Syllabus for Math 152

Spring 2013

Instructor Jennifer Lewis .

Office Blocker 630A

office hours: MWF 11-1: , Tues 10-1 Thurs 12-3

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My website: www.math.tamu.edu/~jlewis

At my website you will find my course materials at my Math 152 page.

The departmental Math 152 Course Home Page *URL address* is

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

Here you will find the times and location for the common exams.

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.

My 152 classes: All lectures are MWF If you miss one, you may attend another.

Sections 513-515 1:50-2:40 Held 111

537-539 8:00-8:50 Held 111

801-804 9:10-10:00 Held 109

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 . Practice assignments are not for a grade and are not really due. **You should also do the suggested problems in the text book listed on my website. The webassign homework is not enough practice.**

Quizzes: You will have a quiz in recitation each week. The quiz problems will be similar to suggested problems in the text book problems and / or problems done in class. 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 and is written by me. The format will be discussed later in the course. (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/wimath152.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

ç Week 1 Jan 14-Jan 18

- ç Sections 6.4–6.5, 7.1
  Review of the Fundamental Theorem of Calculus, integration by substitution, area

ç Week 2 Jan 21-Jan 25

- ç Sections 7.1–7.2
  Area, volumes by slicing, disks, washers

ç Week 3 Jan 28-Feb 1

- Sections 7.3–7.4
  Volume by cylindrical shells, work

ç Week 4 Feb 4-Feb 8

- Sections 7.5, 8.1–8.2
  Average value, integration by parts, trigonometric integrals

ç Week 5 Feb 11-Feb 15

8.3, 8.4
Trigonometric substitution, partial fractions

- Review and **Exam 1** (Covers through Section 8.2 or 8.3 to be announced)

ç Week 6 Feb 18 - Feb 22

- 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)

ç Week 7 Feb 25 - Mar 1

Sections 10.1–10.2
Sequences, Series

Week 8 Mar 4 - Mar8

Sections 10.2, 10.3

Series, convergence tests

Spring Break March 11-March 15

ç Week 9 Mar 18-Mar 22

- Review and **Exam 2** (Covers through Section 10.2 or 10.3 to be announced)

ç Week 10 Mar 25-Mar 28 Friday Mar 29 is Good Friday and is a reading day, no classes

- Sections 10.4, 10.5, 10.6
  Series, convergence tests. Power series, representing functions as power series

ç Week 11 Apr 1-Apr 5 Sections 10.7, 10.9

- Taylor and Maclaurin series, applications of Taylor series

ç Week 12 Apr 8 - Apr 12

Sections 10.7, 10.9
Taylor and Maclaurin series, applications of Taylor series

ç Week 13 Apr 15-Apr 19

Section 11.1–11.3
3D coordinates, vectors, dot product , cross product.

ç Week 14 Apr 22-Apr 26

- Review and Exam 3 (covers through 11.2 or 11.3 to be announced)

ç Week 15 Apr 29 and Tues Apr 30 Tuesday, Apr 30 is redefined as a Friday, attend all Friday classes.

Section 13.4
Polar coordinates

Final Exam Schedule	Sections 513-515	Tues, May 7	3:30-5:30 pm
	537-539	Fri, May 3	10:00 am- noon
	801-804	Mon, May 6	8:00 - 10:00 am