

Overlake Summer Math Test Out Guide

Wednesday, March 18, 2015

In exceptional circumstances, it may be beneficial for an Overlake Upper School student to test out of a course in the core sequence (Algebra I, Geometry, Algebra II, or Precalculus). The Overlake Math Department provides this document to provide some general recommendations, answer some frequently asked questions, and outline the process for testing out of a course.

General Information

Independently studying a year's worth of mathematics over the summer is an extraordinarily difficult task. Students who elect to test out of a course during the summer is not only undertaking an academic challenge. They are also giving up valuable summer time during which they may have many sports, extra-curricular, and family commitments. In addition, vacation time is meant to be a time to relax from the rigors of the Overlake program, and students who devote their time over the summer to academic work may find themselves struggling more during the regular semester.

To this end, the Overlake School Math Department generally recommends that students do not test out of a course during the summer.

However, in some exceptional circumstances, the benefits of self-studying and testing out of a core math course outweighs the downsides. For example, a highly motivated and talented student who did not attend Overlake Middle School and did not have the opportunity to take Algebra in 8th grade may elect to study Geometry over the summer so they can take Calculus their senior year.

In all these cases, the student is intrinsically motivated, a highly independent learner, and has mastered the curriculum of their current and prior courses at an exemplary level.

It is important for students who are passionate and talented in mathematics to know that testing out of a math course is not the only way---and in fact is often one of the worst ways---for them to find challenge and enjoyment in mathematics. Please see the FAQ section below for some suggested summer options for students who wish to broaden their mathematical horizons during the summer.

Geometry / Accelerated Geometry

The Overlake School offers an Accelerated Geometry course over the summer for rising 9th and 10th graders. Students who wish to test out of Geometry or were recommended by their 8th grade math teacher to study Geometry over the summer should first consider the Accelerated Geometry course. While fast paced and rigorous, the summer course provides a structure for the younger students and is taught by experienced Overlake faculty and uses the Overlake Honors Geometry curriculum.

Algebra II

The Overlake Math Department strongly recommends against testing out of Algebra II, due to the following reasons:

1. Experience has shown that mastery of Algebra II is the most important factor in determining a student's success in Calculus and college math courses. Inversely, students who do not have a deep understand Algebra II tend to do poorly in future courses, including Calculus and AP Computer Science. Students who study Algebra II without the guidance of an experienced teacher

often develop "bad habits" that end up being detrimental in the future.

2. The Overlake Honors Algebra II course, compared to many high school Algebra II courses, covers a wide array of material in depth. The sheer amount of content makes this a challenging course to go through over a summer even within a structured course; this is why The Overlake School does not offer a summer Algebra II course.
3. Honors Algebra II, bring a rigorous course, is often the first "real" challenge that many mathematically talented students (and often those who consider testing out of a course) face in a math class. Beyond just mathematics, the course teaches students successful study and time management skills that are necessary for success in Honors Precalculus and AP Calculus courses.

Frequently Asked Questions

What do I have to do to test out of a class?

Two comprehensive exams are given over the summer, similar to the final exams given in December and June of the academic year. You must score at least 80% on both tests to test out of a class. While the second test is meant to only assess the topics in the second half of the course, by nature of the subject the second test is "cumulative" and requires the continued mastery of the first half of the course.

Can I take a summer course instead of studying independently?

With the exception of the Overlake Accelerated Geometry course, we've found no local course offerings that match or exceed The Overlake School's expectations. From our experience, local high school summer courses only cover about 60% to 70% of the Overlake curriculums. You must follow the same test procedures and deadlines even if you elect to take a non-Overlake summer course; you cannot use a non-Overlake summer course credit to place out of a course or to fulfill graduation requirement.

Can I test out of a regular class instead of an Honors class?

All summer test outs are done at the Honors level, with no exceptions.

I am currently a 5th, 6th, or 7th grader. Can I test out of my next math class?

Summer test outs are only available to Upper School students and students entering the Upper School.

I am not currently an Overlake student, but will be attending Overlake as an Upper School student next year. Is the Accelerated Geometry class or summer test out option available to me?

Yes. Please e-mail the department chair directly for more details specific to incoming students.

What resources will the Overlake Math Department provide me for the summer?

The Math Department will provide to you an outline of the curriculum. Depending on the course and textbook availability, you may also borrow a textbook from the Department. Please note that there may be course content that are not covered in the textbook, and supplementary material beyond the textbook will not be provided.

Can I have some information about the tests themselves? Are there practice tests?

The tests given over the summer are similar to the final exams given during the regular semester. In general, they are between 8 to 16 pages long and are timed at 2 hours. More details about each individual test will be given at least two weeks prior to the test date. No practice tests or other review materials will be provided.

When are these tests given?

The first test must be taken on or before 7/31, while the second test must be taken a week before the

first day of school, at the latest. Test times are scheduled with the department chair during the summer. Please be aware that due to faculty and staff availability it may not be possible to schedule tests during specific days or times.

If I want to test out of a course, how do I register for classes?

Course registration in the spring do not take summer test outs into account. You will register for the next class in the normal sequence. For example, if you are currently in Honors Geometry, you would register for Algebra II or Honors Algebra II.

If I test out of Algebra II, will I be able to take AP Computer Science or AP Statistics the following fall?

Yes. However, note that you will not be able to register for those courses in the spring, which means that it is likely that you will not be able to get into the courses. This is especially true if you are a rising 10th grader, as seniors and juniors have priority in electives where space is limited.

Are there any costs associated with this process?

There is a \$100 per test administrative fee, charged to your student account for each test taken. This fee is only charged if a test is taken, and is charged regardless of result. For example, a student who takes the first test but does not pass (and therefore not take the second test) would be charged \$100.

I enjoy mathematical challenges and would like to expand my skills and knowledge over the summer. What are some ways for me to do that besides testing out of a course?

There is a number of summer programs designed for talented mathematical students across the country. These programs expose students to unique challenges in fields of mathematics outside the traditional curriculum (e.g., graph theory, cryptography, topology) and provide an excellent supplement to Overlake's curriculum. Some of these programs include:

- Summer Institute of Mathematics at UW
- MathiLy at Bryn Mawr College and University of Oregon
- Hampshire College Summer Studies in Mathematics at Hampshire College
- PROMYS at Boston University

If you are interested in more information in summer math programs, please contact the department chair.

Process

If you are interested in testing out of a math course...

1. Contact the math department chair before 5/1.
2. The math department chair will meet with you and your family during May to discuss the process, as well as recommendations from both the department and your current teacher.
3. If you wish to proceed, your family will sign a Summer Test Out Contract which outlines the conditions of testing out of a course and the financial costs.
4. You will need to take the first test on or before 7/31. The result of the test will be sent to you within 3 days.
5. If you passed the first test, you will take the second test a week before the beginning of the school year, at the latest. Once again, the result of the test will be sent to you within 3 days.
6. If you passed the second test, you will be contacted by the department chair or the registrar in regards to registering for fall courses.

Contact Information

For questions concerning the summer test out process, please e-mail Wing L. Mui, Math Dept. Chair, at

wmui@overlake.org.