

## MATH1322-003 / Precalculus I

Fall 2014

Room CH 106, MWF 1:00-1:50 PM

Instructor: Alice Lubbe, MS

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Office Hrs: T/Th 9:45-10:45 AM, Fr 9-10 AM, or by appt.

**Textbook:** *Precalculus* (With MyMathLab Subscription) by Lial, Hornsby, Schneider and Daniels, 5th edition. Students must register online at <http://www.mymathlab.com> using their UTA email, with **Course ID: lubbe45014**

**Course Prerequisites:** Math Aptitude Test (MAT) is required to register for this course. See <http://www.uta.edu/math/pages/main/mpt.htm> for test details.

### Learning outcomes: Upon completion of Math 1322:

1. Students will be able to solve problems by applying elementary algebra: properties of the real number system and complex number system, using rules for exponents and radicals, simplifying algebraic expressions, solving equations and inequalities.
2. Students will be able to graph polynomial equations of first and second degree and to explain features of the graphs such as: intercepts, vertex, slope, line of symmetry and translations.
3. Students will be able to define a function and determine if an equation represents a function. They will be able to perform operations on functions such as: addition, multiplication, division, composition and finding inverse functions. Students will be able to define and find the domain and range of a function.
4. Students will be able to sketch the graph of polynomial and rational functions, without the aid of a graphing calculator, including finding complex zeros and identifying asymptotes of rational functions.
5. Students will be able to identify and solve problems involving exponential and logarithmic functions and equations.
6. Students will be able to solve problems involving systems of two equations in two unknowns, using the method of substitutions or the theorem of equivalent systems.

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

### Grade components

- |                          |   |
|--------------------------|---|
| 1. Midterm 1:            | 20%, Friday, September 26; 5:30-7:00 pm, PKH 308  |
| 2. Midterm 2:            | 25%, Friday, October 24; 5:30-7:00 pm, PKH 308    |
| 3. Final examination:    | 35%, Saturday, December 6, 2014; 12:30pm - 3:00pm |
| 4. Homework and quizzes: | 20%.  |

Homework and quizzes will be done using MyMathLab. While grades from homework assignments will not count in your final grade you must earn at least 70% on an assignment to unlock your MyMathLab quiz for each assignment. The grades of the quizzes will count 20% toward your final grade. The two (2) lowest online quiz grades will be dropped. MyMathLab can also be used for practice and review.

## Midterms and Finals

These exams are departmental, i.e., all sections of Math 1322 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.

**Any student who scores below 50 on the final exam cannot receive a grade higher than D in the course.**

## Make-up Policy

No make-up exams or quizzes. If your class schedule has a conflict with either midterm or final, you must complete a makeup request form and provide sufficient documentation of your conflict to the instructor **by Census Date, September 8, 2014**. Delays in submitting a make-up request may mean that your request cannot be approved.

## Attendance Policy

Attendance to all class and exam sessions is required. Absences are only excused for participation in University-sanctioned events, significant and verifiable issues, or the observance of religious holidays. In the case of extended illness or injury, the doctor's notes will give justification for a possible grade of "incomplete". More than four unexcused absences will lower your final grade 10%.

## 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 at <http://wweb.uta.edu/aao/fao/>.

## **Calculators: The only calculators allowed for the midterms and final are TI-30XA and TI-30XIIS.**

If you wish to use a different calculator, then you must get permission to do so BEFORE an exam. Only nonprogrammable calculators with basic computational features, such as arithmetic and transcendental functions will be allowed. Calculators with the following features are NOT allowed: graphing, equation solving, differentiation and integration. Any device that has internet or e-mail capabilities this — this means NO cell phones — and any device with a QWERTY keyboard are also not permitted.

## 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](mailto:resources@uta.edu), or view the information at [www.uta.edu/resources](http://www.uta.edu/resources).

### Supplemental Instruction (SI)

Supplemental Instruction is a FREE voluntary academic development program that increases student performance and retention. The program is offered to all students in this class, as well as for other historically difficult subjects on campus. SI provides regularly scheduled out-of-class peer facilitated sessions. A senior student (SI Leader), who has successfully taken the course before, facilitates structured group study sessions to support students to master course content and learn effective study skills. On average, students who attend SI on a regular basis, obtain a half letter to a full letter grade higher when compared to those students who do not attend. It is also a great way to get to know students in your class. All SI Leaders receive extensive training. Session times will be presented by your SI Leader during the first week of class; alternatively you can visit our website at <http://www.uta.edu/utsi>.

### Math Clinic

The Math Department operates the Math Clinic, a tutoring service staffed by upper level undergraduate students. When you registered for this course, you were assessed a fee which allows you unlimited access to the Math Clinic. You will need to show your Mav ID to use the Math Clinic. The Math Clinic is in room 325 PKH; 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 <http://www.uta.edu/math/clinic/> to get more information or to access assignment sheets for the courses for which tutoring is offered.

### Previous Exams

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	8am-8pm
Friday	8am-5pm
Saturday	12pm-5pm
Sunday	Closed

You need a MavID 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>.

### Americans with Disabilities Act

The University of Texas at 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). 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 that disability. Any student requiring an accommodation for this course must provide the instructor with official documentation in the form of a letter certified by the staff in the Office for Students with Disabilities, University Hall 102. 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](http://www.uta.edu/disability) or by calling the Office for Students with Disabilities at (817) 272-3364.

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 is committed to upholding U.S. Federal Law “Title IX” such that no member of the UT Arlington community shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity. For more information, visit [www.uta.edu/titleIX](http://www.uta.edu/titleIX).

## **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.

## **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>.

## **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 exit the room and move toward the nearest exit, which is located at the north-west corner of the building. 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.

### **Grade Replacement and Grade Exclusion Policies**

These policies are described in detail in the University catalog and can also be founded online at [http://www.uta.edu/catalog/content/general/academic\\_regulations.aspx#10](http://www.uta.edu/catalog/content/general/academic_regulations.aspx#10) (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.

**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.

### **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.

### **Important Dates:**

August 21	First Day of Classes at UTA
September 1	Labor Day holiday – NO CLASSES
September 8	Census Date (Deadline for makeup requests for ALL exams)
Friday September 26	Midterm 1, 5:30-7:00 pm, PKH 308
Friday October 24	Midterm 2, 5:30-7:00 pm, PKH 308
Wednesday October 29	Last day to drop a class with “W”
November 27-28	Thanksgiving break – NO CLASSES
Wednesday, December 3	Last day of classes
Saturday, December 6	Final Exam, 12:30 – 3:00 pm (Tentative)

# LECTURE CALENDAR\*

<u><b>MONDAY</b></u>	<u><b>WEDNESDAY</b></u>	<u><b>FRIDAY</b></u>
		<b>August 22 / FIRST DAY</b> <b>Sec R.1 Sets</b>
August 25 Sec R.2 Real Number Props	August 27 Sec R.2 Order of Ops/Abs Val	August 29 Sec R.3 Polynomials
<b>September 1</b> <b>HOLIDAY / No class</b>	September 3 Sec R.4 Factoring Polynomials	September 5 Sec R.5 Rational Operations
<b>September 8 / CENSUS DATE</b> R.5 Complex Fractions	September 10 Sec R.6 Rational Exponents	September 12 Sec R.7 Radical Expressions
September 15 Sec R.7 Radicals/Rationalizing	September 17 Sec 1.1 Linear Equations	September 19 Sec 1.2 Applications/Modeling
September 22 Sec 1.3 Complex Numbers	<b>September 24</b> <b>REVIEW</b>	<b>September 26</b> <b>REVIEW **</b>
September 29 Sec 1.4 Quadratic Equations	October 1 Sec 1.4 Quad Formula/Discr	October 3 Sec 1.6 Rational Eq Apps
October 6 Sec 1.6 Rad/Quad Form Apps	October 8 Sec 1.7 Inequalities	October 10 Sec 1.8 Absolute Val Eqs
October 13 Sec 2.1 Graphing	October 15 Sec 2.2 Circles	October 17 Sec 2.3 Function Properties
October 20 Sec 2.4 Linear Functions	<b>October 22</b> <b>REVIEW</b>	<b>October 24</b> <b>REVIEW **</b>
October 27 Sec 2.5 Equations of Lines	<b>October 29 / DROP DATE</b> Sec 2.6 Basic Function Graphs	October 31 Sec 2.6 Piecewise/Relations
November 3 Sec 2.7 Graphing Techniques	November 5 Sec 3.1 Quadratic Functions	November 7 Sec 2.8 Composition
November 10 Sec 4.1 Inverse Functions	November 12 Sec 4.2 Exp Functions	November 14 Sec 4.3 Log Functions
November 17 Sec 4.4 Evaluate Logs	November 19 Sec 4.5 Exp/Log Equations	November 21 Sec 9.1 Elimination/Substitution
November 24 Sec 9.1 Solve Linear Systems	November 26 Sec 9.5 Nonlinear Systems	<b>November 28</b> <b>HOLIDAY / No Class</b>
<b>December 1</b> <b>REVIEW</b>	<b>December 3 / LAST CLASS</b> <b>REVIEW **</b>	

\* Lecture topic dates indicate the approximate dates on which given topics will be completed.

**\*\*Friday September 26**

**Midterm 1, 5:30-7:00 pm, PKH 308**

**\*\*Friday October 24**

**Midterm 2, 5:30-7:00 pm, PKH 308**

**\*\*Saturday, December 6**

**Final Exam, 12:30 – 3:00 pm (Tentative)**

*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. ~Alice Lubbe*