

PreCalculus

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Course Information Sheet 2016

General Information

Course Overview: PreCalculus is a gateway into college-level math. It involves not only mathematical processes, but also abstract mathematical reasoning to understand how and why to apply them. As the name implies, its purpose is to prepare students for Calculus. In addition, at SVHS it is geared to prepare students for IB Mathematics SL their senior year. It is similar to a college PreCalculus course but has some differences in emphasis.

Units of Study: Fall semester starts by reviewing and building off of the algebraic content of previous years, but then spends most of the time on trigonometry. Spring semester reviews logarithms and probability, and introduces linear modeling, vectors, and differentiation.

Course Level: PreCalculus is a challenging course, intended for students planning to take Calculus in college.

Calculator: A graphing calculator is required. Students will begin using their own TI-83 or TI-84 calculator in class daily, beginning September 1. New TI-84 Plus CE calculators are available for around \$100 on Amazon, and cheaper options are also available by considering used or older models. Other brands of graphing calculators are also available, but are not recommended. Please contact me if acquiring a graphing calculator prior to September 1 may present a financial hardship for your family.

Assignments

Online Quizzes: Each section has a four-question multiple-choice quiz based directly on the online notes. Online quizzes can be resubmitted until a perfect score is achieved.

Classwork: A set of problems aligned with each section of notes is done together as a class. In addition, a few points are given periodically for things such as class preparation and in-class practice problems.

Homework: There is homework for each section. The primary purpose of the assignments is not to practice skills, but rather to be aware where weak points in conceptual or procedural understanding may lie. Therefore, there is little to no redundancy within assignments. Students should not be concerned if there are a small number of problems they are unsure of in an assignment, but should seek help from classmates or others before the due date if there are many problems they do not understand. Homework is graded on completeness of work shown, including proper notation, and on corrections made in class, but not on accuracy.

Quizzes: To help students stay on top of the material, there is a quiz after each section, usually the following day. The material is reviewed explicitly before a quiz is handed out.

Project: There is a linear modeling project second semester to help students who are moving on to IB Math SL next year practice for their IB internal assessments.

Reviews: Reviews are done in self-selected groups of four. Each group gets four different versions of the review that are very similar except for being different levels of difficulty, allowing each student to choose one that is at the level that would most help him or her prepare for the test. Reviews also serve as study guides, and students often take it upon themselves later to print a different version at home to practice.

Tests: Tests cover both conceptual and procedural aspects of the content. A portion of the points missed on chapter tests can be regained by submitting careful explanations of how to do the missed problems correctly. Test explanations can be turned in until the day before the next test.

Things to make life easier

Notes and Book: All class notes and most other course materials are available online at ewyner.com. All assignments except tests are open-notes and open-book. Electronic devices may be used, without sound, at all times except during tests.

Extensions: Students who feel they may need extra time to turn in an assignment, because they will be absent when it is due or for any other reason, can have me sign an extension request form before the assignment is due to change the due date to a different date before the test. In some circumstances, a new due date on or after the test date may be granted. Extensions must be requested in person and are not granted once an assignment is due, so please plan ahead.

Free C: Students may request a "Free C" on any nontest assignment once per grading period. When the assignment is due, it can be turned in normally, or the Free C form can be turned in in its place for a score of 70%. The Free C form must be signed by me before the assignment's due date.

Score Increases: All quizzes can be retaken until the day before the test. Test scores can be increased by doing test explanations, in which students carefully explain how to do the problems originally done incorrectly.

Study Sessions: At any point, a group of 4 to 12 students can arrange a formal teacher-led study session, given availability.

Absences and Late Work

Unplanned absences such as illness: To receive full credit, turn in all late work at least one day before the test. Parents will receive an email at the end of each chapter to confirm that the absences were unplanned.

Planned absences such as sports, school activities, vacation, or medical appointment: To prevent falling behind, students should check in before the days of absence. They can choose to complete assignments, including quizzes and tests, before they leave, or they can request an extension (see above).

For all absences: It is important not to fall behind. Other than quizzes and tests, all course content and assignments are available online. Online quizzes should still be completed on time. Other than online quizzes, students may have extra time for assignments that were turned in when they gone, but not for assignments collected after they return, including quizzes and tests. Late work that is not excused will still receive most of its points as long as it is turned in before the test. No assignments other than projects will be graded if turned in after the test has been handed out.

Signatures

We have read and understood this course information sheet.

Parent

Name: _____

Signature: _____

Student

Name: _____

Signature: _____

Please return this entire page. It is available online for later reference.