

Information Sheet for Fall Semester, 2017

Math 3435-48F    Calculus III

Instructor: B. Dale Daniel

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On campus Office Hours: By appointment

On-line Office Hours: TBA

Text - *Calculus - Early Transcendental Functions*, 6<sup>th</sup> Edition, by Larson and Edwards,  
and class notes

Catalog Description - Functions of several variables, partial derivatives, vector functions,  
multiple integrals in different coordinate systems, line and surface integrals of vector fields.

Exams - There will be 2 major (take-home) exams. The comprehensive final is one of these two.  
Dates for exams are given in the Semester Schedule. Their average will constitute 100 points.

Final Exam - Final/Exam 2 is December 11-12.

Technology/Access Requirements – You will need a reliable internet connection, access to  
Blackboard and Webassign, and use of microphone and camera.

Written assignments – Four written assignments will be given throughout the semester. You will  
have to formulate your response(s) and upload it to Blackboard in pdf. The average of your  
written assignments will constitute another 100 points. Dates for all written assignments are given  
in the Semester Schedule.

Daily Grades - Homework on Webassign will be regularly given; the average (Total points scored  
on homework assignments / Total number of points available on homework assignments) of these  
will count 100 points. There are Webassign homework assignments due each week on Friday  
at 11:30 pm.

\* All exams, discussion assignments, and quizzes will be given using the Webassign system  
and/or Blackboard. I have prepared a semester schedule for our course. It is very important that  
you familiarize yourself with important due dates.

Make-up Policy - A student must have a university-approved excuse to make up any missed  
work. No exceptions.

Course Grade - If you get 90% of available points, you are guaranteed an A, 80% a B, 70% a C,  
and so on. You should assume that there will be no curve. There is no extra credit available.

Communication - As the course is 100% online, my primary mode of communication is email. I  
primarily use the address above: [dale.daniel@lamar.edu](mailto:dale.daniel@lamar.edu) I will closely monitor this account

Monday through Friday from 9AM to 9PM. I will reply to emails to this account on these days and times and do so within 24 hours.

Grade Reporting - The Written Assignments and major exams have restricted available times (usually 48 hours). All Webassign assignments are available from the beginning of the course. But I will not grade any assignment until after the due date. All grades will be posted in the Grade Center in Blackboard.

Office Hours - I will be holding online office hours – in Blackboard Collaborate – as needed. You can join me and ask questions about homework or anything else about our class. (Of course you can still also just e-mail me at any time.)

Sources for Help:

1. I will try to help you in any reasonable way. Do not hesitate to contact me!
2. If you are on campus, there is a tutoring lab located on the second floor of the Lucas building.
3. The department (Lucas 200) maintains a list of private tutors available for one-on-one or group tutoring.
4. There will be online office hours offered by me and/or a course TA.

Scholastic Honesty: All work you submit is to be your own. Cheating will not be tolerated.

Student Learning Outcomes: Upon completion of the course, students will:

1. Perform calculus operations on vector-valued functions, including derivatives, integrals, curvature, displacement, velocity, acceleration, and torsion.
2. Perform calculus operations on functions of several variables, including partial derivatives, directional derivatives, and multiple integrals.
3. Find extrema and tangent planes.
4. Solve problems using the Fundamental Theorem of Line Integrals, Green's Theorem, the Divergence Theorem, and Stokes' Theorem.
5. Apply the computational and conceptual principles of calculus to the solutions of real-world problems.
6. Convert and graph basic equations in Cartesian, cylindrical, or spherical coordinates;
7. Describe 3-D motion using vector functions;
8. Compute limits of functions of several variables;
9. Apply the chain rule to finding derivatives;
10. Apply Lagrange Multipliers to find extrema subject to constraints;
11. Change variables in multiple integrals;
12. Define a vector field and sketch a simple vector field;
13. Compute a line integral with respect to arc length,  $x$ ,  $y$ , and  $z$ ;
14. Compute a line integral over a vector field;
15. Identify a conservative vector field and compute a potential function for a conservative vector field;
16. Parameterize a surface.

Core Curriculum Outcomes: Upon completion of this course, the student will demonstrate his or her abilities to think critically, communicate quantitative information, and apply mathematical concepts:

1. Critical Thinking: Develop a logical, consistent plan to solve a problem, recognize consequences of the solution, and articulate a reason for choosing solution method.
2. Communication Skills: Use and present quantitative information in connection with an argument or problem solution and explicate it in an effective format.
3. Empirical and Quantitative: Construct and present a detailed problem statement with evidence of relevant contextual factors and possible approaches for solving the problem, then implement a solution and review the results.

### **Other Important Information for Students:**

Lamar University expressly prohibits intimidation and harassment of students, faculty, staff, or applicants. <http://students.lamar.edu/academic-support/code-of-conduct.html>

**Drop Policy:** Please make note of the three dates indicated in this drop policy. Any drop will be your responsibility; I will not drop a student from the course.

***September 13, 2017:*** (Census Date-Six Drop Rule does not apply) A student may drop or withdraw without consulting with the instructor. The Six Drop Rule does not apply to a drop before 5:00 PM.

***September 29, 2017:*** (Six Drop Rule applies) A student may drop or withdraw from the course without academic penalty and receive a Q, however, the Six Drop Rule applies. The student will consult with the instructor and the Records Office to initiate a drop.

***November 3, 2017:*** (Six Drop Rule applies) Last day to drop or withdraw with academic penalty; the student must be passing the course at the time of the requested drop in order to receive a Q. The drop form, including all required signatures, must arrive in the Records Office by no later than 4:00 PM. No drop is allowed after this date except in extreme extenuating circumstances. Any “late drop” must be approved by the instructor, department chair, college dean, and provost.

**Academic Integrity:** Students are expected to maintain complete honesty and integrity in their academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. Students are specifically warned against all forms of cheating and plagiarism. The *Lamar University Student Handbook* clearly reads: “Any student found guilty of academic dishonesty in any phase of academic work will be subjected to disciplinary action. Punishable offenses include, but are not limited to, cheating on an examination or academic work which is to be submitted, plagiarism, collusion, and the abuse of source materials.” One aspect of the *Handbook’s* definition of cheating includes “purchasing or otherwise acquiring and submitting as one’s own work any research paper or other writing assignment prepared by an individual or firm.” Plagiarism is defined as “the appropriation and the unacknowledged incorporation of another’s work or ideas into one’s own and submitted for credit.” Faculty members in the College of arts and Sciences investigate all cases of suspected plagiarism. Any student who is found cheating in this course will receive a course grade of F. <http://students.lamar.edu/student-handbook.html>

**Accommodations through the Disability Resource Center:** Lamar University is committed to providing equitable access to learning opportunities for all students. The Disability Resource Center (DRC) is located in the Communications building room 105. Office staff collaborate with students who have disabilities to provide and/or arrange reasonable accommodations. If you have, or think you may have, a disability (e.g., mental health, attentional, learning, chronic health, sensory, or physical), please contact the DRC at [409-880-8347](tel:409-880-8347) or [drc@lamar.edu](mailto:drc@lamar.edu) to arrange a confidential appointment with the Director of the DRC to explore possible options regarding

equitable access and reasonable accommodations. If you are registered with DRC and have a current letter requesting reasonable accommodations, we encourage you to contact your instructor early in the semester to review how the accommodations will be applied in the course.

<http://www.lamar.edu/disability-resource-center/>

**Incomplete Grades:** The grade of "I" may be given when any requirement of the course, including the final examination, is not completed. Arrangements to complete deficiencies in a course should be made with the instructor prior to the end of the semester or term. Incomplete work must be finished during the next long semester or the Records Office will change the "I" to the grade of "F." While the extension may be granted by the instructor with the approval of his/her Department Chair and Academic Dean, once the "I" is changed to an "F" it cannot be changed back to an "I." In this case, either a "change of grade" procedure must be initiated or the course must then be repeated if credit is desired. The instructor may record the grade of "F" for a student who is absent from the final examinations and is not passing the course.

**Campus Closure:** In the event of an announced campus closure in excess of four days due to a hurricane or other disaster, students are expected to login to Lamar University's website's homepage for instructions about continuing courses remotely. <http://lamar.edu>

**Emergency Procedures:** Many types of emergencies can occur on campus; instructions for severe weather or violence/active shooter, fire, or chemical release can be found at:

<http://www.lamar.edu/about-lu/administration/risk-management/index.html>

Following are procedures for the first two:

**Severe Weather:**

- Follow the directions of the instructor or emergency personnel.
- Seek shelter in an interior room or hallway on the lowest floor, putting as many walls as possible between you and the outside.
- If you are in a multi-story building, and you cannot get to the lowest floor, pick a hallway in the center of the building.
- Stay in the center of the room, away from exterior walls, windows, and doors.

**Violence/Active Shooter:**

- **CALL** - 8-3-1-1 from a campus phone (880-8311 from a cell phone). Note: Calling 9-1-1 from either a campus phone or cell phone will contact Beaumont City Police Dispatch rather than University Police.
- **AVOID**- If possible, self-evacuate to a safe area outside the building. Follow directions of police officers.
- **DENY**- Barricade the door with desks, chairs, bookcases or any other items. Move to a place inside the room where you are not visible. Turn off the lights and remain quiet. Remain there until told by police it is safe.
- **DEFEND**- Use chairs, desks, cell phones or whatever is immediately available to distract and/or defend yourself and others from attack.

**Course Evaluations:** You will have an opportunity to evaluate all aspects of this course in a formal process to be completed online near the end of the term. You will receive an email reminder through your LU account.

While I have made a sincere effort to ensure that this syllabus is correct, changes may be required. I will announce any substantive changes in a Blackboard announcement. If you find an error or omission, please advise me at once so that the other members of the class may be advised.