Math 1452 Calculus II

Instructor: Dr. Angela Peace	Text: <i>Calculus</i> by Strauss/Bradley/Smith/Toda, 7 th ed.
Office Hours: Math 243 MW 10:30-12:00, W 1:00-2:00, and by appointment	Email: a.peace@ttu.edu

TTU Core Curriculum Student Learning Outcomes for Mathematics

- Apply arithmetic, algebra, geometry and statistics to solve problems.
- Represent and evaluate basic mathematical information numerically, graphically, and symbolically.
- Use mathematical and logical reasoning to evaluate the validity of an argument.
- Interpret mathematical models such as formulas, graphs, tables and schematics, and draw inference from them.

Students graduating from Texas Tech University should be able to demonstrate the ability to apply quantitative and logical skills to solve problems. This course satisfies core curriculum math requirements.

Expected Learning Outcomes	Methods for Assessment	
Set up and evaluate integrals to find areas and volumes	Exam I, Homework, Class Discussion, Final Exam	
and to solve real world problems		
Evaluate integrals by hand using a variety of techniques	Exam II, Homework, Class Discussion, Final Exam	
including substitutions, parts, partial fractions, and		
hyperbolic trigonometry		
Analyze the convergence of sequences, series,	Exam III, Homework, Class Discussion, Final Exam	
and power series		
Solve elementary problems in vector analysis	Homework, Class Discussion, Final Exam	

Major Course Requirements: There will be 3 in-class exams, each accounting for 20% of your course grade. Another 15% of the grade will be derived from the homework. The remaining 25% will consist of your score on the comprehensive departmental final exam

Grading Scale: A = 100%-90.00%, B = 89.99%-80.00%, C = 79.99%-70.00%, D = 69.99%-60.00%, F = 59.99%-0%

Requirement	Description	Grade Percentage
WebWork	Online assignments due Monday and Thursdays: The URL is:	15%
	nup.//webwork.math.tu.edu/webwork2/spi18anpeacem1452s101	
Quizzes	In-class quizzes	15%
Examinations	3 in-class exams, each worth 15%	45%
Final Exam	Comprehensive Exam, May 14 th 4:30-7:30	25%
Total		100%

Schedule		
Lecture	General Description of the Subject Matter	
Week 1-5	Using integrals to find areas and volumes and to solve real world problems	
Week 6-9	Evaluating integrals by hand	
Week 10-14	Analyzing the convergence of sequences, series, and power series	
Week 15-16	Vector analysis and review	

Exam	Dates
Exam I	February 19
Exam II	March 26
Exam III	April 23
Final Exam	May 14, 4:30 -7:00

Required Reading: You are expected to read the relevant sections of the textbook before attending each lecture.

Calculators: No calculators or other electronic devices may be used on any exam.

Attendance: You are responsible for all material covered and announcements made in lecture, via email, and on the web.

Homework: Homework will be assigned through WebWork. You will also be given a list of additional problems in the textbook. These will not be graded, but are nonetheless essential in preparing for the exams. You should expect to spend at least 6-8 hours per week doing homework.

Missed Assignments or Exams:

In general, no missed in-class activities will be made up and no homework will be accepted after the deadline (except for documented university absences as required by TTU OP's). If you miss one of the 3 exams, your grade on the final can be used to replace one missed exam, but only with my permission for a valid, documented emergency.

Additional Resources:

Math Tutor Center: <u>http://www.math.ttu.edu/Undergraduate/Resources/TSC/tutor.shtml</u> Supplemental Instruction: <u>https://www.depts.ttu.edu/soar/SI/includes/SI_Schedule.pdf</u>

Academic Integrity:

http://www.depts.ttu.edu/opmanual/OP34.12.pdf

It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension.

"Scholastic dishonesty" includes, but it not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

You are expected to maintain the highest standards of academic integrity in this course. Any violation will be punished to the fullest extent. In particular, no calculators, notes, books, or other outside resources may be used on exams. You may (and are encouraged to) discuss homework problems with each other and with tutors at the math tutoring center, but you may not use any work done completely by another person or copy from the student solution guide. For example, suppose you are working with a friend or tutor on a homework problem and they discover the answer. You may not copy their answer or their work. If however, they explain the problem to you, and you **completely** understand every detail (meaning you could work a similar problem completely on your own), then you may re-write the solution as you understand it and the solution would now be considered your own.

Observance of Religious Holy Day:

https://www.depts.ttu.edu/opmanual/OP34.19.pdf

"Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code §11.20. A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. A student who is absent from classes for the observance of a religious holy day shall be allowed to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence. A student who is excused may not be penalized for the absence; however, the instructor may respond appropriately if the student fails to complete the assignment satisfactorily.

Accommodation for Students with Disabilities:

https://www.depts.ttu.edu/opmanual/OP34.22.pdf

Any student who, because of a disability, may require special arrangements in order to meet the course requirements should contact the instructor as soon as possible to make any necessary arrangements. Students should present appropriate verification from Student Disability Services during the instructor's office hours. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services in West Hall or call 806-742-2405.