Calculus II
Math 142 (Section 001 and 002), Spring 2024

Meeting Times: T TH, 10:05AM - 11:20AM

Classroom: Close-Hipp Building, Room 750

Instructor: Professor Yi Sun

Office: Leconte College, Room 317

Office Hours: T TH, 11:40AM - 1:10PM, or by appointment

Email: yisun@math.sc.edu

Course Website: http://people.math.sc.edu/yisun/classes/24S-142/index.htm

Teaching Assistant: Tapas Bhowmik (Email: tbhowmik@email.sc.edu)

Section 001: **Lab/Recitation**: Mon./Wed. 9:40AM - 10:30AM at Leconte 101
Section 002: **Lab/Recitation**: Mon./Wed. 10:50AM - 11:40AM at Leconte 101

Prerequisite: Qualification through placement or a grade of C or better in MATH 141.

Textbook: <u>Thomas' Calculus, Early Transcendentals (15th Ed.)</u> (as revised by Hass, Heil, Bogacki, Weir), Pearson.

Learning Outcomes: This course builds upon the ideas introduced in Math 141. We will cover the material presented in Sections 5.4–5.6, 8.1–8.5, 8.8, 10.1–10.10, 11.1–11.5 of the textbook. Students are expected to continue developing as independent learners and problem solvers. Upon successfully completing this course, students should be able to approach problems from a conceptual viewpoint, use multiple ideas in a single problem, and apply appropriate calculus skills to problems in context. Students should master concepts and acquire skills necessary to solve problems related to integration techniques, sequences and series, Taylor polynomials and series, and parametric and polar coordinate curves.

Grading:
    Quizzes: (20%),   Computer Labs: (10%),   2 Midterms (20% each),   Final Exam (30%)

Grading Scales:

[90,100] A	[86, 89] B+	[80, 85] B	[76, 79] C+
[70, 75] C	[66, 69] D+	[60, 65] D	[0, 59] F

Homework: Homework assignments will be posted on the course website and should be completed by the day of the quiz. These assignments are for your practice and will not be collected. However, your performance on periodic quizzes will be used to evaluate your study of the material covered in the homework. The quiz problems will either be the same as, or very similar to, those from the homework. Exam questions will also be related to the homework problems. I strongly encourage you to work all homework problems.

Quizzes: There will be **ten** quizzes given approximately after completing two or three subsections. Each quiz will contain a couple of problems that are related to the material covered in class. The quizzes will be conducted in class and will last for 15 minutes. Your

cumulative quiz grade will be based on the **best eight** of the ten quizzes. Please note that no notes or books will be permitted during the quizzes and exams.

Gateways: There will be **three** gateways exams during the semester. These short 30-minute tests will help you master basic calculus skills and assure that you are prepared for future material in Calculus II. The first Gateway is the Readiness test, the second Gateway covers limits and derivatives, and the third Gateway covers integration techniques. You are allowed to make as many proctored attempts as possible for each of these exams until the deadline. Proctored attempts can be made during designated lab sections, in office hours with your TA, or at the Mathematics Tutoring Center on a first-come-first-serve basis. Your TA will explain this process to you in detail.

Exams: There will be two midterm exams and one comprehensive final exam:

Exam#1: Feb. 13 (Tue.) or Feb. 15 (Thu.).

Exam#2: Mar. 26 (Tue.) or Mar. 28 (Thu.).

Final Exam: April 30 (Tue.)

Makeup policy: Makeup exams and quizzes will only be allowed with **documentation of a university approved excuse**. For instance, if you are unable to attend an exam or quiz due to illness, I expect to receive an email notifying me of your absence, along with a doctor's note upon your return. If you are aware in advance that you will be unable to take an exam or quiz on the scheduled date, please inform me at least one week beforehand so that alternative arrangements can be made.

Attendance: It is expected that you attend all classes. Attendance will be regularly monitored. Arriving late and/or leaving early will be considered as an absence. At the end of the semester, students with more than four unexcused absences may have their grades lowered. Students are expected to adhere to the university guidelines, which can be found at
`http://academicbulletins.sc.edu/undergraduate/policies-regulations/undergraduate-academic-regulations`

How to write solutions: When solving problems for homework, quizzes, and exams, you must provide complete solutions that include all steps described in detail. Use sentences to explain your reasoning, rather than simply presenting the formulas. Do not skip steps in your solutions, even if they may seem obvious to you. If you have any questions regarding the grading of a quiz/exam, please submit them in writing along with the graded quiz/exam.

Reading: It is highly recommended that you read the textbook **before** attending the lecture. This preparation has several benefits, including becoming familiar with the terminology and concepts that will be discussed (allowing you to differentiate between important points and secondary details), being able to ask questions about parts of the presentation that you find unclear, and having an opportunity to review the skills and techniques necessary to apply the new concepts.

Academic Integrity Statement: Cheating and plagiarism will not be tolerated. While you are encouraged to discuss homework problems with others, it is expected that you complete quizzes and exams independently. Students are expected to follow university guidelines:
`http://www.sc.edu/academicintegrity`