Math 1352 Section 12 Fall 2011

Room/Time:	TT 8:00-9:20, Room Math 015 (Basement)
Instructor:	Dr. David S. Gilliam
Email:	david.gilliam@ttu.edu
Office:	Math Room 103
Phone:	806-742-2580 ext. 265
Webpage:	http://www.math.ttu.edu/~gilliam/ttu/f11/m1352_f11/m1352_f11.htm
Office Hours:	9:30-10:30 TT, $9:00-10:00$ MWF and by appointment
Text:	"Calculus, 5rd Custom Edition" by Strauss/Bradley/Smith

Calculators: Calculators will NOT be allowed on exams.

Homework Assignments: Homework will be delivered using WebWork. See class web page for link to homework. Your WebWork user name is your eraider name (all lower case) and your initial password is your R number (including the R).

Student Learning Outcomes: M1352 satisfies the university core curriculum requirement in Mathematics: "Students graduating from Texas Tech University should be able to demonstrate the ability to apply quantitative and logical skills to solve problems." It meets the TTU general education student learning outcomes for mathematics that students will:

1. Apply arithmetic, algebraic, geometric, statistical and logical reasoning to solve problems. 2. Represent and evaluate basic mathematical and/or logical information numerically, graphically, and symbolically. 3. Interpret mathematical and/or logical models such as formulas, graphs, tables and schematics, and draw inference from them.

Students will become proficient in techniques of integration and the use of integration to solve real world problems. They will also understand the basic properties of convergent series and sequences. In particular the students will: 1. Compute areas and volumes; 2. Solve real world problems involving selected concepts from the physical and life sciences, and economics; 3. Integrate by using substitution, integration by parts, and partial fractions; 4. Analyze the convergence of infinite series and sequences; 5. Perform basic vector algebra

This course is intended to develop students skills in the following areas: 1. applications of integrals to compute areas and volumes, surface areas and work; 2. solution of real world problems including selected topics from the physical and life sciences; 3. integration techniques including integration by parts, substitutions, partial fractions; 4. Indefinite integration; 5. infinite series - convergence, divergence, power series and Taylor series; 6. vector arithmetic in two and three dimensions (including scalar and cross product).

Course Outline (Approximate Times): 1. Chapter 5 (review) $(1 \text{ class})^1$ 2. Chapter 6, Sections 6.1 – 6.5 (6 classes); 3. Chapter 7, Sections 7.1 – 7.5, 7.7 (7.5 classes); 4. Chapter 8, Sections 8.1 – 8.8 (7.5 classes); 5. Chapter 9, Sections 9.1 – 9.4 (3 classes).

Assessment of Learner Outcomes (Grading Policy): Assessment of learning outcomes will be based on exams and homework assignments. In more detail:

1. There will be 3 exams given in class. For review for an exam, sample tests will be handed out several days in advance of each exam. Each exam counts as one score. A missed exam

¹Here class means 1 hour 20 minutes class period

gives a score of 0, i.e., there are no makeup exams. Under extreme (and well documented) circumstances, arrangements might be made to take a test in advance.

- 2. There will be approximately 15 online homework assignments using WebWork. The homework will count as 1 additional score.
- 3. There will be approximately 12 in-class quizzes. The quizzes will count as 1 additional score.
- 4. The final exam will count for 2 more scores. This final is a comprehensive final.
- 5. After the final you will have 7 scores. Your final grade for the course will be determined by the average of your best 5 of these 7 scores.
 Grading scale: 90-100, A; 80-89, B; 70-79, C; 55-69, D;

Important Dates:

- (1) August 30th, Tuesday, Last day to add a class
- (2) September 5th, Monday, Labor Day Holiday (no class)
- (3) September 12, Monday, Last day for student-initiated drop on MyTech without penalty.
- (4) September 13, Tuesday, Last day for student-initiated drop (counts against drop limit).
- (5) October 10-11, Monday-Tuesday, No Classes.
- (6) October 24, Wednesday, Mid-Term Grades due.
- (7) October 31, Monday, Last day for student-initiated drop on MyTech with penalty.
- (8) November 23 27, Wednesday Sunday, Thanksgiving.
- (9) December 1 7, Thursday Wednesday, Period of no examination
- (10) December 7, Wednesday, Last day of classes.
- (11) Final examination. Tuesday, December 13, 10:30 a.m.-1:00 p.m. Room TBA.

Attendance: Attendance will be taken daily to provide evidence of absence. You are expected to attend class. In particular students are responsible for any and all information given in class, e.g., test dates, quizzes, assignments, and general course material. The primary reason for poor performance of students on tests and homework is repeated failure to attend class and not doing their own homework.

ADA Accommodations: Any student who, because of a disability, may require special arrangements in order to meet course requirements should contact me as soon as possible to make necessary arrangements. The instructor may request verification of need from the Dean of Students Office.

Religious Holy Day: 1. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code β 11.20. 2. Any a student who plans to be absent from classes for the observance of a religious holy day should arrange with the instructor (in advance) to complete any work for that period. 3. A student who is excused for religious observance may not be penalized for the absence; however, arrangements must be made in advance for completion of any work that might be missed.

Student Honesty and Classroom Policy: Cheating will not be tolerated and may result in severe academic sanctions. Disruptive behavior during class will not be tolerated. All cell phones are to be turned off upon entering the classroom – there are no exceptions. Disruptive behavior includes talking out of turn, cell phones ringing during class, texting and repeatedly arriving late or leaving class early. Class starts promptly on the hour. Please try to arrive on time.