Kent Pearce

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Math 1352-008

Lecture MWF 11:00 MA 110

Text Strauss, Bradley & Smith, *Calculus*, 5th Ed. Prentice Hall

Chapters: 6-9

Office Hours

Tu-Th 1:30-3:00 or By Appointment

Learning Objectives

This course is intended to develop students skills in the following areas:

1. application of definite integration to computing physical quantities: area, volume, arc length, surface area, work and fluid force;

2. integration techniques including: substitution, integration by parts, trigonometric substitution and partial fractions;

3. computation of improper integrals;

4. introduction to infinite series: sequences, geometric series, convergence tests, power series and Taylor series;

5. vector arithmetic in two and three dimensions, including scalar and cross product.

Assessment of the learning outcomes

Assessment will be achieved through one or more activities, non-graded and graded, such as: attendance, class discussion, board work, short quizzes, selected homework, examinations and other optional activities deemed appropriate by the instructor. It is important to note that these assessments are for your learning benefit. Class grades will be assigned according to the following rubric:

Grades

| HomeWork | 12 assignments - Paper Based - Drop Lowest | | | |
|--------------|---|----------------|--|--|
| | Due "every third class period" (Dates - See Calendar) | | | |
| | http://www.math.ttu.edu/~pearce/courses/1352-20082(008)-hwk.shtml | 100 pts | | |
| WebWork | 13 assignments - Web Based - Drop Lowest | | | |
| | Due "the period after each HW" (Dates - See Calendar) | | | |
| | http://webwork.math.ttu.edu/webwork2/m1352spr08kpearce/ | 100 pts | | |
| Examinations | 4 mid-term examinations, no make-up examinations | | | |
| | Jan 09, Feb 08, Mar 07, Apr 16 | 400 pts | | |
| Final Exam | Comprehensive, Friday, May 2, 10:30 am - 1:00 pm | <u>200</u> pts | | |
| Total | | 800 pts | | |
| | | | | |

Grading Scale

| A100% - 90% | B89% - 80% | C79% - 70% | D69% - 60% | F59% - 0% |
|-------------|------------|------------|------------|-----------|
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Review Sessions

Thurs. Feb 07, 7:00 pm; Thurs. Mar 06, 7:00 pm; Tues. Apr 15, 7:00 pm

Technology

Graphing calculators (TI-83, TI-84, TI-89 or equivalent) and/or computer algebra software (Maple, Mathematica) can be invaluable aids for facilitating learning. On the other hand, the course objectives are not centered around calculator proficiency nor computer expertise. Students may use a graphing calculator or computer algebra software while doing homework and webwork assignments to facilitate: (1) learning of concepts; (2) understanding the material; (3) checking calculation details. The emphasis on mid-term exams and the final exam will be oriented towards assessing mastery of the concepts stated in the Learning Objectives section. To that end, calculators will <u>not</u> be allowed in the mid-term exams nor in the final exam.

Attendance

A roll sheet will be circulated each class period (except on exam dates). Each student is responsible for his/her signing the roll each class period. Students who are absent more than four (4) class periods will receive 20 point deduction from their cumulative total. Students who are absent more than eight (8) periods will receive a 80 point deduction from their cumulative total.

Competency Exam

A competency exam will be administered on the first day of class to assess adequate Calculus I preparation for being in Calculus II. The competency exam will focus on differentiation techniques (Chapter 3.1-3.6) and on elementary integration techniques (Chapter 5.4-5.4).

Critical Dates

Wednesday, Mar 05, 2008 - Mid-semester grades due. Wednesday, Mar 12, 2008 - Last day to drop a course Tuesday, Apr 29, 2008 - Last day of classes. Friday, May 2, 2008 - Comprehensive Final Exam (10:30 - 1:00)

Notices

Academic Integrity (Extracted from OP 34.12)

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.

Observance of Religious Holiday (Extracted from OP 34.19)

A student who intends to observe a religious holy day should make that intention known 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.

Accommodation for Students with Disabilities (Extracted from OP 34.22)

Any student who, because of a disability, may require some special arrangements in order to meet course requirements should contact the instructor at MA 201-B as soon as possible to request necessary accommodations. Students should present appropriate verification from Student Disability Services (AccessTECH). No requirement exists that accommodations be made prior to completion of this approved university process.