Class meets: MW 10:10-11:00 a.m. and TR 9:30-10:20 a.m. in ILB 235

Instructor: Dr. Victoria Sadovskaya. You may call me Victoria
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Office: ILB 316
Office phone: 460-6264 ext. 2622
Office hours: MW 11:10 a.m. - 12:10 p.m., TR 10:30 -11:30 a.m., or by appointment

Course webpage: www.southalabama.edu/mathstat/personal_pages/sadovska/227/227-101.html
It will contain a copy of this syllabus, a schedule, homework assignments, and announcements.

Course description: This is the third part of a three-course sequence intended to provide a good foundation in elementary calculus and its applications for students in mathematics, statistics, science, and engineering. The topics include vectors and the geometry of space; vector functions and functions of several variables; partial derivatives; local linearity; directional derivatives; the gradient; differential of a function; the chain rule; higher order partial derivatives; quadratic approximation; optimization of functions of several variables; parametric curves and surfaces; multiple integrals and their application; vector fields; line and surface integrals; vector calculus. Prerequisite: C or better in MA 126.

Goals and Objectives: Students will learn the basic concepts and techniques of calculus of several variables and vector calculus, as well as many important applications to science and engineering. Students will also improve their reasoning and problem-solving skills, so that they are better prepared to use mathematics in a wide variety of contexts.

Coverage: We will cover most of Chapters 12-17 of the book.

On-line Resources: New textbooks come with access to CalcPortal. It includes digital versions of the text and of the solution manual, interactive applets, chapter quizzing, etc.

Calculator: A graphing calculator is recommended.

Attendance: You are expected to attend every class. Roll will be taken daily, starting the second week of classes. You are responsible for finding out what you missed on days when you are unable to attend. Habitually absent students will lose privileges such as office hours and grading appeals. Class attendance will be considered in raising borderline letter grades.

Exams: There will be four in-class exams and a comprehensive final exam. The dates of the in-class exams will be announced in class and posted on the course webpage at least one week in advance. The Final Exam will be on Monday, December 12, 10:30 a.m. - 12:30 p.m.

There will be no make-up exams. If you are unable to attend an exam, you should notify me promptly, before the exam if possible, or otherwise before the next class. If there is a legitimate reason for missing an exam, such as illness or a family emergency, the exam score will be replaced by the final exam score. Otherwise, the score for the missed exam will be zero.

Books, notes, calculators, and other electronic devices cannot be used during the exams.


**Homework:** Completing all homework assignments is essential to learning the material and succeeding in the course. Homework assignments will be given daily. Odd-numbered problems will not be collected. On a weekly basis, several even-numbered problems will be collected and graded. *No late homework will be accepted, but the lowest two homework scores will be dropped.*

**Collaboration:** You may collaborate with your classmates on the problems that are not to be graded. For the problems to be graded, however, you should not collaborate, seek help from anyone but the instructor, or consult any sources other than your notes and your textbook.

**Standards of written work:** The solutions must be complete, correct, neatly written, and easy to follow. You must show all your work, it should be clear what is done in each step, in particular which quantity is computed and which formula is used.

**Final grade computation:** Your total score and your letter grade will be calculated as follows:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graded homework</td>
<td>30%</td>
<td>A: at least 90%</td>
</tr>
<tr>
<td>Exams 1,2,3,4</td>
<td>10% each</td>
<td>B: at least 80%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>30%</td>
<td>C: at least 70%</td>
</tr>
</tbody>
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- D: at least 60%
- F: below 60%

**Departmental tutoring:** Free tutoring is available from the Department of Mathematics and Statistics in ILB 456. For the Tutoring Lab schedule check the bulletin board outside ILB 325.

**JagSuccess early alert program:** JagSuccess is a program intended to help students be successful in 100 and 200 level courses. Students who are not doing well will receive an email during week 7 of this semester advising to see the instructor. They will also be directed to access an online tutorial intended to help with common problems affecting academic performance.

**Dropping:** The last date to withdraw from a course is Friday, October 28. Please talk to me if you are falling behind. Should you consider dropping the course, speak with me before making the final decision.

**Academic Conduct:** The USA policy regarding Student Academic Conduct is published in *The Lowdown* [http://www.southalabama.edu/lowdown/] and includes the following:

As a community of students and scholars, the University strives to maintain the highest standards of academic integrity. All members of the community are expected to exhibit honesty and competence in academic work. Any dishonesty related to academic work or records constitutes academic misconduct including, but not limited to, activities such as giving or receiving unauthorized aid in tests and examinations, improperly obtaining a copy of an examination, plagiarism, misrepresentation of information, or altering transcripts or university records.

**Academic Disruption:** The USA policy regarding Academic Disruption is published in *The Lowdown* and includes the following: Disruptive academic behavior is defined as individual or group conduct that interrupts or interferes with any educational activity or environment, infringes upon the rights and privileges of others, results in or threatens the destruction of property, and/or is otherwise prejudicial to the maintenance of order in an academic environment.

**Academic accommodations:** If you have a specific disability that qualifies you for academic accommodations, please notify me and provide certification from the Office of Special Student Services. It is located at 5828 Old Shell Road, phone 460-7212.

**Note:** The requirements and the policies may be modified as circumstances dictate. Such changes will be announced in class and posted on the course homepage.