



**BUSAN FOREIGN SCHOOL**

*Embracing Diversity, Striving for Excellence*

[www.busanforeignschool.org](http://www.busanforeignschool.org)

# Course Descriptions 2019-20

Middle School and High School

BUSAN FOREIGN SCHOOL





# General Information

## Graduation Requirements

A diploma will be granted to each student who has:

Attended BFS for at least the entire final semester of their 12<sup>th</sup> grade

Satisfactorily completed 26 credits during their 9<sup>th</sup> to 12<sup>th</sup> grade

Completed 75 required community service hours

Paid in-full fees and tuition owed to BFS

Minimum Graduation Requirements (9 <sup>th</sup> -12 <sup>th</sup> Grade)		
Subject	Credits	Remarks
Language Arts	4	Senior English mandatory
Math	3	Must include Geometry and Algebra 2
Social Studies	3	US History recommended for US citizens
Science	3	Must include two years of a lab science
Electives	9	9 credits required
Foreign Language	2	Two consecutive years of the same language (Three years is strongly recommended)
Visual, Performing, Digital Arts or Computer Science	1	Art, Music, Multimedia/Technology, Computer Science classes or other classes approved by the administration
P.E./Health & Art	1	Must include one semester of both Art and PE
Total	26	26 required
Community Service	Non credit	A total of 75 community service hours are required to graduate, of which 25 hours must be performed in a student's Senior year.



BFS GRADING SYSTEM High School		Weighing Scale	AP/(H) Weighing Scale
Letter Grade	% Grade	4.0 point scale	5.0 point scale
A+	97-100	4.0	5.0
A	93-96	3.9	4.8
A-	90-92	3.7	4.5
B+	87-89	3.3	4.0
B	83-86	3.0	3.7
B -	80-82	2.7	3.3
C+	77-79	2.3	3.0
C	73-76	2.0	2.7
C-	70-72	1.7	2.3
D+	67-69	1.3	1.9
D	63-66	1.1	1.6
D-	60-62	0.7	1
F	0-59	0.0	0

## Advanced Placement (AP) Program

AP courses are open to eligible students in grades 10-12.

AP courses allow students to earn possible college credits while still in high school in addition to the one high school credit. Many universities and colleges in the US and internationally honor AP credits.

It is mandatory that students receive approval from the AP Coordinator, Mr. Saunders, before enrolling in more than two (2) AP courses.

Students may not take more than four (4) AP courses in one school year.

AP tests are administered in the spring of each school year per the College Board, and all students enrolled in AP classes are strongly encouraged to take the course exam.

*Students / families are responsible for all fees that may occur with AP exams.*

BFS offers the AP Capstone™ Diploma program. Students must take the AP Seminar class followed by the AP Research class to earn the AP Seminar and Research Certificate. By taking these two plus an additional four (4) AP classes, students can



earn the AP Capstone Diploma.

## High School Recommended Course of Study

GRADE LEVEL			
Grade 9	Grade 10	Grade 11	Grade 12
Biology	Chemistry	Physics or Environmental Sc. or AP Science	Physics or Environmental Sc. or AP Science
Geometry	Algebra 2	Pre-Calculus or HS Calculus or AP Statistics	AP Calculus or AP Statistics
Asian History	US History or AP World History or AP Psychology	Social Studies (elec) or AP World History or AP Economics or AP Psychology	Government & Economics or AP World History or AP Economics or AP Psychology
Intro to Literature	American Literature	English-11 or AP English	Senior English (mandatory)
Foreign Language 1	Foreign Language 2	Foreign Language 3 or Elective 1	Foreign Language 4 or Elective 1
PE-Health	Visual, Performing or Digital Arts	Elective 2	Elective 2
Elective 1	Elective 1	Elective 3	Elective 3



## CORE COURSES

### English/Language Arts

#### *Grade 6 Reading Workshop*

*Ms. Muller*

This course will provide students with a solid foundation in reading narrative, informational, and persuasive texts. Students will acquire skills to help them tackle tough texts, learn critical reading strategies and analyze techniques used by authors of both fiction and nonfiction. The workshop model empowers young readers through a variety of techniques including whole group instruction, read aloud, literature circles, individual conferences, and book clubs. Students will also have daily opportunities to focus on grammar and vocabulary, deepening their knowledge through the study of roots, prefixes, and suffixes.

#### *Grade 6 Writing Workshop*

*Ms. Muller & Ms. Suk*

Students will write original narrative, informational, and persuasive texts by practicing and following the steps of the writing process. The workshop model provides students with a structured environment where students can write extensively and grow as authors. Students will be given frequent opportunities to share their writing through conferences, peer editing, group reads, and publishing of texts. Writing Workshop is closely aligned with the Reading Workshop scope and sequence; therefore, students can apply the strategies they have learned as readers to their own writing.

#### *Grade 7 Reading Workshop*

*Mr. Nelson*

In 7th Grade Reader's Workshop, students will read and study a variety of different novels that span the many different genres of literature. They will read together as a class and read in literature groups analyzing the components that make up a story map. Students will increase their vocabulary skills throughout the year with a growing list of words taken from the books they read.

#### *Grade 7 Writing Workshop*

*Mr. Nelson*

In 7th Grade writing workshop, students experiment with both narrative and expository writing, increasing their understanding of focus, specific details, and voice. Students work on identifying and correcting grammar errors through weekly practice.

#### *Grade 8 Reading Workshop*

*Mr. Nelson & Ms. Suk*

Reading workshop continues in 8th Grade as students read and master more challenging texts. Students practice developing inferential thinking while supporting their ideas and claims with relevant textual evidence. Students tackle multi-genre projects and practice digging deeper into the texts they read.



## *Grade 8 Writing Workshop*

*Mr. Nelson*

In 8th Grade writing workshop, students can expect to take their writing to a more polished level, both in terms of grammar and style. Students get an opportunity to experiment with expressing their perspectives effectively. Literature circles and reading responses continue here, as well as higher level Latin and Greek vocabulary.

## *Grade 9 Introduction to Literature (Language Arts Credit)*

*Ms. Boyle*

This class focuses on expanding students' understanding works of literature through a genre approach. The goal is to provide students with a strong foundation in literature as they progress through high school. Literature will include short stories, poetry, a young adult fiction, mythology, selections from *The Odyssey*, *Romeo and Juliet* and non-fiction, among others. In addition, vocabulary, through the study of Greek and Latin roots, and grammar will be addressed. Writing skills will focus on the essay and using evidence effectively to support a thesis.

## *Grade 10 American Literature (Language Arts Credit)*

*Ms. Boyle*

This year-long course covers the central themes and movements of American Literature. Readings will involve a wide variety of forms chronologically from the Puritan through contemporary periods. Class activities will include Socratic seminars, informal small and large-group discussions, close reading strategies, webquests, presentations, research, essays, and written responses. Occasional ties to American history class may occur. Grammar and unit-specific vocabulary will also be addressed throughout the course.

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## *Grade 11 English/Language Arts-11 (Language Arts Credit)*

*Ms. Leland*

Language Arts 11 is a thematic course that explores a variety of texts that explore narratives of the human experience. The texts include biblical stories, short stories, the *Dark Knight*, *The Kite Runner*, and *Hamlet*. While they read, students will practice reflection and analysis both in writing and in discussion. Students will focus on making inferences and forming arguments about texts and supporting their ideas with evidence. As the year progresses, students will work to find thematic connections between the text and broaden those connections to the real world. The final quarter of the course, students will write a synthesis essay that focuses on evaluating sources, analyzing arguments, taking a position, and arguing that position with supporting evidence. The culmination of the class will be a choice book. For this final unit, students will read a literary novel of their choice; writing literary analysis paragraphs throughout their reading; make inferences, arguments, and support both with textual evidence; tie their novel to our the class themes; make text connections to the other texts we've read, the outside world, and their own feelings; and as a final, they will write a paper and give a presentation on their book.

## *Grade 12 Senior English: College Preparation Literature and Composition (Language Arts Credit)* **MANDATORY FOR ALL SENIORS**

*Ms. Boyle/Ms. Leland*

This course, specifically designed for BFS seniors, will have several purposes: successful completion of the college application process, preparation for writing at the collegiate level, and an in-depth look at upper-level literature. Literature may vary from year to year. For 2018-19, readings will focus on British and World Literature. Students will reflect and



analyze timeless and universal themes and consider their place as a world citizen confronting the world beyond high school and in many cases beyond South Korea. In addition, students will formally research topics using library databases, for a variety of rhetorical purposes (expository, argumentative, and a synthesis essay analyzing a trend) and produce an appropriate paper through the entire writing process, document sources. Speaking activities may include Socratic discussions, formal speeches or informal group work.

*Grades 10, 11,12 AP Literature & Composition (Language Arts Credit; Elective Credit) **New Course!***

*Ms. Boyle*

AP Literature and Composition covers literature and composition in depth. The focus will be on poetry and the novel, but other types of literature will be addressed. The course is modeled after a college seminar; therefore, all reading is done outside of class, and class time is spent in discussion and writing. A summer assignment is required. Students will have the opportunity to take the Advanced Placement Exam in the spring and college credit may be granted upon successful completion of this exam.

## Math

*Grade 6 Mathematics Course 1*

*Mr. Yang*

In this class, students will investigate and explore decimal and fraction operations, collecting and displaying data, proportional and geometric relationships, and two- and three-dimensional measurements. Emphasis will be placed on fully communicating mathematical work, understanding mathematical notation, and multiple representations, i.e., exploring mathematical concepts simultaneously through graphs, tables, equations and written explanations.

*Grade 6 Advanced Mathematics Course 1 **New Course!***

*Mr. Hanawalt*

In this advanced class, students will investigate and explore decimal and fraction operations, collecting and displaying data, proportional and geometric relationships, and two- and three-dimensional measurements. Emphasis will be placed on fully communicating mathematical work, understanding mathematical notation, and multiple representations, i.e., exploring mathematical concepts simultaneously through graphs, tables, equations and written explanations.

*Grades 7, 8 Pre-Algebra*

*Mr. Yang*

In this class, students will investigate and explore rational and real numbers, integer and exponential operations, data analysis and probability, plane geometry, proportional reasoning, equations and inequalities, slope, sequences and functions, polynomials and logic and discrete math. Emphasis will be placed on fully communicating mathematical work, understanding mathematical notation, and multiple representations, i.e., exploring mathematical concepts simultaneously through graphs, tables, equations and written



explanations.

### *Grades 7, 8, 9 Algebra I*

*Mr. Hanawalt*

In this class, students will investigate and explore equations, inequalities, functions and linear functions, systems of equations and inequalities, exponents and polynomials, factoring polynomials, quadratic functions and equations, data analysis and probability. For advanced students, some of Algebra II topics will be introduced (exponential, radical and rational functions and equations). Emphasis will be placed on fully communicating mathematical work, understanding mathematical notation, and multiple representations, i.e., exploring mathematical concepts simultaneously through graphs, tables, equations and written explanations.

### *Grades 8, 9 Geometry (Math Credit)*

*Mr. Gates*

This course involves the student as a problem solver, one who can reason mathematically and who can communicate and make connections among various mathematical ideas, including the following: points, lines, planes and angles, parallel lines and planes, transformations and congruence, congruent triangles, similar polygons, right triangles, circles, areas of plane and solid figures, volume and surface area of solids, organizing proofs logically and using formulae to solve problems.

### *Grades 9, 10 Algebra 2 (Math Credit)*

*Ms. Williams*

In this course, students will be investigating Algebra as a tool for calculation and problem-solving. We'll start with some review of Algebra I and Geometry and focus on quadratic functions and factoring, polynomial functions, rational exponents and functions, rational functions, data analysis and statistics, sequence and series, quadratic relations and conic sections. Students will start learning how to use graphic calculator with activities and work on research projects for in-depth understanding.

### *Grades 9, 10 Algebra 2 with Trigonometry (Math Credit) [New Course!](#)*

*Mr. Hanawalt*

The content of Algebra 2 with trigonometry is organized around families of functions, including linear, quadratic, exponential, logarithmic, and rational functions. As students study each family of functions, they will learn to represent them in multiple ways – as verbal descriptions, equations, tables, and graphs. They will also learn to model real-world situations using functions in order to solve problems arising from those situations.

In addition to its algebra content, Algebra 2 with Trigonometry includes lessons on probability and data analysis as well as numerous examples and exercises involving geometry and trigonometry. These math topics often appear on standardized tests, so maintaining students' familiarity with them is important. To help students prepare for standardized tests, Algebra 2 with Trigonometry provides instruction and practice on





standardized test questions in a variety of formats – multiple choice, short response, extended response, and so on.

### *Grades 10, 11 Pre-Calculus (Math Credit)*

*Ms. Williams*

In this course, the students will review and learn more depth in Trigonometric, Geometric, and Algebraic techniques and how to integrate them to prepare for the study of calculus and strengthen their conceptual understanding of problems and mathematical reasoning in solving problems. In addition to working problems by hand, students will learn how to use technology such as TI 83/84/89. These standards take a functional point of view toward those topics. The most significant new concept is that of limits.

### *Grades 10, 11, 12 Advanced Pre-Calculus (Math Credit) **New Course!***

*Mr. Hanawalt*

In this advanced course, the students will review and learn more depth in Trigonometric, Geometric, and Algebraic techniques and how to integrate them to prepare for the study of calculus and strengthen their conceptual understanding of problems and mathematical reasoning in solving problems. In addition to working problems by hand, students will learn how to use technology such as TI 83/84/89. These standards take a functional point of view toward those topics. The most significant new concept is that of limits.

### *Grades 11, 12 Calculus (Math Credit) **New Course!***

*Ms. Williams*

Calculus is a transition course to upper-division mathematics and computer science courses. Students will extend their experience with functions as they study the fundamental concepts of calculus: limiting behaviors, difference quotients and the derivative, Riemann sums and the definite integral, antiderivatives and indefinite integrals, and the Fundamental Theorem of Calculus. Students review and extend their knowledge of trigonometry and basic analytic geometry as well as algebraic manipulation. Important objectives of the calculus sequence are to develop and strengthen the students' problem-solving skills and to teach them to read, write, speak, and think in the language of mathematics. In particular, students learn how to apply the tools of calculus to a variety of problem situations.

### *Grades 11-12 AP Calculus AB (Math Credit/Elective)*

*Mr. Gates*

In this college-level math course, students will learn real-world problem solving using math and explore all aspects of single-variable calculus. Students will study limits, differentiation, applications of differentiation, integration, applications of integration and basic differential equations. The students will learn both algebraic approach and geometric approach to understand calculus with help of technology (TI 83/84/89) and graphical analysis. At the conclusion of the course, students are strongly encouraged to take the AP Calculus exam (AB).

### *Grades 11, 12 AP Calculus BC (Math Credit/Elective)*

*Mr. Gates*

In this college-level math course, students will learn real-world problem solving using math



and explore all aspects of single-variable calculus. Students will study limits, differentiation, applications of differentiation, integration, applications of integration and basic differential equations. The students will learn both algebraic approach and geometric approach to understand calculus with help of technology (TI 83/84/89) and graphical analysis. At the conclusion of the course, students are strongly encouraged to take the AP Calculus exam (BC).

### *Grades 10-12 AP Statistics (Math Credit/Elective)*

*Mr. Gates*

The purpose of this AP course in statistics is to strengthen students' understanding of the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes:

1. Exploring Data: Describing patterns and departures from patterns
2. Sampling and Experimentation: Planning and conducting a study
3. Anticipating Patterns: Exploring random phenomena using probability and simulation
4. Statistical Inference: Estimating population parameters and testing hypotheses

The AP Statistics course is an excellent option for any secondary school student who has successfully completed a second-year course in algebra and who possesses sufficient mathematical maturity and quantitative reasoning ability. Because second-year algebra is the prerequisite course, AP Statistics usually will be taken in either the junior or senior year. Students who take the AP Statistics course are strongly encouraged to take the exam.

## Social Studies

### *Grade 6 Ancient History*

*Mr. Muller*

Ancient History covers the birth of humanity and growth of civilizations from Mesopotamia and Egypt to Greece and Rome. The course will include a discussion of characteristics of civilizations including the development of agriculture, governments, division of labor, social hierarchies, and culture. Students will focus on causes, effects, and turning points in the rise and fall of various civilizations. They will investigate major religions including Judaism, Hinduism, Buddhism, Christianity, and Islam and their impact on governments, society, and culture. The course will be rigorous and relevant with instruction that integrates thinking skills, historical processes, and content so that students are able to apply their learning to their own lives. Instruction should include the integration of concepts and principles from history, economics, geography, civics, and the humanities.

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### *Grade 7 Middle Ages History*

*Mr. Muller*

Middle Ages History explores the legacy of civilizations from Europe, Africa, and the Middle East to Asia and the Americas. The course will include ancient Rome, the Byzantine Empire, feudalism, the Crusades, the Renaissance, and Enlightenment. Students will explore the histories of West Africa, China, Japan, and the Americas during Medieval times. The course should be rigorous and relevant with instruction that integrates thinking skills, historical processes, and content so that students are able to apply their learning to their own lives.



Instruction should include the integration of concepts and principles from history, economics, geography, civics, and the humanities.

## *Grade 8 World Geography*

*Mr. Neeno*

Geography is the study of the world, its people, and the landscapes they create. This course will explore a stimulating, case-study approach to geography and students will develop map reading skills. In Mapping Labs, students work in pairs to complete a series of geography challenges that spiral in difficulty. They learn about the physical and human geography of regions around the world and discover and implement the steps in the geographic inquiry process (GIP).

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## *Grade 9 Asian History (Social Studies Credit)*

*Mr. Neeno*

This course offers a detailed study of Asian history, geography, and cultures as it follows the social and political development of the Asian continent. Students will be able to describe the physical geography of Asian countries. They will become familiar with the major religions practiced and how these religions shaped the development of each country. They will discover how the past has influenced the development and present of Asian countries. Students will be assessed through tests, quizzes, homework, and group and individual projects.

## *Grade 10 U.S. History (Social Studies Credit)*

*Mr. Muller*

This social studies course is aimed at developing an understanding of the history of the United States. The course content takes you through a somewhat comprehensive journey through U.S. History with an emphasis on the most impactful periods in U.S. history. Students will learn about the institutions, individuals, groups, ideas, circumstances, and events (both good and bad) which shaped the U.S. into what it is today. Throughout the learning process, students will work to gain an understanding of key historical, political, geographical, and economic concepts which can be applied outside the context of U.S. history. In addition to content, students will work to develop their academic reading, writing, research, presentation, and communication skills to better prepare them for future coursework. Students must complete reading assignments, notes, and participate in discussions in order to be successful. Assessment will take place through frequent quizzes, tests, and projects.

## *Grades 10, 11, 12 Government & Economics (Social Studies Credit/Elective)*

*Mr. Muller*

In the first semester, students apply knowledge to pursue a deeper understanding of the institutions of government. They compare differences and similarities in world governmental systems today. This course is designed to prepare students to solve society's problems, to understand and to participate in the governmental process, and to be a responsible citizen of the United States and the world. In the second semester, students will master basic economic concepts to help them make sound economic decisions in the future. They will use graphs, models, and charts to make sense of complex economic ideas. Students will also complete a personal finance unit.

## *Grades 10, 11, 12 Sociology (Social Studies Credit/Elective)*

*Ms. Muller*



Students in this course will study human societies and social behavior. How do groups of people interact with each other and why? This social science course will ask students to observe students and adults at BFS and make inferences about why people may act the way they do. How do agreed upon values get reflected or represented in society? This class will deal with how we act towards each other and what happens if we deviate from acceptable behaviors. The course will cover a wide range of topics including culture, deviant behavior, race, class, and gender. You'll never think about your social life the same after studying sociology.

*Grades 10, 11, 12 Global Issues/MUN (Social Studies Credit/Elective)*

*Mr. Neeno*

The world has become much smaller in recent years as new technology increases the speed and flow of information from one part of the world to the next. In this course, students conduct inquiries into contemporary and emerging global issues. Students work to gain an understanding of how history, culture, politics, and economics play important roles in shaping many of the global issues of our time. The course will also promote and enhance research, collaboration, and multimedia presentation skills which can transfer to future academic coursework. Students will participate in the Model United Nations (MUN) competition through the South Korea Activities Conference (SKAC) and will have the opportunity to participate in a regional MUN competition.

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*Grades 10, 11, 12 AP World History: Modern (Social Studies Credit/Elective)*

*Mr. Neeno*

Explore key themes of world history, including interaction with the environment, cultures, state-building, economic systems, and social structures, from approximately 1200 C.E. to the present. Learn to apply historical thinking skills including the ability to craft arguments from evidence; describe, analyze and evaluate events from a chronological perspective; compare and contextualize historical developments; and analyze evidence, reasoning, and context to construct and understand historical interpretations.

*Grades 10, 11, 12 AP Psychology (Social Studies Credit/Elective)*

*Ms. Muller*

The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students also learn about the ethics and methods psychologists use in their science and practice.

*Grades 11, 12 AP Microeconomics (Social Studies Credit/Elective)*

*Mr. Yang*

Economics is a social science that studies how individuals, governments, firms, and nations make choices while attempting to satisfy unlimited needs and wants with limited resources. The purpose of the AP Microeconomics course is to give students a thorough understanding of the principles of economics that apply specifically to the functions of individual decision-makers, both consumers and producers, within the economic system. It places primary emphasis on the nature and functions of product markets, includes the study of factor markets, and of the role of government in promoting greater efficiency and equity in the economy.



## Science

### *Grade 6 Earth Science*

*Mr. Cressey*

The primary focus for this course will be on earth sciences; Students will have the opportunity to explore the interesting world of science by participating in a variety of activities and differentiated assessment that cater to the different learning styles of individual students, while still encouraging the development and utilization of new skills and study techniques. There is also a strong emphasis on the scientific method which will be reinforced via laboratory work where students will learn and practice the procedure for conducting experiments. The units of study for this course are Mapping, plate tectonics, earthquakes, volcanoes, erosion, weather factors, and astronomy. Renewable and Non-Renewable Resources and how we capture of energy from the natural world will also briefly be covered.

### *Grade 7 Life Science*

*Mr. Cressey*

The primary focus for this course will be on life sciences; however, we will cover some earth and physical sciences also. Students will have the opportunity to explore the interesting world of science by participating in a variety of activities and differentiated assessment that cater to the different learning styles of individual students, while still encouraging the development and utilization of new skills and study techniques. There is also a strong emphasis on the scientific method which will be reinforced via laboratory work where students will learn and practice the procedure for conducting experiments. The units of study for this course are geologic time, evolution, cell processes, genetics, and structure and function in living things, and the identification/classification of living things.

### *Grade 8 Physical Science*

*Mr. Cressey*

The primary focus for this course will be on physical sciences, which is composed of chemistry and physics. Students will have the opportunity to explore the interesting world of science by participating in a variety of activities and differentiated assessment that cater to the different learning styles of individual students, while still encouraging the development and utilization of new skills and study techniques. There is also a strong emphasis on the scientific method which will be reinforced via laboratory work where students will learn and practice the procedure for conducting a controlled experiment. The units of study for this course are motion, forces, waves, electricity, magnetism, the structure of matter, elements, the periodic table, atoms and bonding, chemical reactions, acids and bases, and carbon chemistry.

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### *Grade 9 Biology (Science Credit)*

*Mr. Lee*

Biology is the study of life and living organisms, including their structure, function, growth, evolution, distribution, and taxonomy. The objectives of this course are to provide students with a general knowledge of biology and to prepare students for a general biology course in university. The course topics are: lab safety and lab materials, the science of biology, the chemistry of life, cell structure and function, photosynthesis, cellular respiration and fermentation, cell growth and division, introduction to genetics, DNA, RNA and protein synthesis, human heredity, Darwin's theory of evolution, evolution of populations,



classification, history of life, introduction to animals, animal evolution and diversity, animal systems I, animal systems II, digestive and excretory systems, nervous system, skeletal, muscular, and integumentary systems, circulatory and respiratory systems, endocrine and reproductive systems, and immune system and disease.

### *Grade 10 Chemistry (Science Credit)*

*Mr. Lee*

Chemistry is the study of the composition, structure, properties, and change of matter. The objectives of this course are to provide students with a general knowledge of chemistry and to prepare students for a general chemistry course in university. The course topics are: lab safety, lab materials, and math review, matter and change, measurements and calculations, atoms: the building blocks of matter, arrangement of electrons in atoms, the periodic law, chemical bonding, chemical formulas and chemical compounds, chemical equations and reactions, stoichiometry, states of matter, gases, solutions, ions in aqueous solutions and colligative properties, acids and bases, acid-base titration and pH, reaction energy, reaction kinetics, chemical equilibrium, nuclear chemistry, and organic chemistry.

### *Grades 10, 11, 12 Environmental Science (Science Credit)*

*Mr. Cressey*

Using skills and tools that all scientists use, students in the environmental science course will study how living things, including humans, affect and interact with their environment. Based on current issues and a knowledge of all the earth sciences and social sciences, we will explore how people use natural resources and, at times, create serious issues that need attention. Based on the Next Generation Science Standards (NGSS) standards, the course will use an applied science approach to focus on real-life challenges, industry, workforce, the future, and the betterment of humanity and to investigate practical solutions to current environmental problems. Students will become aware of human interaction with environmental systems and search for ways in which they can steward their surroundings and the planet. Be ready to debate the issues, create authentic projects that improve and protect our surroundings, and discover ways we can enhance the planet we have inherited from our ancestors. A field science class, students will spend many class periods outdoors in all seasons.

### *Grades 11,12 Physics (Science Credit)*

*Mr. Lee*

Physics is the study of the motion of matter, energy, and forces. The objectives of this course are to provide students with a general knowledge of physics and to prepare students for a general physics course in university. The course topics are: lab safety, lab materials, and math review, the science of physics, motion in one dimension, two-dimensional motion and vectors, forces and the laws of motion, work and energy, momentum and collisions, circular motion and gravitation, fluid mechanics, heat, vibration and waves, sound, light and reflection, refraction, electric forces and fields, electrical energy and current, circuits and circuit elements, magnetism, electromagnetic induction, and additional content.

### *Grades 11,12 AP Chemistry (Science Credit) **New Course!***

*Mr. Lee*

AP Chemistry is the study of matter and the properties, changes, and interactions it undergoes. The objective of this course is to provide students with the knowledge of a general chemistry course in university. The course topics are: lab safety and lab materials,



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select topics from HS chemistry, reactions in aqueous solutions, gases, thermochemistry, intermolecular forces and liquids and solids, physical properties of solutions, chemical kinetics, chemical equilibrium, acids and bases, acid-based equilibria and solubility equilibria, entropy, free energy, and equilibrium, electrochemistry, and additional content.



## ELECTIVE COURSES

### AP Capstone

#### *Grades 10, 11,12 AP Seminar (Elective Credit)*

*Ms. Leland*

AP Seminar is the foundational course in the AP Capstone diploma that engages students in cross-curricular conversations that explore the complexities of academic and real-world topics and issues by analyzing divergent perspectives. Using an inquiry framework, students practice reading and analyzing articles, research studies, and foundational literacy, and philosophical texts; listening to and viewing speeches, broadcasts, and personal accounts; and experiencing artistic works and performances. Students learn to synthesize information from multiple sources, develop their own perspectives in written essays, and design and deliver oral and visual presentations, both individually and as part of a team. Ultimately, the course aims to equip students with the power to analyze and evaluate information with accuracy and precision in order to craft and communicate evidence-based arguments.

#### *Grades 10, 11,12 AP Research (Elective Credit)*

*Ms. Leland*

AP Research, the second course in the AP Capstone experience, allows students to deeply explore an academic topic, problem, issue, or idea of individual interest. Students design, plan and implement a year-long investigation to address a research question. Through this inquiry, they further the skills they acquired in the AP Seminar course by learning research methodology, employing ethical, employing ethical research practices, and accessing, and analyzing and synthesizing information. Students reflect on their skill development, document their process, and curate the artifacts of their scholarly work through a process and reflection portfolio. The course culminates in an academic paper of 4,000-5,000 words (accompanied by a performance, exhibit, or product where applicable) and a presentation with an oral defense.

### Physical Education

#### *Grades 6,7,8 Physical Education / Health*

*Mr. Galles*

Physical Education for MS students consists of individual sport-specific skill training with an emphasis on volleyball & basketball rules, skills, techniques, and strategies for competition. This course ties in well with our school's SKAC league sports seasons in semester 2. Additionally the course focuses on health-related physical fitness concepts based on the Fitness For Life program, which utilizes a textbook and supplemental online ancillary resources.

#### *Grades 9,10,11,12 Physical Education (PE) / Health (Full HS PE Credit)*

*Mr. Galles*

Physical Education for HS students consists of individual sport-specific skill training with an emphasis on volleyball & basketball rules, skills, techniques, and strategies for competition. This course ties in well with our school's SKAC league sports seasons in Semester 1. Additionally the course focuses on health-related physical fitness concepts based on the Fitness For Life program, which utilizes a textbook and supplemental online ancillary





resources.

## Digital Arts/Technology Skills

### *Grades 6,7,8 Maker Space: Design and Engineering*

*Mr. Yang*

This is a year long and project-driven course devoted to solving problems and creativity. Students will analyze problems, create solutions, and test their designs. They will learn to use a variety of materials from paper-craft, traditional wood construction, Lego robotics, and 3D printing as well as others to solve tasks. These tasks will be a combination of practical problems to be solved for the benefit of BFS, problems posed by the teacher, and problems and designs that the students will come up with on their own. Activities will include identifying possible construction projects, determining materials needed, learning the safe and proper use of hand and power tools, working both independently and collaboratively, and the basic use of circuits and programming to accomplish tasks.

### *Grades 9-12 Maker Space: Design and Engineering*

*Ms. Williams*

This is a year long and project-driven course devoted to solving problems and creativity. Students will analyze problems, create solutions, and test their designs. They will learn to use a variety of materials from paper-craft, traditional wood construction, Lego robotics, and 3D printing as well as others to solve tasks. These tasks will be a combination of practical problems to be solved for the benefit of BFS, problems posed by the teacher, and problems and designs that the students will come up with on their own. Activities will include identifying possible construction projects, determining materials needed, learning the safe and proper use of hand and power tools, working both independently and collaboratively, and the basic use of circuits and programming to accomplish tasks.

### *Grades 9,10,11,12 Digital Media/Yearbook (Digital Arts Credit; Elective)*

*Dr. Barnes*

As technology and social trends change the way that people create and consume media, it is becoming more important for corporations, organizations, and individuals to stay updated on the most effective ways to create digital media that helps us spread our ideas. In this course, students will learn practical skills that they can apply to help future extra-curricular clubs, non-profit organizations, etc. Through application within a team atmosphere, students will improve creativity, writing, photography, video editing, journalism, presentation, and promotion skills. Members of this class will create the BFS Yearbook throughout the school year.

## Computer Science

### *Grades 6, 7, 8 MS Computer Coding 1*

*Mr. Huffman*

As technology continues to grow and evolve, computers are becoming more and more integrated into society. As they continue to fill all sorts of roles, it becomes more and more important for us to know not only how they work, but how to use them. How do we talk to them and tell them to do what we want them to? Learn the basics of computer science, programming, and computational thinking with JavaScript. Students begin by learning foundational concepts and applying them to navigate Karel the Dog through a series of



programming puzzles. The second half of the year will feature a heavy focus on game design as students create their own version of a variety of classic games such as Pong and Flappy Bird. This course will use CodeHS (codehs.com), a Javascript-based educational platform designed to teach coding easily and efficiently. This is a great first course for middle school students.

## **Grades 6, 7, 8 MS Computer Coding 2**

*Mr. Huffman*

This is a project-based computer science course that teaches students how to build their own web pages and understand computing ideas. Using CodeHS (codehs.com), students will start by learning HTML and CSS, and will create their own live homepages to serve as portfolios of their creations. Students will also learn the basics of Python and use its text-processing abilities to create several different projects. With a unique focus on creativity, problem-solving and project-based learning, students will have the opportunity to explore several important topics of computing using their own ideas and creativity and develop an interest in computer science that will foster further interest in the field.

## **Grades 9, 10, 11, 12 Intro to Computer Science (*Digital Arts Credit; Elective*)**

*Dr. Barnes*

This class focuses on building skills in computer science and teaches the fundamentals of computer programming as well as some advanced features of the Python language. Using CodeHS, students use what they learn in this course to build simple console-based games. This course does not assume any prior programming experience. Students will learn the basics of programming, and then gradually harness the power of some of Python's more advanced features to make games and solve real-world problems. This course is equivalent to a semester-long introductory Python course at the college level.

## **Grades 11, 12 AP Computer Science Principles (*Digital Arts Credit/Elective*)**

*Dr. Barnes*

AP Computer Science Principles introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. With a unique focus on creative problem solving and real-world applications using JavaScript, AP Computer Science Principles prepares students for college and career through digital projects that showcase your creativity. It is recommended that students have successfully completed high school algebra course and have knowledge of a Cartesian system before taking this course.

## **Grades 11, 12 AP Computer Science A (*Digital Arts Credit/Elective*)**

*Dr. Barnes*

The AP Computer Science A course introduces students to computer science with fundamental topics including problem-solving, design strategies and methodologies, the organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java programming. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. Prerequisites for this course are knowledge of basic English and algebra, including functions and function notation.



## Visual & Performing Arts

### *Grades 6 - 12 Studio Art (HS Arts Credit/Elective)*

*Ms. Soo*

These middle and high school classes are designed with the serious art student in mind. We will emphasize art as an ongoing process that involves you making informed and critical decisions while working in a number of different artistic realms: drawing, 2D, and 3D pieces. You will add to your technical artistic skills and become more aware of all aspects of visual artistic elements. Students will create projects that range from the political to the personal and whimsical by using a variety of media - for example, a collage that makes a powerful visual statement about an important issue or a Picasso-like sculpture splashed with color and pattern. A key focus is the language of art, known as the Elements and Principles of Design. Some key art movements are studied as well as the larger question: "What is Art?" Feedback and reflection are other important parts of the learning process, facilitated by our art teacher. This class will open students' eyes to new ideas about art and creativity.

### *Grades 10 – 12 AP 3-D Art and Design (Arts Credit/Elective) **New Course!***

*Ms. Soo*

AP 3-D Art and Design is intended for students who are seriously interested in the practical experience of creating an art portfolio. The class focuses on critical analysis and innovative art-making processes in which students create and submit a portfolio for 3-D Art and Design with two sections: Sustained Investigation and Selected Works. Students will submit fewer works of art than in the past, giving them more time to focus on in-depth, inquiry-based art and design making. Students should be able to recognize quality in their own work, concentrate on a sustained investigation of a particular visual interest or problem, and use a range of approaches in the formal, technical, and expressive means of an artist.

### *Grades 6 - 8 MS Choir **New Course!***

*Mrs. Pochon*

The middle school Choir class is designed to develop the musical, creative, and expressive abilities of students. Chorus students will learn to use their vocal instrument to create a correct and pleasing singing sound. In addition to learning proper vocal singing technique, students will also learn music reading and listening skills, sight-singing skills, and performance etiquette. Students will begin to develop their mastery of solfege, major and minor scales, and 2 and 3 part harmonies. Students will learn to create and experience music as a musical ensemble. Students will develop an understanding and appreciation of music from different cultures and periods of time. Students will have the opportunity to develop team building and leadership skills as they prepare for school and regional performances. This is a performance-based class. Participation in concert performances outside of regular class hours is required.

### *Grades 6 - 8 MS Concert Band (Arts Credit/Elective) **New Course!***

*Dr. Grant*

This new course is designed to engage musicians in a large and dynamic instrumental ensemble. Concert Band primarily involves wind instruments and percussion. Stringed instruments can be accommodated, but the musical arrangements are designed for wind instruments. In this class we will further develop our skills as a musician working on;



sight-reading, key signature, dynamics, balance and blend, and tuning. We will listen to a variety of musical styles and play concert band selections that are as exciting for the performer as they are for the listener.

### *Grades 9 - 12 HS Concert Band (Arts Credit/Elective) **New Course!***

*Dr. Grant*

This new course is designed to engage musicians in a large and dynamic instrumental ensemble. Concert Band primarily involves wind instruments and percussion. Stringed instruments can be accommodated, but the musical arrangements are designed for wind instruments. In this class we will further develop our skills as a musician working on; sight-reading, key signature, dynamics, balance and blend, and tuning. We will listen to a variety of musical styles and play concert band selections that are as exciting for the performer as they are for the listener.

### *Grades 10 – 12 Music History/Theory (Arts Credit/Elective) **New Course!***

*Dr. Grant*

In this class, we will get a basic understanding of how music has evolved over the ages. We will start with music from over 1000 years ago and follow its development through the Renaissance, Baroque, Classical, Romantic, and 20th Century experiencing the music and exciting lives of the musical masters of the eras. As we move through the historical development of music, we will also explore detail on how the language of music evolved, from Guido in the 11th Century teaching choral parts to people pointing at different parts of his hand for specific musical notes to the writings of 20th Century composers that are musically bizarre! Understanding the elements of music as described for High School Concert Band classes will be explored in much more detail.

### *Grades 10 – 12 AP Music Theory (Arts Credit/Elective) **New Course!***

*Dr. Grant*

AP Music Theory is a college level class covering musicianship, theory, musical materials, and procedures. Musicianship skills, including dictation and other listening skills, sight singing, and harmony, are an important part of the course. Through the course, students develop the ability to recognize, understand, and describe basic materials and processes of tonal music that are heard in a score. The class also includes developing mastery in the rudiments and vocabulary of music, including hearing and noting pitches, intervals, scales and keys, chords, meter, and rhythm.

## World Languages

### *Grade 6-8 MS Spanish 1*

*Ms. Aguerre*

This first-year middle school Spanish sequence will introduce students to the basics of the language and help to develop their expressive confidence. Through stories, songs, games, and other activities, students will communicate about their family and friends, likes and dislikes, school, food, and the world around them. Lessons will focus on specific strategies to help students improve in the four skill areas of listening, reading, writing, and speaking. Students should continue with MS Spanish 2 the following year.

### *Grade 7-8 MS Spanish 2*

*Ms. Aguerre*



This second-year middle school Spanish sequence will build on skills learned in MS Spanish I, expand vocabulary, increase literacy skills, and give students the confidence to express themselves in the Spanish language. Students will work individually and collaboratively in groups to communicate about their personal lives, their communities, and the world around them. During this course student will gain self confident to express their opinions and point of views about nowadays topics in the target language. Lessons will focus on specific strategies to help students improve in the four skill areas of listening, reading, writing, and speaking.

### *Grade 9-12 HS Spanish 1 (Foreign Language Credit)*

*Ms. Taylor*

This first-year high school Spanish course will introduce students to the foundation of the language and help to develop their expressive confidence. Through individual and collaborative activities, students will communicate about their family and friends, likes and dislikes, school, food, culture, and the world around them. Through songs, introductory novels, videos, and other authentic materials, students will be immersed in the Spanish language in order to build a strong base in the four skill areas of listening, reading, writing, and speaking.

### *Grade 9-12 HS Spanish 2 (Foreign Language Credit)*

*Ms. Taylor*

This course will build on skills learned in Spanish I, expand vocabulary, increase grammar proficiency, develop literacy skills, and give students the confidence to express themselves more fully in the Spanish language. Spanish 2 will prepare students to communicate in various times and tenses through the exploration of topics such as the body, the home, shopping, and travel. Through songs, introductory novels, videos, and other authentic materials, students will be immersed in the Spanish language and related cultures in order to improve in the four skill areas of listening, reading, writing, and speaking.

### *Grade 10-12 HS Spanish 3-4 (Foreign Language Credit/Elective)*

*Ms. Taylor*

Spanish 3/4 will review and build on prior skills learned in Spanish I, II and Spanish III, moving students closer to fluency. This level of Spanish instruction assumes a basic-intermediate knowledge of grammar concepts and vocabulary introduced in previous levels. Emphasis is on communicating in Spanish through reading, listening, writing, and speaking in various contexts and aspects of time. Students also study Hispano-American and Spanish cultures, geography, and history through literary texts, film, pop songs, and other authentic materials. Students will frequently participate in individual, paired, and group activities as well as complete written and oral projects to practice and apply new vocabulary and grammar concepts. Students will read at least one novel each semester as well as explore social and cultural topics through literary texts and authentic readings. Students will present on topics using composition and conversation while integrating advanced grammar. Oral and written proficiency will be evaluated frequently.

### *Grades 11-12 AP Spanish Language & Culture (Foreign Language Credit/Elective)* *New Course!*

*Ms. Taylor*

This AP Spanish course will review, build upon, and greatly enhance prior skills learned in Spanish I-IV. This level of Spanish instruction assumes an intermediate-high knowledge of grammar concepts and vocabulary. The AP Language and Culture course is structured



around six themes: Beauty and Aesthetics, Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities and Families and Communities. The course will include composition and communication in Spanish, rooted in literature and in-depth projects, with a heavy emphasis on vocabulary. Students will be expected to actively participate (individually, in partners, and as a whole class) through daily reading, writing, speaking, and listening.

*Grades 9 – 12 Korean for Non-Native Speakers (Foreign Language Credit/Elective)*  
*Ms. Lee*

This introductory course is for non-native speakers of Korean only. The class is designed to build literacy and oral proficiency with lessons appropriate for students' level of Korean understanding. Through individual and collaborative activities, students will communicate and develop vocabulary, literacy, listening and speaking skills.

## English Language Development

*Grades 6 – 8 ELL Language Development*  
*Ms. Suk*

This non-graded class is designed to further develop the listening, speaking, reading, and writing skills of English Language Learner (ELL) students based on the WIDA English language proficiency assessment. Students work toward their individual language goals through a variety of hands-on small group and partner activities. Students develop their knowledge of academic English related to vocabulary, comprehension, and fluency in order to be successful in their content area classes. ELL Language Development content may also support English/language arts class units.

