Math 142 – Calculus II
Sections 5, 6, 7, 8, Spring 2023

Instructor: Prof. Xiaofeng Yang
Office: Leconte 357
Office Hours: MWF 12:00pm-1:00pm (online Zoom) or by appointment
(Zoom Meeting ID and Password: see course webpage)

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Teaching Assistant:
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Meeting times: Lectures: Tu,Th 11:40am-12:55pm (section 5, 6),

Tu,Th 1:15pm-2:30pm (section 7, 8),

Leconte, Room 118

I. Prerequisites

Qualification through placement or by earning a **C** or better in Math 141.

II. Course Rationale and Description

This course is the second course in the traditional calculus sequence. The course offers a balance between mathematical skills and conceptual understanding, with presentation of ideas geometrically, algebraically, numerically and verbally and with attention to applications.

III. Learning Outcomes

A student who successfully completes Calculus II (Math 142) should continue to: Develop as an independent learner with the ability to approach problems from a conceptual point of view; Utilize more than one idea in a single problem, and to apply appropriate calculus skills to problems in context; Master concepts and gain skills needed to solve problems related to techniques of integrations, sequences and series, Taylor polynomials and series, parametric and polar coordinate curves.

IV. Textbook

Thomas' Calculus, Early Transcendentals, 13th *Edition*, by George B. Thomas.

V.   Course Requirements

Students are expected to read assigned sections in the text and compete homework assignments, quizzes and exams. Students should check Blackboard or the class website frequently for announcements and course documents such as worksheets, solutions to quizzes and exams, and handouts.

VI.   Course Outline

Our tentative schedule is to first review sections 5.4-5.6, then study sections 8.1-8.8, 10.1-10.8, 10.10, 11.1-11.3, 11.5 in the textbook.

VII.   Course Policies

Attendance — Attendance will be recorded regularly (either face-to-face or online classes). The instructor/TA may excuse absences with documentation of illness or emergency and it will be the student responsibility to provide such documentation in a timely manner. In accordance with university's policy, a letter grade may be deducted for students who miss 10% or more of classes, whether excused or unexcused, in our case this is the equivalent to 3 lecture sessions. For more information see the Bulletin of Undergraduate Studies: `http://bulletin.sc.edu/content.php?catoid=97&navoid=2830`

Make-up Work – There are no early exams. A late make-up exam is only possible for a written legitimate documented reason like doctor's excuse and Chair or Dean's approval in advance.

Withdrawal — The last day to change/drop a course without a grade of "W" being recorded is January 17, 2023 (Tuesday). The last date to withdraw without a grade of WF being assigned is March 27, 2023 (Monday).

Honor Code — It is imperative that you refrain from engaging in plagiarism, cheating, falsifying your work and/or assisting other students in violating the Honor Code. The honor code applies to **all** work for this course. Students should review the Honor Code at `http://www.sc.edu/policies/ppm/staf625.pdf`.

VIII.   Assessment and Grading

Homework — Homework will be assigned on the lecture basis and should be done in time. Although not collected, homework assignments are an essential part of learning and understanding the course material. They should be thought of as required for success in the course.

Quizzes — Quiz: There will be approximately one quiz per week in Thursday's class, and no quiz during the exam weeks. There are 2-3 short questions in one quiz and around 10-25 minutes (subject to change with the difficulty). Two lowest quiz grades will be dropped from the final grade calculation. Notice: Quiz questions possibly are chosen from Homework or very similar to the Homework. No quiz on the first week and exam week.

Lab projects — Projects will be assigned based on Maple or other formats decided by the TA.

Gateways — —There will be two gateways tests in charged by the TA during the semester. The gateways are tests of skills that are important to Calculus II. The first test (Gateway 1 test) covers limits and derivatives and the second (Gateway 2 test) integration techniques. In order to pass a gateway test, the student must correctly answer all but one of the total

six problems. Gateway tests can be retaken once a week for the following open periods so that the student have up to 3 attempts for each of the two gateway tests.

	Attempt #1		Attempt #2		Attempt #3	
	Open	Close	Open	Close		
Gateway1 test	Jan. 10	Feb. 5	Feb. 6	Feb. 12	Feb. 13	Feb. 19
Gateway2 test	Mar. 13	Mar. 19	Mar 20.	Mar. 26	Mar. 17	Apr. 2

All these gateway tests are proctored and taken online. For Attempts #1 and #2, the student will do them with the TA during the computer lab meetings in the corresponding weeks; For Attempts #3, the student has two choices: one is to do it with the TA during the office hours or by making an appointment with the TA in the corresponding week, the other is to do it at any available times in the Math Tutoring Center (LC102) proctored by a tutor (open 10am-4pm on Monday to Thursday and 10am-1pm on Friday).

Exams — There will be three exams: **two 75 minute midterm exams** and **a final exam**. The two midterm exams will be given online/face-to-face (according to school policy) during the time normally used for a lecture and each of them will test only the material covered since the previous one. The final exam will be a cumulative exam. Exams are ***tentatively*** scheduled as follows (the date and time for the final exam are fixed):

Exam 1	Lecture time (face-face)	Feb. 7, 2023
Exam 2	Lecture time (face-face)	Apr. 6, 2023
Final Exam	face-to-face	TR - 11:40 a.m: Tuesday, May 2 - 12:30 p.m.
		TR - 1:15 p.m. Thursday, April 27 - 12:30 p.m

Grades — Grades will be weighted as follows:

Lab projects:	**5%**	Gateways:	**10%**	Quiz:	**10%**
Exam 1:	**20%**	Exam 2:	**20%**	Final Exam:	**35%**
Total:	**100%**				

and the course letter grade is finally determined based on the ranges:

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

IX. **Additional Help**

- Student Success Center (SSC) located in mezzanine level of the Thomas Cooper Library. Website: `https://sc.edu/about/offices_and_divisions/student_success_center/index.php`

- Math Tutoring Center: runs walk-in help desks around campus. The site also maintains a list of private tutors in math and statistics. Website: `https://sc.edu/study/colleges_schools/artsandsciences/mathematics/study/tutoring`.

- Supplemental instruction schedule and information can be found at `https://sc.edu/about/offices_and_divisions/student_success_center/supplemental-instruction/index.php`.

X. Students with Disabilities

The University of South Carolina provides high-quality services to students with disabilities, and we encourage you to take advantage of them. Students with disabilities needing academic accommodations should: (1) Register with and provide documentation to the Student Disability Resource Center in LeConte College Room 112A, and (2) Discuss with the instructor the type of academic or physical accommodations you need. Please do this as soon as possible. All course materials are available in alternative format upon request. Website for the disability resource center `https://sc.edu/about/offices_and_divisions/student_disability_resource_center/index.php`.