Instructor: Evan Vargas
Office: AG107, Agriculture Building, Levelland Campus
Phone: (806) 716-4673
Email: evargas@southplainscollege.edu
Office Hours in Levelland Campus:
T: 11:00-1:30 TR: 11:00-1:30 F: 9:00-12:00
Or by Appointment

SOUTH PLAINS COLLEGE
MATHEMATICS, ENGINEERING & COMPUTER SCIENCE

Mathematics 2412 – Pre-Calculus
Section 002: Tuesday/Thursday 2:30-4:35 PM
Room: Library 337, Levelland Campus

Course Information

Textbook	*Precalculus: A Right Triangle Approach* by Ratti, McWaters, and Skrzypek, 4th edition, 2019, Pearson Education
Materials	Pencils, 3 ring binder, loose paper, and scientific calculator
Description	This course covers the study of algebraic, polynomial, rational, exponential, logarithmic, and trigonometric functions as well as analytic geometry.
Purpose	Acquaint student with solutions to different mathematical problems covering algebra, trigonometry, and analytic geometry.
Requirements	A student should attend all class sessions, take notes, participate in class, complete all homework assignments, pass classroom quizzes, and pass examinations.

Learning Outcomes

1. Review basic concepts of Algebra
2. Solve equations with inequalities
3. Learn to graph functions
4. Solve polynomial and rational functions
5. Learn exponential and logarithmic functions
6. Learn trigonometric function identities and solve applications
7. Solve systems of equations
8. Learn matrices and determinants
9. Learn conic sections

Grading

Weights

			Grading Scale		
Binder	5%			90-100	A
Homework	10%			80-89	B
Quiz	10%			70-79	C
Exam	15% each			60-69	D
Final Exam	20%			0-59	F

Binder — Students are expected to organize all course material in a single three ring binder for reference and study guide. This binder should be brought in every day as it will be periodically checked at random by the instructor during the semester; Notes, Homeworks, Quizzes, and Exams must all be separated by a labeled divider. Neatness and organization will be graded.

Homeworks — Every student must complete homework. Homework will be assigned daily/weekly via class or Blackboard. Homework must be collected at the beginning of class without Receiving penalty. Late homework will be accepted as follows.

1. -15% for tardiness
2. -50% for next class
3. -100% otherwise

Quizzes   Quizzes will be given once a week and will contain material pertaining to Homework and Lecture. No make-up quizzes will be allowed.

Exams   Exams will cover material from Homework, Quizzes, and Lectures as indicated by the course itinerary. Examinations will be a combination of open answer, fill in the box, and/or multiple choice. Students need only bring pencils, lead, erasers, and approved calculators. No other material will be required unless stated in class.

Cell phones, smart watches, tablets, computers, etc. **are not allowed** and students will be asked to remove their device(s) or leave the class. Students seen with and using unapproved devices will receive an automatic 0 for the exam and be dropped.

Final Exam   A **comprehensive** final exam will be given at the end of the semester. Failure to attempt the final exam will result in a failing grade for the course. The final exam will be given on **Tuesday December 11th 2018 from 1:00-3:00 P.M.** Conflicting test schedules must be worked out with instructors.

Classroom Policies

Disclaimer   The instructor reserves the right to amend any class policies as deemed necessary by the instructor or South Plains College and will announce any changes in class. If a student has any questions about a change in policy ask the instructor.

Class Cancellation Policy   In the event of class being canceled by the school/instructor, the student will be responsible for the lecture material missed. The class will continue on the following class day. All information will be on Blackboard and/or sent via email to be accessed by the student.

Attendance Policy   Records of student attendance are maintained throughout the semester. Three absences, *for any reason*, are allotted to the student for the semester. Tardies count as one-half of an absence and will be applied for leaving early. Once this condition is exceeded, the instructor has the right to drop the student with an F or X grade at their discretion.

Withdrawal   To withdraw from this class, the student will need to go to the Admissions and Records office either on the Levelland campus or the Reese Center campus, and fill out a drop notification form.

Email Policy   The instructor will only acknowledge, respond, and send emails to your assigned SPC email. This ensures the intended recipient receives all correspondence from the instructor.

Final Grading Policy   All grades are rounded from the tenths place, e.g. 80.5 = 81, 80.49 = 80. Upon the submission of grades at the end of the semester. **ALL GRADES ARE FINAL!**

Returning Grades Policy   The instructor will attempt to return grades by the next class meeting; however, the instructor reserves the right to have at least one (1) week to grade assignments and post grades from the due date.

Religious Holy Days   Section 51.911, Texas Education Code, South Plains College will allow a student who is absent from class for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within seven (7) calendar days after the absence. Students are required to file a written notification of absence with each instructor within the first fifteen (15)

days of the semester (**Friday, 14 September 2018**) in which the absence will occur. Forms for this purpose are available in the Student Services Office along with instructions and procedures. "Religious holy days" means a holy day observed by a religion whose place of worship is exempt from property taxation under Section 11.20, Tax Code.

Disabilities Statement	Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that appropriate arrangements may be made.
Diversity Statement	The instructor will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate everyone to learn about others, the larger world, and ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is but also model society as it should and can be.
Sexual Misconduct	It is important for students to know that all faculty members are mandated reporters of any incidents of sexual misconduct. Faculty cannot keep information about sexual misconduct confidential if students share that information. SPC offers advisors that students can confidentially seek out in the Health & Wellness Center. These advisors have the best interest in students and information can be accessed on campus or even in the local community.
Campus Concealed Carry	Campus Concealed Carry - Texas Senate Bill - 11 (Government Code 411.2031, et al.) authorizes the carrying of a concealed handgun in South Plains College buildings only by persons who have been issued and are in possession of a Texas License to Carry a Handgun. Qualified law enforcement officers or those who are otherwise authorized to carry a concealed handgun in the State of Texas are also permitted to do so. Pursuant to Penal Code (PC) 46.035 and South Plains College policy, license holders may not carry a concealed handgun in restricted locations.
Academic Honesty	Students are expected to uphold the ideas of academic honesty; all work that is submitted for grading must be your own. Violation of this policy will result in an F for the assignment(s) and the student dropped with an F. For more details on what is considered cheating, see the South Plains College catalog.
Equal Opportunity	South Plains College strives to accommodate the individual needs of all students in order to enhance their opportunities for success in the context of a comprehensive community college setting. It is the policy of South Plains College to offer all educational and employment opportunities without regard to race, color, national origin, religion, gender, disability, or age.
Holiday/ Travel Statement	If a student has any pre-existing plans to travel during scheduled class times, the student must inform the instructor **no later than Thursday, September 6th, 2018**. Failure to properly inform of any missed class will result in forfeiture of any graded class work with no allowable replacement/make-up work.
Recording Devices	Students are not allowed to use recording devices such as audio or video during class unless approved by the instructor
Resources	Students may utilize free tutoring provided by SPC. Tutoring is available at all SPC campus locations. Please consult with the instructor for further information.

Course Itinerary   Planned schedule; subject to change as necessary.

Week 1	August 28	**Introduction**, Review of Basic Algebra Concepts
	August 30	**Chapter 1**, Linear and Quadratic Equations, Complex Numbers
Week 2	September 4	Solving Other Types of Equations Inequalities, Absolute Values
	September 6	**Chapter 2**, Coordinate Plane, Graphs of Equations, Lines
Week 3	September 11	Function Properties and Transformations
	September 13	Composite and Inverse Functions
Week 4	September 18	**Chapter 3**, Quadratic and Polynomials Functions
	September 20	Real and Complex Zeros of Polynomials, Rational Functions
Week 5	September 25	**Examination 1**
	September 27	**Chapter 4**, Exponential and Logarithmic Functions
Week 6	October 2	Log Rules, Equations and Inequalities
	October 4	**Chapter 5**, Angles, Right-Triangle Trig
Week 7	October 9	Trig Functions of any Angle, Unite Circle
	October 11	Graphs of Other Trig Functions, Inverse Trig Functions
Week 8	October 16	**Chapter 6**, Trig Identities, Sum and Difference Formulas
	October 18	Double-Angle and Half-Angle Formulas, Product-to-Sum
Week 9	October 23	Sum-to-Product, Trig Equations
	October 25	**Examination 2**
Week 10	October 30	**Chapter 7**, Law of Sines and Cosines
	November 2	Area of Polygons using Trig, Vectors
Week 11	November 6	Dot Products, Polar Coordinates
	November 9	**Chapter 8**, Systems of Linear Equations with Two Variables
Week 12	November 13	Systems with Three Variables, Partial-Fraction Decomposition
	November 15	Systems of Nonlinear Equations, Systems of Inequalities
Week 13	November 20	**Chapter 9**, Matrices and Systems of Equations
	November 22	**Thanksgiving Break**
Week 14	November 27	Matrix Algebra, Inverse Matrix, Determinants and Cramer's Rule
	November 30	**Examination 3**
Week 15	December 4	**Chapter 10**, Conics Overview, Parabolas
	December 6	**Final Examination Review**
Week 16	December 11	**Final Exam**