Bothell High School is proud to offer a wide variety of advanced courses for our students. Our Advanced Placement (AP) and College in the High School (CHS) courses offer BHS students the opportunity to take rigorous courses and earn college credit.

AP is a nationally recognized and standardized program created by the College Board offering college-level curriculum in the high school. AP classes attract and challenge highly motivated students wishing to excel academically in the high school setting with the support of AP trained high school teachers. Students enrolled in AP courses are encouraged to take the AP exam(s) in May for the course(s) in which they are enrolled. AP exam fees are $104 per exam, or free for students who qualify. Students who score well on these exams may use AP scores to earn college credit and advanced standing at their future college.

CHS is a dual enrollment program between Bothell High School and local colleges offering students direct access to earn college credit by performing well in CHS courses. Taught by BHS teachers at BHS, CHS courses offer students an opportunity to jump ahead academically by earning college credit while they are meeting their high school graduation requirements. Students pay a significantly discounted tuition rate for their college credit. Bothell students receive their CHS course credits through Bellevue College, Cascadia College, Edmonds Community College and the University of Washington (Seattle). After students graduate from BHS, they send their CHS college transcripts showing the credits they earned while in high school to their future college to transfer the credits.

BHS offers AP courses, CHS courses, and some courses where students can choose to earn AP or CHS credit. To earn AP college credit, students must perform well on the standardized AP exam offered in May. To earn CHS college credit, students must perform well in their class. Some colleges are more likely to accept AP college credit, specifically, some out-of-state and private colleges. In-state public colleges accept both AP & CHS credit equally. Students can learn more about deciding between CHS and AP credit from their course teachers. Students are encouraged to examine the AP and CHS policies at their potential future colleges to assist them in deciding which college credit program is the best fit for them.

**AP MUSIC THEORY (9,10,11,12)**

The ultimate goal of this course is to develop a student’s ability to recognize, understand and describe the basic materials and processes of music that are heard or presented in a score. Like most first year college courses, this AP Music Theory course will emphasize aural and visual identification of procedures based in common practice tonality.

**AP COMPUTER SCIENCE PRINCIPLES (9,10,11,12)**

In this course, students will learn the fundamentals of computing including problem solving, working with data, understanding the internet, cyber security and programming. Students completing this course should leave with a broadened understanding of computer science for use in diverse majors and careers. Those wanting to earn AP credit will submit two ‘through-course performance tasks’ to the College Board for grading, and will take a multiple-choice end-of-year exam. This course is not a prerequisite for Computer Programming I, but Computer Programming I is the logical follow-up class for students inspired to study computer science more deeply following completion of this class.
**CHS COMPUTER PROGRAMMING I (10,11,12)**
*4 college credits from the University of Washington (CSE 142) may be earned from the CHS Program when a grade of B or better is earned.*

Using the C# programming language, students will learn to write programs with good overall design and effective use of objects. Topics include procedural programming (methods, parameters and return values), basic control structures (sequence, if/else, loops), file processing, collections, object-oriented design and working with graphical output. Students end the year with a multi-week group project where they write a game for entry in Microsoft’s “Hunt the Wumpus” programming competition. No prior programming experience is required.

**AP PSYCHOLOGY (10,11,12)**

The Advanced Placement Psychology course is designed to introduce students to the systematic and scientific study of human mental processes and behavior. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology (such as: history and approaches, research methods, biology and behavior, learning and cognition, developmental and abnormal psychology, and social psychology). Students will also learn about careers in psychology and the pathways to additional training. This course is equivalent to an introductory college course in psychology. As a college level course, AP Psychology is best suited for students willing to apply themselves to the study of interesting and sometimes challenging material.

**AP ENGLISH LITERATURE & COMPOSITION (12)**

Advanced Placement Literature and Composition is a yearlong college-level course that culminates in the AP Literature and Composition examination. Students will learn to produce complex academic arguments by reading a wide variety of text drawn from multiple genres, periods, and cultures.

**AP ENGLISH LANGUAGE (11)**

Advanced Placement English Language is a yearlong college-level course that culminates in the AP Language and Composition examination. Students will cultivate critical thinking by reading a wide variety of fiction and non-fiction texts, and will learn the basic elements of rhetoric. The focus of study will be the literal what of the text, the techniques of style underlying the how, and the timeless, universal connections of why.

**CHS ENGLISH (12)**

This college level English option is comprised of two separate semester-length courses working in conjunction to offer a total of 10 credits through Cascadia College: ENGL&101 and ENGL&111. Please see the separate course descriptions below.

**COMPOSITION I (ENGL&101)**

This unique BHS course helps students learn how to make judgments and decisions about their own and others’ communication, especially in college writing. They will practice various modes of reading, developing strategies for interpreting, responding to, and making use of a wide array of texts in their own writing. They will develop and document a personalized process to compose texts that demonstrate an understanding of purpose and audience, are thoughtfully organized, achieve appropriate levels of correctness, and are crafted with specified purposes for identified audiences. This class is organized around a theme chosen by the instructor.

Students who enroll in English 101 should anticipate a rigorous course of study and be prepared to assume significant responsibility to increase and sharpen their understanding of various modes of communication. This is a 0.5 credit semester course taught in conjunction with Introduction to Literature (ENGL&111) for a total of 1.0 high school credit. However, for those who have passed the Accuplacer Exam (or scored a 3 or 4 on the SBAC) prior to enrollment, and earn a 70% or better in the class, you have the opportunity to earn five credits through Cascadia College upon payment of the fee.

**INTRODUCTION TO LITERATURE (ENGL&111)**

This unique BHS literature course grows out of our assumption that fiction, poetry, drama, non-fiction and film help give voice to the human experience while giving poetic shape and meaning to our lives. Students will learn and practice skills for exploring and appreciating the meaning and effects of literature while at the same time encountering and interpreting texts’ relationships to their historical and cultural contexts. Class discussions and written essays will help students discover and express their own thoughts and learning about literature.

Students who enroll in English 111 should anticipate a rigorous course of study and be prepared to assume significant responsibility to increase and sharpen their literary analysis skills. This is a 0.5 credit semester course taught in conjunction with Composition I (ENGL&101)
for a total of 1.0 high school credit. However, for those who have passed the Accuplacer Exam (or scored a 3 or 4 on the SBAC) prior to enrollment, and earn a 70% or better in the class, you have the opportunity to earn five credits through Cascadia College upon payment of the fee.

MATH

CHS PRE-CALCULUS (10,11,12)
*10 college credits from Edmonds CC may be earned under the conditions of the CHS Program.

This is a fast-paced, rigorous course of mathematics that is more challenging than Pre-Calculus. Students must be highly self-motivated and have already demonstrated strong study skills. This course is designed for a student preparing to complete the AP/CHS Calculus course. The first semester of the course is equivalent to Math 141 (Pre-Calculus I) and second semester is equivalent to Math 142 (Pre-Calculus II). Students will continue to build and expand upon their understanding of functions and their graphs. This course prepares students to advance their levels of analysis to include asymptotic behavior, domain restrictions, degree and factorization, and it incorporates more advanced forms of mathematical symbology like interval notation.

CHS DIFFERENTIAL CALCULUS (10,11,12)
*5 college credits may be earned from Edmonds CC under the conditions of the CHS Program.

This is a college-level course that covers limits, differentiation of algebraic, exponential, logarithmic, trigonometric, and inverse trigonometric functions and applications. The course is equivalent to Math 151 (Differential Calculus).

AP CALCULUS AB/CHS CALCULUS (10,11,12)
* Students may take the AP exam in the spring. 10 college credits from Edmonds Community College may be earned under the conditions of the CHS Program (MATH151 & 152).

This course designed for students with a high interest and strong background in mathematics. Students can choose the AP program, and/or the Edmonds Community CHS program. The first semester of the course is equivalent to Math 151 (Differential Calculus) and second semester is equivalent to Math 152 (Integral Calculus). The course includes the conceptual development, formal development, and applications of basic differential and integral calculus. Emphasis is on process, problem solving, and clear communication of ideas and techniques. Students will have the option of taking the Advanced Placement exam in the spring.

CHS CALCULUS III (10,11,12)
*5 college credits may be earned from Edmonds CC through the CHS Program when a grade of B or better is earned.

This is a college level course that builds on the topics covered in AP Calculus AB and extends to cover a third quarter of college calculus. Topics include: infinite sequences and series, Taylor series, calculus of polar and parametric representations, geometry of 2D and 3D space, and calculus of multi-variable functions.

AP STATISTICS/CHS STATISTICS
*Students may take the AP exam in the spring. Up to 5 college credits may be earned from Edmonds CC when a grade of B or better is earned.

Students must be highly self-motivated and have already demonstrated strong study skills. This course is designed to offer a continued study of quantitative thinking in the areas of statistics and probability for the serious math student. Throughout this course, students will be introduced to the major concepts and tools for collecting and analyzing data as it relates to four conceptual themes: exploring data, sampling and experimentation, anticipating patterns and statistical inference. This course reflects the content of a typical introductory college level statistics course. This course may be taken concurrently with another mathematics course offering. The course is equivalent to Math 146 (Introduction to Statistics).

SCIENCE

AP BIOLOGY (10,11,12)
*Students may take the AP exam in the spring. 10 college credits may be earned from Bellevue College under the conditions of the CHS Program (BIO160 & BIO162).
AP/CHS Biology is a second year course designed to prepare students to do well on the optional Advanced Placement Biology exam. It will consider, but not be limited to, biology, ecology, chemistry of cells, cellular energy, evolutionary diversity of organisms, function of plants and animals, heredity, life, and molecular genetics and structure. These topics will be covered through class discussions, lectures, independent student research and both teacher-directed and independent experiments. Some dissection may be required. Students need to be able to work independently. This course meets college entrance requirements for an algebra-based science.

**AP CHEMISTRY (10,11,12)**

AP Chemistry will delve more deeply into the concepts covered in first year chemistry. This class will cover the same materials as is covered in Chemistry 140-160 at the University of Washington (and most other college General Chemistry courses). The class will pick up where Chemistry left off, moving quickly into the application of equilibrium concepts to gaseous, ionic and acid-base systems. The course will prepare students to take the AP Chemistry exam in the Spring.

**AP ENVIRONMENTAL SCIENCE (10,11,12)**

Advanced Placement Environmental Science will provide students with an understanding of the scientific principles that govern interrelationships in the natural world. Important environmental issues will be explored and the comparative risks of known and potential problems will be evaluated. Specific focus on finding solutions to current and future challenges will be highlighted.

**AP PHYSICS I (9,10,11,12)**

Advanced Placement Physics I is the equivalent to a first-semester college course in algebra-based physics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. This course will prepare students to take the AP Physics I exam in the spring.

**AP PHYSICS II (10,11,12)**

Advanced Placement Physics II is the equivalent to a second-semester college course in algebra-based physics. The course covers fluid mechanics; thermodynamics; electricity and magnetism; optics; and atomic and nuclear physics.

**CHS INTRODUCTION TO ENVIRONMENTAL SCIENCE (10,11,12)**

*Up to 5 college credits may be earned from Cascadia College (ENVS&101) when a grade of B or better is earned.

Critical, timely topics in environmental science will be framed by three recurring questions: How would this process operate naturally if humans weren’t here? But we are here, and how does our activity influence the process? Could we do things differently, accomplish the same goals, and have a smaller impact on the environment? Specific topics are likely to include environmental worldviews, sustainability, biodiversity, human population, water quality, soil, land use, air quality, climate change, and alternative energy sources. Along the way, students will learn enough chemistry and history to inform and enrich those studies.

**SOCIAL STUDIES**

**AP HUMAN GEOGRAPHY (9)**

This course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth’s surface. Students learn to employ spatial concepts and landscape analysis to examine human socioeconomic organization and its environmental consequences. They also learn about the methods and tools geographers use in their research and applications. In addition, this course will focus on reading, writing, and study skills to help prepare students to be successful in high school and beyond. AP Human Geography addresses the Common Core State Standards for History, prepares students for the Smarter Balanced State Assessments, and establishes the skills necessary for a successful progression of learning to the next grade level of Social Studies course work.

**AP WORLD HISTORY (10)**

This is a college level, year-long course designed to develop greater understanding of global history; the study of human interactions and their consequences throughout history. This class begins its study in ancient history and ends with an investigation of present day global relations. Students who successfully complete the course will be prepared to pass the AP World History Exam, which will enable them to earn college credit.
**CHS FRENCH 350, CHS GERMAN 350, CHS JAPANESE 350 (10,11,12)**  
*French: 5 college credits (FRCH&123) can be earned from Edmonds CC through the CHS Program.  
*German: 5 college credits (GER&123) can be earned from Everett CC through the CHS Program.  
*Japanese: 5 college credits (JPN&123) can be earned from Cascadia College through the CHS Program.

Local institutions of higher education, as part of their CHS programs will offer their 103 level course as a third year language course option. After paying the class tuition and successfully completing the course juniors and seniors may earn 5 college credits transferable to most other 4-year colleges in the nation. These courses all entail the exclusive use of the studied language in the classroom with an emphasis on communication skills, interactive presentation of grammar and daily practice outside of class.

**CHS FRENCH 450, CHS JAPANESE 450, CHS SPANISH 450 (10,11,12)**  
*French: 5 college credits (FRCH&221) can be earned from Edmonds CC through the CHS Program.  
*Japanese: 5 college credits (JPN&221) can be earned from Cascadia College through the CHS Program.  
*Spanish: 5 college credits (SPN 201) can be earned from U.W. through the CHS Program.

In this fourth year course we will strive towards proficiency in all communication skills. The course is conducted largely in an immersion environment. Students will have an opportunity to improve and practice their acquired skills. An extensive review of grammar enables students to speak at an advanced level. The goal for year-end will be that students will have a working proficiency in the language. The local institutions of higher education, as part of their CHS programs may offer their 201 level course as a fourth year language course option. After
paying the class tuition and successfully completing the course juniors and seniors may earn 5 credits through that respective college transferable to most other 4-year colleges in the nation. These courses all entail the exclusive use of the studied language in the classroom with an emphasis on communication skills, interactive presentation of grammar and daily practice outside of class.