# Math 1421 Preparation for Calculus Spring 2016

**Instructor:** Scott Lacy, PhD.

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Office Hours: Wed & Thu, 11:00am until 12:00pm (noon), or by appointment

**Section Information:** MATH 1321-250

Time and Place of Class Meetings: Lecture – TTh 5:30-6:50 pm in in LS 101

Lab 251 - TTh 4:30-5:20 pm in PKH 311

## **Textbook (Required)**

<u>Precalculus</u> eText with MyMathLab and Explorations and Notes -- Access Card Package by Eric Schulz, William L. Briggs, & Lyle L. Cochran.

# **Course Materials (Required)**

ScanTron (form SC882-E)

Calculators: TI-30XA or TI-30XIIS

## **Course Materials (Optional)**

Graph Paper

## **Course Prerequisite**

A grade of C or above in Math 1302 or a minimum score on the Math Placement Test.

## **Student Learning Outcomes**

Upon completion of Math 1421:

- 1. Students will be able to justify and explain their steps in problem solving. In particular, students will be able to construct correct and detailed mathematical arguments to justify their solutions to problems.
- 2. Students will demonstrate facility with expressing, applying, and combining functions in tabular, graphical, and symbolic forms.
- 3. Students will be able to identify and analyze the unifying characteristics of functions and their graphs including invariant properties under function transformations, domain and range, asymptotes, zeroes, and end behavior.
- 4. Students will be able to interpret and define the six trigonometric functions, in terms of both right triangles and the unit circle. They will be able to graph trigonometric and inverse trigonometric functions, without the aid of a graphing calculator, by applying the concepts of amplitude, periods and phase shifts. Students will also be able to verify and use trigonometric identities and formulas and to apply them to solve trigonometric equations and word problems, including problems that require solving a triangle.

Grading Scale	90-100 A 80-89 70-79 60-69 0-59	B C D F
Grade Components		
Midterm 1	20%	Friday, February 12, 2016 from 6-8 pm
Midterm 2	25%	Friday, April 1, 2016 from 6-8 pm
Final Exam	35%	Saturday, May 7, 2016 from 12:30-3 pm
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Lab Worksheets 5% Quizzes 5% Homework 8% Skills Review 2%

All students in Math 1421 must pass the Calculus Gateway Exam on or before Friday, May 6 in order to receive a grade above D in the course. See details under Calculus Gateway Exam below.

#### **Exam Location**

Note that the location of exams will be announced prior to the exam date. The location will, most likely, NOT be in our classroom.

#### Homework

Homework will be completed online using MyLabsPlus and Blackboard. No late homework will be accepted for any reason. The three lowest MyLabsPlus homework grades and at least one Blackboard homework grade will be dropped at the end of the semester.

#### Quizzes

Quizzes will be given during the first 25 minutes of the second lab session each week. Students who are late will not be given additional time to complete the guiz. At least one in-class guiz grade will be dropped at the end of the semester.

#### **Skills Review**

Over the course of the semester you will be assigned a series of skills reviews to work on through MyLabsPlus. You must complete all of them over the course of the semester and you may continue to attempt the assignments until you have mastered the material. You may not attempt the next skills review until you have mastered (80%) the previous one. These skills reviews will help solidify skills you will use frequently in calculus (and have seen in Math 1302), but will not be directly discussed in Math 1421.

Calculators: The only calculators allowed for use on labs, quizzes, midterm exams, and the final exam are TI-30XA and TI-30XIIS. You may not use a cellphone as a calculator on exams.

#### **Attendance**

At The University of Texas at Arlington, taking attendance is not required. Rather, 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.

#### **Lecture Attendance Policy**

Attendance is required, and will be recorded at every lecture session.

#### **Lab Attendance Policy**

Attendance is required to receive credit for labs and quizzes.

## **Electronics Policy**

Students may not use electronics during course meetings without prior consent from the instructor (unless the instructor is using technology to poll the entire class). *This includes (but is not limited to): cell phones, tablets, laptop computers.* 

#### **Midterms and Finals**

Exams are departmental, i.e., all sections of Math 1421 will take the same exam and the 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 bring a photo ID to each exam; failure to do so may result in you not being admitted to the exam or your exam not being graded.

Students may bring one 3"x5" note card to use as a formula sheet on the final exam. Formula sheets are *not allowed* on the midterms.

## Make-up Policy

All makeup exams are scheduled through your instructor and must be requested by <u>Census Date</u> (February 3). If you know that you have a conflict with one of the dates listed above you must contact your instructor, in writing, before this date. It is up to the instructor whether or not to grant a makeup exam.

Makeup exams will <u>not</u> be granted after the fact; that is, requesting a makeup after Census Date will result in a denial of makeup unless substantiation of an emergency (i.e. hospital records, etc.) is provided.

Students absent for religious holidays or University events must give notice to the instructor at *least 7 days* before the absence; substantiation may be requested.

There are no make-ups on homework, labs, or quizzes.

#### **Calculus Gateway Exam**

All students in Math 1421 must pass the Calculus Gateway Exam on or before the last class day in order to receive a grade above D in the course. The Calculus Gateway Exam (CGE) will become available under the "lab" link in MyLabsPlus on April 2. The CGE can be taken anytime during the eligible time period between April 2 and May 6. Students are allowed up to 3 attempts on the CGE, however these attempts can only be used during the eligible time period. The CGE is to be taken outside of class and is subject to University rules on academic dishonesty. You are allowed to use a

non-graphing calculator on the CGE, but you may not receive help from any source. Receiving or providing assistance on the CGE will be subject to discipline for academic dishonesty. It is the philosophy of The University of Texas at Arlington that academic dishonesty is a completely unacceptable mode of conduct and will not be tolerated in any form. Discipline may include suspension or expulsion from the University.

## **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/).

**Drop Date:** Friday, April 1 by 4 pm.

#### **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 <a href="http://www.uta.edu/oit/cs/email/mavmail.php">http://www.uta.edu/oit/cs/email/mavmail.php</a>.

## **Student Support Services Available**

The University of Texas at 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. These resources include tutoring, major-based learning centers, developmental education, advising and mentoring, personal counseling, and federally funded programs. For individualized referrals to resources for any reason, students may contact the Maverick Resource Hotline at 817-272-6107 or visit <a href="https://www.uta.edu/resources">www.uta.edu/resources</a> for more information.

## University Tutorial and Supplemental Instruction (UTSI)/University College

All first time freshmen can receive five FREE hours of tutoring for this course and other selected subjects for this semester. Students must sign up and complete their first hour of tutoring by February 12, 2016. To sign up, visit UTSI in 205 Ransom Hall/University College. Upon completion of your first tutoring appointment, you will receive five hours of additional free tutoring. Flexible tutoring hours are available from 7:00am – 9:00pm, seven days a week at secure locations on campus. All tutors receive extensive training. Find out more at <a href="https://www.uta.edu/Startstrong">www.uta.edu/Startstrong</a>

## **Math Clinic**

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

Monday – Thursday 8am to 9pm
Friday 8am to 1pm
Saturday 1pm to 6pm
Sunday 1pm to 9pm

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

## **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). 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. Counseling and Psychological Services, (CAPS) www.uta.edu/caps/ or calling 817-272-3671.

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 <a href="https://www.uta.edu/disability">www.uta.edu/disability</a> or by calling the Office for Students with Disabilities at (817) 272-3364.

Student responsibility primarily rests with informing faculty at the beginning of the semester and in providing authorized documentation through designated administrative channels.

If you require an accommodation based on disability, I would like to meet with you in the privacy of my office, during the first week of the semester, to make sure you are appropriately accommodated.

#### Title IX

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 <a href="https://www.uta.edu/titlelX">uta.edu/eos</a>. For information regarding Title IX, visit <a href="https://www.uta.edu/titlelX">www.uta.edu/titlelX</a>.

## **Academic Integrity**

Students enrolled in this course 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 as they see fit in their courses, including (but not limited to) 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.

## **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 <a href="mailto:resources@uta.edu">resources@uta.edu</a>, or view the information at <a href="mailto:www.uta.edu/resources">www.uta.edu/resources</a>.

# **Grade Replacement and Grade Exclusion Policies**

These policies are described in detail in the University catalog and can also be founded online at <a href="http://wweb.uta.edu/catalog/content/general/academic\_regulations.aspx#10">http://wweb.uta.edu/catalog/content/general/academic\_regulations.aspx#10</a> (Scroll about half way down the page).

## **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 <a href="http://www.uta.edu/sfs">http://www.uta.edu/sfs</a>.

#### **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 exit the room exit the room and take an immediate right or left, walk down the hallway toward the corner of the building and descend the stairs. 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 handicapped individuals.

An evacuation map for our classroom (LS 101) can be found at https://www.uta.edu/campus-ops/ehs/fire/Evac Maps All/Evac LS/Evac LS 101.pdf

## **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.

## **Important Dates**

Tue, Jan 19 First Day of Classes

Wed, Feb 3 Census Date & Deadline for makeup requests for *all* exams

Fri, Feb 12 Midterm 1, 6 – 8 pm

March 14-19 Spring Break

Fri, Apr 1 \*Last day to drop a class (submit requests to advisors by 4 PM)

Midterm 2, 6 - 8 pm

Fri, May 6 Last day of classes Sat, May 7 Final Exam, 12:30 - 3 pm

# **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

# **Course Schedule**

<u>Date</u>	Lecture section(s)	Discussion section(s)	
Jan 19 Jan 21	1.1, 1.2 1.3, 1.4	1.1, 1.2	
Jan 26	1.5	1.1, 1.2, 1.3, 1.4	
Jan 28	1.6, 1.7	1.3, 1.4, 1.5	
Feb 2	2.1, 2.2	1.5, 1.6, 1.7	
Feb 4	2.5, 2.6	1.6, 1.7, 2.1, 2.2	
Feb 9	3.1	2.1, 2.2, 2.5, 2.6	
Feb 11	3.2	2.5, 2.6, 3.1	
Feb 12	Midterm exam 1 (covers sections 1.1-1.7, 2.1, 2.2, 2.5)		
Feb 16	3.3	3.1, 3.2	
Feb 18	3.4	3.2, 3.3	
Feb 23	3.5	3.3, 3.4	
Feb 25	4.1	3.4, 3.5	
Mar 1	4.2	3.5, 4.1	
Mar 3	4.3	4.1, 4.2	
Mar 8	4.4	4.2, 4.3	
Mar 10	4.5	4.3, 4.4	
Mar 22	5.1	4.4, 4.5	
Mar 24	5.2	4.5, 5.1	
Mar 29	5.3	5.1, 5.2	
Mar 31	5.4	5.2, 5.3	
Apr 1	Midterm exam 2 (covers sections 2.6, 2.1-3.5, 4.1-4.4, 5.1, 5.2 and midterm 1 sections)		
Apr 5	5.5	5.3, 5.4	
Apr 7	6.1	5.4, 5.5	
Apr 12	6.2	5.5, 6.1	
Apr 14	6.3	6.1, 6.2	
Apr 19	6.4	6.2, 6.3	
Apr 21	7.1	6.3, 6.4	
Apr 26	7.2	6.4, 7.1	
Apr 28	7.3	7.1, 7.2	
May 3 May 5		7.2, 7.3 7.3	
May 7	Final exam		

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.