schools/artsandsciences/mathematics/study/tutoring/ Tutoring in the math lab is open to all students enrolled in a 100-level MATH class. You do not need an appointment – you can drop in whenever the lab is open. In addition, look for peer tutoring resources, including online tutoring, at the Student Success Center http://www.sc.edu/success/ Finally, you are always welcome to come ask me questions. My office is currently Honors Residence Hall A107 (on the 1st floor) and will be LeConte 433 (on the 4th floor) when the building is open. If you cannot make it during office hours, just send me an email to request an appointment. The university offers many options for help. Do not wait until you are completely lost to seek assistance!

Academic Integrity

All students must review the Office of Academic Integrity sanctions. This information may be found at https://www.sc.edu/about/offices_and_divisions/student_conduct_and_academic_integrity/index.php
One or more of the following sanctions may be imposed for Academic Integrity violations: 1) Expulsion from the University; 2) Suspension from the University for a period of no less than one semester; and/or Probation. A combination of the above sanctions may be implemented. It should be noted that submitting someone else's work is cheating and against the Carolina Code. Cheating, or any other Academic Integrity violations, will result in failure of the course for all involved parties. All parties will also be referred to the Office of Academic Integrity for additional retribution.

Student Disability Services

Students with disabilities should contact the Office of Student Disability Services. Students with special test accommodations should request that tests be proctored by SDS at least a week before the test date.
MAIN OFFICE: Close-Hipp, Suite 102 **Phone:** 803-777-6142
Email: sadrc@mailbox.sc.edu **Web:** http://www.sa.sc.edu/sds/

Tentative Course Schedule

Week	Sections	Topics
1	1.1-1.3	Functions, combinations of functions, and trig functions
2	1.6, 2.1-2.2	Exponential functions, inverse functions, rates of change, tangents, limits of a function
3	2.4-2.6	Limit laws, one-sided limits, continuity, and limits involving infinity
4	3.1-3.2	Derivative at a point, Derivative as a function
5	3.3	Derivative rules
6	3.5-3.7	Derivatives of trig functions, chain rule, implicit differentiation
7	3.8-3.10	Derivatives of inverse functions, logarithms, and inverse trig functions, related rates
8	4.1-4.3	Extreme values, Mean value theorem, first derivative test
9	4.4-4.5	Curve sketching, indeterminate forms and L'Hopital's rule
10	4.6,4.8, 5.1	Optimization, antiderivatives, area and estimating with finite sums
11	5.3-5.5	Riemann sums, the definite integral, FTC, indefinite integrals, and the substitution method
12	5.6, 6.1	Definite integral substitutions, area between curves, Disk&Washer methods
13	6.2	Shell method
14		Review for the Final Exam

Tentative Schedule of Course Assignments

Day	Date	Assignment/Holiday
F	Aug 19	Gateway Orientation/Readiness Test
M	Aug 22	Worksheet 1 Recitation
W	Aug 24	Worksheet 1 Due
F	Aug 26	Quiz 1 Skills Lab A
M	Aug 29	Worksheet 2 Recitation
W	Aug 31	Worksheet 2 Due
F	Sept 2	Quiz 2 Skills Lab B
M	Sept 5	Labor Day – No Classes
M	Sept 5	No Recitation
W	Sept 7	Worksheet 3 Due
F	Sept 9	Quiz 3 Gateway 1 First Attempt
M	Sept 8	Worksheet 4 Recitation
W	Sept 14	Worksheet 4 Due
F	Sept 16	Quiz 4 Skills Lab C
M	Sept 19	Test 1 in Recitation
W	Sept 21	No Worksheet Due
F	Sept 23	No Quiz Skills Lab D
M	Sept 26	Worksheet 5 Recitation
W	Sept 28	Worksheet 5 Due
F	Sept 30	Quiz 5 Skills Lab E
M	Oct 3	Worksheet 6 Recitation
W	Oct 5	Worksheet 6 Due
F	Oct 7	Quiz 6 Skills Lab F
M	Oct 10	Worksheet 7 Recitation

Day	Date	Assignment/Holiday
W	Oct 12	Worksheet 7 Due
Th-F	Oct 13-14	Fall Break – No Classes
M	Oct 17	Quiz 7 in Recitation Worksheet 8 Recitation
W	Oct 19	Worksheet 8 Due
F	Oct 21	Quiz 8 Gateway 2 First Attempt
M	Oct 24	Test 2 in Recitation
W	Oct 26	No Worksheet Due
F	Oct 28	No Quiz Skills Lab G
M	Oct 31	Worksheet 9 Recitation
W	Nov 2	Worksheet 9 Due
F	Nov 4	Quiz 9 Skills Lab H
M	Nov 7	Worksheet 10 Recitation
W	Nov 9	Worksheet 10 Due
F	Nov 11	Quiz 10 Skills Lab I
M	Nov 14	Worksheet 11 Recitation
W	Nov 16	Worksheet 11 Due
F	Nov 18	Quiz 11 Skills Lab J
M	Nov 21	Test 3 in Recitation
W-F	Nov 23-25	Thanksgiving Break
M-F	Nov 28 – Dec 2	Final Exam Review
W	Dec 7	Final Exam