

Upper-Level Math Course Selection Guidelines

This information is being provided to help you choose your math course for next year. When making your course selection, you should not only consider this recommendation, but also:

- **School/Life Balance:** Considering your other planned courses, extra-curricular activities, and personal/family needs, will you be able to commit the amount of time and effort necessary for success in the class?
- **Personal characteristics:** How hard are you willing to work? Are you willing to persevere in the face of challenges? Are you neat and organized in showing work to support your answers?
- **Motivation:** Why do you want to take a certain class? Good reasons would be that you think you will enjoy the subject matter or that it aligns with your passions and goals. Poor reasons would be that all your friends are taking it or that it would look good on your transcript/college application.
- For **Statistics and AP Statistics**, students should know that there is a LOT of reading. As such, reading comprehension and analysis/interpretation are critical skills.

IMPORTANT: Consider all of this carefully if you are thinking of taking a class that is above your recommended level! If you enroll in a course and later change your mind, please be aware that there is a limited period to drop the class and enrollment in another course may not be possible.

1) **The Cal High Math Department uses multiple measures (listed below) for recommendations into upper-level math courses.**

- a. Your 1st semester grade
- b. Your 1st semester final exam grade
- c. Your 3rd quarter progress grade
- d. Your score on the course-specific diagnostic test

Your Total Score: _____

Your Course Selection: _____

2) **Each of these measures is assigned a point value according to the following chart:**

Sem1 Grade / Sem1 Final Score / Q3 Progress Grade	Point Value
A/A+	6
A-	5
B+	4
B	3
B-	2
C+	1
C	0

Diagnostic Test Score	Point Value
42 – 45	6
38 – 41	5
34 – 37	4
30 – 33	3
26 – 29	2
22 – 25	1
≤21	0

Your composite score (out of a possible 24) is posted in Schoology under the title “Rec Score”. *Note: this score is posted in the gradebook but does not affect your grade!*

3) **Your recommended course(s) for next year is shown below.** Find the course you are currently taking in the left-hand column. Scores for recommendation into subsequent courses are listed to the right of your current class. Cells that are shaded indicate courses that are either earlier in the math sequence or require additional coursework to be completed.

To: From:	Intro to Data Science	Advanced Math Topics	Precalc	Honors Precalc	Statistics	AP Statistics	Calculus	AP Calc AB
Algebra 2	≤ 24	≤ 7	8 – 14	15 – 24	3 – 15	16 – 24		
Acc. Algebra 2	≤ 24		≤ 3	4 – 9	3 – 8	9 – 24	10 – 11	12 – 24
Precalculus	≤ 24				2 – 7	8 – 24	≤ 13	14 – 24
Honors Precalc	≤ 24				1 – 6	7 – 24	≤ 9	10 – 24

An example scenario is included on the back to help you understand the scoring and course selection process. Answers to some frequently asked questions are also provided. If you have any other questions regarding this information, please contact your math teacher or counselor.

Example Scenario:

Gina is taking Algebra 2 this year. She has earned the following scores/grades in Algebra 2:

- a. 1st semester grade: B (3 points)
- b. 1st semester final exam grade: B- (2 points)
- c. 3rd quarter progress grade: A- (5 points)
- d. Precalculus diagnostic test score: 28 (2 points)

Gina has a total score of 12 points. It is recommended for Gina to take either Precalculus or Statistics. While Gina could choose to ignore this recommendation and sign up for Honors Precalculus or AP Statistics, she may find that she struggles in the class or must devote more time and effort than desired to maintain a passing grade. Gina could also choose to take Intro to Data Science or Advanced Math Topics.

Frequently Asked Questions:

- I am interested in taking Intro to Data Science. What are the prerequisites? When can I take it?
It is recommended that students enrolling in this course have successfully completed Algebra 2. Students will typically be juniors or seniors, but sophomores who have had Algebra 2 have been very successful in this course. Successful students have the curiosity to use math and computer coding to ask and answer statistical questions. No prior experience with computer languages is necessary -- we will learn R in this course.
- I am interested in taking Statistics. What are the prerequisites? When can I take it?
Students enrolling in Statistics must have passed Algebra 2 and be willing to persevere with problems. Students should be interested in simulating real life situations using data and statistics and be willing to examine events such as presidential polls, jury selection, and distribution of M&Ms through statistical modeling.
- I am interested in taking AP Statistics. What are the prerequisites? When can I take it?
Students enrolling in AP Statistics must have passed Algebra 2 with a B or higher. They should be prepared to take a fast-paced, weighted class and handle the work that comes with it. Students should have strong communication skills and understand that AP Statistics involves word problems, which involve reading and comprehension.
- What is the difference between Calculus and AP Calculus AB?
AP Calc AB is roughly the equivalent of one semester of college calculus and prepares you to take the AP exam. Regular Calculus starts with a short review of prerequisite skills/concepts (Calc AB does not) and covers most, but not all, of the material in Calc AB, while going at a slower pace. Assignments and assessments in regular Calculus are shorter and less rigorous than those in Calc AB. Most students who enroll in Regular Calculus are seniors who want to take another year of the traditional math sequence without the increased stress of an AP course. Juniors who take regular Calculus often take Statistics or AP Statistics in their senior year.
- Can I skip AP Calc AB and go directly to AP Calc BC?
No. Students must successfully complete AP Calc AB before taking AP Calc BC.
- Some of my friends are taking math classes at DVC or another outside institution. Is this recommended?
Taking math classes at an outside institution over the summer is often done by students who want to complete the high school math curriculum at an accelerated pace. Colleges prefer that students take courses at their high school if they are offered, and Cal High offers all the math classes that colleges expect students to complete in high school. Students who take classes online or over the summer often struggle when they move on to their next math class because the online/summer classes do not always cover the prerequisite material needed to be successful in subsequent courses. Please carefully consider your learning style, schedule, and motives before taking a class online or anywhere outside of Cal High.