

Engineering Mathematics II: WebCalc

This is the WebCalc section of Math. 152, 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 if you already own the Stewart book, you will probably find it useful and should certainly not resell it). Instead, during your MWF classes you will read the WebCalc2 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 have a chance to ask questions, practice problem-solving in small groups, take a quiz over the current topic, and occasionally hear a brief lecture. You will take the common exams with the other sections of Math. 152, and the class will follow the same weekly schedule of topics as the other sections so that you can benefit from the Math. 152 Week in Review.

Course description: Math. 152 is the second semester of the calculus sequence for engineering majors. *Prerequisites:* Math. 151 or equivalent. *Topics:* Techniques and applications of integration, introduction to differential equations, sequences and series, 3-dimensional vectors.

Plenary classes (“quiz days”): TR 2:20–3:10, Heldenfels 109

Sections (“computer days”): MWF 9:10–10:00 (Sec. 513) or 10:20–11:10 (Sec. 514), SCC 210F

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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 3:00–3:50, T 3:30–4:20, F 3:00–3:50

Permanent office hours will be announced later.

Teaching Assistant: Alicia Russell
She will provide you with her personal information.

Grading system: Test 1:	150	Thursday, Feb. 15
Test 2:	150	Thursday, March 22
Test 3:	200	Tuesday , April 24
Final exam:	250	Wednesday, May 9
Quizzes:	<u>250</u>	(and class participation)
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 109 (**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/w152/sindex.tex>
- Certain course materials will also be posted in HTML or PDF versions at <http://calclab.math.tamu.edu/~fulling/w152/index.html>
- General information (primarily for instructors, but open to students) for all sections of Math. 152 is at <http://calclab.math.tamu.edu/docs/math152/>
- In particular, a schedule that shows which sections of Stewart correspond to each of our topics is <http://calclab.math.tamu.edu/docs/math152/currentsched.html>
- The main index for *WebCalc2* (sections **not** in the order prescribed by the TAMU syllabus!) is <http://www.academicalsolutions.com/webcalc2/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 quizzes and group exercises (“class participation”). Your scores on the quizzes and group exercises (suitably rescaled) will substitute for the *Maple* lab scores in the other sections of Math. 152. Class attendance may influence your grade in borderline cases (negatively in the case of excessive absences; positively in case of low class-participation scores). Another way to get a few points is to point out errors in the *WebCalc2* materials to Professor Yasskin; he will explain the procedure in class soon. Makeup quizzes cannot be given; your lowest two quiz grades will be dropped. 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. Also, you may be asked to provide ScanTron forms for the exams.

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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	.....	α	.....	alpha
Β	.....	β	.....	beta
Γ	.....	γ	.....	gamma
Δ	.....	δ	.....	delta
Ε	.....	ϵ	.....	epsilon
Ζ	.....	ζ	.....	zeta
Η	.....	η	.....	eta
Θ	.....	θ	.....	theta
Ι	.....	ι	.....	iota
Κ	.....	κ	.....	kappa
Λ	.....	λ	.....	lambda
Μ	.....	μ	.....	mu
Ν	.....	ν	.....	nu
Ξ	.....	ξ	.....	xi
Ο	.....	\omicron	.....	omicron
Π	.....	π	.....	pi
Ρ	.....	ρ	.....	rho
Σ	.....	σ	.....	sigma
Τ	.....	τ	.....	tau
Υ	.....	υ	.....	upsilon
Φ	.....	ϕ	.....	phi
Χ	.....	χ	.....	chi
Ψ	.....	ψ	.....	psi
Ω	.....	ω	.....	omega