

Course Syllabus
MTH 1314.10
Pre-Calculus Algebra (3 credit hours)
Fall Semester 2017

Instructor: Sriyan Wickramasuriya

Class Meeting Time: TTh 11:00 am-12:20 pm

Class Meeting Place: LDB 216

Office: LDB 149

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Office Hours: Monday 12:45 pm-2:45 pm,

Wednesday 9:30 am-10:30 am **or by appointment**

(The minute you feel you are having trouble understanding any of the material please come to office hours and I am more than happy to help you)

Objective: This course is designed for those students who need preparation beyond two years of high school geometry before taking the calculus sequence. In this course the student is expected to obtain an understanding of:

- The principles involved in the algebra of real and complex numbers
- The concept of a function and how to use algebraic and geometric properties to study properties of functions
- How to use functions and algebraic principles to model and solve real-world problems

Description: Topics include a brief review of introductory algebra, variation, elementary theory of equations, functions (including exponential and logarithmic) inequalities, systems of equations, and other related topics. Prerequisites: Two years of high school algebra and one year of high school geometry. Credit 3.

Textbook: *College Algebra*, 8th edition, by Aufmann

Exams and Final Exam: There will be **3 midterm exams** and a **comprehensive final**. You cannot make-up an exam except in cases of documented emergencies.

Quizzes: There will be three quizzes. You cannot make-up a quiz except in cases of documented emergencies.

Homework: Homework is due at the **beginning of class in class on the due day.**

Please **staple your homework** before turning it in.

The homework will be will be graded as follows: for completeness and grading a few selected problems. **Late homework submitted within 2 days of the due date will be given 6 points.** After that late homework will not be accepted.

The following are the homework problems from each section you need to do.

Homework List (*College Algebra, 8th Edition by Aufmann and Nation*)

SECTION	PROBLEMS
Chapter 1.1 Linear and Absolute Value Equations	7,11,13,15,25,27,31,35,39,43,47,51
Chapter 1.2 Formulas and Applications	7,13,23,25,35,39,49,51
Chapter 1.3 Quadratic Equations	7,9,13,21,27,35,39,41,53,59,73,75,85,95
Chapter 1.4 Other Types of Equations	7,11,17,19,21,27,31,35,45,47,55,83
Chapter 1.5 Inequalities	7,9,21,25,31,37,39,41,49,51,55,59,67
Chapter 6	6.1 (25,37), 6.2 (5,6,7,8,9,10)
Chapter 2.1 Two-Dimensional Coordinate Systems and Graphs	11,23,35,37,45,49,53,57,61,67,73,77,79
Chapter 2.2 Introduction to Functions	1,3,5,7,9,11,15,19,23,27,29,33(a),33(b), 37,41,45,65,73,77,79,81,87,91,95,99
Chapter 2.3 Linear Functions	5,7,9,11,13,17,21,25,27,29,39,41,43,47,51, 59,63,73,75
Chapter 2.4 Quadratic Functions	1,5,9,15,19,25,29,33,37,45,51,53,69
Chapter 2.5 Properties of Graphs	7,11,15,19,23,27,31,37,41,45,51,53,61,63, 71,73(b)
Chapter 2.6 Algebra of Functions	11,15,19,23,27,31,35,37,41,47,49,53,59,63, 67,79
Chapter 3.5 Graphs of Rational Functions and Their Applications	5,7,15,21,23,29,31,33,35,39,43
Chapter 4.1 Inverse Functions	5,15,21,27,31,37,41,45,47
Chapter 4.2 Exponential Functions and Their Applications	7,11,15,19,23,27,29,31,33,53(a),59(a)
Chapter 4.3 Logarithmic Functions and Their Applications	7,11,15,19,23,27,31,35,39,43,47,51,55, 57,69,73,77

Grades:

Quizzes: **60** points (**20** points each)

Homework: **170** points (**15** points each except HW prelim which is worth **20** points)

Midterm Exams: **600** points (**200** points each)

Bonus: **60** Points (not using phone) and **30** Points (responsible signing of the attendance)

Final Exam (Comprehensive and Scantron): **200** points

Final Grade=Quiz points + Homework points + Three Midterm Exam points + Final Exam points + Bonus points

Letter Grades: THERE WILL BE NO NEGOTIATION ON GRADES

A=900 points and above

B=800-899 points

C=700-799 points

D=600-699 points

F=below 600

Blackboard: I will upload my Lecture notes, model exams and their solutions, midterm exam solutions and your grades on Blackboard. If you see that a grade is entered incorrectly you need to inform me **within 7 days** of the grade being entered. After that I will not change any grade.

Calculator: You must have a calculator for this class and you cannot use your cell phone as a calculator. You cannot borrow a calculator during an exam. Your calculator must be able to evaluate roots, powers, exponentials, and logarithms (a scientific calculator will do this). You may use a graphing calculator on parts of some exams or quizzes, but may not be allowed to use the graphing calculator on other parts.

Cell Phone Use: Use of cell phones, smartphones, iphones (text messaging etc.) are prohibited during class time except in cases of emergency. **Using your cell phone in class will result in you losing all 60 bonus points given for not using your phone in class.** During an exam, your cell phone should be stored securely in such a way that it cannot be seen or used. The visible presence of such a device during an exam may result in a zero on the exam and is considered de facto evidence of cheating.

Class Schedule:

Date	Tentative Topic	Homework
08/24	Fractions, 1.1 Linear and absolute value equations	
08/29	Quiz 1 , Finish 1.1	HW Prelim
08/31	1.3 Quadratic Equations	HW 1.1
09/05	1.3 Quadratic Equations	
09/07	1.4 Other Types of Equations	HW 1.3
09/12	Finish 1.4	
09/14	MIDTERM 1	
09/19	1.5 Inequalities	HW 1.4
09/21	Finish 1.5	
09/26	6.1 Linear Systems in Two Variables, 6.2 Linear Systems in Three Variables	HW 1.5
09/28	Finish 6.2	
10/03	Quiz 2 , 2.1 Graphs	HW6.1, 6.2
10/05	2.2 Functions	
10/10	Finish 2.2	
10/12	2.3 Linear Functions, Review	HW 2.2
10/17	MIDTERM 2	
10/19	Finish 2.3, 2.4 Quadratic Functions	
10/24	Finish 2.4	HW 2.3
10/26	2.5 Properties of Functions	
10/31	2.6 Algebra of Functions	HW 2.4
11/02	Quiz 3 , Finish 2.6	
11/07	3.5 Graphs of Rational Functions	HW 2.6
11/09	Finish 3.5	
11/14	4.1 Inverse Functions	HW 3.5
11/16	4.2 Exponentials, Review	
11/21	MIDTERM 3	
11/22- 11/26	THANKSGIVING BREAK	
11/28	4.3 Logarithms, 1.2 Formulae (maybe very briefly)	
11/30	Review	
	FINAL	

Further Notes:

- *Attendance* – You are strongly encouraged to attend all classes and are responsible for all announcements, assignments, quizzes, and exams given in class.
- *Academic Honesty* – The University expects all students to engage in all academic pursuits in a manner that is above reproach. Students are expected to maintain complete honesty and integrity in the academic experiences both in and out of the classroom. Any student found guilty of dishonesty in any phase of academic work will be subject to disciplinary action. [http://www.shsu.edu/~vaf www/aps/documents/810213.pdf](http://www.shsu.edu/~vaf/www/aps/documents/810213.pdf)
- *Religious Holy Days* – Students are excused from attending classes or other required activities, including examinations, for the observance of a religious holy day, including travel for that purpose. As a courtesy, it is appreciated if you notify me in advance and in writing of the dates and times that are to be missed so that appropriate arrangements can be made regarding homework and/or exams. [http://www.shsu.edu/~vaf www/aps/documents/861001.pdf](http://www.shsu.edu/~vaf/www/aps/documents/861001.pdf)
- *Students With Disabilities Policy* – It is the policy of Sam Houston State University that individuals otherwise qualified shall not be excluded, solely by reason of their disability, from participation in any academic program of the university. Further, they shall not be denied the benefits of these programs nor shall they be subjected to discrimination. Students with disabilities that might affect their academic performance should register with the Office of Services for Students with Disabilities located in the Lee Drain Annex (telephone 936-294-3512, TDD 936-294-3786, and e-mail disability@shsu.edu). They should then make arrangements with their individual instructors so that appropriate strategies can be considered and helpful procedures can be developed to ensure that participation and achievement opportunities are not impaired.

SHSU adheres to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations for students with disabilities. If you have a disability that may affect adversely your work in this class, then I encourage you to register with the SHSU Services for Students with Disabilities and to talk with me about how I can best help you. All disclosures of disabilities will be kept strictly confidential. NOTE: No accommodation can be made until you register

with the Services for Students with Disabilities. For a complete listing of the university policy, see: <http://www.shsu.edu/dept/academic-affairs/documents/aps/students/811006.pdf>

- *Classroom Etiquette* - Students will refrain from behavior in the classroom that intentionally or unintentionally disrupts the learning process and, thus, impedes the mission of the university. Students are prohibited from eating in class, using tobacco products, making offensive remarks, reading newspapers, sleeping, talking at inappropriate times, wearing inappropriate clothing, or engaging in any other form of distraction. Inappropriate behavior in the classroom shall result in a directive to leave class. Students who are especially disruptive also may be reported to the Dean of Students for disciplinary action in accordance with university policy. <http://www.shsu.edu/students/guide/StudentGuidelines2010-2012.pdf#page=29>
- *Visitors in the Classroom* – Only registered students may attend class. Exceptions can be made on a case-by-case basis. In all cases, visitors must not present a disruption to the class by their attendance. <http://www.shsu.edu/syllabus/>