



**Division of  
Academic Enhancement  
UNIVERSITY OF GEORGIA**

**UNIV 1110 – Introduction to Pre-Calculus  
Spring, 2018**

**Course Instructor Information**

Instructor: Xuechao Li

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Phone: (DAE) 706-542-7575

Office: 203 Milledge Hall

Office Hours: 9:55—10:10 & 10:15-11:15 AM (MWF)

or by appointment

Special tutoring hours (3:00—5:30PM) will be provided at the day before each test and final, the date and time will be delivered later during the semester

**Course Meeting Information**

Meetings: 2:30—3:20PM (MWF)

Location: Journalism 515

**UNIV Courses are offered by the Division of Academic Enhancement**, a unit of the Office of Instruction at the University of Georgia.

The Division empowers all students to achieve success with innovative courses, programs, services, and student-centered initiatives. The DAE supports students as they transition into higher education and sustains their progress through the University's unique academic environment. We are committed to students, committed to success.

**Course Description**

This class offers a complete review of algebra and problem-solving techniques to prepare students for pre-calculus. Topics include factoring, solving equations and inequalities, rational, radical, exponential, logarithmic functions, graphing techniques and basics of trigonometric functions.

**Learning Objectives**

Upon successful completion of this course, students will be able to:

performing mathematical operations with algebraic expressions, solving rational equations, first and second degree equations and inequalities, applying concepts of solving equations and inequalities to solve real world application problems .

Students will also be able to demonstrate proficiency in:

determining domain, range, and where appropriate, rational, square root and absolute value functions, translating between verbal, numeric, and algebraic forms of mathematical situations, including real world application problems basic trigonometric concepts.

### Course Policies

UNIV 1110 consists of 4 chapters:

Chapter 1: (HW 1-5) Functions, domain & range, function values, linear functions, and circles.

Chapter 2: (HW 6-10) Operations on functions, graph properties, transformation, quadratic Functions and inverse functions.

Chapter 3: (HW 11-13) Exponential functions and logarithmic functions

Chapter 4: (HW 14-17) Introduction to trigonometry, graph of trig functions, and trig. equations.

Guideline on how to login homework on webpage

1. <http://www.aleks.com>
2. Find the "Have a class key?" Is ALEKS.com used in your instructors class click here.
3. Enter the class key:

XJRR9-REERW

4. Choose section of "UNIV 1110 1-2", go to assignment.

**Grading/Evaluation: Assignments: 20%, Projects: 10%, Chapter tests: 40%, Final exam: 30%.**

**Assignments :** (90% or above of completion of each HW will be counted as 100% completion)

**Chapter Tests: No-Make-Ups.** There will be 4 tests that you will take during this semester. You will have an option to drop your lowest test score for one of FOUR in class tests. Your chapter tests are worth a total **40%** of your course grade. The final exam may be used to substitute ONE missing chapter test in the event of an excused emergency absence. An excused emergency absence will only be granted when you have notified me of the illness/emergency prior to the class meeting on the test day, and with a document excuse presented to me later. The exact dates of the tests will be announced in class. Next message is **for dropping Math 1113 students only:** if you have taken two tests in Pre-cal, and you take two tests in UNIV 1110, then these two tests will be kept for your grade.

**Projects: (self-guided reviewing for chapter test):** 10% of your course grade. Details regarding the projects will be delivered later during the semester.

**Final:** 30% of your total grade.

### **Course Materials**

1. College Algebra (8<sup>th</sup> Edition), Larson.

ISBN: 0618643109

2. Handouts will be delivered by instructor each week (at least once) during class for self-guided study and purpose of in class exercises

3. Calculator

### **Participation Policy**

Good participation is a must. You cannot succeed to the best of your ability if you are not actively in class for each lecture. **Do not** lure yourself into the false security of thinking you only need someone's notes and you can figure out the homework yourself.

***Typically 4 absences of any sort result in an automatic drop a half letter grade in the course.***

We will start each class lecture with questions concerning the previous assignment. Please ask questions: this is the only way we learn.

In the event that the university cancels classes, such as for severe weather, students are expected to continue with readings as originally scheduled. Any assignments scheduled during those missed classes, such as a project or homework, are due at the next class meeting unless other instructions are posted at the course website or communicated via email.

### **Disability Statement**

If you anticipate issues related to the format or requirements of this course, please meet with me. I would like us to discuss ways to ensure your full participation in the course. If you determine that formal, disability-related accommodations are necessary, it is very important that you be registered with the Disability Resource Center (Voice: 706-542-8719 or TTY: 706-542-8778) and notify me of your eligibility for reasonable accommodations. We can then plan how best to coordinate your accommodations.

### **Academic Honesty Policy**

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: <https://ovpi.uga.edu/academic-honesty/academic-honesty-policy>. Lack of knowledge of the academic honesty policy is not a reasonable explanation for a violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor.

**Other Division Resources** From peer tutoring through the Academic Resource Center to Academic Coaching to Student Success Workshops and more, the Division is committed to the

success of all students at the University of Georgia. For more on these and other resources, visit <https://dae.uga.edu>.

**Course Outline:**

Week	General Topic	Assignment/Projects
1 (Jan.4-5)	Syllabus	Set up account for HW online
2 (Jan.8-12)	Demonstration online HW Functions. Domain &range	Pre-exercise for HW, HW 1
Jan. 15 (Holiday)		
3 (Jan. 17-19)	Function values, linear functions	HW 2-3
4 (Jan.22-26)	Distance, Circles & <b>Test 1</b>	HW 4-5, Project one
5 (Jan.29—Feb.2)	Operation on functions, function properties.	HW 6-7
6 (Feb. 5--9)	Graphing& transformation	HW 7-8
7 (Feb. 12-16)	Quadratic functions	HW 8, handout word-problems
8 (Feb.19-23)	Quadratic function & its applications	HW 9& Cont. Handout word-problems
9 (Feb. 26-March 2)	Composite functions & Inverse functions <b>Test 2</b>	Cont. on HW 9, HW 10 & Project two
10 (Match 5-9)	Pre-cal problem mine-storm &	Cont. HW 10 &
11 (March. 12-16)	Exponential functions	HW 11-12
(March 19-23)	Spring Break	
12 (March 26-30)	Logarithmic function & its properties	HW 13& Project three
13 (April2-5)	<b>Test 3</b> & Intro. To Trig.	HW 14-15
14 (April 9-13)	unit circle & trig. graphs	HW 15-16
15 (April16-20)	Trig equations & word problems,	HW 16-17,Project four
16 (April 23-25)	<b>Test 4</b> & Review for final.	Handout for final review

Note: The course syllabus is a general plan for the course; deviations announced to the class by the instructor may be necessary.

Tentative dates for tests.

01/26/2018: Test 1

03/02/2018: Test 2

03/30/2018: Test 3

04/23/2018: Test 4 (trigonometry & Pre-cal)

Final exam (Comprehensive): 04/27/2018 (Friday) from 3:30—6:30PM