

Math 2414 – Calculus II

Spring 2009

Professor: Dr. David Milan

Office: RBN 4006

Office Hours: M: 11-12, W,F: 4-5, T,R: 1:30-2:30 and other times by appointment

Email: dmilan@uttyler.edu

Office Phone: 903-566-7198 (email is best)

Web: class page on blackboard (password: 730)

Class Meeting Time: 7:30-8:45 MWF

Required Text:

Essential Calculus Early Transcendentals 1st edition, by James Stewart, Thomson, Brooks/Cole 2007 (some online sites say March 2006), ISBN # 0-495-01428-1 (some online sights say ISBN # 0-495-01428-7).

Prerequisites: Math 2413

Course Description: A study of differentiation and integration of transcendental functions, polar coordinates, techniques of integration, sequences, series and improper integrals.

Learning Outcomes: By the end of this course, students should be able to:

1. Apply the ideas of definite integrals to solve problems involving area, volume, physical work, and other physical applications.
2. Apply the techniques of substitution, integration by parts, trigonometric substitution, partial fractions and tables of anti-derivatives to evaluate definite and indefinite integrals.
3. Describe the meaning of an improper integral. Apply the concepts of limit, convergence and divergence to evaluate some classes of improper integrals.
4. Define sequences and series, and determine convergence or divergence of them.
5. Find the Taylor and MacLaurin series to represent elementary functions. Apply Taylor or MacLaurin polynomials to the integration of functions not integrable by conventional methods.
6. Apply the ideas of polar coordinates to find areas, lengths of curves and representations of conic sections.

Summary of grading policy: Your grade will be based on:

- Attendance and Participation 5%
- Homework, Projects and Quizzes 20%
- Three Exams 45%
- Final Exam 30%

Attendance and Participation: Attend class each day and make an effort to contribute during group work and other classroom activities and you will receive 100% of the points for attendance and participation (A&P). After 3 absences, you will receive 50% of the points for A&P. More than 5 absences will result in 0% for A&P. Certain instances of bad behavior will result in a student being considered absent for the day (examples: texting in class, leaving after the quiz, refusing to contribute during group work, etc.).

Homework: Homework will be assigned daily. Homework assigned during the week will be due in class on Wednesday of the following week.

Quizzes: We will have a quiz every Friday, unless there is a test. At the end of the semester I will use your 10 highest quiz scores to compute your grade. **Make-ups will not be granted for quizzes.**

Tests and Final Exams: There will be 3 tests during the semester and a comprehensive final exam. A preliminary list of the dates and sections covered on each test are listed below. **The final exam will be held in the evening on May 5. Please arrange your work schedule to get this date off. You will not be able to take the test at a different time unless you have a class scheduled at that time.**

Test 1: Wednesday, February 4, 5.5, 6.1 – 6.3, 6.5, 3.7, 6.6

Test 2: Friday, March 20, 7.1 – 7.5, 8.1 – 8.4

Test 3: Friday, April 24, 8.5 – 8.8, 9.1 – 9.5

Final: Tuesday, May 5, comprehensive

Important Dates:

January 19 – No class (MLK Day).

January 26 – Census date. Last day for schedule changes, to file for grade replacement.

March 9-13 – No class (Spring break).

March 25 – Last day to withdraw

Instructor Policies:

Make-ups: Make-ups for **documented** absences that are **required** as part of a UT Tyler obligation (e.g. athletes participating in an event, participating in a debate contest, etc.) or for religious observation will be granted. For all make-ups of this type, prior notification of at least one week and documentation are required. Other make-ups are granted only in extreme cases and at the sole discretion of the instructor.

Calculator Policy: No calculators will be allowed on quizzes and tests.

POLICIES THAT MUST APPEAR IN COURSE SYLLABUS

The following University policies must appear on each course syllabus or be provided as an informational sheet (web-links to these policies may be used in the print or electronic syllabus) <http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf>

Students Rights and Responsibilities

To know and understand the policies that affect your rights and responsibilities as a student at UT Tyler, please follow this link: <http://www.uttyler.edu/wellness/StudentRightsandResponsibilities.html>

Grade Replacement/Forgiveness

If you are repeating this course for a grade replacement, you must file an intent to receive grade forgiveness with the registrar by the 12th day of class. Failure to do so will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates will receive grade forgiveness (grade replacement) for only three course repeats; graduates, for two course repeats during his/her career at UT Tyler.

State-Mandated Course Drop Policy

Texas law prohibits a student who began college for the first time in Fall 2007 or thereafter from dropping more than six courses during their entire undergraduate career. This includes courses dropped at another 2-year or 4-year Texas public college or university. For purposes of this rule, a dropped course is any course that is dropped after the 12th day of class (See Schedule of Classes for the specific date).

Exceptions to the 6-drop rule include, but are not limited to, the following: totally withdrawing from the university; being administratively dropped from a course; dropping a course for a personal emergency; dropping a course for documented change of work schedule; or dropping a course for active duty service with the U.S. armed forces or Texas National Guard.

Petitions for exemptions must be submitted to the Registrar's Office and must be accompanied by documentation of the extenuating circumstance. Please contact the Registrar's Office if you have any questions.

Disability Services

In accordance with federal law, a student requesting accommodation must provide documentation of his/her disability to the Disability Support Services counselor. If you have a disability, including a learning disability, for which you request an accommodation, please contact Ida MacDonald in the Disability Support Services office in UC 282, or call (903) 566-7079.

Student Absence due to Religious Observance

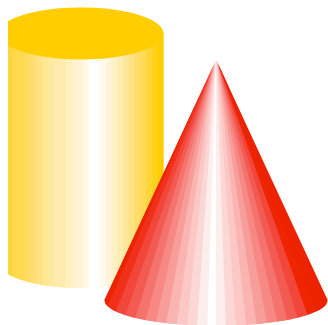
Students who anticipate being absent from class due to a religious observance are requested to inform the instructor of such absences by the second class meeting of the semester.

Student Absence for University-Sponsored Events and Activities

If you intend to be absent for a university-sponsored event or activity, you (or the event sponsor) must notify the instructor at least two weeks prior to the date of the planned absence. At that time the instructor will set a date and time when make-up assignments will be completed.

Social Security and FERPA Statement:

It is the policy of The University of Texas at Tyler to protect the confidential nature of social security numbers. The University has changed its computer programming so that all students have an identification number. The electronic transmission of grades (e.g., via e-mail) risks violation of the Family Educational Rights and Privacy Act; grades will not be transmitted electronically.



Add a Math Minor!

For many majors, it only takes one additional class and a lab!

If your major is	Requirements for your major	Courses to add a math minor
Chemistry	MATH 2413, MATH 2414, MATH 3203, MATH 3404	MATH 2113 Calculus I Lab* MATH 3425 Foundations of Mathematics
Education 4-8 Math/Science Certification	MATH 2113, MATH 2114, MATH 2413, MATH 2414, MATH 3203	MATH 3425 Foundations of Mathematics (In place of MATH 2330) One more upper level course**
Computer Science	MATH 2413, MATH 2414, MATH 3203	MATH 2113 Calculus I Lab* MATH 3425 Foundations of Mathematics (In place of MATH 2330) One more upper level course**
Civil Engineering	MATH 2413, MATH 2414, MATH 3305, MATH 3404	MATH 2113 Calculus I Lab* MATH 3425 Foundations of Mathematics
Electrical Engineering	MATH 2413, MATH 2414, MATH 3202, MATH 3305, MATH 3404	MATH 2113 Calculus I Lab* MATH 3425 Foundations of Mathematics
Mechanical Engineering	MATH 2413, MATH 2414, MATH 3305, MATH 3404	MATH 2113 Calculus I Lab* MATH 3425 Foundations of Mathematics

***Waived, if Calc I was taken at UTT before Fall 2007**

**** Must have a total of 18 credits for minor**

In general, to get a math minor, you must complete 18 credits in math, 9 of these in upper level courses. You must take MATH 2113, MATH 2413, MATH 2414, and MATH 3425. You may pick the remaining courses from among MATH 3404, MATH 3203, MATH 3305, MATH 4160, MATH 3336, MATH 3345, MATH 4350, MATH 3380, MATH 4336, MATH 4341, MATH 4351, MATH 4380, MATH 4342

Contact a math advisor for more information.