#### Mathematics 2413.001 Calculus I – Fall 2024

## Monday-Friday 8:00 – 8:55 am in RBN 4019

**Instructor**: Gayathri Kambhampati

Office: RBN 4044

**Email**: <u>gkambhampati@uttyler.edu</u>

**Office Hours**: MW: 10:00-11:30A; 3:30-4:30P

Tue/Thus: 11:00A-12:00P; 2:00-3:00P

Friday: 10:15-11:15A

Open door policy. Other times by appointment.

**Student Contact**: The preferred method of contact is email from your Patriots account. Check your email and **respond** to any emails from the instructor in a timely manner. Failure to do so may result in missing class work deadlines without any extensions. I will make any course announcements through canvas: http://canvas.uttyler.edu/

### **Prerequisite:**

- A grade of C or better in trigonometry (MATH 1316 or equivalent) or in a mathematics department approved precalculus course (MATH 2312 or equivalent).
- Pass a trigonometry/precalculus placement test administered by the Academic Advising Center.
   You may contact them to schedule your exam at 903.565.5712. It is suggested that you study for this test.
- Score of 710 or higher on the SAT (quantitative section) or 27 or higher on the ACT (math section).
- If you do not satisfy requirements 1 or 3 then you MUST take the placement test, or else enroll in MATH 2312 (Precalculus) prior to enrolling in MATH 2413 (Calculus).

**Credit hours**: 4 hours

**Course Description:** A study of functions, limits, continuity, differentiation, applications of the derivative, the definite and indefinite integral, and applications of integration.

# **Student Learning Outcomes**

Upon completion of this course the students should be able to:

- Discuss the solution to the tangent and area problems involving the calculus concepts of limits, derivatives, and integrals.
- Use graphs of algebraic and transcendental functions to determine limits, continuity, and differentiability at a point.
- Determine whether a function is continuous and/or differentiable at a point using limits.
- Apply differentiation rules to differentiate algebraic and transcendental functions.
- Choose appropriate calculus concepts and techniques to provide mathematical models of real-world situations and determine solutions to applied problems.
- Compute definite integrals using the Fundamental Theorem of Calculus.
- Recognize and discuss the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.

**Required Text**: Calculus Volume 1, by OpenStax. This is an open educational resource textbook. The online edition is available for free at <a href="https://openstax.org/details/books/calculus-volume-1">https://openstax.org/details/books/calculus-volume-1</a> (There are print copies for about \$25. See the order link on the book's website.

**Calculators:** Calculators are **not** allowed in this course.

**Dropping the Course**: The last day to register, change your schedule, or change sections is **September 09**, **2024**. The absolute last day to drop this course is **November 04**, **2024**. You cannot get a W after this date.

**Grading Policy:** Your course grade will be based on assignments (homework), quizzes, tests, and a comprehensive final exam. Your grade will be determined by (note the dates are subject to change):

Assignments: 75 points

Quizzes (11): Aug 30, Sep 06, Sep 13, Sep 27, Oct 04, Oct 11, Oct 18,

Oct 25, Nov 08, Nov 15 and Dec 06.

Tests (3): Sep 20, Oct 28, and Nov 22.

Final Exam: Wed Dec 11: 8-10am

Total Points Possible:

Oct 25, Nov 08, Nov 15 and Dec 06.

75 points
300 points
150 points
600 points

#### Scale:

Points		Letter Grade	
$score \geq 540$	(90-100%)	A	
$480 \leq score \leq 534$	(80-89%)	В	
$420 \leq score \leq 474$	(70-79%)	C	
$360 \le score \le 414$	(80-89%)	D	
$score \leq 359$	(0-59%)	F	

**Homework**: Homework is the most important part of the learning process in mathematics. Students who do their homework tend to do well. Students who do not do their homework and /or rely on others to complete their homework almost always fail.

**Quizzes**: Problem solving is essential to mathematical learning. You will be assigned homework in every class. Quizzes based on the homework will be given during the dates mentioned above. Quizzes are given during the first fifteen minutes of the class. There are no exceptions for late students, and you cannot make up quizzes.

**Tests**: There will be three closed-book, closed-notes tests during the semester. The tentative dates are given above. Any changes will be announced two classes before the date. There will not be any reviews for any tests except final exam.

**Final Exam**: Our final exam is comprehensive. No early finals will be given.

**Academic Honesty**: Academic dishonesty will not be tolerated and will be prosecuted to the full extent of the rules of the university and the law.

Make-up Policy: Make-ups for quizzes, tests and homework are given for excused absences ONLY (UT Tyler sponsored activities), but it is the responsibility of the student to inform the instructor in a timely manner about the absence so that arrangements can be made. If you know that you will be away from campus for a required UT Tyler activity, then prior notification of at least one week in advance (preferably at the beginning of the semester) and documentation are required. Athletes and other students involved in extensive university activities should schedule a meeting in my office during the first two weeks of class to discuss this further. All work missed for unexcused absences may not be made up except in extreme cases and at the sole discretion of the instructor.

**Attendance**: Attendance is required to succeed in the class. You are expected to come to class every day on time, be ready for class, and participate. Students who miss more than two classes almost always fail the course.

Cell Phone, Laptops, and other Electronic Devices Policy: Cell phones, laptops, pda's, ipods, and all other electronic devices are not allowed during the class. Before class begins, you must turn your cell phone off or put it in silent mode. Cell phones cause a distraction to other students and disrupt the class. Text messaging, listening to music using earphones and playing games on the calculators is not allowed in the class and will result in a zero on that day's quiz/ assignment. Recording of class lecture is not permitted without prior permission of the instructor.

Classroom Behavior: You are expected to be respectful of the other students in the classroom by refraining from any activities which are distracting (e.g. talking and whispering, making noises, eating, messing with cell phone, etc.) or demeaning (e.g. racist or sexist comments, profane or insulting language). If you have questions during the class, please direct them to the instructor. Talking with your neighbor, even when you are talking about mathematics, is a distraction to the instructor as well as other students.

### **Artificial Intelligence Usage:** AI is **not permitted** in this course at all.

I expect all work students submit for this course to be their own. I have carefully designed all assignments and class activities to support your learning. Doing your own work, without human or artificial intelligence assistance, is best for your efforts in mastering course learning objectives. For this course, I expressly forbid using ChatGPT or any other artificial intelligence (AI) tools for any stages of the work process, including brainstorming. Deviations from these guidelines will be considered a violation of UT Tyler's Honor Code and academic honesty values.

# **Important Covid-19 Information for Classrooms and Laboratories**

It is important to take the necessary precautions to ensure a healthy and successful year. UT Tyler continues to urge you to protect yourselves against the flu, COVID and any new threats that may be developing. Be diligent about preventive measures such as washing hands, covering sneezes/coughs, social distancing and vaccinations, which have proven to be successful in slowing the spread of viruses. Encourage those who don't feel well to stay home, and if they show symptoms, ask them to get tested for the flu or COVID. Self-isolation is important to reduce exposure (CDC quarantine/isolation guidelines). Please work with your faculty members to maintain coursework and please consult existing campus resources for support.

### **Important Dates:**

September 09 Last day to make schedule changes

Nov 04 Last day to drop classes November 25-29 Thanksgiving Break December 09 **Final review session** 

December 09- December 13 Finals week

**Getting Help**: You have several resources to get help in the course:

(a) **Instructor**: You are encouraged to come and get help from me either during the posted office hours or by scheduling an appointment. Students who take advantage of this tend to be students who do well in the course. My office hours are open to all students and operate on a first-in-first –out basis. I will make every effort to help you.

# (b) Mathematics Learning Center (MLC)

The Department of Mathematics provides a free tutoring service for UT Tyler students taking mathematics courses (Intermediate Algebra through Calculus II) in the Mathematics Learning Center located in RBN 4021. In the MLC students have access to free tutoring, and access to computers for online homework and Mathematica labs. Upon entering the MLC students are asked for their student ID which will be scanned for attendance and held until the student wishes to be scanned out before leaving the lab. The MLC is a place to do work related to your mathematics courses - it is not a general access lab used for surfing the internet and checking email (this will be monitored by the tutors). The tutors are there to help you with your homework. However, this doesn't mean that they remember how to do all of the different types of problems. Sometimes it will be necessary for the tutor to review some topics before helping you.

- The tutors in the MLC are there to help you, but they are not allowed to simply do your problems for you.
- Sometimes the tutors don't know how to help you-that is normal and expected. If this happens, try asking another tutor or the instructor.
- In the MLC, you must be working on math!
- (c) <u>PASS Tutoring Center</u>: The PASS Tutoring Center supports a variety of courses. Check the website to see the courses supported for the Fall 2024 term.
- (d) <u>Supplemental Instruction (SI)</u>: SI is a series of weekly peer-assisted study sessions in courses identified by previous students as difficult. Check the website to see the support courses for the Fall 2024 term.
- (e) <u>Upswing (24/7 Online Tutoring)</u>: Upswing is a free, confidential, and convenient way to receive help in nearly all of UT Tyler's undergraduate courses.

# **UT Tyler Resources for Students**

- UT Tyler Writing Center (903.565.5995), writingcenter@uttyler.edu
- UT Tyler Tutoring Center (903.565.5964), tutoring@uttyler.edu
- The Mathematics Learning Center, RBN 4021, this is the open access computer lab for math students, with tutors on duty to assist students who are enrolled in early-career courses.
- UT Tyler Counseling Center (903.566.7254)

#### **University Policies:** See the following website:

http://www.uttyler.edu/academicaffairs/syllabuspolicies.pdf

#### **UT Tyler Honor Code**

Every member of the UT Tyler community joins together to embrace: Honor and integrity that will not allow me to lie, cheat, or steal, nor to accept the actions of those who do.

# **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/rightsresponsibilities.php

#### **Campus Carry**

We respect the right and privacy of students 21 and over who are duly licensed to carry concealed weapons in this class. License holders are expected to behave responsibly and keep a handgun secure and concealed. More information is available at <a href="http://www.uttyler.edu/about/campus-carry/index.php">http://www.uttyler.edu/about/campus-carry/index.php</a>

### **UT Tyler a Tobacco-Free University**

All forms of tobacco will not be permitted on the UT Tyler main campus, branch campuses, and any property owned by UT Tyler. This applies to all members of the University community, including students, faculty, staff, University affiliates, contractors, and visitors. Forms of tobacco not permitted include cigarettes, cigars, pipes, water pipes (hookah), bidis, kreteks, electronic cigarettes, smokeless tobacco, snuff, chewing tobacco, and all other tobacco products. There are several cessation programs

available to students looking to quit smoking, including counseling, quitlines, and group support. For more information on cessation programs please visit www.uttyler.edu/tobacco-free.php

# Grade Replacement/Forgiveness and Census Date Policies

Students repeating a course for grade forgiveness (grade replacement) must file a Grade Replacement Contract with the Enrollment Services Center (ADM 230) on or before the Census Date of the semester in which the course will be repeated. Grade Replacement Contracts are available in the Enrollment Services Center or at http://www.uttyler.edu/registrar. Each semester's Census Date can be found on the Contract itself, on the Academic Calendar, or in the information pamphlets published each semester by the Office of the Registrar.

Failure to file a Grade Replacement Contract will result in both the original and repeated grade being used to calculate your overall grade point average. Undergraduates are eligible to exercise grade replacement for only three course repeats during their career at UT Tyler; graduates are eligible for two grade replacements. Full policy details are printed on each Grade Replacement Contract.

Γhe Census Date is the deadline for many forms and enrollment actions that students need to be aware of
These include:
☐ Submitting Grade Replacement Contracts, Transient Forms, requests to withhold directory information
approvals for taking courses as Audit, Pass/Fail or Credit/No Credit.
Receiving 100% refunds for partial withdrawals. (There is no refund for these after the Census Date)
Schedule adjustments (section changes, adding a new class, dropping without a "W" grade)
Being reinstated or re-enrolled in classes after being dropped for non-payment
Completing the process for tuition exemptions or waivers through Financial Aid
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 earner. This includes courses dropped at enother

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 census date (See Academic Calendar for the specific date). Exceptions to the 6-drop rule may be found in the catalog. Petitions for exemptions must be submitted to the Enrollment Services Center and must be accompanied by documentation of the extenuating circumstance. Please contact the Enrollment Services Center if you have any questions.

## **Student Disability/Accessibility Services**

In accordance with Section 504 of the Rehabilitation Act, Americans with Disabilities Act (ADA) and the ADA Amendments Act (ADAA) the University of Tyler at Texas offers accommodations to students with learning, physical and/or psychological disabilities. If you have a disability, including non-visible diagnosis such as a learning disorder, chronic illness, TBI, PTSD, ADHD, or you have a history of modifications or accommodations in a previous educational environment, you are encouraged to visit

https://hood.accessiblelearning.com/UTTyler and fill out the New Student application. The

**Student Accessibility and Resources** (SAR) office will contact you when your application has been submitted and an appointment with Cynthia Lowery, Assistant Director Student Services/ADA Coordinator. For more information, including filling out an application for services, please visit the SAR webpage at <a href="http://www.uttyler.edu/disabilityservices">http://www.uttyler.edu/disabilityservices</a>, the SAR office located in the University Center, # 3150 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.

### **Emergency Exits and Evacuation:**

Everyone is required to exit the building when a fire alarm goes off. Follow your instructor's directions regarding the appropriate exit. If you require assistance during an evacuation, inform your instructor in the first week of class. Do not re-enter the building unless given permission by University Police, Fire department, or Fire Prevention Services

## **Student Standards of Academic Conduct**

Disciplinary proceedings may be initiated against any student who engages in scholastic dishonesty, including, but not limited to, cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student or the attempt to commit such acts.

- i. "Cheating" includes, but is not limited to:
- copying from another student's test paper;
- using, during a test, materials not authorized by the person giving the test;
- failure to comply with instructions given by the person administering the test;
- possession during a test of materials which are not authorized by the person giving the test, such as class notes or specifically designed "crib notes". The presence of textbooks constitutes a violation if they have been specifically prohibited by the person administering the test;
- using, buying, stealing, transporting, or soliciting in whole or part the contents of an unadministered test, test key, homework solution, or computer program;
- collaborating with or seeking aid from another student during a test or other assignment without authority;
- discussing the contents of an examination with another student who will take the examination;

- divulging the contents of an examination, for the purpose of preserving questions for use by another, when the instructors has designated that the examination is not to be removed from the examination room or not to be returned or to be kept by the student;
- substituting for another person, or permitting another person to substitute for oneself to take a course, a test, or any course-related assignment;
- paying or offering money or other valuable thing to, or coercing another person to obtain an unadministered test, test key, homework solution, or computer program or information about an unadministered test, test key, home solution or computer program;
- falsifying research data, laboratory reports, and/or other academic work offered for credit;
- taking, keeping, misplacing, or damaging the property of The University of Texas at Tyler, or of another, if the student knows or reasonably should know that an unfair academic advantage would be gained by such conduct; and
- misrepresenting facts, including providing false grades or resumes, for the purpose of obtaining an academic or financial benefit or injuring another student academically or financially.
- ii. "Plagiarism" includes, but is not limited to, the appropriation, buying, receiving as a gift, or obtaining by any means another's work and the submission of it as one's own academic work offered for credit.
- iii. "Collusion" includes, but is not limited to, the unauthorized collaboration with another person in preparing academic assignments offered for credit or collaboration with another person to commit a violation of any section of the rules on scholastic dishonesty.
- iv. All written work that is submitted will be subject to review by  $SafeAssign^{TM}$ .