MATH 2350: Calculus III - Summer 2011 - Section 101

Class Information

Time: MTWRF 8.00 am - 9.50 pm **Room:** MATH 108

Instructor Information

Name: Mervyn Parakrama B. Ekanayake Office: MATH 006 Phone: (806) 742-2566 (Math office)

Email: mpb.ekanayake@ttu.edu Office Hours: MWF 9.50 - 10.50 am / Appointment

Course Information

Prerequisites: C in MATH 1350 or 1550 or 7 on MPE or C in 1321 with 5 on MPE or 660 on SATM or 29 on ACTM

Textbook: CALCULUS, 5th Ed., by Strauss, Bradley, and Smith; published by Pearson.

Calculators and Electronic Devices: Use of calculators is NOT permitted in class exams and final. However, calculators can be used as study aids for other class activities.

Website: http://netra.math.ttu.edu/staff_pages/mpb_ekanayake/courses/2011_summer/MATH1351/index.html or go to http://netra.math.ttu.edu/ and click "Personnel" then click "CBCIS Staff Pages" and select my link. All the class related material, announcements, homework, etc. will be posted on this website. Check it regularly!

Course Description and Purpose

One of the main goals is developing the student's geometric insight into the concepts of differentiation and integration, and applying these concepts to problem solving and "real world application". Instructors should emphasize the concepts of limit, continuity, and differentiability to properties of graphs. Intuitive discussions and "picture arguments" are acceptable, as well as a few short proofs (e.g., prove the product rule for differentiation).

Expected Learning Outcomes

MATH 1351 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:

- Apply arithmetic, algebraic, geometric, statistical and logical reasoning to solve problems.
- Represent and evaluate basic mathematical and/or logical information numerically, graphically, and symbolically.
- 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 differentiation, understand the concept of rate of change and how to use it to solve real world problems, the concept of definite and indefinite integral and their relations to area and rate of change. In particular, the students will

- Be able to explain the concept of continuous functions
- Compute instantaneous rate of change
- Compute derivatives of polynomial and transcendental functions
- Differentiation to solve related rate and optimization problems
- Compute definite and indefinite integrals

Methods of Assessment of Expected Learning Outcomes

Assessment of learning outcomes will be achieved through many activities. Graded homework, quizzes, in class exams, class projects and reports will serve as an important component to this effect, in addition to their contribution towards the final grade. Class discussion, board work, non-graded quizzes, non-graded homework, visits during the office hours and other optional activities deemed important by the instructor will used as methods of assessment of expected learning outcomes. It is important to note that these assessment schemes are for your learning benefit only, and will not affect your final grade. Students are encouraged and expected to ask questions during the class, and to seek the instructor's help during office hours when needed.

Course Outline

Chapter 01: Functions and Graphs [4 hours],

Chapter 02: Limits and Continuity [4 hours],

Chapter 03: Differentiation [8 hours],

Chapter 04: Additional Applications of the Derivative [8 hours],

Chapter 05: Integration [9 hours].

Time allocation prescribed by the course handbook of the Department of Mathematics and Statistics. Actual time used for each chapter may deviate slightly.

Grading Policy

There will be THREE in class exams and a FINAL. In addition, quizzes and homework will also contribute towards the final grade. Homework will be assigned regularly, and will be collected on a due date prescribed when the homework is assigned. Exams and quizzes will NOT be rescheduled unless for a university approved trip or a religious holy day, as required by the university. The lowest scoring test will be replaced by the final exam score, given the final exam score is better. The contribution of each component towards the final as well as the *tentative* policy for assigning the final grade letters are given the following tables:

Final Grade Composition						
Method	Day	Weight				
Final Exam	July 01, <i>Friday</i> , 8.00 – 10.30 am	25%				
In class Exam 1	June 08, Wednesday – in class	20%				
In class Exam 2	June 15, Wednesday – in class	20%				
In class Exam 3	June 22, Wednesday – in class	20%				
Quizzes & Homework	Regularly	15%				

Points for F	inal Grade
Grade Letter	Score
A	90% - 100%
В	80% - 89%
С	70% - 79%
D	60% - 69%
F	0% - 59%

Important Dates from the University Calendar

- May 31, Tuesday
 - * Last day to register or withdraw from the university without penalty.
 - * 4:30 p.m., first cancellation. Students who are not enrolled in a payment plan or have not paid 100% of mandatory tuition and fees will have their registration cancelled for all classes. Late fees will be assessed and will be subject to collections.
- June 1, Wednesday
 - * Classes begin.
 - * Student-initiated drop-add (changes in schedule) and withdrawal (drop all courses) begin on MyTech.
- June 2, Thursday
 - * Last day to add a course.
 - * Last day for student-initiated drop on MyTech without penalty (drop does not count against drop limit).
 - * Last day to drop a course and receive a refund. Does not apply to students who drop to 0 hours.
- June 7, Tuesday
 - * Student-initiated drop made on or after this date counts against drop limit. All drops are the responsibility of the student.
- June 9, Wednesday
 - * Last day for graduate degree candidates to file with the Graduate School a statement of intention to graduate.
- June 13, Monday
 - * 4:30 p.m., final cancellation. Students who are not enrolled in a payment plan or have not paid 100% of mandatory tuition and fees will have credit hours removed from their course(s) and will remain financially responsible for their charges in full. Late Cancellation fees will be assessed and will be subject to collections.
- June 17, Friday
 - * Last day for degree candidates and faculty to order invitations and academic regalia at the bookstore.
- June 21, Tuesday
 - * Last day for student-initiated drop on MyTech with penalty (counts against drop limit) and/or transfer between colleges. All drops are the responsibility of the student.
 - * Last day to declare pass/fail intentions.
- June 28, Tuesday
 - * Last day to withdraw from the university.
 - * Last day for undergraduate degree candidates to remove grades of I and PR and to complete final exams in correspondence courses.
 - * Applicable Payment Plan due date Required payment must be received by the due date or the account will incur late fees.
- June 30, Thursday
 - * Last day of classes.
- July 1 2, Friday Saturday
 - * Final examinations.
- July 2, Saturday
 - * First summer term ends.
- July 3, Sunday
 - * Students without room reservations for the second term must vacate residence hall rooms by 10 a.m.
- July 7, Thursday
 - * 5 p.m., final grades due via Raiderlink.

The students are expected be aware of the important dates and deadlines of the university. The complete official academic calendar is available at http://www.depts.ttu.edu/officialpublications/calendar/10-11calendar/10-11detailed.php.

Common Courtesy Guidelines

As a measure of respect and common courtesy towards your fellow students and the instructor you are expected to behave in a civil and acceptable manner. Please:

- Come to lass on time and do not leave early. If you absolutely need to go out of the class, please do so without disturbing others
- Turn off or at least mute your mobile phones during class
- Do not use portable media player (iPod etc.), mobile phone (for texting, games etc) and other such devices during class

For more information see www.studentaffairs.ttu.edu/vpsa/publications/civility.htm .

Texas Tech Operating Policies and Procedures

The following three items are brief excerpts. The complete policies are available at http://www.depts.ttu.edu/opmanual.

Academic Honesty (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 is not limited to, cheating, plagiarism, collusion, falsifying academic records, misinterpreting facts, and any act designed to give unfair advantage to the students or the attempt to commit such an act.

ADA Accommodation (OP 34.22) Any student who because of a disability may require special arrangements in order to meet course requirements should contact the instructor as soon as possible to make any necessary accommodations. Student should present appropriate verification from AccessTECH. Please note: instructors are not allowed to provide classroom accommodations to a student until appropriate verification from Student Disability Services has been provided. For additional information, please contact Student Disability Services in West Hall or call 806-742-2405.

Absence for Observance of Religious Holy Day (OP 34.19) "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Texas Tax Code Section 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.

Class Attendance Policy

Students are expected to have good class attendance..Attendance records will be collected daily. In addition, there may be random quizzes. Absences due to observance of religious hoy days, officially approved trips and illness or death of close family will be handled in accordance with the Texas Tech University Operating Policies (OP codes) and the Texas Tech University Catalog.

Absence due to officially approved trips

The Texas Tech University Catalog states that the department chairpersons, directors, or others responsible for a student representing the university on officially approved trips should notify the students instructors of the departure and return schedules in advance of the trip. The instructor so notified must not penalize the student, although the student is responsible for material missed. Students absent because of university business must be given the same privileges as other students (The Texas Tech University Catalog page 50).

Illness and Death Notification

The Center for Campus Life is responsible for notifying the campus community of student illnesses, immediate family deaths and/or student death. Generally, in cases of student illness or immediate family deaths, the notification to the appropriate campus community members occur when a student is absent from class for four (4) consecutive days with appropriate verification. It is always the students responsibility for missed class assignments and/or course work during their absence. The student is encouraged to contact the faculty member immediately regarding the absences and to provide verification afterwards. The notification from the Center for Campus Life does not excuse a student from class, assignments, and/or any other course requirements. The notification is provided as a courtesy. The service is explained as follows and can be found on the Center for Campus Life web site at: http://www.campuslife.ttu.edu/crisis/.

Tutoring and Study Center and Tutoring Resources

The "Tutoring and Study Center" (TSC) is a free tutoring center operated by the Department of Mathematics and Statistics. It meets in MATH 106. Students are encouraged to visit TSC if they have any problems regarding any of the homework or course material offered by the department of mathematics. In addition, the mathematics department office maintains a tutor list, if you ever happen to feel the need of a personal (paid) tutor for a course offered by the mathematics department.

Disclaimer

This syllabus outlines the general procedures of operation and guidelines specific to MATH 1351: Calculus I, summer 2011, section 101. The instructor reserves the right to make amendments to the syllabus for the benefit of the students in accordance with the rules and regulations of the Texas Tech University and the Department of Mathematics and Statistics.

Tentative Semester Schedule

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Days
May 29	May 30	May 31	June 01	June 02	June 03	June 04	
			CH 1	CH 1	CH 2		3
June 05	June 06	June 07	June 08	June 09	June 10	June 11	
	CH 2	CH 2	Review Test 1	CH 3	CH 3		8
June 12	June 13	June 14	June 15	June 16	June 17	June 18	
	CH 3	CH 3	Review Test 2	CH 4	CH 4		13
June 19	June 20	June 21	June 22	June 23	June 24	June 25	
	CH 4	CH 4	Review Test 3	CH 5	CH 5		18
June 26	June 27	June 28	June 29	June 30	July 01	July 02	
	CH 5	CH 5	CH 5	Review	FINAL		22