Course Information:
Fall 2020
MA 112 – 108: Precalculus Algebra
Course Format: Web-Enhanced
MSPB 430
TR 9:30am – 10:45am

Instructor Information:
Dr. Armin Straub
Phone: 251-460-7262 (please use e-mail whenever possible)
Email: straub@southalabama.edu
Office Hours: TR 11:00am – 1:15pm; TR 5:45pm – 6:30pm
Held virtually; email at least 2h before for an appointment.

Course Format Details: This section of Precalculus Algebra will be taught with in-person meetings (in rotating cohorts, with a total of 3-4 cohorts; you may only attend those assigned to your cohort, see in-person meetings below) combined with pre-recorded online lectures. Additional asynchronous (on your own time) activities include completing homework assignments and quizzes as well as watching weekly video lectures. The in-person class meetings will be used to discuss more challenging questions, problem solving, and to address any questions you might be having.

In-person meetings: In-person class meetings are restricted by university regulations. In our case, at most 12 students are allowed to attend each time. Attendance of in-class meetings is optional. In order to attend an in-person meeting, you must sign up for the corresponding cohort (see class schedule on page 3) by sending an email to your instructor. Cohort membership is first come, first served; if your cohort of choice is full, you will be able to sign up for another cohort. If you are signed up for a cohort and fail to attend without informing your instructor in advance, you will be removed from the cohort. After three days, you may sign up again (but, if full, you might not be able to get back into the previous cohort). Lecture recordings will be posted which you can view at your own time. These replace the classes you cannot attend.

Pre-requisite: ACT Math 22 or MTH 100 Minimum Grade of C or MyMathTest 070 or MTH 101 Minimum Grade of C or MA 105 Minimum Grade of C or SAT Mathematics 560 or MATH SECTION SCORE 580 or TRNFR Math Placement 2.

The USA Bulletin description of MA 112: The course covers algebraic, graphical and numerical properties of functions, focusing on linear, quadratic, general polynomial, absolute value, rational, exponential, and logarithmic functions. Topics also include equations, inequalities, and complex numbers. Applications of mathematics to modeling real world situations are emphasized. Credit for both MA 112 and MA 115 not allowed. Core Course

Course Goals: At the completion of this course, students should:
1. Be able to read, interpret, describe and produce graphs of functions, including polynomials, rational functions, exponentials and logarithms.
2. Be able to find the roots of polynomials.
3. Be able to solve equations and inequalities, including ones involving rational expressions, radical expressions, absolute values, exponentials, and logarithms.
4. Be able to evaluate, manipulate, and simplify exponential and logarithmic expressions.

General Education Learning Outcomes for Quantitative Reasoning:
1. Evaluate information presented in mathematical forms (e.g., equations, graphs, diagrams, tables, words).
2. Convert relevant information into various mathematical forms (e.g., equations, graphs, diagrams, tables, words).

Text: *Precalculus: Concepts through Functions, A Unit Circle Approach to Trigonometry, A Corequisite Solution,* Fourth Edition, by Michael Sullivan, Michael Sullivan, III, Jessica Bernards, and Wendy Fresh (2019). (ISBN: 9780135874653) **An access code is required.** The access code allows student access to Pearson's MyLab Math website, where all assignments and tests must be completed and where the entire textbook may be viewed as an e-text. A hardcopy of the entire textbook may be purchased, but is not required.

Coverage: Chapters F – 4 (omitting 1.6, 1.7, 2.2, 2.6, and 4.9).

Calculator: A Texas Instruments TI-30XIIS scientific calculator is required.

Technology: A computer with working webcam and microphone is required. This is required, in particular, for the exams which will be administered via Zoom and during which you may be recorded. You will also need a scanner or a phone application that can create a PDF of exam scratch-work. Recommended browsers are Google Chrome or Mozilla Firefox.

Course Supplement: The Math Technology Lab (ASC1301) is staffed with qualified assistants for on-demand math help.
Math Technology Lab Hours: Monday – Friday: 1:00pm – 6:00pm (these are subject to change, so please check)

Homework: Problems from the text will be assigned for each book section in MyLab Math. Homework is graded online and will contribute to 15% of the final course average. Problems are scored immediately and each problem will have FIVE attempts. **In order**

to take a quiz, you must score at least 90% on the homework assignments for the textbook sections that are covered on that quiz. All homework assignments open on the first day of class and close Monday, November 30 at 8:00 pm. Each homework section is due the Sunday following coverage. At the end of the semester the lowest 3 homework assignments will be dropped.

Practice Exams: Before each exam, there will be a practice exam available in the MyLab Math homework section. **These practice exams must be completed at a 75% in order to take each exam.** Problems are scored immediately and each problem will have FIVE attempts. Practice exams are due 30 minutes prior to respective exam start time.

Quizzes: Quizzes are available in MyLab Math. Quizzes will contribute to 15% of your final course average and have a 50 minute time limit. The purpose of the quiz is for students to practice without the help buttons that are available in the homework. There will be a quiz given each week. See the attached schedule for exact due dates. Late submissions will be allowed with a 20% penalty; final submission deadline is Monday, November 30 at 8:00 pm. You will have 2 attempts on each quiz and the highest score from those 2 attempts will be recorded. At the end of the semester the lowest 2 quiz scores will be dropped.

Exams: Three exams will be given throughout the semester in MyLab Math. Exams will be held via Zoom during our regular class time (see dates below). Each exam will contribute to 15% of your final course average. There will be a 50 minute time limit. After completing each exam, you will need to upload a PDF of all scratch-work and submit this PDF to a designated assignment in Canvas. The scratch-work must include **all problems**, properly numbered with **all work shown,** to receive full credit. The instructor reserves the right to question, evaluate, and change points for any exam problem based on the scratch-work. If complete steps for each problem are not shown, the exam will be re-graded deducting points for incomplete (or erroneous) work. Failure to submit scratch-work will result in a grade of zero. After each exam students can review the exam with their instructor during office hours or by appointment.

Exam 1	Exam 2	Exam 3
Thursday, Sept. 17	Thursday, Oct. 15	Thursday, Nov. 12

Final Exam: The final will be a comprehensive exam given in Zoom (with provided access code). The final exam contributes 20% to your final course average and cannot be dropped or replaced. **You must complete the final practice exam at 75% in order to take the final.** If you do not take the final exam, your final exam score will be zero. **Formula sheets will not be allowed on the final exam.** Final Exam Date, Time, and Place: Thursday, December 3 from 10:30am to 12:30pm in Zoom

Participation: Participation will contribute to 5% of your final course average. Upon registering for this class, you are taking responsibility for the course. On-time attendance for every class meeting and on time completion of assignments is expected. A participation grade will be submitted for each quiz. A score of 100% will be entered if the quiz is submitted on time; a score of 0% will be submitted otherwise. At the end of the semester, the 2 lowest participation scores will be dropped.

Participation and Exams: At the end of the semester, for students who have a 100% participation average (after dropping the two lowest participation scores), the lowest of the 3 exam scores can be replaced by the final exam score, if higher. This replacement will not be made for any student who has been reported for academic misconduct regardless of the participation score.

Makeup Policy: If you have a University approved absence routed through the Dean of Students with provided documentation, quizzes and exams can be made up. You must notify your instructor **prior** to the missed assignment. Deadlines will be extended the number of days the absence is excused by the Dean of Students.

Grade Determination:

Homework	15%
Quizzes	15%
Participation	5%
Exams	45%
Final Exam	20%

90% and higher: **A**, 80% - 89%: **B**, 70% - 79%: **C**, 60% - 69%: **D**, below 60%: **F**.

Tutoring: The Center for Academic Excellence offers individual and small-group peer tutoring for a large variety of general education courses, as well as writing consultations for courses in a discipline. **The CAE offers online tutoring for math and science courses via the Canvas Tool: Thinking Storm and is available 24/7.** Additionally, the CAE provides workshops, events, and programs aimed at empowering USA students to succeed in their coursework and beyond. To schedule a subject tutoring appointment or a writing consultation with the Center for Academic Excellence, please visit www.southalabama.edu/cae, email cae@southalabama.edu, or call (251) 460-6480.

Important Dates:

Labor Day:	Monday, September 7
Last Day to Drop a Course:	Friday, October 23
Last Day of Class:	Tuesday, November 24
Thanksgiving Break:	Wednesday, November 25 – Friday, November 27
Finals:	Tuesday, December 1 – Friday, December 4

Academic Misconduct: All work submitted is expected to be your own. Any dishonesty relating to academic work or records constitutes academic misconduct. Academic misconduct in this course is unacceptable and will be dealt with immediately. **Academic misconduct includes but is not limited to: Using notes (formula sheet) or a phone (or having a phone on your person) while taking a quiz or test, giving or receiving unauthorized aid during tests or quizzes, submitting work that is not your own, or communicating the contents of a test or quiz to another student.** Any academic misconduct on an assignment will result in an academic misconduct report and a 0% score recorded for the assignment; a report of the incident will be made and procedures will be followed as detailed in The Lowdown, with penalties ranging from loss of credit for the assignment to failure of the course and/or dismissal from the university.

Note: If you get to the point where you are considering dropping the course, please speak with your instructor, the department chair (Dr. Mulekar) or the assistant to the chair (Dr. Brick) before dropping.

Please see the link below for additional academic course policies that are common to all academic courses offered at the University of South Alabama. http://tinyurl.com/additionalcoursepolicies-pdf

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Class Meeting Schedule

Please note: The following schedule may be modified at the discretion of the instructor. Change notification will be made via email/Canvas.

Date	Week 1 08/17 – 08/21	Date	Week 9 10/12 – 10/16
08/18	no in-person class; pre-recorded online lecture	10/13	TBA
08/20	in-person, Cohort A	10/15	Exam 2: Sections 2.3, 2.4, 2.7, 3.1-3.5, A.3, A.5, A.11
	Week 2 08/24 – 08/28		**Week 10 10/19– 10/23**
08/25	in-person, Cohort B	10/20	TBA
08/27	in-person, Cohort C	10/22	TBA
	Week 3 08/31 – 09/04		**Week 11 10/26 – 10/30**
09/01	in-person, Cohort A	10/27	TBA
09/03	in-person, Cohort C	10/29	TBA
	Week 4 09/07 – 09/11 (Labor Day Holiday: Monday, September 7)		**Week 12 11/02 – 11/06**
09/08	in-person, Cohort B	11/03	TBA
09/10	pre-recorded online lecture	11/05	TBA
	Week 5 09/14 – 09/18		**Week 13 11/09 – 11/13**
09/15	online via Zoom	11/10	TBA
09/17	Exam 1: Sections F.1-F.4, 1.1-1.5	11/12	Exam 3: Sections 4.1-4.8
	Week 6 09/21 – 09/25		**Week 14 11/16 – 11/20**
09/22	TBA	11/17	TBA
09/24	TBA	11/19	TBA
	Week 7 09/28– 10/02		**for Week 15 11/23 – 11/27 (Last Day of Classes: Tuesday, November 24) (Thanksgiving holidays: November 25-27)**
09/29	TBA	11/24	TBA
10/01	TBA		
	Week 8 10/05 – 10/09		**Assignments for Week 16 11/30 – 12/04 12/01 – 12/04 - Finals**
10/06	TBA	12/03	Final Exam: Comprehensive
10/08	TBA		

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Student Assignment Checklist

Please note: The following schedule may be modified at the discretion of the instructor. Change notification will be made via email or the announcement page of MyLab Math.

Check	Assignments for Week 1 08/17 – 08/21	Check	Assignments for Week 9 10/12 – 10/16
	HW Orientation		Practice Exam 2: Due 30 minutes before Exam 2 You must score a 75% to take Exam 2!!
	HW F.1: The Distance and Midpoint Formulas		**Exam 2: Thursday, October 15 (Sections 2.3, 2.4, 2.7, 3.1-3.5, A.3, A.5, A.11)**
	HW F.4: Circles		HW 4.1: Composite Functions
	Quiz 1 (F.1, F.4): Due Monday, August 24 at 8:00 pm		**Quiz 9 (4.1): Due Monday, October 19 at 8:00 pm**
	Assignments for Week 2 08/24 – 08/28		**Assignments for Week 10 10/19 – 10/23**
	HW F.2: Graphs of Equations in Two Variables; Intercepts; Symmetry		HW 4.2: One-to-One Functions; Inverse Functions
	HW F.3 & 2.1: Lines		HW 4.3: Exponential Functions
	Quiz 2 (F.2, F.3): Due Monday, August 31 at 8:00 pm		**Quiz 10 (4.2, 4.3): Due Monday, October 26 at 8:00 pm**
	Assignments for Week 3 08/31 – 09/02		**Assignments for Week 11 10/26 – 10/30**
	HW 1.1: Functions		HW 4.4: Logarithmic Functions
	HW 1.2: The Graph of a Function		HW 4.5: Properties of Logarithms
	Quiz 3 (1.1, 1.2): Due Monday, September 7 at 8:00 pm		**Quiz 11 (4.4, 4.5): Due Monday, November 2 at 8:00 pm**
	Assignments for Week 4 09/07 – 09/11 (Labor Day Holiday: Monday, September 7)		**Assignments for Week 12 11/02 – 11/06**
	HW 1.3: Properties of Functions		HW 4.6: Logarithmic and Exponential Equations
	HW 1.4: Library of Functions; Piecewise-defined Functions		HW 4.7: Financial Models
	HW 1.5: Graphing Techniques: Transformations		**Quiz 12 (4.6, 4.7): Due Monday, November 9 at 8:00 pm**
	Quiz 4 (1.3, 1.4, 1.5): Due Monday, September 14 at 8:00 pm		
	Assignments for Week 5 09/14 – 09/18		**Assignments for Week 13 11/09 – 11/13**
	Practice Exam 1: Due 30 minutes before Exam 1 You must score a 75% to take Exam 1!!		HW 4.8: Exponential and Logistic Growth and Decay Models
	Exam 1: Thursday, September 17 (Sections F.1-F.4, 1.1-1.5)		**Quiz 13 (4.8): Due Wednesday, November 11 at 8:00 pm**
	HW 2.3: Quadratic Functions and Their Zeros		Practice Exam 3: Due 30 minutes before Exam 3 You must score a 75% to take Exam 3!!
	Quiz 5 (2.3): Due Monday, September 21 at 8:00 pm		**Exam 3: Thursday, November 12 (Sections 4.1-4.8)**
	Assignments for Week 6 09/21 – 09/25		**Assignments for Week 14 11/16 – 11/20**
	HW 2.7 & A.11: Complex Numbers & Complex Zeros of a Quadratic Function		HW 2.5, 3.6, & A.10: Inequalities: Linear, Quadratic, Polynomial, and Rational
	HW 2.4: Properties of Quadratic Functions		HW 2.8: Equations and Inequalities involving Absolute Value
	Quiz 6 (2.7, A.11, 2.4): Due Monday, September 28 at 8:00 pm		**Quiz 14 (2.5, 3.6, A.10, 2.8): Due Monday, November 23 at 8:00 pm**
	Assignments for Week 7 09/28 – 10/02		**Assignments for Week 15 11/23 – 11/27 (Last Day of Class: Tuesday, November 24) (Thanksgiving Break: Wednesday 25 – Friday 27)**
	HW 3.1: Polynomial Functions and Models		Practice Final Exam: Due 30 minutes before Final Exam You must score a 75% to take the Final Exam!!
	HW 3.2, A.3, & A.5: Polynomial Division (Long and Synthetic) & The Real Zeros of a Polynomial Function		
	Quiz 7 (3.1, 3.2, A.3, A.5): Due Monday, October 5 at 8:00 pm		
	Assignments for Week 8 10/05 – 10/09		**Assignments for Week 16 11/30 – 12/04 12/01 – 12/04 - Finals**
	HW 3.3: Complex Zeros; Fundamental Theorem of Algebra		**Final Submission for ALL Homework and Quizzes Monday, November 30 at 8:00 pm**
	HW 3.4: Properties of Rational Functions		**Final Exam: Thursday, December 3 (Comprehensive)**
	HW 3.5: The Graph of a Rational Function		
	Quiz 8 (3.3, 3.4, 3.5): Due Monday, October 12 at 8:00 pm		