

South Plains College
Mathematics, Engineering, & Computer Science Department
Pre-Calculus – MATH 2412.002
Tuesday & Thursday: 8:30am – 10:35am
Course Syllabus - Spring 2026

Instructor: Jake Wyatt

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Office Hours (Levelland Campus): M & W: 3-5pm, T & R: 1:30-3pm, and by appointment.

Office Hours (Lubbock Campus): F: 12-1pm, and by appointment.

Course Description: Pre-Calculus is the study of algebra, trigonometry, and analytic geometry in preparation for calculus.

Credit: 4 Semester Credit Hours

Prerequisites: College Algebra - MATH 1314 or MATH 1414

Textbooks: *Precalculus with Limits (4th ed.)* by Larson, Hostetler, & Edwards (Provided)

Attendance: Both attendance and effort are important for success in this course. Class attendance may be taken at any time during the class period, so please do not arrive late or leave early.

Class Format: 8:30 – 9:00am Questions from Students
9:00 – 10:00am Lecture
10:00 – 10:05am Break
10:05 – 10:35am Lab Assignment

Lab Assignments: Lab assignments (labs) are short worksheets to be completed in class. The lab consists of problems related to the lecture. If the lab cannot be completed by 10:35, then an extension without penalty will be granted. However, if a student leaves early before completing the lab, no extension will be granted, and he or she must turn in the incomplete lab before leaving. Make-up labs are only permitted in the case of an excused absence. Groupwork is encouraged during labs.

Homework: Homework will be assigned at each class meeting but will not be graded until exam day.

Format for all homework assignments:

1. Copy the given problem on your own paper.
2. Solve, showing all the necessary work. Use graph paper and a straight edge when graphing.
3. Clearly mark your answer.
4. Check your answer with the answer key to make certain you are practicing correctly.

Notebook: You are required to maintain a 3-ring binder with four dividers, labeled: Notes, Homework, Lab Assignments, & Exams. Your notebook will be collected on exam days and will be graded for completeness and neatness.

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|-----------------|------------------|----------|
| Grading: | Notebook: | 10% |
| | Lab Assignments: | 10% |
| | 4 Exams: | 15% each |
| | Final Exam: | 20% |

Note: Your lowest exam score will be replaced with your final exam score, provided the latter is higher.

Your final average in the course will determine the letter grade posted on your transcript. This grade is determined by the following scale. A(90-100%), B(80-89%), C(70-79%), D(60-69%), F(0-59%).

Calculators: A non-graphing calculator may be used if needed. The TI-30XIIS is a good option. Cell phones are prohibited.

Supplementary Information: The course syllabus, schedule, and grades can be accessed through Blackboard, the online course management system for this course. Please email questions regarding Blackboard support to blackboard@southplainscollege.edu. For information regarding official South Plains College statements about diversity, disabilities, non-discrimination, Title V Pregnancy & Parenting Accommodations, and Campus Concealed Carry, please visit: <https://www.southplainscollege.edu/syllabusstatements/>.

Pre-Calculus Course Outline – Spring 2026

MATH 2412.002 (TR 8:30 – 10:35am)

Topics & Assignments from:

Precalculus with Limits (4th ed.) by Larson, Hostetler, & Edwards

| Week | Date | Lecture Topic | Assignment |
|------|----------------------------|---|---|
| 1 | Jan 13 – T | 1.1 – Lines in the Plane | 1: 1-55 odd |
| | Jan 15 – R | B.3 – Solving Equations Algebraically & Graphically | 2: 1-41 eoo, 51-85 eoo |
| 2 | Jan 19 – M | <i>Martin Luther King Jr. Holiday – no office hours</i> | |
| | Jan 20 – T | B.4 – Solving Inequalities Algebraically & Graphically 1.2 – Functions | 3: 1-47 eoo 1-37 eoo, 39, 43, 47, 49, 51 |
| | Jan 22 – R | 1.5 – Combinations of Functions 1.6 – Inverse Functions | 4: 1-73 eoo 1-81 eoo |
| 3 | Jan 27 – T | 2.1 – Quadratic Functions 2.2 – Polynomial Functions of Higher Degree | 5: 1-61 eoo 1-83 eoo, 87 |
| | Jan 29 – R | Review for Exam 1 | |
| 4 | Feb 3 – T | Exam 1 (15%) | |
| | Feb 5 – R | 2.3 – Real Zeros of Polynomial Functions 2.4 – Complex Numbers | 6: 1-75 eoo 1-77 odd |
| 5 | Feb 10 – T | 2.5 – The Fundamental Theorem of Algebra 3.3 – Properties of Logarithms | 7: 1-45 odd 1-61 eoo, 67, 69, 81 |
| | Feb 12 – R | 2.6 – Rational Functions & Asymptotes 2.7 – Graphs of Rational Functions | 8: 1-31 odd 1-45 eoo |
| 6 | Feb 17 – T | 9.1 – Introduction to Conics: Parabolas 9.2 – Ellipses Part 1 | 9: 1-47 odd, 55 |
| | Feb 19 – R | 9.2 – Ellipses Part 2 9.3 – Hyperbolas | 10: 1-41 odd, 47 1-43 odd, 44 |
| 7 | Feb 24 – T | Review for Exam 2 | |
| | Feb 26 – R | Exam 2 (15%) | |
| 8 | Mar 3 – T | 4.1 – Radian & Degree Measure 4.2 – Trigonometric Functions: The Unit Circle | 11: 1-89 eoo 1-59 odd |
| | Mar 5 – R | 4.3 – Right Triangle Trigonometry 4.4 – Trigonometric Functions of Any Angle | 12: 1-53 eoo, 57 1-97 eoo |
| 9 | Mar 10 – T | 4.5 – Graphs of Sine & Cosine Functions 4.6 – Graphs of Other Trigonometric Functions | 13: 1-61 eoo 1-41 odd |
| | Mar 12 – R | 4.7 – Inverse Trigonometric Functions 5.1 – Using Fundamental Identities | 14: 1-61 eoo 1-71 odd, 77 |
| SB | Mar 16 – 20 | <i>Spring Break – no classes</i> | |
| 10 | Mar 24 – T | Review for Exam 3 | |
| | Mar 26 – R | Exam 3 (15%) | |
| 11 | Mar 31 – T | 5.2 – Verifying Trigonometric Identities Part 1 | 15: 1-19 odd |
| | Apr 2 – R | 5.2 – Verifying Trigonometric Identities Part 2 5.3 – Solving Trigonometric Equations Part 1 | 16: 21-35 odd, 63, 65 |
| | Apr 3 – F | <i>Easter Break – no office hours</i> | |
| 12 | Apr 7 – T | 5.3 – Solving Trigonometric Equations Part 2 5.4 – Sum & Difference Formulas Part 1 | 17: 1-69 eoo |
| | Apr 9 – R | 5.4 – Sum & Difference Formulas Part 2 5.5 – Multiple-Angle & Product-to-Sum Formulas | 18: 1-57 odd 1-79 eoo |
| | Apr 10 – F | <i>Registration Opens for Spring & Summer Classes</i> | |
| 13 | Apr 14 – T | 6.1 – Law of Sines 6.2 – Law of Cosines | 19: 1-27 odd 1-25 odd |
| | Apr 16 – R | Review for Exam 4 | |
| 14 | Apr 21 – T | Exam 4 (15%) | |
| | Apr 23 – R | <i>No Class – Instructor at NASCC: The Steel Conference</i> | |
| 15 | Apr 28 – T | 7.7 – The Determinant of a Square Matrix 9.5 – Parametric Equations | 20: 1-12 all 1-41 odd |
| | Apr 30 – R | 9.6 – Polar Coordinates 9.7 – Graphs of Polar Equations | 21: 1-77 eoo 1-57 odd |
| 16 | May 7 – R 8:00–10:00 am | Final Exam (20%) | |

Note: The instructor reserves the right to modify the course syllabus and schedule, as well as notify students of any changes, at any point during the semester.