

Syllabus for Math 152 Sections 501-503 and 504-506

Spring 2012

Instructor Jennifer Lewis .

Office Blocker 630A

office hours: MW 12 - 2 , Tues & Thurs 11-2

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Math 152 Course Home Page URL address is

<http://calclab.math.tamu.edu/docs/math152/>

Course Description: Credit 4. Integration techniques and their applications (area, volumes, work), improper integrals, analytic geometry, vectors, infinite series, power series, Taylor series, computer algebra (Matlab). Prerequisite: Math 151 or equivalent. credit will not be given for more than one of Math 148, 152, 172.

Text books: *Calculus: Early Vectors*, preliminary edition (hard back), by Stewart et al, published by Brooks/Cole. The computer laboratory will use *Matlab: An Introduction with Applications* by Wiley.

Course Schedule: Both of my lectures are in Held 107. Recitation and lab are taught by your TA.

Section	Lecture time	Recitation	Lab
501	MWF 9:10-10	R 9:35-10:25 CE 136	T 9:35-10:25 BLOC 126
502	MWF 9:10-10	R 11:10-12:00 CE 136	T 11:10-12:00 BLOC126
503	MWF 9:10-10	R 3:55-4:45 CE 138	T 3:55-4:45 BLOC 123
504	MWF 10:20-11:10	R 8:00-8:50 CE 138	T 8:00-8:50 BLOC 123
505	MWF 10:20-11:10	R 9:35-10:25 CE 223	T 9:35-10:25 BLOC 124
506	MWF 10:20-11:10	R 11:10-12:00 CE 223	T 11:10-12:00 BLOC 124

Online Homework: Online homework is required in all math 152 classes. These online homework assignments can be accessed anytime day or night, from any computer with a connection to the internet and a Web browser. All information regarding online homework can be found at

<http://www.math.tamu.edu/courses/eHomework> . **You should also do the suggested problems on my website as the webassign homework is not enough practice.** Only the online homework will be graded.

Quizzes: You will have a quiz in recitation each week. The quiz problems will be similar to suggested problems, problems done in class, and/or online homework problems. There will also be occasional quizzes in lecture.

Grading: Your grade will be determined by three exams, a cumulative final exam, a laboratory grade , a homework grade and a quiz grade. The points of each of these out of 600 total are as follows:

Exam I	Exam II	Exam III	Final	Matlab	Webassign	Quizzes
100	100	100	150	60	30	60

90-100% = 540-600 points = A, 80-89%=480-539 points = B,
70-79%=420-479 points=C, 60-69%=360-419 points = D
0-59% = Below 360 = F

Exams I, II and III are common exams (the same exam is given for all sections of Math 152) and are administered in the evenings from 7:30-9:30pm. [Copies of old exams](#) are available on the web. The final is comprehensive and is given in your lecture room according to the final exam schedule. The final is not a common exam. (See weekly schedule below)

Make-ups for exams and quizzes will only be given with documented University-approved excuses (see University Regulations).

Where to get Help: My office hours are for you . You do not need an appointment to come to office hours. If you cannot come during those hours, please let me know, other times can be arranged.

Week in Review: The week in review is a 2-hour review of the week just completed. You are highly encouraged to attend. WIR is taught by Amy Austin; time and place will be announced in class. Before you go to WIR, print the problems from the WIR website which will be posted on my webpage soon.

Streaming Videos: Streaming videos by Amy Austin are available at <http://www.math.tamu.edu/~amy.austin/wirmath152.html>

Help Sessions: Help sessions are question and answer sessions on a drop in basis. This schedule will be announced in class and can be found at <http://www.math.tamu.edu/teaching/helpsession/>

Academic Integrity Statement: "An Aggie does not lie, cheat or steal or tolerate those who do." Please see the Honor Council Rules and Procedures on the web at <http://www.tamu.edu/aggiehonor>.

Students with Disabilities: 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 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, in Room 126 of the Koldus Building or call 845-1637.

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Tentative Weekly Schedule

- Week 1 Jan 17-Jan 20
 - Sections 6.4–6.5, 7.1
Review of the Fundamental Theorem of Calculus, integration by substitution, area
- Week 2 Jan 23-Jan 27
 - Sections 7.1–7.2
Area, volumes by slicing, disks, washers

- Week 3 Jan 30-Feb 3
 - Sections 7.3–7.4
Volume by cylindrical shells, work
- Week 4 Feb 6-Feb 10
 - Sections 7.5, 8.1–8.2
Average value, integration by parts, trigonometric integrals
- Week 5 Feb 13-Feb 17

8.3, 8.4
Trigonometric substitution, partial fractions

 - Review and **Exam 1** (Covers through Section 8.3).
- Week 6 Feb 20-Feb 24
 - Sections 8.9, 9.3, 9.4
 - Improper integrals, arc length, surface area of revolution
 - (Section 8.8 on Numerical integration will be done in lab)

- Week 7 Feb 27-Mar 2

Sections 10.1–10.2
Sequences, Series

- Week 8 Mar 5-Mar9

Sections 10.2, 10.3

Series, convergence tests

Spring Break March 12-March 16

- Week 9 Mar 19-Mar 23
 - Review and **Exam 2** (Covers through Section 10.3)
- Week 10 Mar 26-Mar 30
 - Sections 10.4, 10.5, 10.6
Series, convergence tests. Power series, representing functions as power series
 -
- Week 11 Apr 2-Apr 6 no class Apr 6, Good Friday
 - Sections 10.7, 10.9
 - Taylor and Maclaurin series, applications of Taylor series
 -
- Week 12 Apr 9-Apr 13
 - Sections 10.7, 10.9
 - Taylor and Maclaurin series, applications of Taylor series
- Week 13 Apr 16-Apr 20
 - Section 11.1–11.3
 - 3D coordinates, vectors, dot product , cross product.
- Week 14 Apr 23-Apr 27
 - Review and Exam 3 (covers through 11.3)
- Week 15 Apr 30 Monday class; May 1, attend Friday classes
 - Section 13.4
 - Polar coordinates

Final Exam Schedule:

Sections 501-503 Lecture time MWF 9:10-10 Final is Friday May 8 10 am - noon
in Held 107

Sections 504-506 Lecture time MWF 10:20-11 Final is Friday May 8 3pm - 5 pm
in Held 107