

1 Course

Texas A&M University Department of Mathematics Math 151/819–821, Fall 2007

Engineering Mathematics I (3-2), Credit 4, I, II, S. Rectangular coordinates, vectors, analytic geometry, functions, limits, derivatives of functions, applications, integration, mathematical software (MATLAB 7). The class meets three times a week in lecture, once in recitation, and once in computer laboratory. The recitation is designed for you to discuss homework problems with your teaching assistant (TA) and take written quizzes. In computer laboratory, you will use the mathematical software package MATLAB 7 on weekly assignments. Prerequisites: High school algebra I and II, trigonometry and geometry; Math 150 or satisfactory performance on a qualifying exam.

2 Classes/Sessions

- **Lecture:** Monday/Wednesday/Friday, 10:20–11:10 am, HELD 113
- **Computer Lab (Tuesday) / Recitation (Thursday):**
 - Section 819: 9:35–10:25 am; Tuesday, BLOC 127 / Thursday, HECC 202
 - Section 820: 3:55–4:45 pm; Tuesday, BLOC 127 / Thursday, HELD 119
 - Section 821: 8:00–8:50 am; Tuesday, BLOC 130 / Thursday, BLOC 164
- **MATLAB Help Sessions** in Blocker 131: Monday–Thursday, 7:00–10:00 pm; Sunday, 1:00–10:00 pm
- **Calculus 1 Help Sessions:** See <http://www.math.tamu.edu/teaching/helpsession/> once the term begins.

3 Instructor

Lecturer	Art Belmonte (belmonte@calclab.math.tamu.edu)
Office	BLOC 601J
Phone	845-4299
Class Page	http://calclab.math.tamu.edu/~belmonte/2007c.m151.html
Course Page	http://calclab.math.tamu.edu/docs/math151/
Office Hours	Monday–Friday, 11:30 am–12:00 noon (or by appointment) in Blocker 601J
Week in Review	http://www.math.tamu.edu/~amy.austin/wirmath151.html

4 Books

Textbook	<i>Calculus: Early Vectors</i> , ©1999, ISBN 0-534-49348-3 (required)
Authors	James Stewart (and members of the Texas A&M University Department of Mathematics)
Coverage	Chapters 1–6
Lab Manual	<i>MATLAB: An Introduction with Applications, 2nd Edition</i> , ©2005, ISBN 0-471-69420-7 (required)
Author	Amos Gilat
Coverage	Chapters 1–11

5 Evaluations

Grading: A (90–100%), B (80–89.99%), C (70–79.99%), D (60–69.99%), F (0–59.99%)

Type	Number	Weight
Exams	3	50%
Final	1	25%
Homework	13	5%
Quizzes	9	9%
MATLAB	11	11%
TOTAL		100%

6 Notes

1. This is a first engineering math course with a technology component, the mathematical software package **MATLAB 7**. (You may purchase MATLAB for \$110 at the TAMU Bookstore in the MSC.) In lecture we do examples by hand so as to best prepare you for common exams. That said, we live in a technological world! I recommend a **TI-89** calculator, which contains a computer algebra system (CAS) that enables you to do symbolic math. I have made a series of streaming videos that show you how to do lecture problems with this calculator. [Alternatively, you may purchase the new **TI-NSpire CAS** calculator if and when it is available.]
2. Please be on time to class. Make sure that you have read the relevant sections in the textbook or lab manual *beforehand*.
3. It is imperative that you spend time doing MATLAB during open hours, in TAMU open access labs, or at home.
4. Make-ups for exams will be given only in the case of absences authorized under University Regulations.
5. Please bring your ID card to all common exams. These are administered in the evening (7:30–9:30 pm) in rooms to be designated on the Web.
 - **Exam 1:** Thursday, 27/Sep/2007, worth 15% of your grade.
 - **Exam 2:** Thursday, 25/Oct/2007, worth 15% of your grade.
 - **Exam 3:** Tuesday, 27/Nov/2007, worth 20% of your grade.
6. Also bring your ID card and a BLUE BOOK to the final exam. It will be given on Tuesday, 11/Dec/2007, in HELD 113 from 8:00–10:00 am. It is comprehensive and worth 25% of your grade.
7. Selected homework problems from your textbook will be assigned but not graded. See the Web for details. It is imperative that you spend time working these problems. When you have questions, please ask for help.
8. Additionally, there are online homework assignments that are worth 5% of your grade. Your TAs will provide you with details.
9. The nine quizzes, each worth 1% of your grade, will be given in recitation.
10. Details regarding MATLAB assignments from your lab manual will be posted on the Web.
11. Lectures for each section covered in the textbook are provided via the Web. This material is copyrighted. I grant you permission to make ONE copy of each document for your personal use.

7 Miscellany

- The American with Disabilities Act (ADA) is a federal anti-discrimination statute that provides comprehensive civil rights protection for persons with disabilities. Among other things, this legislation requires that all students with disabilities be guaranteed a learning environment that provides for a reasonable accommodation of their disabilities. If you believe you have a disability requiring an accommodation, please contact the Department of Student Life, Services for Students with Disabilities.
- “An Aggie does not lie, cheat, or steal or tolerate those who do.” You are referred to the Honor Council Rules and Procedures on the Web at <http://www.tamu.edu/aggiehonor>.