

SUMMER SCHOOL PROGRAMS

Students entering grades 9–12 can take one or more classes in the summer through Lakeside’s Summer School Programs. Financial aid is available for all qualifying students. Students who receive financial aid during the school year will receive the same percentage of aid during the summer school if they register before April 30, 2021. No additional form needs to be filled out to receive this aid. For students who do not receive school-year aid, there is a separate form that will need to be submitted for consideration for summer financial aid.

REGISTRATION PROCESS

Current Lakeside Upper School students will indicate their interest in credit-earning Summer School courses as part of the regular course sign-up period at the end of January. A follow-up email will be sent to parents & guardians in early February to pay for the course and complete the registration process. (Financial aid will be applied at that point.) Registration for these courses is open to Lakeside Middle School students, The Downtown School students, and children of alumni beginning Feb. 15. Registration opens to the public beginning Monday, Feb. 22, 2021.

Summer School courses offerings fall into two categories:

1. Lakeside credit — Students can take classes that earn Lakeside credit. These courses are offered for several reasons. Some students enroll in a summer class to free up time in their schedules for the following academic year. Others enroll in classes because they want access to more classes in that area as they proceed through the Upper School. And some enroll in these classes because they are interested in the course and are not able to work that course into their school-year schedules. Students sign up for these credit-bearing courses during the regular course sign-up period.
2. Skills-based and college-preparation courses — While they do not earn course credit, these skill-building courses may help prepare students for coursework during the academic year, assist with the college application process, or fulfill service learning graduation requirements. Examples of such courses are the Service Learning Experience class, 9th/10th Grade Writing, or The College Application Essay. These classes are not listed below in the curriculum guide but will be posted on our Summer School website in January: <https://www.lakesideschool.org/summer/high-school-courses>.

Students considering taking credit-bearing classes in the summer must consult with their advisors and their teachers. As with any decision regarding coursework, it is important for the student to have a clear understanding of how a summer course fits into the four-year plan while at Lakeside.

SUMMER 2021 COURSE OFFERINGS

Arts

K110 Photography I

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

This class is designed to expose students to the creative and technical aspects of photography while establishing a foundation in the visual arts. Students work with digital cameras and will gain a solid grounding in camera controls and image adjustment while learning to appreciate the role that composition, design, color, and light play in the visual arts. Students will have opportunities to exhibit and showcase their photographs and learn to use digital tools to share their artwork. Cameras are available for student use, though some students may prefer to use their own cameras.

This is a graded course earning one year of credit.

No prerequisites.

K120 Digital Music Production

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

Due to recent innovations in music production technology, anyone can now compose and produce their own songs and beats. In this six-week course, students will produce their own original songs using a Digital Audio Workstation (DAW), covering many genres including pop, rock, and hip hop. This course will cover topics including song concept development, song structure, midi instruments and sampling, and how to mix, using tools such as EQ, compression and filters. Students will also dip into elements of creative writing with an ultimate focus on crafting original lyrics for their songs. This course is structured around the design-thinking process, which involves empathizing with an audience, iterating on a prototype, collaborating with peers, and releasing the final product for more feedback. Over the course of six weeks, students will compose and produce several original compositions and will actively participate in group studio classes, collaborative projects and peer-review exercises.

This is a graded course earning one year of credit. This course is non-repeatable for credit.

Prerequisites: none.

English

K220 English 10

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

This course — which earns one year of course credit — explores how authors from diverse international backgrounds have used literature to explore personal, cultural, and national identities as well as related issues of social justice. Together, we investigate the ways in which literature can be a vehicle for the creation and reflection of cultural and identity, and for the understanding of and resistance to power and privilege. In addition, we study the specific characteristics and effects of different literary genres, principally fiction (novels and short fiction), drama, poetry and literary nonfiction. By learning about the elements of literature through critical reading, students also hone their own expressive skills through a range of analytical, creative, personal and persuasive writing assignments, as well as through public speaking, collaborative assignments and creative projects. Texts include Jhumpa Lahiri’s “Interpreter of Maladies,” Edwidge Danticat’s “The Dew Breaker,” Jeannette Winterson’s “Why Be Happy When You Could Be Normal?,” Trevor Noah’s “Born a Crime,” a play by Shakespeare, and additional novels, short stories, poems and works of nonfiction.

This is a graded course earning one year of credit.

Prerequisites: E100 or one year of high school English.

History

K310 World History I: The Human Web

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

How did the world get so interconnected? To what end has power been used by individuals, empires and groups of people? This is a survey of the formative events, ideas, and conditions of the world from ancient history to the Enlightenment. Using project-based learning as our strategy, students will practice the skills necessary for successful historical inquiry: critical reading of a variety of sources; cogent analytical writing; participating successfully in class discussions; engaging in substantive research; and speaking persuasively. Themes emphasized include the evolution of belief systems, interactions between cultures and the environment, the rise of new political systems, inequity and global economic integration. The summer culminates with a student-driven, comprehensive research project.

This is a graded course earning one year of credit.

No prerequisites.

K330 United States History

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

James Baldwin asserted that “the great force of history comes from the fact that we carry it within us, are unconsciously controlled by it in many ways, and history is literally present in all that we do.” Starting with the essential question of “Who is the ‘we’ in the ‘We the People?’” this course provides students with a foundation for understanding the modern United States in all of its complexity. It also provides a foundation for active citizenship, exploring themes of power, the establishment of a republican form of government, and the intersection of politics and economics. Writing is an important feature of the offering, and students will engage in historical analysis through regular essay writing and multiweek research projects. Students will refine their organizational and communication skills through regular Harkness discussions, debate and group projects.

This is a graded course earning one year of credit.

Prerequisites: H100 and H200 (Lakeside students) or at least one year of high school history.

Math and Computer Science

K510 Algebra II

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

The course focuses on the analysis of functions and their applications while introducing students to a variety of topics in discrete mathematics. After exploring the algebraic, graphical, and numerical properties of general functions, specific types of functions will be examined from these perspectives. The course will examine each of the following families of functions: linear, quadratic, exponential, logarithmic, rational and trigonometric. Additional topics in discrete mathematics such as statistics, matrices, combinatorics, and probability will give students the tools to analyze interesting, highly relevant problems. Both computers and graphing calculators will be used throughout the course. Students will also learn dynamic spreadsheets to further their understanding of the mathematical concepts.

This is a graded course earning one year of credit.

Prerequisite: Algebra I (M110).

K530 Precalculus

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

The focus of Precalculus is on the concept of function and the use of functions as mathematical models. Topics necessary for success in either a calculus or a statistics course (including conic sections, regression techniques, trigonometry and limits) will be studied. Students should anticipate some review of material from previous courses as a bridge toward more advanced understanding. Topics in computer programming including variables, expressions, scripts, and conditional loops and functions will be reviewed and used regularly to explore mathematical content.

This is a graded course earning one year of credit.

Prerequisite: Geometry (M300).

K550 Accelerated Calculus AB

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

This course is an introduction to differential and integral calculus, equivalent to a robust semester of college-level calculus, for students with no previous exposure to calculus. This course emphasizes an intuitive, geometric understanding of calculus concepts and utilizes varied applications and problem-solving techniques from numerical, graphical, and algebraic perspectives. Topics include limits and continuity, the derivative and applications, the integral and applications, the Fundamental Theorem of Calculus, and differential equations with slope fields. This course prepares students for success on the AP Calculus AB exam in May.

This is a graded course earning one year of credit.

Prerequisite: Precalculus (M530).

K581 Computer Science I

6/21 - 7/9

9:00 a.m. – 1:00 p.m.

This course is open to all students with little or no programming experience who want to go beyond just using computer applications. Computer Science I is an introduction to how computers work and how to write software. Technical expertise or prior programming experience is not required, only an open mind and a willingness to experiment, explore and have some serious fun. Students will learn some basics of programming in the Python language by writing a series of programs defined by their instructor. They will then have the opportunity to follow their own interests and pursue more complex projects that may require them to learn new, more advanced programming techniques. Quizzes will be used to check understanding of basic programming concepts, but the majority of the grade will be determined by successful completion of teacher and student defined projects. This course is designed as an introductory experience for students who

are curious about computers and programming, but who have limited or no formal training. *No prerequisites. This is a graded course earning one semester of credit.*

K582 Computer Science II

6/21 – 7/9

9:00 a.m. – 1:00 p.m.

This fast-paced course introduces students to computer programming through the Java language. The course begins by studying elementary algorithms, data types, flow of control, user input, file input/output, recursion and some graphical applications using procedural programming techniques. Problem analysis, planning, coding, and debugging will be emphasized for each project. This course will also teach principles and techniques of software engineering (software life cycle, programming practices, etc.). Students with a programming background in Java or another language can refine their skills by choosing to complete more complex projects. This course when combined with Computer Science III prepares students for success on the AP Computer Science exam in May.

Prerequisites: Successful completion of Computer Science I or equivalent course.

K583 Computer Science III

7/12 – 7/30

9:00 a.m. – 1:00 p.m.

This course is a continuation of Computer Science II covering object-oriented programming and inheritance in Java, more advanced data structures (lists, stacks, queues, trees), and the efficiency and complexity algorithms (particularly searching, sorting). Problem analysis, planning, coding, and debugging will be emphasized for each project. This course prepares students for success on the AP Computer Science Exam in May. Students also design and complete an independent project, culminating in a presentation to the class at the end of the course.

Prerequisites: Successful completion of Computer Science II.

Science

K610 Biology

6/21 – 7/30

Island Wood Trip: 7/11 – 7/15

9:00 a.m. – 1:00 p.m.

As Lakeside's introductory science course, Biology provides students an initial opportunity to become familiar with science as a way of thinking. Students will learn to collect, analyze and interpret information, as well as how to effectively communicate scientific concepts. Student-focused discussions, exploratory activities, and laboratory exercises are designed to enhance scientific literacy. The class will introduce students to a broad range of biological concepts, including ecology, gene expression and cell structure/function, with a particular emphasis on the core concepts of evolution and genetics. If it is safe to do so (depending on the COVID-19 situation this spring), students will spend one week at Island Wood on Bainbridge Island immersed in their studies and doing field research.

This is a graded course earning one year of credit.

No prerequisites.

K620 Physics

6/21 – 7/30

9:00 a.m. – 1:00 p.m.

This lab course is an introduction to the physical world through hands-on and theoretical investigations. Students will be challenged to derive physical meaning from patterns in the data they collect and analyze. Students will investigate ideas surrounding motion, force, momentum, energy, circuits, magnetism, and various topics in modern physics. Students will also learn authentic professional skills such as technical communication (reading, writing, speaking, listening), proportional reasoning, computational thinking, time management, and how to collaborate successfully in a group.

This is a graded course earning one year of credit.

Prerequisites: Biology (S100 / K610) and Algebra II (M210 / K510) or Honors Geometry (M320).