

**MA 112 Precalculus Algebra**  
**Section 109**  
**Fall Semester 2018**  
**TR 12:30pm-1:45pm MSPB 345**

**Instructor:** Dr. Armin Straub                      **e-mail:** [straub@southalabama.edu](mailto:straub@southalabama.edu)

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**Office Hours:** TR 10:00am-noon, 2:00pm-3:00pm

**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.

**Course Format:** Web-enhanced.

**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.

**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.

**Quantitative Reasoning:** In this course, the students will demonstrate proficiency with quantitative reasoning and use of mathematics and statistics. As defined by The Association of American Colleges & Universities (AACU), Quantitative Reasoning requires the student to think critically and apply mathematics and statistics to interpret data, draw conclusions, and solve problems within a disciplinary or interdisciplinary context. Specific learning outcomes based on course content will be mapped to at least one of the following:

1. Explain 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:** A custom edition for the University of South Alabama. Taken from: *Precalculus: A Right Triangle Approach*, Fifth Edition by Judith A. Beecher, Judith A. Penna and Marvin L. Bittinger (2016). ISBN 9781323102879 This is a hole-punched loose-leaf format available at the USA bookstore shrink wrapped with an access code for MyLabsPlus.

**\*\*\*Buyer Beware Note\*\*\***

*The required materials for this course should be purchased at the campus bookstore. A tutorial program called Mymathlab will be a required component of this course and access will be through MyLabsPlus. The technology program will give you access to a complete e-book, on-line tutorial assistance with homework problems, access anytime video help, and incorrect answer analysis and feedback. The price of the bundled textbook and the MyLabsPlus access code is available as a very cost-effective solution for this course.*

*There are two warnings to consider:*

- 1) *If you decide to rent a textbook or buy a used copy, you will also need to purchase the tutorial and homework access card separately. The separate code is available for purchase in the bookstore or directly from the publisher. However, please note that the combined cost of the rented/used book and the access code may be more expensive than buying the new book/access code bundle in the bookstore.*
- 2) *I strongly suggest that you do not purchase your codes from any person or site other than the bookstore or Pearson. Many of the codes sold on Amazon Marketplace and like sites can be defective or already activated and will not work. You will then need to purchase a second code, causing greater expense*

**Coverage:** Chapters 1 – 5 (omitting 2.6).

**Calculator:** A TI-30XIIS is required. **The use of any other calculator will be considered cheating.**

**Homework:** Problems from the text will be assigned for each book section in MyLabsPlus. Homework is graded online and will contribute to 10% of the final grade. Problems are scored immediately and students will be allowed to redo homework problems as many times as they wish. **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 will close on Sunday, December 9<sup>th</sup> at 9:00 pm.

**Quizzes:** Quizzes will be taken on-line at home and will contribute to 10% of your final grade. The purpose of the quiz will be for you to practice without the help buttons that are available in the homework. There will be a quiz given each week. Quizzes will be due on Sunday at 9:00 pm. (See the attached schedule for exact due dates.) You will have 3 attempts on each quiz and the highest score from those 3 attempts will be recorded. **In order to take an exam, you must score at least 70% on the quizzes for the textbook sections that are covered on that exam.** If you are unable to reach 70% on a quiz due to an extenuating circumstance, contact your instructor within 24 hours of the due date.

**Practice Exams:** Before each exam, there will be a practice exam available in the MyLabsPlus homework section. These practice exams will not contribute to your homework average. However, if you score at least 80% on the practice exam, 3 percentage points will be added to your exam score.

**Exams:** Three exams will be given throughout the semester in the computer lab during your regular class time (see dates in the table below). There will be a 50 minute time limit. **No make-ups will be given.** At the end of the semester, the final exam score will replace the lowest of the 3 mid-term exam scores for MWF students who have 6 or fewer absences and for TR/MW students who have 4 or fewer absences. This replacement will not be made for any student who has been reported for academic misconduct regardless of the number of absences. **Formula sheets will not be allowed on exams.**

	<b>Exam 1</b>	<b>Exam 2</b>	<b>Exam3</b>
<b>MWF &amp; MW Classes</b>	Mon, Sep 24 <sup>th</sup>	Wed, Oct 24 <sup>th</sup>	Wed, Nov 28 <sup>th</sup>
<b>TR Classes</b>	Tues, Sep 25 <sup>th</sup>	Thurs, Oct 25 <sup>th</sup>	Thurs, Nov 29 <sup>th</sup>

**Final Exam:** The final will be a comprehensive exam given in the computer lab. The final exam grade cannot be dropped or replaced. **You must score at least 70% on all quizzes 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: Thursday, December 13, 1:00pm-3:00pm

**Grade Determination:**

Homework	10%
Quizzes	10%
Exams	60%
Final Exam	20%
90% and higher: <b>A</b> , 80% - 89%: <b>B</b> , 70% - 79%: <b>C</b> , 60% - 69%: <b>D</b> , below 60%: <b>F</b> .	

**Attendance:** Upon registering for this class, you are taking responsibility for the course and you are expected to attend. If you do miss, it is your responsibility to get caught up. Roll will be taken daily. For TR/MW classes, students who have 2 or fewer absences will have 2 points added to their final course grade. For MWF classes, students who have 3 or fewer absences will have 2 points added to their final course grade. Four tardies equals 1 absence.

**Tutoring:** JagSuccess provides academic resources for all USA students. It is located in the Academic Services Center at 111 Jaguar Drive. JagPALs are available to tutor in most 100/200 level courses, including Mathematics and Statistics. See the following link for more information. <http://www.southalabama.edu/departments/academicsuccess/students.html>

**Important Dates:**

Last day to drop a course:	Friday, October 26
Labor Day Holiday:	Monday, September 3
Fall Break:	Thursday, October 11 – Friday, October 12
Thanksgiving Holidays:	5:00 pm Tuesday, November 20 – Friday, November 23

**Academic Misconduct:** A grade of 0 will be given to any assignment in which copying or cheating is observed and this score cannot be dropped or replaced. An academic misconduct report will be submitted to the university. All exams must be taken in the computer lab. Taking an exam from home will be considered cheating.

**Note:** If you get to the point where you are considering dropping the course, please speak with me, 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>