

**Engineering Mathematics I: WebCalc**

This is the WebCalc section of Math. 151, taught via the World Wide Web using the software package Scientific Notebook. There is no Maple lab session associated with this class. There is no required paper textbook (but for several reasons you are advised to buy the Calculus: Early Vectors (“Aggie Stewart”) book used in the regular 151 sections). Instead, during your MWF classes you will read the WebCalc1 text material on a computer screen and work its exercises with pencil and paper. (This “homework” will not be collected. A teaching assistant will be present to help you during these sessions.) The TR classes will be run somewhat like traditional recitation sections: You will see example problems worked, have a chance to ask questions, and take a quiz over the current topic. You will take the common exams with the other sections of Math. 151, and the class will follow the same weekly schedule of topics as the other sections so that you can benefit from the Math. 151 Week in Review.

**Course description:** Math. 151 is the first semester of the calculus sequence for engineering majors. *Prerequisites:* High school algebra I and II, trigonometry and geometry; Math. 150 or satisfactory performance on a qualifying exam. Credit will not be given for more than one of Math. 131, 142, 151 and 171. *Topics:* Rectangular coordinates, vectors, functions, limits, derivatives of functions, applications, integration.

**Plenary classes (“quiz days”):** TR 2:20–3:10, Heldenfels 111

**Sections (“computer days”):** MWF 11:30–12:20, SCC 210F (Sec. 507),  
MWF 12:40–1:30, SCC 102B (Sec. 508)

**Instructor:** S. A. Fulling  
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845-2237  
fulling@math.tamu.edu

If I am not in my office, you can leave a note in my mailbox (in the room opposite the math department office, 6th floor of Blocker) or in the plastic pouch beside my office door.

Temporary office hours: M 2:45–3:45, F 10:10–11:10, and after class (in the lecture room) on T and R.

Permanent office hours will be announced later.

**Teaching Assistant:** Christopher Romero  
He will provide you with his personal information.

<b>Grading system:</b>	Test 1:	150	Thursday, Sept. 27
	Test 2:	150	Thursday, Oct. 25
	Test 3:	200	<b>Tuesday</b> , Nov. 27
	Final exam:	250	Wednesday, Dec. 12
	Quizzes:	<u>250</u>	(and attendance)
	Total	1000	

The “curve” will be at least as generous as the “standard” scale [i.e., 90% (= 900 pts) will guarantee an **A**, etc.].

The hour tests are departmental common exams **in the evening**, 7:30–9:30 p.m., place to be announced later. The final exam is **not** a common exam; it takes place in our plenary classroom, HELD 111 (**not** the common exam room and **not** the computer room) at the time period (Wed. 1:00–3:00) assigned to our plenary class (**not** to your MWF computer class).

**The nature of *WebCalc* and *Scientific Notebook*:** *WebCalc* is a calculus course taught via the World Wide Web using the software package *Scientific Notebook*. This software is a combined word processor, computer algebra system (*Maple*), and Web delivery system (“browser”). **It is available on any of the public access PC computers on campus.** (Mac and Unix versions do not exist.) It may be purchased at the bookstore for about \$99, and 30-day free trial copies are available (how to get them will be explained in class). *Scientific Notebook* will bring up *Netscape* to read HTML files when necessary, but *Scientific Notebook* files will not display properly in *Netscape* or *Internet Explorer*.

#### Important URLs:

- Your main entry to the course is through *Scientific Notebook* by opening the location <http://calclab.math.tamu.edu/~fulling/w151/sindex.tex>
- Certain course materials will also be posted in HTML or PDF versions at <http://calclab.math.tamu.edu/~fulling/w151/index.html>
- General information (primarily for instructors, but open to students) for all sections of Math. 151 is at <http://calclab.math.tamu.edu/docs/math151/>
- In particular, a schedule that shows which sections of Stewart correspond to each of our topics is <http://calclab.math.tamu.edu/docs/math151/syllabus/currentschedule.html>
- The main index for *WebCalc1* (sections **not** in the order prescribed by the TAMU syllabus!) is <http://www.math.tamu.edu/~webcalc/mindex.tex>

**More details on class procedures:** Each week you will be assigned several *WebCalc* sections to read in class on MWF (and finish elsewhere, if necessary). Each section has many examples and exercises fully worked out and an extensive problem set with answers. **You are expected to use pencil and paper to work out these problems as you read.** (*Maple* is available inside *Scientific Notebook*; how to access it will be explained in class.) There are also many notes and hints that will pop up and give extra information in response to mouse clicks. When you have questions during the reading, **you are encouraged to talk (quietly) with neighboring students** and, of course, to ask the TA

or instructor for help. The TR class sessions give another opportunity to ask questions; they will also be used for examples and quizzes. Your scores on the quizzes (generously curved) will substitute for the *Maple* lab scores in the other sections of Math. 152. Class attendance will influence your grade (negatively in the case of excessive absences; positively in case of low quiz scores: a paper with a score of 0 counts more than no paper at all). Another way to get a few points is to point out errors in the *WebCalc1* materials to Professor Allen, using “bug report” forms that will be provided. It is impossible to administer makeups for individual quizzes; instead, your lowest three or four quiz grades will be dropped, and there will be a comprehensive makeup quiz during the last week of the semester. Makeups for major exams will be handled in accordance with the university rules for authorized absences and the departmental policies and procedures for making up common exams. The policy on calculators during common exams will be announced before each exam. At present, my policy is to provide the ScanTron forms for the exams (that is, you don’t have to buy them). Students with disabilities should take advantage of the services offered by the Office of Services for Students with Disabilities (845–1637).

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**Plagiarism:** Plagiarism and copyright are separate issues. The fact that **any** material written by someone else appears to be “in the public domain” is **never** a defense against a charge of cheating. Passing off another person’s ideas or words as one’s own, even with that person’s permission, is plagiarism and is one of the worst academic sins. See the Student Rules under the section “Scholastic Dishonesty”.

## The Greek Alphabet

Α	.....	$\alpha$	.....	alpha
Β	.....	$\beta$	.....	beta
Γ	.....	$\gamma$	.....	gamma
Δ	.....	$\delta$	.....	delta
Ε	.....	$\epsilon$	.....	epsilon
Ζ	.....	$\zeta$	.....	zeta
Η	.....	$\eta$	.....	eta
Θ	.....	$\theta$	.....	theta
Ι	.....	$\iota$	.....	iota
Κ	.....	$\kappa$	.....	kappa
Λ	.....	$\lambda$	.....	lambda
Μ	.....	$\mu$	.....	mu
Ν	.....	$\nu$	.....	nu
Ξ	.....	$\xi$	.....	xi
Ο	.....	$\omicron$	.....	omicron
Π	.....	$\pi$	.....	pi
Ρ	.....	$\rho$	.....	rho
Σ	.....	$\sigma$	.....	sigma
Τ	.....	$\tau$	.....	tau
Υ	.....	$\upsilon$	.....	upsilon
Φ	.....	$\phi$	.....	phi
Χ	.....	$\chi$	.....	chi
Ψ	.....	$\psi$	.....	psi
Ω	.....	$\omega$	.....	omega