Course Syllabus MATH 2425-150
Calculus II: Spring 2019

Instructor: Jeremy Glass

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Office Hours: Mon/Wed 12-1PM
Tue 12-12:30PM, 1:30-2PM
Thurs 11-12PM

Faculty Profile: https://mentis.uta.edu/explore/profile/jeremy-glass

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Section Information: MTAH 2425-150

Time and Place of Class Meetings:

Lecture:	COBA 256,	MW 1-2:20 PM
Lab – 151:	PKH 311,	MW 2:30-3:20PM
Lab – 152:	PKH 311,	MW 3:30-4:20PM

Description of Course Content: This course includes the study of applications of integration, techniques of integration, parametric equations, polar coordinates, sequences, and series. Prerequisite: C or better in MATH 1426 or HONR-SC 1426.

Student Learning Outcomes: Upon completion of Math 2425, the student should be able to:

1. Compute the area between two curves, in both rectangular and polar coordinates; compute volumes and surface areas of solids of revolution, in both rectangular and polar coordinates; computes arc length of both polar and rectangular curves;
2. Compute the value of integrals by the method of integration by parts, trigonometric substitution and partial fractions;
3. Compute the values of improper integrals;
4. Compute the limits of sequences and series;
5. Determine the radius of convergence of power series; differentiate and integrate power series;
6. Represent a known function as a Taylor series; approximate a known function with a Taylor polynomial and determine the error involved;
7. Justify and explain their steps in problem solving. In particular, students should be able to construct correct and detailed mathematical arguments to justify their claimed solutions to problems.

Required Textbooks and Other Course Materials

1. ***Calculus - Early Transcendentals*, 3rd Ed., Briggs, Cochran, Gillett & Schulz**, Pearson Ed. Inc., 2019. ISBN: 9780134770512. This can be purchased from the bookstore, for only $25.
   AND
2. **Access to MyLabs:** The online homework for this course is required. Your course materials include the e-version of the course text as well as MyLab course access which is designed to enrich student success by providing instant feedback on your assignments plus on-demand access to personalized study plans, a multimedia library, practice tests, and more. Every student has trial access to MyLab course materials as soon as the course is available in Blackboard, so you can start working on your course even before you purchase the course materials! That said, students will need a verified

purchase within the first two weeks of classes, otherwise, the access to your digital materials will freeze and your account will stay deactivated until the purchase is confirmed. As part of the UTA Mathematics Department Affordability Campaign, students can receive a discounted price (only $25) by purchasing course materials through the UTA Bookstore. Search by course or use this site: http://bit.ly/2tQ090S and purchase 2425/2326 DDA MATH-CALCULUS II.

3. **If you have a paper copy of the 2nd edition of the textbook, that together with the online access should be sufficient.**

Expectations for Out of Class Study: Beyond the time required to attend each class meeting and lab session, students enrolled in this course should expect to spend an additional 12 hours per week of their own time on focused course-related activities, including reading the Calculus text, completing assignments, and preparing for exams and quizzes.

Grading Scale: **A**: 90-100 **B**: 80-89 **C**: 70-79 **D**: 60-69 **F**: 0-59

Grade Components and Major Assignments and Examinations:

Midterm 1: 20% (6-8pm Friday Feb 8, 2019)
Midterm 2: 25% (6-8pm Friday March 22, 2019)
Final Exam: 35% (12:30-3, Saturday May 4, 2019)
Group Problem-Solving Labs: 10%
Online Homework: 5%
Quizzes: 5%

Online Homework: Homework will be assigned on a daily basis. A student will access the online homework directly through Blackboard (elearn.uta.edu) and must have access to this Pearson content since part of your grade will be based on the completion of homework assignments online. Your homework grade is based solely on the online homework.

Quizzes: Quizzes will be administered during your lab section each Wednesday. They will consist of 1-3 problems. I will keep the top 10 quiz grades. You must be present for the entire lab session in order to take the quiz. Each Wednesday, prior to taking your quiz, the lab session will be spent in recitation. This is your opportunity to ask the TA questions from homework, lecture, concepts, etc.

Lab Attendance and Worksheets: Each Monday your lab section will consist of a problem solving worksheet. These are intended to be more in-depth than the problems on the assignment sheet and are to be worked out in groups. Therefore, you will turn in the lab worksheets in groups of 3-4 (no more, no less).

The lab assignments will be due at the end of the lab that day. You must be present for the entire lab in order to turn in the lab assignment with your group. Because your lab will be due at the end of the hour, the previous week you will receive a Pre-Lab Assignment, which will constitute 20% of your lab grade for that day. These must be completed before you arrive for the associated lab as they will help you complete the lab in a timely manner. The Pre-lab assignment aims to allow you to work important questions and seek answers to them prior to encountering the associated lab.

I will keep the top 10 lab grades. If you are more than 25 minutes late you will be considered absent. Also, you may not leave lab early unless your group has turned in their lab. If you do so, you will be considered absent for the day. If you are absent on the day of a problem solving activity, you will not be part of a lab group for that week. If after receiving approval for an excused absence (with documentation) from the instructor, you may submit the missed lab work individually.

Attendance: At the University of Texas at Arlington, taking attendance is not required but attendance is a critical indicator in student success. Each faculty member is free to develop his or her own methods of evaluating students' academic performance, which includes establishing course-specific policies on attendance. As the instructor of this section, I have decided that attendance at all class lectures is

required, but attendance will not be taken nor directly factored into your grade. Any student who misses a lecture for any reason is responsible for missed material and missed announcements. Attendance is required to receive credit for problem solving activities, as noted and underlined above. Attendance is required at recitation sections to take and receive credit for quizzes, as noted and underline above. However, while UT Arlington does not require instructors to take attendance in their courses, the U.S. Department of Education requires that the University have a mechanism in place to mark when Federal Student Aid recipients "begin attendance in a course." UT Arlington instructors will report when students begin attendance in a course as part of the final grading process. Specifically, when assigning a student a grade of F, faculty report the last date a student attended their class based on evidence such as a test, participation in a class project or presentation, or an engagement online via Blackboard. This date is reported to the Department of Education for federal financial aid recipients.

Grading: Students are expected to keep track of their performance throughout the semester and seek guidance from available sources (including the instructor) if their performance drops below satisfactory levels. See "Student Support Services" below.

Midterms and Final Exam: These exams are departmental. That is, all sections of Math 2425 will take the same exam and the same grades will have the same weight in each section. All of these exams are comprehensive. Each exam will be a mix of multiple choice problems and show-your-work problems. You must provide a scantron SC882-E for each exam. You may access recent previous midterms and some of the finals online. Go to https://mavspace.uta.edu/xythoswfs/webview/_xy-3749101_1.
Any student who scores below 50 on the final exam cannot receive a grade higher than D in the course. Any student who scores a 0 on the final exam will receive an F in the course.

Make-up Policy:

If you have a conflict with either midterm or final, you must contact your instructor no later than 5pm on the Census Date (Wed, 30-Jan-2019), by using a form provided to you at your request by your instructor & submitting it together with necessary documentation as indicated on the form. If a conflict arises after the census date, contact your instructor immediately. **Delays in submitting a make-up request may mean that your request cannot be approved by the course coordinator.**

Makeups for quizzes will only be given for university activities such as athletics and illness with a doctor's note.

Calculator: You must only use nonprogrammable calculators with basic computational features, such as arithmetic and transcendental functions. You may NOT use any calculator with the following capabilities: graphing, equation solving, differentiation, integration, QWERTY keyboard, and any device that has internet capabilities (This means **NO CELL PHONES, SMART WATCHES, TABLETS, ETC**). Approved calculators are:

Texas Instruments 30X series: TI-30Xa, TI-30X-IIS, TI-30XS
TI30 PLUS or TI30 PRO versions NOT PERMITTED

If you would like to use another calculator, you must get it approved by me BEFORE the exam date. Failure to do so may result in not being able to use a calculator on your exam. The same calculator policy applies to labs and quizzes. If you are caught using a non-approved calculator during a quiz or exam, YOU WILL AT A MINIMUM RECEIVE A GRADE OF ZERO for that exam or quiz, and if it is a quiz, that zero CANNOT BE DROPPED.

Electronic Communication: UT Arlington has adopted MavMail as its official means to communicate with students about important deadlines and events, as well as to transact university-related business regarding financial aid, tuition, grades, graduation, etc. All students are assigned a MavMail account and are responsible for checking the inbox regularly. There is no additional charge to students for using this account, which remains active even after graduation. Information about activating and using MavMail is available at http://www.uta.edu/oit/cs/email/mavmail.php.

Blackboard: We will be making heavy use of Blackboard in this class. Copies of our syllabus will be located here under the syllabus section. In addition, under the course content section students will find review sheets for tests. Quiz and test grades may also be posted here. **Students should periodically log onto Blackboard in order to check on their grades.** To access the course, go to **https://elearn.uta.edu/** or click on the Blackboard link located on the UTA student home page and log in with your NetID and password. Click on the name of the course in the upper left module after logging in. **Students need to e-mail me if they have any questions about their grades. All graded papers returned to students should be kept in a safe place until the end of the semester in case they are ever needed to resolve a grade dispute.**

Drop Policy: Students may drop or swap (adding and dropping a class concurrently) classes through self-service in MyMav from the beginning of the registration period through the late registration period. After the late registration period, students must see their academic advisor to drop a class or withdraw. Undeclared students must see an advisor in the University Advising Center. Drops can continue through a point two-thirds of the way through the term or session. It is the student's responsibility to officially withdraw if they do not plan to attend after registering. **Students will not be automatically dropped for non-attendance**. Repayment of certain types of financial aid administered through the University may be required as the result of dropping classes or withdrawing. For more information, contact the Office of Financial Aid and Scholarships (http://wweb.uta.edu/aao/fao/). **The last day for students to drop is 4:00pm, Friday 29-March-2019. (Submit requests to advisor prior to 4:00 pm,)**

Drop for Non-Payment of Tuition: If you are dropped from this class for non-payment of tuition, you may secure an Enrollment Loan through the Bursar's Office.

Grade Replacement and Exclusion: These policies are described in detail in the University catalog, which can be found online at http://catalog.uta.edu/academicregulations/grades/

Academic Integrity: Students enrolled all UT Arlington courses are expected to adhere to the UT Arlington Honor Code:

> *I pledge, on my honor, to uphold UT Arlington's tradition of academic integrity, a tradition that values hard work and honest effort in the pursuit of academic excellence. I promise that I will submit only work that I personally create or contribute to group collaborations, and I will appropriately reference any work from other sources. I will follow the highest standards of integrity and uphold the spirit of the Honor Code.*

UT Arlington faculty members may employ the Honor Code in their courses by having students acknowledge the honor code as part of an examination or requiring students to incorporate the honor code into any work submitted. Per UT System *Regents' Rule* 50101, §2.2, suspected violations of university's standards for academic integrity (including the Honor Code) will be referred to the Office of Student Conduct. Violators will be disciplined in accordance with University policy, which may result in the student's suspension or expulsion from the University. Additional information is available at https://www.uta.edu/conduct/. Faculty are encouraged to discuss plagiarism and share the following library tutorials http://libguides.uta.edu/copyright/plagiarism and http://library.uta.edu/plagiarism/

Disability Accommodations: UT Arlington is on record as being committed to both the spirit and letter of all federal equal opportunity legislation, including *The Americans with Disabilities Act (ADA), The Americans with Disabilities Amendments Act (ADAAA),* and *Section 504 of the Rehabilitation Act.* All instructors at UT Arlington are required by law to provide "reasonable accommodations" to students with disabilities, so as not to discriminate on the basis of disability. **Students are responsible for providing the instructor with official notification in the form of a letter certified by the Office for Students**

with Disabilities (OSD). Please do so no later than the census date, Wed 30-Jan-2019. Students experiencing a range of conditions (Physical, Learning, Chronic Health, Mental Health, and Sensory) that may cause diminished academic performance or other barriers to learning may seek services and/or accommodations by contacting:
The Office for Students with Disabilities, (OSD) www.uta.edu/disability or calling 817-272-3364. Only those students who have officially documented a need for an accommodation will have their request honored. Information regarding diagnostic criteria and policies for obtaining disability-based academic accommodations can be found at www.uta.edu/disability.
Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671 is also available to all students to help increase their understanding of personal issues, address mental and behavioral health problems and make positive changes in their lives.
If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first two weeks of the semester, to make sure you are appropriately accommodated.

Non-Discrimination Policy: *The University of Texas at Arlington does not discriminate on the basis of race, color, national origin, religion, age, gender, sexual orientation, disabilities, genetic information, and/or veteran status in its educational programs or activities it operates. For more information, visit uta.edu/eos.*

Title IX Policy: The University of Texas at Arlington ("University") is committed to maintaining a learning and working environment that is free from discrimination based on sex in accordance with Title IX of the Higher Education Amendments of 1972 (Title IX), which prohibits discrimination on the basis of sex in educational programs or activities; Title VII of the Civil Rights Act of 1964 (Title VII), which prohibits sex discrimination in employment; and the Campus Sexual Violence Elimination Act (SaVE Act). Sexual misconduct is a form of sex discrimination and will not be tolerated. *For information regarding Title IX, visit* www.uta.edu/titleIX or contact Ms. Michelle Willbanks, Title IX Coordinator at (817) 272-4585 or titleix@uta.edu

Campus Carry: Effective August 1, 2016, the Campus Carry law (Senate Bill 11) allows those licensed individuals to carry a concealed handgun in buildings on public university campuses, except in locations the University establishes as prohibited. Under the new law, openly carrying handguns is not allowed on college campuses. For more information, visit http://www.uta.edu/news/info/campus-carry/

Student Disruption: The University reserves the right to impose disciplinary action for an infraction of University policies. For example, engagement in conduct, alone or with others, intended to obstruct, disrupt, or interfere with, or which in fact obstructs, disrupts, or interferes with, any function or activity sponsored, authorized by, or participated in by the University.

Student Feedback Survey: At the end of each term, students enrolled in classes categorized as "lecture," "seminar," or "laboratory" shall be directed to complete an online Student Feedback Survey (SFS). Instructions on how to access the SFS for this course will be sent directly to each student through MavMail approximately 10 days before the end of the term. Each student's feedback enters the SFS database anonymously and is aggregated with that of other students enrolled in the course. UT Arlington's effort to solicit, gather, tabulate, and publish student feedback is required by state law; students are strongly urged to participate. For more information, visit http://www.uta.edu/sfs.

Final Review Week: A period of five class days prior to the first day of final examinations in the long sessions shall be designated as Final Review Week. The purpose of this week is to allow students sufficient time to prepare for final examinations. During this week, there shall be no scheduled activities such as required field trips or performances; and no instructor shall assign any themes, research problems or exercises of similar scope that have a completion date during or following this week *unless specified in the class syllabus*. During Final Review Week, an instructor shall not give any examinations constituting 10% or more of the final grade, except makeup tests and laboratory examinations. In

addition, no instructor shall give any portion of the final examination during Final Review Week. During this week, classes are held as scheduled. In addition, instructors are not required to limit content to topics that have been previously covered; they may introduce new concepts as appropriate.

Emergency Exit Procedures: Should we experience an emergency event that requires us to vacate the building, students should take a right when exiting the room, than an immediate left to move down the stairs and out the nearest exit. When exiting the building during an emergency, one should never take an elevator but should use the stairwells. Faculty members and instructional staff will assist students in selecting the safest route for evacuation and will make arrangements to assist individuals with disabilities.

Student Support Services: UT Arlington provides a variety of resources and programs designed to help students develop academic skills, deal with personal situations, and better understand concepts and information related to their courses. Resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals, students may visit the reception desk at University College (Ransom Hall), call the Maverick Resource Hotline at 817-272-6107, send a message to resources@uta.edu, or view the information at http://www.uta.edu/universitycollege/resources/index.php.

Math Clinic: The Math Department operates the Math Clinic, a tutoring service staffed by upper level undergraduate students. The Math Clinic is on the 3rd floor of Pickard Hall; the phone number is 817-272-5674; and the hours of operation for fall and spring are

Monday – Thursday	8:00a – 9:00p
Friday	8:00a – 1:00p
Saturday	1:00p – 6:00p
Sunday	1:00p – 9:00p

Go to the Math Clinic webpage http://www.uta.edu/math/clinic/ to get more information or to access assignment sheets for the courses for which tutoring is offered.

Science Education and Career Center (SECC): All previous midterm exams and some previous final exams are available to students in the Science Education and Career Center (SECC), 106 Life Science Building. The fall and spring hours of operation are

Monday-Thursday	8:00a – 8:00p
Friday	8:00a – 5:00p
Saturday	12:00p – 5:00p

You need a Mav ID Card to check out these exams. A copy machine is available for you to make copies. There are also video tapes of lectures on calculus topics that can be viewed in the SECC. For more information, go to https://www.uta.edu/cos/SECC/login.php.

University Tutorial & Supplemental Instruction (Ransom Hall 205): UTSI offers a variety of academic support services for undergraduate students, including: 60 minute one-on-one tutoring sessions, Start Strong Freshman tutoring program, and Supplemental Instruction. Office hours are Monday-Friday 8:00am-5:00pm. For more information visit www.uta.edu/utsi or call 817-272-2617.

Tutor List: The Math Department maintains a list of people who have expressed an interest in tutoring. These persons are not necessarily recommended by the Math Department and they set their own fees. You may obtain a copy of the tutor list in the Math Office, 478 PKH.

IDEAS Center: The IDEAS Center (2nd Floor of Central Library) offers free tutoring to all students with a focus on transfer students, sophomores, veterans and others undergoing a transition to UT Arlington. To schedule an appointment with a peer tutor or mentor email IDEAS@uta.edu or call (817)272-6593.

The Library's 2nd floor Academic Plaza offers students a central hub of support services, including IDEAS Center, University Advising Services, Transfer UTA and various college/school advising hours. Services are available during the library's hours of operation. http://library.uta.edu/academic-plaza

Emergency Phone Numbers: In case of an on-campus emergency, call the UT Arlington Police Department at **817-272-3003** (non-campus phone), **2-3003** (campus phone). You may also dial 911. Non-emergency number 817-272-3381

Important Dates (2019)

Jan 14 (Mon)	First Day of Classes
Jan 21 (Mon)	MLK Day holiday
Jan 30 (Wed)	Census Date & Deadline for ALL Make-up Exam Requests
Feb 8 (Fri)	Midterm 1, 6p-8p
Mar 11-16 (Mon-Sat)	Spring Break Holiday (No Classes)
Mar 22(Fri)	Midterm 2, 6p-8p
Mar 29 (Fri)	Last Day to Drop Classes (4 PM)
May 3 (Fri)	Last Day of Classes
May 4 (Sat)	Final Exam: 12:30p-3p

Course Schedule and Assignment Sheet (Tentative)

TEXT: Calculus, Early Transcendentals, 3rd edition, by Briggs, Cochran, Gillett (Pearson)
Tentative Course Schedule:

Dates	Sections	Topics
Week of 1/14	8.1/8.3	Trigonometric Integrals
Week 1/21	8.2	Integration by Parts
	8.4	Trigonometric Substitutions
Week of 1/28	8.5	Partial Fractions
	8.9	Improper Integrals
Week of 2/4	10.2/10.1	Sequences
		Review
Feb 8, 6pm-8pm		Midterm 1: 8.1-8.7,8.9, 10.1, 10.2 (tent)
Week of 2/11	10.3	Infinite Series
	10.4	The Divergence and Integral Test
Week of 2/18	10.5	Comparison Tests
	10.6	Alternating Series
Week of 2/25	10.7/10.8	Ratio and Root Tests
	11.1	Approximating Functions with Polynomials
Week of 3/4	11.2	Properties of Power Series
	11.3	Taylor Series
Week of 3/18	11.4	Working with Taylor Series
		Review
March 22, 6pm-8pm		Midterm 2: 10.3-10.8, 11.1-11.4 + M1 Sections (tent)
Week of 3/25	6.3	Volume, Disk Method
	6.4	Volume, Shell Method
Week of 4/1	6.5	Arc Length
	6.6	Surface Area
Week of 4/8	6.7	Physical Applications
	12.1	Plane Curves and Parametric Equation
Week of 4/15	12.2	Polar Coordinates
	12.3	Areas and Lengths in Polar Coordinates
Week of 4/22		Review
May 4, Saturday		12:30- 3:00 PM Final Exam: All Covered Sections

As the instructor for this course, I reserve the right to adjust this schedule in any way that serves the educational needs of the students enrolled in this course. – Jeremy Glass