Math 264: Unified Calculus & Analytic Geometry IV, Section 4
Spring 2020

Tues/Thurs 2:30–3:45 pm Hume 203

Instructor:	Samuel Lisi
Office Hours:	Hume 318, Tuesdays and Thursdays, 10–11:30 am; also by appointment
Email:	stlisi@olemiss.edu
Textbook:	*Calculus: Early Transcendentals*, 2nd edition, by Briggs, Cochran and Gillett. (ISBN-13: 9780321947345)

Course content:
This course is the fourth semester of a four-semester calculus sequence at the University of Mississippi. The course will cover material in chapters 12, 13, and 14 of Briggs, Cochran and Gillett's *Calculus: Early Transcendentals*, in particular, Functions of Several Variables, Partial Derivatives, Lagrange Multipliers, Multiple Integrals, and Vector Calculus.

Learning objectives:
This is the culmination of the calculus sequence, so by the end of the course, the student will have a complete command of all the basic techniques of undergraduate calculus. In particular, the student will have

- learned the concepts and theory of vector calculus;
- learned to apply these concepts to solve problems;
- improved their mathematical problem solving skills;
- strengthened their critical thinking and analytical reasoning abilities;
- obtained the background necessary to take related upper division classes in mathematics, science and engineering.

Assessment:
The course grade will be based on the following items:

- **Homework** assignments. These will be assigned regularly on MyMathLab and will count towards **15%** of the course grade. The lowest homework grade will be dropped.
- Three **midterm tests**, held during class time. The lowest midterm test score will be replaced by the final exam score, if this improves the grade. The tests, averaged together, will count for **60%** of the course grade. Tentatively, these will be held February 20, March 26 and April 21.
- Comprehensive Final Exam — **25%** of grade. (Tuesday, May 5th, 4pm–7pm.)

Homework:
Homework will be assigned on MyMathLab. The course ID is `lisi88488`. The lowest homework grade will be dropped. You may rework the homework as many times as you like, without penalty, until the submission deadline. You may submit late homework for a 50% penalty until the final exam.

Warning: if you rework a problem you already submitted correctly, you may end up losing points on the assignment. Instead, use the review mode and/or self-quiz features of the MyMathLab site.

Tests/exams:
Calculators, cell phones and other electronic equipment will **NOT** be permitted during tests. Students must show all work for each test question and arrive at a correct answer. All missed work will earn the grade of 0. No make-up tests will be given for any reason, but the final exam grade can be used to replace a test missed for a valid medical reason. Any person who must miss a scheduled exam because of an official University function must reschedule and take this exam at a time **before** the exam is scheduled to be given. No other rescheduling will be allowed. Official documentation must be provided.

Mathematica
We will occasionally use Mathematica to visualize the topics in vector calculus. **Do not buy it**. The university has a site license so you can install it and use it on your personal computer, or you can use it in the university computer labs. (For details, visit your account on MyOleMiss and search for "research software".)

Blackboard:
Blackboard will be used for course materials and announcements.

Course Grade:

93 - 100 %	A	83 - 86.9 %	B	70 - 76.9 %	C
90 - 92.9 %	A-	80 - 82.9 %	B-	60 - 69.9 %	D
87 - 89.9 %	B+	77 - 79.9 %	C+	0 - 59.9 %	F

Tutoring Tutoring for all courses through Calculus 4 is offered Monday–Thursday from 10am–7pm and on Friday from 10am–2pm in the J.D. Williams Library Commons. The Commons is on the bottom floor of the library. A desk worker is stationed near the reference desk and can direct you to a tutor.

This tutoring is provided as part of your course fees, so it is available at no additional cost.

Disability Access and Inclusion: The University of Mississippi is committed to the creation of inclusive learning environments for all students. If there are aspects of the instruction or design of this course that result in barriers to your full inclusion and participation, or to accurate assessment of your achievement, please contact the course instructor as soon as possible. Barriers may include, but are not necessarily limited to, timed exams and in-class assignments, difficulty with the acquisition of lecture content, inaccessible web content, and the use of non-captioned or non-transcribed video and audio files. If you are approved through SDS, you must log in to your Rebel Access portal at `https://sds.olemiss.edu` to request approved accommodations. If you are NOT approved through SDS, you must contact Student Disability Services at 662-915-7128 so the office can: 1. determine your eligibility for accommodations, 2. disseminate to your instructors a Faculty Notification Letter, 3. facilitate the removal of barriers, and 4. ensure you have equal access to the same opportunities for success that are available to all students.
Note that unlike a few years ago, a student with testing accommodations must schedule all tests through the SDS Rebel Access online portal.

Attendance, cheating and deadlines:
Attendance is strongly recommended, but will not be checked past the first weeks of class. If a student misses class, for whatever reason, it is their responsibility to find out what has been missed and to get notes from a classmate.

The following statement is the policy of the Department of Mathematics regarding cheating: Cheating on any exam, quiz, homework, work to be completed in class; theft, or attempted theft of exam questions; or possession of exam questions prior to the time for examination shall all be offenses subject to appropriate penalties.

The course withdrawal deadline is Monday, March 2nd. After the Course Withdrawal Deadline, courses dropped will be recorded on University records and the W grade will be recorded if the student is not failing the course at the time of withdrawal; otherwise, the grade recorded will be F. After the course withdrawal deadline, a student may drop a course only in cases of extreme and unavoidable emergencies as determined by the academic dean. (Change of major or dissatisfaction with an expected grade are not acceptable reasons.)

An "I" grade will not be given without the permission of the Department of Mathematics. Every student must take the final exam at the time scheduled, unless they have pre-arranged an exception, in accordance with university regulations.

Tentative Schedule:

Tuesday	Thursday
1/21 1 Overview, Section 12.1	1/23 2 Section 12.2
1/28 3 Sections 12.3, 12.4	1/30 4 Sections 12.4, 12.5
2/4 5 Section 12.6	2/6 6 Section 12.7
2/11 7 Section 12.8	2/13 8 Section 12.9
2/18 9 Section 12.9, Review	2/20 10 **Test**
2/25 11 Section 13.1	2/27 12 Section 13.2
3/3 13 Sections 13.3, 13.4	3/5 14 Sections 13.4, 13.7
3/10 Spring break	3/12 Spring break
3/17 15 Section 14.1	3/19 16 Sections 14.1, 14.2
3/24 17 Section 14.2, Review	3/26 18 **Test**
3/31 19 Sections 14.3, 14.4	4/2 20 Section 14.4
4/7 21 Section 14.5	4/9 22 Section 14.6
4/14 23 Section 14.7	4/16 24 Section 14.7 and Review
4/21 25 **Test**	4/23 26 Section 14.8
4/28 27 Section 14.8 and Review	4/30 28 Review
5/5 **Final Exam** (4 pm)	5/7