## Math 142 – Calculus II

Sections 3, 4, 16,17, Spring 2021

**Instructor:** Prof. Xiaofeng Yang

Office: Online

Office Hours: Tu,Th 11:30pm-1:00pm or by appointment

(Zoom Meeting ID: (see course webpage), Password:)

 $\textbf{Email:} \ xfyang@math.sc.edu$ 

**Phone:** 803-777-3776

Website: http://people.math.sc.edu/xfyang/Teaching/MA1422021Spring.html

### Teaching Assistant:

CASEY, RORY (for Section 3, 4), Email: RMCASEY@email.sc.edu

BROOKS, GEORGE (for Section 16, 17), Email: GHBROOKS@email.sc.edu

Meeting times: Lectures: Tu,Th 10:05pm-11:20pm (section 3,4), Online

Tu,Th 1:15pm-2:30pm (section 16,17), Online (Zoom Meeting ID: (see course webpage))

## 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, 13<sup>th</sup> 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, and 11.1-11.3 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 Tuesday, January 19. The last date to withdraw without a grade of WF being assigned is Saturday, March 27.

**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 — There will be NO quizzes

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

Gateways — There will be two gateways tests 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. These tests are taken online; during your computer lab sessions, your TA will explain this process. In order to pass a gateway test, you must correctly answer all but one of the total six problems within 30 minutes. Gateway tests can be retaken once a week for the following open periods so that you have up to 3 attempts for each of the two gateway tests:

	Open	Close
Gateway1 test	February 7	February 27
Gateway2 test	March 8	March 26

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

Exam 1		Feb. 23, 2021
Exam 2		Apr. 15, 2021
Final Exam	Check USC school calendar for details	

**Grades** — Grades will be weighted as follows:

Lab projects:	<b>5</b> %	Gateways:	<b>5</b> %		
Exam 1:	20%	Exam 2:	20%	Final Exam:	<b>50</b> %
Total:	100%				

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

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

### XI. Resources and Participation

You may use a Desktop, Laptop, Tablet or even cell phone (equipped with camera and microphone) to join our online lectures. We will also record our online sessions and provide the link in Blackboard for you to watch as needed after the class.

### XII. COVID-19 Classroom Things

Face Coverings — Face coverings protect you and your classmates in case the wearer is unknowingly infected but does not have symptoms. Faculty, students and staff are required to wear an appropriate face covering in all classrooms and in other designated areas on campus. Face coverings should cover your nose and mouth in a community setting. Students with conditions that prohibit them from wearing a face covering must register with the Student Disabilities Resource Center (SDRC); appropriate accommodations will be approved by the SDRC. Failure or refusal to wear the required face coverings in designated areas may result in your immediate removal from the classroom and corrective action, including referral to the Office of Student Conduct, in accordance with University policies and procedures (UNIV 3.04).

Hand and Surface Hygiene — Please use hand sanitizer upon entering the classroom and wipe down your desk/table and chair at the beginning of class. All wipes should be disposed of in the trash can and not left on the desk or floor.

Student Well-Being — Any student who has difficulty affording groceries or accessing sufficient food to eat every day, or who lacks a safe and stable place to live and believes this may affect their performance in the course, is urged to contact the Division of Student Affairs and Academic Support. Students do not learn when they do not feel safe. If you feel unsafe on campus at any time in any place, please contact Police Dispatch at 803-777-4215 (in an emergency, please call 911) and reach out to the Division of Student Affairs and Academic Support.

If the student refuses to wear a face covering or has no options to retrieve a face covering, the instructor may:

- tell the student to leave and come to the next class in a face covering;
- tell the student to leave or submit a referral to the Office of Student Conduct and Academic Integrity resulting in disciplinary sanctions that could include removal from the course.

If the student refuses to leave the classroom as requested, the instructor may:

- ask the student to sit apart from the rest of the class in an area where physical distancing is possible (if there is space in the classroom), continue to teach the class, and submit a referral to the Office of Student Conduct;
- dismiss the class and submit a referral to the Office of Student Conduct.

If the student is causing a disruption (e.g., yelling, using profanity, interrupting teach), the instructor may also contact Univ of SC police.

**Privacy** — UofSC faculty should not provide the name, identifying characteristics such as age or gender, or the number of students in their classes who test positive for COVID-19.