

Pre Calculus Course Syllabus [2021-2022]

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Course Description:

This course meets District requirements for math credit. This course is designed to provide a comprehensive study of functions, which are the basis of calculus and other higher mathematics courses. The students will study the properties and graphs of trigonometric, polynomial, rational, inverse, exponential and logarithmic functions in the first semester. During the second semester, the students will explore inequalities, polar coordinates, complex numbers, conic sections, matrices, vectors, sequences, series and limits. Specific topics to be covered in depth are listed below for both Fall and Spring Semester.

Unit 1: Values of Trigonometric Functions

Unit 2: Graphs and Properties of Trigonometric Functions

Unit 3: Inverse of the Trigonometric Functions

Unit 4: Trigonometric Identities

Unit 5: Trigonometric Equations

Unit 6: Applications of Trigonometric Functions

Unit 7: Composition of Functions and Inverses

Unit 8: Attributes of Piecewise and Step Functions

Unit 9: Polynomial and Power Functions in the Real World

Unit 10: Rational Functions

Unit 11: Exponential and Logarithmic Functions

Unit 12: Arithmetic and Geometric Sequences and Series

Unit 13: Binomial Theorem

Unit 14: Conic Sections and Attributes of Ellipses and Hyperbola

Unit 15: Parametric Equations and Plane Curves

Unit 16: Polar Coordinates, Equations, and Graphs

Unit 17: Vectors

Unit 18: Bridge to Calculus: Exploring Limits

Student Expectations:

As a student, you will be responsible for paying attention and participating in class discussion and in small groups. Students will be responsible for completing each assignment thoroughly, neatly and in a timely manner. If a student misses any homework or class work assignments, the student will receive a zero for a grade until the assignment has been completed and turned in. Tests and quizzes should be prepared for in advance. Students are responsible for arriving to class on time, ready to learn and prepared for the day's work. The student is expected to comply with the rules of the teacher as well as those stated in the student handbook. Remember to always do your best!

Supplies needed EVERYDAY*:

1. Sharpened pencils only
2. Two Composition notebooks one for DO NOW and to keep all handouts given in class, notes taken, etc, another one for test corrections
3. Grid paper for graphing purpose
4. 2-inch Binder for keeping all handouts
5. Dry erase markers.

Class Rules – All students must:

1. Be respectful of all teachers, students, and oneself at all times.
2. Be on time to class. Do not stand at the door between classes.
3. Be prepared. Bring all necessary materials to class (pencils, binder with paper, completed homework).
4. Be an active learner. Participate in class activities including classroom discussions, note taking, and cooperative learning.
5. Arrange for make-up work from absences on the day of your return.

6. Take Care of personal issues before class. Use the restroom in-between periods.
7. No iPods, electronic devices, or cell phones. (They will be taken up and sent to the AP's office.)

Classroom Routine:

1. Bell Work: Before tardy bell student should be in desk working on DO NOW.
2. Review: Be prepared to share response or listen to clarify questions
3. Lecture: Be ready to receive a new lesson or review previous lesson
4. Guided Practice: Participate actively during class lecture/lesson
5. Independent/Group Practice: Work diligently or go to assigned group
6. Assessment: Verbal group or individual/Exit Card/Quiz

Hall Passes:

Students must have their ID card, teacher's permission and a hall pass if out of class during assigned class time. Students being requested by the office will be sent an office call slip. Students are not to be released without a pass.

Attendance:

If you are absent, it is your responsibility to find out what you have missed by checking with me. If possible, contact me as soon as you know you will be missing class and we can keep you up to date with assignments. We can also set times for any make-up tests or quizzes which are typically given on the day of your return. You can do so by way of email at brizwana@houstonisd.org . On the day of your return, please see me before school or before class to get caught up (even if that period does not meet that day). Remember that missing just one block day can put you far behind. Please note that ONLY WORK MISSED DURING EXCUSED ABSENCES CAN BE MADE UP.

Promptness:

Students are expected to be in their seats at the bell ready to work each day. Tardy students must have a pass and will be expected to follow LECJ tardy policy as outlined in the student handbook. Tardy students will also not be permitted to make up the daily warm-up points, regardless of whether their tardy was excused

Citizenship/Classroom Philosophy/Expectations:

Every student deserves the right to an education free of interference and therefore any actions or behavior causing disruption to that education will not be tolerated. Our class time is very valuable and will not be wasted on behavioral problems. With this in mind, every student while in our classroom must adhere to the general expectations and specific policies below. All will... -

Be Prepared –

Be Responsible –

Be a Leader and a Team Player –

Show Respect –

Communicate Clearly –

Stay Organized –

Produce Quality Work

Specific Behavior Policies:

1. Be in your seat with materials out and ready to work when the bell rings. See Promptness above.
2. Bring the required materials to class every day.
3. Follow all directions quickly.
4. Do not interrupt when someone else is speaking.
5. No food, drink, candy or gum. Unspillable water bottle with water is the only exception.
6. The bell does not dismiss the class. Students will be dismissed by the teacher once the room is in order.
7. No cell phones or other electronic devices. They will be confiscated per LECJ school policy. Refer to your student handbook. KEEP THEM OFF AND OUT OF SIGHT.... Your success in the classroom is dependent on your success with the

material as well as with your compliance to the preceding classroom expectations and policies. Please know them well and speak with me about them if there is a problem or need for clarification. Any infractions of the preceding expectations and policies will be dealt with at the teacher's discretion.

Class Discipline Procedure:

If a student fails to follow any school or class rules, or has difficulty following class expectations or procedures within the class period, the following disciplinary procedure will be followed:

Step 1: Verbal Reminder with Written Documentation & Conference with Student

Step 2: Written Documentation & Conference with student & Parent Notification (via written notice, phone call, voice message, or conference)

Step3: Referral to Office

Grading Procedures for ALL graded work:

Refer to the Student Handbook

1. Attendance is part of every class work grade (assignments, quizzes, tests, etc). If a student is tardy, their grade for the day's assignment(s) will be affected.
2. Work must be turned in on the due date in order to be eligible to receive full credit.
3. Refer to the handbook for the late work.

Breakdown:

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| 1. Summative Test/Quizzes | 35% |
| 2. Summative Projects | 25% |
| 3. Formative learning and practice | 25% |
| 4. Home Work | 15% |

I am looking forward to a successful and enjoyable year. This will rely on each person doing their part to contribute to a positive learning environment and experience. I expect all of my Algebra students to always conduct themselves in a manner that best represents their positive qualities and contributes to a

successful, safe, positive, and enjoyable learning environment. Prepare to work hard as you expand your knowledge further in mathematics.

*Timeline is Subject to change pending benchmark, assessment, half-days, and student prior knowledge retention.

Note to parents: if you ever need to contact me, please call the school [713-867-5100] and leave a message or schedule a conference.

Thank you and let's have a great year!

Information to the parents:

We use TI- 84 calculator in our classroom day to day. If, as a parent, you want to purchase for practice, please purchase the TI-84 calculator. [optional]. Students will have the downloaded version of Ti84 calculator on their laptop for practice purpose at home.

3rd and 7th period [12:30 to 2:00 pm] are my Conference periods for A and B days respectively.