

# Sun Valley High School

## 2022-2023 Course Selection Guide

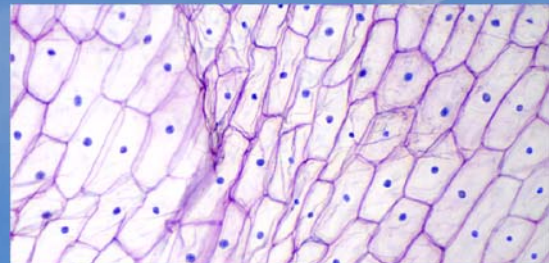
Art Department  
Business & Technology Department  
Family & Consumer Science Department  
Language Arts Department  
Mathematics Department  
Music Department  
Physical Education Department  
Science Department  
Social Studies Department  
World Languages Department  
Career & Technical Education



**Dr. Linda Giles**  
Interim Principal

**Mr. Joseph Peleckis**  
Assistant Principal

**Mr. Pat Rafferty**  
Athletic Director



### Guidance Counselors and Last Name Groups

**Ms. Jillian Foster: A to Da**  
**Mrs. Fran Im: De to I & Vo-Tech**

**Ms. Erin Judge: J to Me**  
**Dr. Kathryn James: Mi to Sc**  
**Mr. Bill Hartwell: Se to Z**







# Academics

Some of the words and terms used in this booklet may not be familiar to all those reading it. The following brief explanations may be helpful.

## Key Terms

### Elective Course

Electives are courses that students choose to study. In most cases, elective courses cannot be taken in place of required courses. They are selected to satisfy total course requirements for graduation in addition to the required courses. ***Any elective must meet enrollment requirements in order to be scheduled.***

### NCAA Requirements

The NCAA Initial-Eligibility Clearinghouse must declare student athletes wishing to participate and be eligible for athletic scholarship/participation at the Division I and II levels during senior year. It is imperative that the student and/or parent notify the guidance counselor that he/she is applying to the Initial-Eligibility Clearinghouse so that the appropriate scheduling can be maintained. Registration is required during the student's junior year.

### Prerequisite

A prerequisite is a course or requirement that a student must complete in order to qualify for entry into another course (*example: Before students can study geometry, they must have successfully completed Algebra I. Therefore, Algebra I is a prerequisite for Geometry*). The Prerequisite may also be part of requirement..



## Academic Levels

### Advanced Placement (AP)

This level is intended for academically talented students whose abilities, interests and demonstrated levels of performance illustrate that they can successfully complete difficult, college-level work in high school. Students may earn college credit or advanced standing at many colleges by earning high scores on the Advanced Placement Tests. The tests are prepared by Educational Testing Services (ETS) and are administered at Sun Valley in May, fee applies.

***\*Students must meet the pre-requisites and other listed requirements for enrollment in Advanced Placement courses. See pages 19-20 of the Student Handbook for additional details.***

### Honors (H)

This level is for high-achieving students who excel academically and have demonstrated an ability to express themselves effectively via various mediums. The designation of (H) in the course book describes those courses in which the expected standards of performance are very high. Students use enrichment materials, engage in research, and complete other activities reserved for those with advanced academic skills.

### Accelerated (X)

This college-prep level describes those courses that make up the major core of the curricula. Students enrolled in the Accelerated level courses are, for the most part, planning to continue their education after high school through competitive four-year colleges or technical studies programs.

### Academic (A)

This college prep level is geared toward two-year and four-year colleges or technical school. The courses are designed to strengthen students' skills and increase their knowledge in basic subject areas to ensure future work and/or school success.





# Academics

Some of the words and terms used in this booklet may not be familiar to all those reading it. The following brief explanations may be helpful.

## Class Deciles Rank

Rank/Deciles in class is calculated on all subjects for which credit is given. It is important to remember that achievement in each year of high school weighs equally in determining the cumulative grade point average. Class deciles rank is a significant factor considered for admission to college. It is **officially** calculated only at the end of an academic year after credits have been earned; for reporting senior year class deciles rank, the junior end-of-year class deciles rank will be used and will be calculated on September 1<sup>st</sup>. Please see Grade Reporting for the chart detailing the weighted value of Sun Valley Courses used in determining class deciles rank.

## College Admissions Requirement

Requirements for admission to college are considerably higher than high school graduating requirements in most cases. College-bound students should check requirements of the colleges to which they want to apply. Some colleges require students to take Accelerated, Honors and Advanced Placement level courses every year in high school. Many four-year colleges require at least 2 years of the same world language in high school; more selective schools require 3 to 4 years of the same world language.

## Delaware County Technical Schools

Students from Sun Valley High School have the opportunity to enhance their education with career and technical experiences directly connected to the real world. Delaware County Career & Technical Center have two locations, Aston Campus and Folcroft Campus. For more information, please reference the Career & Technical Education section on page 43.

## Cyber Classes

Sun Valley High School meets the diverse learning interests and educational needs of students by offering courses through APEX. APEX adds to the current course offerings in this guide by allowing students to select additional innovative, high-quality on-line courses that otherwise would not be available on a case by case basis.

## Grade Promotion

Students enrolled at Sun Valley High School will progress from one grade to another according to the credits they earn and **not according to the number of years they have been enrolled in the high school.**

**Freshman:** Meet the promotion requirements of Northley Middle School.

**Sophomores:** Achieve at least 5 credits and 1 year of high school.

**Juniors:** Achieve at least 11 credits and 2 years of high school.

**Seniors:** Achieve at least 16 credits and 3 years of high school.

## Grade Reporting

### Grade Reporting Procedure

Report cards are issued every nine weeks via online access and an printed at any time. If a printed report card is needed please contact the office. At the midpoint of each quarter an e-alert will be sent, reminding parents to check their students grades.

Advanced Placement	Honors	Accelerated
A+ - 5.0	A+ - 4.5	A+ - 4.0
A - 5.0	A - 4.5	A - 4.0
A- - 4.7	A- - 4.2	A- - 3.7
B+ - 4.3	B+ - 3.8	B+ - 3.3
B- - 4.0	B- - 3.5	B- - 3.0
B- - 3.7	B- - 3.2	B- - 2.7
C+ - 3.3	C+ - 2.8	C+ - 2.3
C - 3.0	C - 2.5	C - 2.0
C- - 2.7	C- - 2.2	C- - 1.7
D+ - 2.3	D+ - 1.8	D+ - 1.3
D - 2.0	D - 1.5	D - 1.0
D- - 1.7	D- - 1.2	D- - 0.7
F - 0.0	F - 0.0	F - 0.0

## Final Grade Report

A student's final grade is determined by the following calculation:

MP1 Grade = 20%

MP2 Grade = 20%

Mid-Term Exam = 10%

MP3 Grade = 20%

MP4 Grade = 20%

Final Exam = 10%



# Academics

## On-Line Grade Reporting

Parents/Guardians also have access to their child's grades via the internet. Parents/Guardians can log onto the district web page and follow directions to view their child's schedule and grade report.

## Keystone Exams

Beginning with the class of 2020 the Commonwealth of Pennsylvania requires all students to take and pass the Keystone Exams in Algebra, Biology and Literature.

In order to graduate and earn a diploma from Sun Valley HS, all students must meet the following requirements:

1. Successfully complete and earn credit for courses as detailed in the Minimum Graduation Requirements.
2. Students that do not demonstrate proficiency on the Algebra I, Biology, and Literature Exams will be scheduled into semester-long, 0.5 credit lab courses to recover content and retake the corresponding exam.



## Graduation Requirements

### Minimum Graduation Requirements

English	4.0
Mathematics	4.0
Science	3.0
Social Studies	3.0
Phys. Ed/Health	1.5
Humanities/Electives	7.5
<b>Total Credits</b>	<b>23.0</b>

### College Bound Students

English	4.0
Mathematics	4.0
Science	4.0
Social Studies	4.0
Phys. Ed./Arts/	
Humanities/Electives	4.0
World Language	3.0
<b>Total Credits</b>	<b>23.0</b>

### Typical Sequence of Classes

#### English

Survey of Literature  
American Literature (10th)  
World Literature (11th)  
British Literature

#### Mathematics

Algebra IA  
Algebra IB  
Algebra I  
Geometry  
Algebra II  
Intro to Calculus  
Calculus  
Statistics  
FST

#### Science

General Science  
Biology  
Chemistry  
Physics

#### Social Studies

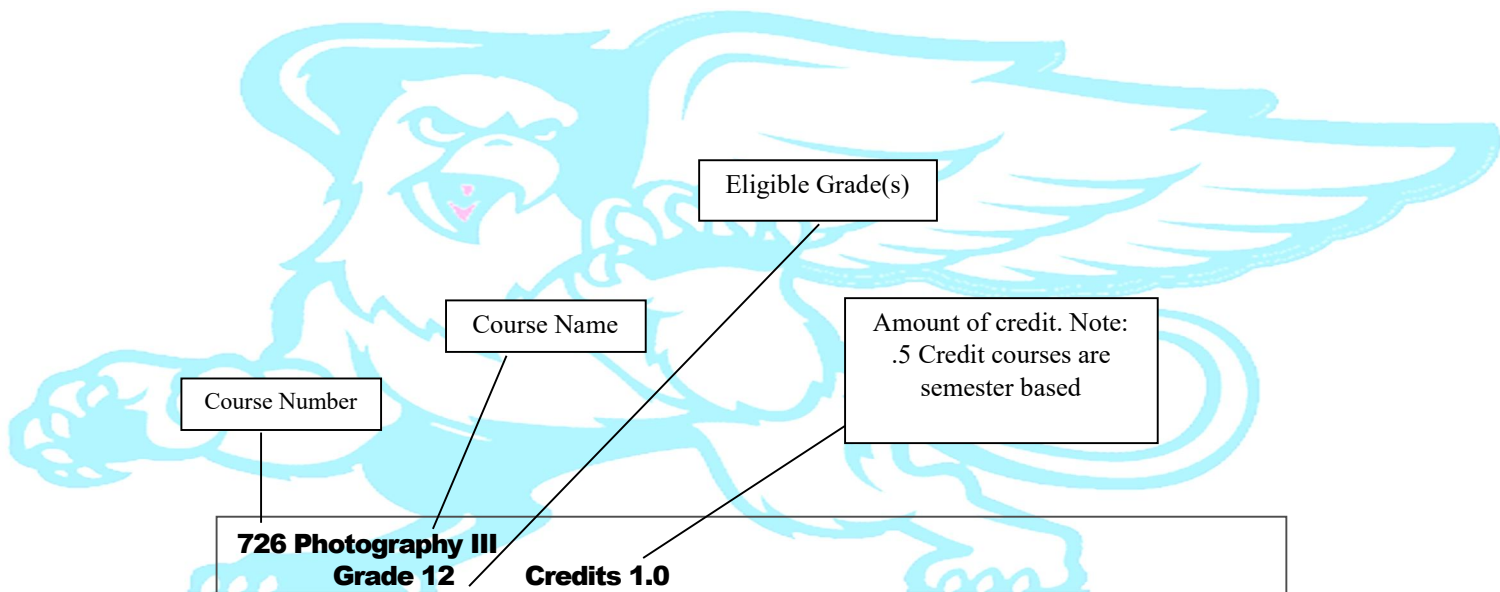
Civics & Government  
World History  
American History  
Elective

# Academics

Sun Valley High School AP Course Selection Information			
Course	Grade Level/s	Prerequisite/s	Graduation Requirement
AP Studio Art	11-12	A in Art Foundations II	Elective
AP Economics	11-12	A or B in AP or H World History or H US History; Teacher Recommendation	Elective
AP Environmental Science	10-12	A or B in Algebra 1 and A or B in previous science courses. Biology must be taken as a pre or	Elective
AP Biology	10-12	A or B in Honors Biology; Teacher Recommendation	Elective
AP Chemistry	11-12	A or B in Honors Chemistry AND A or B in H Algebra II and Teacher Recommendation	Elective
AP Physics	11-12	A or B in Honors Algebra II or A in regular Algebra II and Teacher Recommendation.	Elective or Core Science Credit
AP Language and Composition	11	A or B in Honors American Literature; Teacher Recommendation	Core English credit
AP Literature and Composition	12	AP Language & Composition; A or B in Honors World Literature with Teacher Recommendation	Core English credit
AP Calculus AB	10-12	A or B in Honors Intro to Calculus (or an A in X Intro to Calculus); Teacher Recommendation	Core Math Credit
AP Calculus BC	11-12	Successful Completion of Calculus AB or an A or B in Honors Calculus; Teacher Recommendation	Core Math Credit
AP Statistics	11-12	A or B in Algebra II/ Trig.; Teacher Recommendation	Elective or Core Math Credit
AP Psychology	11-12	Passing 10th/11th AP class or A, B or C in Honors 10th/11th SS or A in accelerated 10th or 11th SS & English. Any grade lower requires Teacher Recommendation.	Elective
AP Government & Politics	12	A or B in AP US History or Honors US History; Teacher Recommendation	Elective
AP World History	10	A in Honors Civics and Government (including mid-term exam); Teacher Recommendation	Core Social Studies Credit
AP US History	11	A or B in AP World or Honors World History; Teacher Recommendation	Core Social Studies Credit



## Reading Your Course Selection Guide



**Course Number**

**Course Name**

**Eligible Grade(s)**

**Amount of credit. Note:  
.5 Credit courses are semester based**

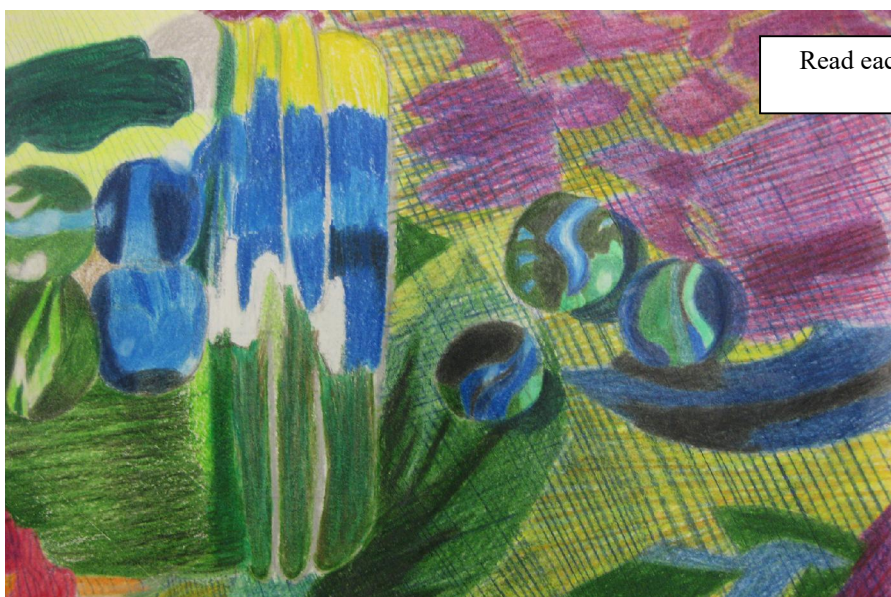
**726 Photography III**  
**Grade 12**      **Credits 1.0**

Prerequisites: Successful completion of Photography I and II.

Photography III is offered to students who have successfully passed photography I and II. Students will work on photographic projects where they may explore personal, aesthetic or technical interests through the development of an individualized photographic series and advanced portfolio development.

Some courses have prerequisites.

Read each course description.



# Guidance

Counselors are important in the course selection process. Through continuous contact, they can assist students in making choices in line with career goals. The counselors use school records including grades, teacher recommendations, test results, work habits, attitudes and previously determined goals to help students with their school plan.

Parents wishing assistance with course selections are encouraged to contact guidance.



## Sun Valley H.S. Guidance

610 - 497- 6300 Ext. 2365



### Naviance

The Naviance system allows the guidance department to support student success in high school and beyond. It allows students, parents and guidance convenient access to new and proven methods to raise student awareness of postsecondary options, chart a path to success and align their coursework to their goals. This allows for better decision making — expanding accountability beyond test scores with a detailed profile for every student and incorporating detailed demographics, survey responses, personality and learning style assessment results, course plans, academic and career interests, key accomplishments, and more.

Students are encouraged to review their Naviance profile and career assessment to align their course selections with their assessment results. Naviance is available through the Penn-Delco website. Select the Sun Valley page and under the search bar “I would like to”, select “Go to Naviance.”

### Modification of Student Schedules

It is important that you choose your courses carefully. **No changes will be made to your course requests in the fall.**

If a student has an administrative error or omission in his/her schedule when they are mailed in the summer, the student or parent should call the Guidance Office. A correction will be made before the start of school. Parents wishing to change or over-ride their child's course selections must complete the Course Change form and return it to the Guidance Office. Only course changes requested in writing will be honored.

### Summer School

Students who schedule summer school courses to make up credits for a failed course must be pre-approved by the Guidance Department before the course begins. Summer School will be done online through Sun Valley using the APEX platform. Summer school courses not taken at Sun Valley must be accredited and parent's must provide the Guidance Department with an official record of the student's participation and the grade received.

### Tutoring in Lieu of Summer School For Make-Up Credit

Students also have the option of being tutored instead of attending Summer School. All tutors must be PA certified to teach the make-up course and subject area and be pre-approved by Sun Valley Administration. Students must receive thirty (30) hours of instruction for full-year courses. The tutor must submit a copy of the course content, the number of hours completed, and the grade received prior to the start of school. All tutoring work must be recorded via a letter from the tutor and filed with the Guidance Department before school opens in September.

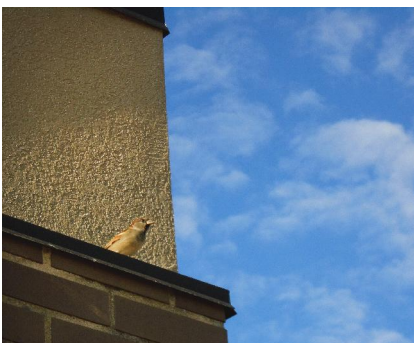
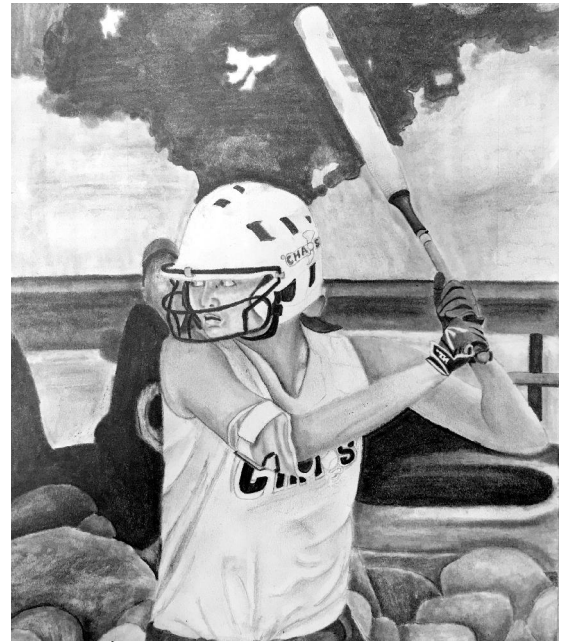




# Art Department

The art courses at Sun Valley are designed for the student who enjoys art and is looking to expand his/her creative skills. Opportunities for developing creative and critical thinking skills, as well as practical skills in a wide variety of media are included in each course offering.

Art Courses	9	10	11	12
Art Foundations I (.5)				
Art Foundations II				
Art Foundations III				
AP Studio Art				
Ceramics & Sculpture (.5)				
Ceramics & Sculpture II				
Ceramics III/IV				
Photography I (.5)				
Photography II				
Photography III				
Mixed Media (.5)				
Advanced Painting (.5)				
Observational Drawing (.5)				
Peer Buddy Assistive Art (.5)				



# Art Department

## **59991 Art Foundations I**

**Grades 9-12 Credits .5**

In this beginning course, students learn to recognize the elements and principles of design and use them in a variety of art media and techniques. Students are provided with opportunities to work in the studio areas of drawing, painting, and print-making. The course includes the four problem-solving areas of art: art criticism, aesthetics, art history, and art production.

## **59991X Art Foundations II**

**Grades 10-12 Credits 1.0**

Prerequisites: A grade of "C" or above in Art Foundations I

This course is intended to help students develop the skills learned in Art Foundations I and expand skills learned a step further in terms of art production, art history, art criticism, and aesthetics. There is an emphasis on art history as students investigate the birth and cycles of different art movements, styles, and geographic regions. Students' projects are a direct reflection of the historical, cultural, and social contexts of both art movements and individual works of art. Students explore a variety of media, subject matter, techniques, and problem solving.

## **ARTFIII Art Foundations III**

**Grades 11-12 Credits 1.0**

Prerequisites: A grade of "C" or better in Art I and Art II

This course is intended to help students develop the skills learned in Art Foundations II and expand skills in art production, art history, art criticism and aesthetics. After completing this course students will be ready for an AP Art Course.

## **51711AP AP Studio Art**

**AP Grades 11-12 Credits 1.0**

Prerequisites: An "A" average in Art Foundations II

In order for all art students to reach their full potential as individuals, this course also requires students to participate in an admissions test. All interested students will receive an assignment to complete, and all submissions will be reviewed by the art department. Upon review, students will be placed in AP or Art III: Independent Study. In order for students to meet the high expectations of the art department, it is important that they are placed at a class level that will allow them to succeed.

AP Art is a college level art course for students who are interested in an intense amount of art production and meticulous development of portfolios. Students entering this course have a thorough background in formal design and study in art history, art criticism, and aesthetics. Students work diligently all year preparing a total of 24 exceptional works (at the pace of approximately one work per week) to be submitted to the AP College Board in May. Students must demonstrate both a variety of artworks and a themed body of artwork. This course requires commitment to hard work (both in and out of class) and frequent evaluation/critique of artworks with the teacher and with peers. Students explore a variety of media, subject

matter, techniques, and problem solving. There is a \$25.00 lab fee for this class. This covers the student's use of professional quality supplies that are reserved exclusively for the AP art students

The 2-D design portfolio must involve purposeful decision-making about how to use the elements of design in an integrative way. Using the principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, figure/ground relationships), artists organize the elements (line, shape, space, color, value, texture) on the picture plane to communicate content. Through his/her portfolio, each student's goal is to show mastery of composition, mastery of technique, mastery of different media, and mastery of concept. Equal weight is placed on the importance of quality and personal voice.

## **5158X Ceramics & Sculpture**

**Grades 9-12 Credits .5**

The goals of this course are to understand art production in three dimensions, investigate three-dimensional media and techniques, and apply the elements of art and principles of design into three-dimensional art. Projects will vary from sculpture, assemblage, paper mache, and ceramics. Students will explore and evaluate the history of three-dimensional objects in art. Students are required to keep current notes and worksheets in a binder, complete class assignments, and produce satisfactory three-dimensional artwork.

## **51582 Ceramics & Sculpture II**

**Grades 10-12 Credits 1.0**

Prerequisites: A grade of "C" or better in Ceramics and Sculpture

Students taking Ceramics and Sculpture II will continue to develop hand building and sculpture skills as a means of solving visual arts problems. Refinement of drawing techniques, alternate methods of surface decoration, and glazing provide the student with a greater number of design options. Historical and cultural studies will continue looking at both past and contemporary artists. Students selecting this course are required to have taken Ceramics and Sculpture I and earned a C or better.

## **13057 Ceramics III/IV**

**Grades 11-12 Credits 1.0**

Prerequisites: A grade of "C" or better in Ceramics and Sculpture II

Ceramics III/IV dives into new material and technique studies of new mediums all while incorporating the taught elements and principles of design into those studies. This class is for students who have a strong interest in art and are considering creative opportunities in their future. New mediums include but are not limited to clay, plastalina, cardboard, metal, soapstone, plaster, found objects, felting, etc. This builds a well-rounded three-dimensional art study here at Sun Valley. Historical and cultural studies will continue looking at both past and contemporary artists. Level four students who have completed level three will commit to creating a portfolio for post high school. Students



# Art Department

selecting this course are required to have taken Ceramics and Sculpture I & II and earned a C or better.

## **11052 Photography I** **Grades 9-12 Credits 0.5**

This photography course introduces students to the Elements of Art and Principles of Design needed for creating photographs: including basic layout and design, color theory, shape, form, and composition. This course will familiarize the student with digital and analog photographic process, equipment, software, materials, and methods through hands-on practice. Emphasis will be placed on the photographic image as a means of expression and the use of the camera to explore and discover the visual world. The history of photography will also be discussed. No experience is necessary.

## **Photography II** **Grades 10-12 Credits 1.0**

Prerequisites: Successful completion of Photography I.

Students in photography II will further explore photographic composition while advancing technical skills in the areas of learning the functions of Digital SLR cameras, studio lighting equipment, post-processing skills, alternative process photography and developing a concentration of work. Students are provided with opportunities to analyze their own work and their peers' work.

## **110523 Photography III** **Grades 11-12 Credits 1.0**

Prerequisites: Successful completion of Photography I and II.

Photography III is offered to students who have successfully passed photography I and II. Students will work on photographic projects where they may explore personal, aesthetic or technical interests through the development of an individualized photographic series and advanced portfolio development. It is recommended that students in this course take the AP Exam when it is offered in May.

## **05154 Mixed Media** **Grades 10-12 Credits 0.5**

Prerequisites: Art I

Mixed Media course will focus on image making through the application and exploration of various artistic mediums including but not limited to painting and drawing, collage and assemblage, photo montage, found objects, Print making, bookbinding etc. Students will focus on work that addresses technical issues such as texture and multiple-layers and the process of discovery and evolution that happens when multiple materials are joined together. Students will be encouraged to seek out ideas and visual

inspiration from their own life experiences and the larger world as source material for their work.

## **05157 Advanced Paint** **Grades 11-12 Credits 0.5**

Prerequisites: Art I

Students will concentrate on the correct use of watercolor, gouache, tempera, acrylic, encaustic oil paint and mixed media painting through project based learning. The semester will involve experimentation with paint through portrait, landscape, figure and abstract composition. Students will review the importance of color theory and art history.

## **05156 Observational Drawing** **Grades 11-12 Credits 0.5**

Prerequisites: Art I and Art II

Observational Drawing is an advanced life drawing course that teaches students how to look, analyze and draw an object from real life. Students will draw from different objects and models located in the studio. Students will also travel around campus to find architectural and landscape drawing opportunities throughout the semester. The class will concentrate primarily on dry medium which consists of pencil, charcoal, pen and pastel. Students will also study the importance of art history, lightening and composition.

## **05201 Peer Buddy Assistive Art** **Grades 9-12 Credits 0.5**

\*Peer Buddy Students Only – Successful Recommendation into the Peer Buddy Program

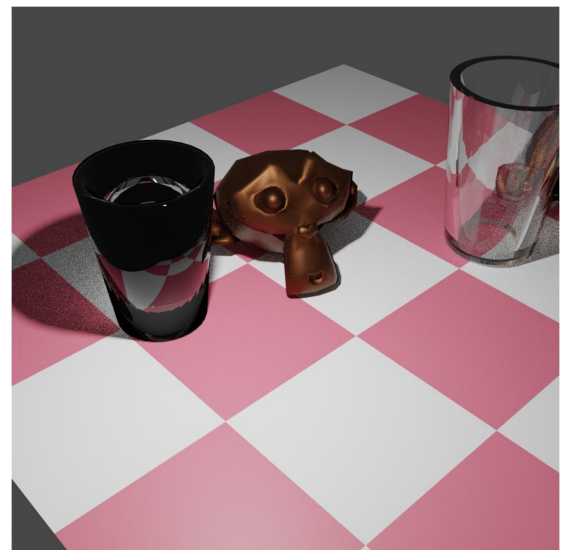
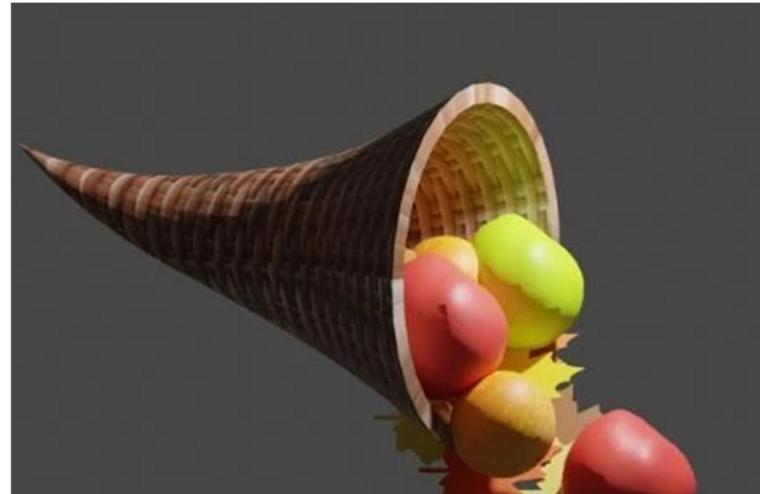
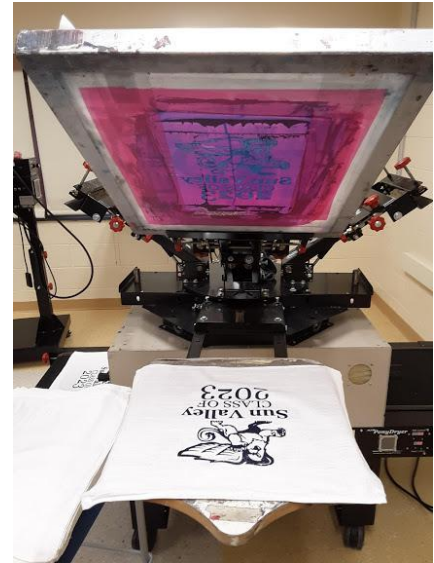
This course is geared toward the special education students and the Peer Buddy Program. This course will introduce fundamental concepts of two dimensional and three dimensional art and design while using a variety of materials, processes, and tools. Students enrolled in this class will be assisted by a peer buddy who will be working on an assignment of a similar type.

Assignments will vary from drawing, painting, collage, small 3D construction, and assemblage. Students will explore and evaluate the four problem-solving areas of art: art criticism, aesthetics, art history, and art production. This course is designed to focus on building the relationship between the special education student, his/her peer buddy, and inclusion within the regular education classroom, while providing a substantial art experience for these students.

# Business & Technology Department

Business courses are open to all students at the grade levels indicated. More detailed information on business course selection is available with the guidance counselors and business education teachers. Be sure to consult with them if you are considering business as a vocation.

Business & Marketing Courses	9	10	11	12
Accounting I				
Accounting II				
Marketing & Sales (.5)				
Business Law (.5)				
Personal Finance				
Introduction to Business (.5)				
Web Design (.5)				
AP Economics				
Sports & Entertainment Management (.5)				
Adobe Illustrator (.5)				
Digital Communication I				
Technology Foundation (.5)				
Textile Design and Creation (.5)				
3-D Modeling (.5)				
Photoshop (.5)				
Introduction to Coding and Game Design (.5)				
Entrepreneurship				
Video Production (.5)				
Business Management				
Digital Animation				





# Business & Technology Department

## **12104 Accounting I** **Grades 9-12 Credits 1.0**

This course exposes students to the world of financial accounting—the language of business. Students explore the make-up, in general, of sole proprietorships, partnerships, and corporations, and discover the importance of accounting activities. Students learn how to record daily business transactions that ultimately result in the preparation of key financial statements such as the balance sheet and the income statement. Century 21 accounting software is used to replicate “real world” accounting experiences. This course is beneficial to students who are interested in a business career and/or those students who want to prepare themselves to more effectively manage their future finances.

## **121042 Accounting II** **X Grades 10-12 Credits 1.0**

Prerequisites: Successful completion of Accounting I.

This course exposes students to the world of financial accounting—the language of business. This course would follow Accounting I with a more advanced and in-depth emphasis on ledgers, journals and cash flow models. This course will also introduce managerial accounting concepts related to inventory control, pricing, and matching revenue with costs.

## **12999 Marketing & Sales** **Grades 9-12 Credits .5**

Marketing and Sales is designed to acquaint students with the fundamentals of marketing in a free enterprise system and a general knowledge of selling and sales related marketing activities. Topics covered include channels of distribution, career opportunities in merchandising, sales techniques and supporting activities to make selling effective.

## **12999X Business Law** **Grades 10-12 Credits .5**

This is a demanding yet personally rewarding course that encompasses many interesting, relevant, and contemporary topics regarding law. The course commences with an overview of ethics, law and the judicial system. However, the main emphasis is placed on the many components of contract law. Course content includes sales and consumer protection, real property, insurance, and business organization.

## **12103 Personal Finance** **Grades 10-12 Credits 1.0**

This course will prepare students with the skills required to make decisions, obtain a job, Explore different options for checking and saving accounts, manage their personal resources and apply academ-

ic skills to daily living experiences. Consumer education along with money management will also be covered.

## **12051 Introduction to Business** **Grades 10-12 Credits 0.5**

This introductory course provides a sampling of business and financial systems utilized in the business world today. This survey style course will cover finance, economics, accounting, marketing, business law, entrepreneurship and management. Students will examine current issues, cases and components in the field of business.

## **10201 Web Design** **Grades 10-12 Credits .5**

Do you like surfing the web? Have you ever wondered how websites are created? This course is designed to introduce you to web page design. You will learn how to create websites through class tutorials and enhance your own web pages. You will use Adobe Dreamweaver, Photo Shop, digital cameras and scanners.

## **4203APAP AP Economics** **Grades 11-12 Credits 1.0**

Prerequisites: A or B in AP or H World History or H US History; Teacher Recommendation

The purpose of this course is to provide students with a college-level experience, to increase student understanding and interest in the daily applications of the way our economy functions, and to prepare students for the Microeconomics course that they will encounter as business majors in any college or university.

## **12163 Sports & Entertainment Management** **Grades 10-12 Credits 0.5**

This course is designed for students interested in a career within sport recreation, sports management and entertainment industry. Students will discover how organizations have turned single events into a multibillion dollar industry. Students will learn all aspects of management including marketing, law, finance and ethics.



# Business & Technology Department

## **11155 Adobe Illustrator** **Grades 10-12 Credits .5**

This course is designed to introduce students to the world of vector graphics. Vector-based graphical elements are highly useful in all manner of design professions. Vector art is fully scalable and utilized by all graphic professions which require detailed, accurate design, including: architects, engineers, graphic artists, silk-screening designers, logo designers, web professionals, and many more. Illustrator is often used as a "pre-press" application because of the precise nature of the elements comprising of artwork and drawings. For this reason, it is an extremely versatile compositing tools which blends many types of artwork, raster graphics, and text into a professionally publishable document.

## **211072 Digital Communication I** **Grades 10-12 Credits 1.0**

Prerequisites: Digital Communication I

Digital Communications introduces a wide variety of digital media skills such as graphic design, advertising design, packaging design, and web design and development. Students explore the fundamental elements of design, multimedia, and communications, and learn how to use the appropriate media to solve communications problems.

## **10003 Technology Foundation** **Grades 9-12 Credits 0.5**

Students will work on small mini units of classes within our curriculum framework. This is designed to offer the students a chance to explore the various areas of technology and see what is right for them. Students will create electronic portfolios and track their accomplishments throughout their high school careers.

## **05164 Textile Design and Creation** **Grades 10-12 Credits 0.5**

This course is designed to introduce students to digital graphic design concepts and silk screen printing techniques. Students will learn how to create vector graphic using Adobe Illustrator, which is used in all graphic professions (such architects, engineers, graphic artists, logo designers, and web professionals). Students will then screen print their digital designs. In the process, students will learn all aspects of running a screen printing business, from budgeting to maintenance to customer service. Students will gain real-world experience by taking on "clients" in the form of Sun Valley clubs and teams who order custom t-shirts from the class.

## **11159 3-D Modeling** **Grades 10-12 Credits .5**

This course introduces students to 3D modeling tools and concepts. Using Sketch-up and Blender, students learn the basics of creating shapes, adding textures and lighting, and rendering. By the end of the course, students produce a series of increasingly sophisticated projects for their 3D portfolio. This course is suitable for students with no prior experience in 3D design or digital media authoring tools.

## **11054 Photoshop** **Grades 10-12 Credits 0.5**

Students will take an in-depth look at Adobe Photoshop – the industry standard software for image editing. Students will learn will take an in-depth look at Adobe Photoshop – the industry standard software for image editing. Students will learn the fundamental tools of Photoshop, such as layers, selections, masks, and adjustments. They will then practice these skills by creating a wide variety of projects for both print and web applications, including advertisements, logos, magazine layouts, webpage layouts, product mock-ups, and many more.

## **10004 Introduction To Coding and Game Design** **Grades 10-12 Credits 0.5**

Students will learn the fundamental concepts and terminology of video game development and develop skills in designing and writing simple computer programs. The course assumes no programming background and provides an overview of the software development process in addition to introducing important programming constructs and methodologies.

## **12053A Entrepreneurship** **Grades 9-12 Credits 0.5**

Students will learn how to develop a business plan, customer service skills, along with merchandising and buying inventory and pricing skills. Students will also be working with children with disabilities in running a school based store.

## **011055 Video Production** **Grades 9-12 Credits 0.5**

This semester course will introduce students to the electronic media of communication through videography. Students will learn how to use the technological tools of video production, including digital video cameras and Adobe Final Cut Express editing software. Students will work in teams to complete a variety of video assignments, including public service announcements, music videos, news broadcasts, commercials, and marketing campaigns. Students who take this course should have an



# *Business & Technology Department*

interest in digital technology and the ability to work well independently and in small groups.

## **04123 Business Management Grades 10-12 Credits 1.0**

In this course students will oversee the operation of the School Store and have the opportunity to guide the overall direction of the Store (and the online store) throughout the year. This course emphasizes the skills needed for managing a business that involves the selection and supervision of employees including efficient use of time, personnel, facilities, and financial resources. Students will explore forms of business ownership; typical business organizational structure; product or service promotion in business; effective communications; human relations skills required in dealing with employees; and effective management strategies used in personnel, finance, production, marketing, and information processing.

## **04122 Digital Animation Grades 9-12 Credits 0.5**

Animation is used everywhere from television cartoons to business presentations. In this semester course, students will learn the origins of animation, starting with flipbooks and culminating in modern digital animation. Students will use Adobe Flash to create professional quality animations, ranging from animated GIFs, walk cycles, web advertisements, and commercials.



# Family & Consumer Science Department

Family Consumer Sciences is the application of math, science and social skills in a occupational and personal setting. Students learn the value of consumer responsibility, personal financing and family skills in these rewarding classes.

Family & Consumer Science Courses	9	10	11	12
Kitchen Science				
Contemporary Living				
Special Culinary Topics: Farm to Table				

## **22201 Kitchen Science** **Grades 9—12 Credits 0.5**

Kitchen Science combines a practical food preparation course with a scientific base. With an emphasis on proper techniques, students will prepare dishes that range from basics to gourmet, including regional American and international specialties. Students will learn to appreciate diversity and celebrate cultural connections through foods while working in a collaborative format. They will also focus on nutrition, current research, career opportunities and business etiquette.

## **22201CL Contemporary Living & Child Development** **Grades 9—12 Credits 1.0**

Test drive life after high school! This course combines education, hands-on experiences and career preparation skills. You will begin a career, buy a house, care for a life-like computerized baby, learn successful financial strategies, cook healthy foods, create crafts and sewing projects, decorate your rooms and plan vacations. Future teachers in the class will have field experience at an elementary school. Guest speakers include chefs, financial experts, designers, and social workers. There is a fee for sewing projects.

## **22202 Special Culinary Topics: Farm to Table** **Grades 10-12 Credits 0.5**

An ever growing trend in restaurants is the use of local ingredients to create culinary masterpieces. This class will demonstrate how to create a meal, start to finish, using fresh, organic produce. Students will learn the value of local ingredients in proper nutrition and the local economy. In conjunction with a home-grown garden, students will design a menu, using the ingredients they harvest.

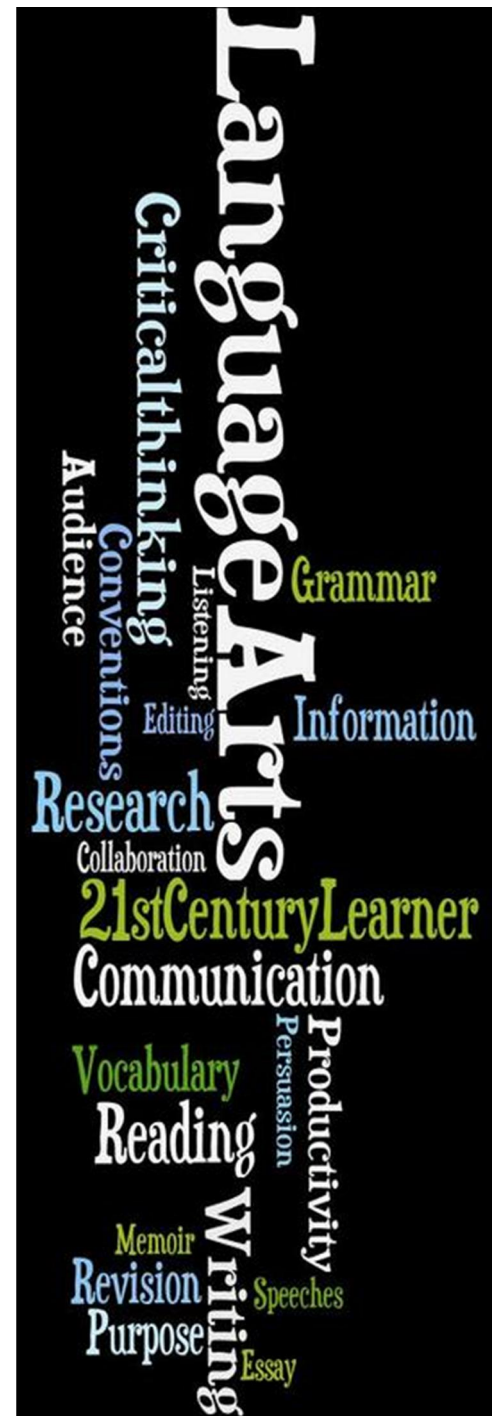




# Language Arts Department

Each summer, students enrolled at Sun Valley High School take part in the summer required reading program. All students are required to read at least two assigned books during the summer. This list is published in June. In addition to the reading assignment, the students must complete a written component. The students are assessed on the material covered in the summer in the first marking period.

Language Arts Courses	9	10	11	12
Survey of Literature				
American Literature				
World Literature				
AP Language & Composition				
British Literature				
AP Literature & Composition				
English/Language Arts I-IV				
Creative Writing (.5)				
Film as Literature—From Page to Screen (.5)				
Film as Literature—Reaction and Critique (.5)				
Journalism & Media Studies				
World Mythology (.5)				
Windows on the World				
Careers (.5)				
Sports Literature (.5)				
Legends and Folklore(.5)				
English Lab (.5)				



# Language Arts Department

## **01099X Survey of Literature** **Grade 9 Credits 1.0**

Accelerated Survey of Literature emphasizes skill building, including reading, writing, and grammar. The curriculum includes major pieces of literature. Students will also have independent reading selections throughout the year. Instruction in persuasive, narrative, descriptive, and expository writing is provided with particular emphasis on developing content, style/syntax/diction, focus, conventions and organization. Written instruction will reinforce and prepare students for the Keystone Composition Exam and PSSA assessment.

## **01099H Survey of Literature** **Grade 9 Credits 1.0**

Prerequisites: In order to remain in honors English classes, students must maintain a grade of "A" or "B," and have teacher recommendation.

Honors Survey of Literature emphasizes skill building, including reading, writing, and grammar. The curriculum includes major pieces of literature. Students will also have independent reading selections throughout the year. Instruction in persuasive, narrative, descriptive and expository writing is provided with particular emphasis on developing content, style/syntax/diction, focus, conventions, and organization; speaking and listening skills will also be addressed. There will be at least one research assignment. Instruction will reinforce and prepare students for the Keystone Composition Exam and PSSA assessment.

## **01055X American Literature** **Grades 10 Credits 1.0**

Accelerated American Literature will give students the opportunity to critically examine various American literary works in chronological order over the past four centuries. Students will learn to relate the literature of the past to present day situations. Emphasis will be placed on critical listening and reading skills, analyzing, researching, speaking and writing in various modes. There are two research requirements for this course: a research paper in the first semester and a research project in the second semester. Students will be required to read two novels per marking period independently. Along with the text, students will read *The Crucible* as well as one other notable work. Students are required to read two books during the summer prior to the course. Students will be tested on these books in September, and these test grades count as major grades.

## **01055H American Literature** **Grades 10 Credits 1.0**

Prerequisites: In order to remain in honors English classes, students must maintain a grade of "A" or "B," and have teacher recommendation.

Honors American Literature allows students to study the traditions from which our country's texts come as well as appreciate and understand the rich fabric of a nation. Through a variety of reading, writing, speaking and listening experiences, students will develop a critical eye with which to study our American literacy heritage. They will consider through both examination of literature of all genres and multiple writing pieces the diverse cultures of American society. Along with the text, students will read *The Crucible*, *The Great Gatsby* and *The Adventures of Huckleberry Finn*. Students are required to read two independent novels per marking period. They are also required to complete a research project and term paper. Students must read three books during the preceding summer. Students will be tested on these books in September and the test grades are important in the 1<sup>st</sup> marking period.

## **1058X World Literature** **Grade 11 Credits 1.0**

Accelerated World Literature emphasizes literary analysis through reading, writing, speaking and listening. The anthology selections in the text include short stories, drama, poetry and non-fiction. Students will write narrative, expository and persuasive essays related to texts as well as utilize library resources and the Internet. Student are required to read two books during the summer preceding the course and must complete related projects that will be graded upon arrival in September. Book titles will be provided to students in June of freshman year. During the course, students are required to read selections from the textbook, novels and dramas. Students are required to read two independent books per semester. A research paper on a controversial topic must be completed to pass the course. Students will be required to located acquire, and assimilate information on a topic of their choice using the accepted MLA format and all procedures leading to a final paper. Additionally, students may be administered the Keystone Literature Exam.

## **1058H World Literature** **Grade 11 Credits 1.0**

Prerequisites: In order to remain in Honors English classes, students must maintain a grade of "A" or "B" and have teacher recommendation.

Honors World Literature is the second of a four year program for advanced students. The focus is a survey of World Literature. The steps of the writing process are reviewed and students are required to demonstrate mastery of the four major modes of writing: descriptive, narrative, persuasive and expository. Grammar and vocabulary skills are taught in conjunction with the writing process. Students are required to read three books during the summer preceding the course and must complete related projects that will be graded upon arrival in September. During the course, students are required to read selections from the textbook, novels and dramas. Students are required to read two independent books per semester. A literary criticism of a non-American novel must be completed to pass the course. Students will locate, acquire and assimilate information using the accepted MLA format and all procedures leading to a



# Language Arts Department

final paper. Additionally, students may be administered the Keystone Literature Exams.

## **1005AP AP Language & Composition** **AP Grade 11 Credits 1.0**

**Prerequisites:** A or B in Honors American Literature; Teacher Recommendation

The 11<sup>th</sup> grade Advanced placement Course in English Language and Composition engages students in becoming skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts, and in becoming skilled writers who compose for a variety of purposes. The focus of the course is to prepare students for the Advanced Placement examination given in May. Accordingly, students must read complex texts with understanding and write prose of sufficient richness and complexity to communicate effectively with mature readers. The course assumes that students already understand and use Standard English grammar with proficiency; therefore, the emphasis of the course is to enhance their ability to use grammatical conventions both appropriately and with sophistication, as well as to develop stylistic maturity in prose.

The emphasis is on intense academic inquiry and expression. During the summer, students are required to read four books. Students will be tested on these books during the first two weeks of school and are important grades for the 1<sup>st</sup> marking period. The first three weeks of class consist of the study of these books and several related writing projects.

Students are required to read novels and essays of varying lengths. The literature is selected from the College Board bibliography for Advanced Placement courses. Students will also learn to write with proficiency in all modes—narrative, exploratory, expository, and argumentative. Several drafts of each essay are required. Students are also expected to contribute to class discussions on a daily basis. Evaluations are based on consistent contributions in class and continuing improvements in writing. Continuance in the Advanced Placement program requires a “B” average and passing a writing sample.

## **01057X British Literature** **Grade 12 Credits 1.0**

This course will examine British Literature from its origin to the present. Historical introductions will allow students to have an understanding of the social, economical and political climate during which each piece was written. This will allow the student to have a deeper understanding of author’s intent and beliefs. Reading, literary terms and techniques, literary analysis, vocabulary development, writing techniques and critical thinking will be vital features of this course. A variety of writing experiences will be included such as essays, poetry explication and research papers. Speaking and listening skills will be emphasized through class discussions, oral reports, speeches and classroom debates. Two of the following will be read:

Teachers may assign any of the remaining novels. Students must also read two additional independent novels. Students will need to complete an assigned research project and term paper to meet the requirements for course completion. Each student is required to read two books the summer prior to senior year. Students will be tested on these books within the first few weeks of September and those test grades are major grades. The books will serve as sources of reference throughout the entire year. There will be a comprehensive final examination at the end of each semester.

## **01057H British Literature** **Grade 12 Credits 1.0**

**Prerequisite:** In order to remain in honors English classes, students must maintain a grade of “A” or “B” and have teacher recommendation.

Honors British Literature focuses on origin to present publications. Works studied will be placed in historical context including the social, economical and political climate during which each piece was written. This will allow students to develop a deeper understanding of the authors’ intent and beliefs. Critical reading, literary analysis, writing strategies and higher level thinking skills are vital features to the course. Writing experiences will include expository, analytical and persuasive essays, poetry explication, other creative pieces and research papers. During the summer preceding the course, students are required to read independently one specified book and two self selected from a distributed list. Students are to return to school in September with a journal related to the required book. They will be tested on the required book. The test grade will be a major grade of the 1<sup>st</sup> marking period.

## **1006AP AP Literature & Composition** **AP Grade 12 Credits 1.0**

**Prerequisites:** AP Language & Composition; A or B in Honors World Literature with Teacher Recommendation

The AP Literature and Composition course offers college level studies in literature and composition while still in high school. It requires students to engage in careful reading and critical analysis of selected works. Students read works from several genres and periods from the 16<sup>th</sup> to the 20<sup>th</sup> centuries. These selections require close, active and careful reading followed by analysis and interpretation. Students will learn how to make careful observations of textual detail, establish connections among their observations, and draw from those connections a series of inferences leading to an interpretive conclusion about each work’s meaning and value.

Writing assignments will focus on critical analysis of literature and will include expository, analytical, persuasive, and argumentative essays, as well as creative pieces. Writing instruction will focus attention to the development and organization of ideas in clear, coherent and precise language. It will include the elements of style, including a

# Language Arts Department

wide-ranging vocabulary, a variety of sentence structures, logical organization, and the effective use of rhetoric.

There will be a comprehensive examination at the end of the first semester. Students will take the Advanced Placement Examination in May.

## **1001-1004 English/Language Arts I—IV** **Grades 9-12 Credits 1.0**

Throughout these courses students develop their knowledge of textual elements and structures enabling them to engage in close reading of increasingly difficult texts. They also develop analytical skills and strategies while moving from a variety of literature genres to a variety of nonfiction genres. Students read literary nonfiction that encompasses a variety of topics, central ideas, and arguments. They also read multiple texts in the same genre to understand what sets it apart from other genres. Through close analytical reading, readers develop theories about which writer is most effective in conveying intent, purpose, and meaning. As readers and researchers, students also study a variety of argumentative texts for structure, tone, audience, claim, counterclaim, evidence, and line of reasoning.

## **011101 Journalism & Media Studies** **Grades 9-12 Credits 1.0**

The course in Journalism and Media Studies will train students in print media reporting, writing, editing, layout, and graphics. The course will offer intensive study on media literacy in many different forms. Students will produce podcasts, video broadcasts, and other examples of digital media. The goal of the course is to educate students to be skilled producers and consumers of information.

## **06289 World Mythology** **Grades 9-12 Credits 0.5**

Students will study an overview of mythologies from around the world, with an emphasis on similarities in theme and function for myths from diverse times and cultures. The course covers the structure of myths, common elements in myths, and the purpose and characteristics of myth. Students will evaluate contemporary theories on myth and mythology and examine the role of mythology in creating and reflecting culture.

## **01104 Creative Writing** **Grades 9-12 Credits 0.5**

Creative Writing is designed for students who wish to experiment in self-expression through writing. Writing emphasis is placed on imitating models, pre-writing and editing techniques, examining various publishing venues and exploring different forms. Students will study

advanced writers such as Kurt Vonnegut, Jean Shepherd, and classic authors, along with a collection of contemporary writers and poets such as, David Sedaris and Maile Meloy. Students will write daily, keep a journal, participate in readings of works both in class and publicly, enter contests and submit works for publication. Students will participate in workshop activities and peer-editing sessions that help enhance final products. The course will be both writing and reading intensive, focusing on reading, analyzing and discussing work of various authors and then learning to work the many literary techniques into student work.

## **05168 Film as Literature—From Page to Screen** **Grades 10-12 Credits 0.5**

This course will examine the fundamental techniques and tools that filmmakers and screenwriters must use to bring a literary work to the screen, as well as analyze how classic pieces of literature can be “re-imagined” for modern audiences. Additionally, the course will introduce students to master filmmaker Alfred Hitchcock and familiarize them with his innovative storytelling and cinematic techniques. The genre of comedy and the theme of power of the individual will also be explored. 1999 Film as Literature—Reaction and Critique.

## **01999 Film as Literature—Reaction and Critique** **Grades 10-12 Credits 0.5**

The course will teach students how to evaluate and critique films across a variety of genres. Students will examine process and technique in order to see how each theme and genre lends itself to particular critical approaches. Finally, students will learn to evaluate both classic and modern films in both spoken and written critiques.

## **01104 Windows on the World: Contemporary** **Reading & Writing Seminar** **Grade 9 Credits 1.0**

Windows on the World is a chance for students to explore viewpoints in the modern world. Through reading and analysis of contemporary stories, essays, poetry, novels, and plays, students will investigate how authors respond to the unique challenges of living in the modern world. Through analytical and expressive writing, students will investigate their own reactions to the world while developing composition and research skills. Course content will consist of a wide variety of work from modern authors in many different genres.

\*\*\*Please note that the successful completion of this course will satisfy the Careers class requirement.



# Language Arts Department

## **022151 Careers** **Grades 9**

**Credits 0.5**

Careers is a project based course designed to help students transition from middle school and begin the process of planning for their lives after high school. This course focuses on practical 21st century skills and gives students a head start on a variety of items that will help them in the post-secondary path of their choice. Throughout the course, students will develop skills that will help them throughout their time at Sun Valley, including how to research and set appropriate, yet challenging, goals for themselves. Careers students will also learn to plan for the future, covering topics such as budgeting, taxes and future education. From researching career paths to resume writing to interview techniques, students will also learn the basics of the job hunt. Furthermore, through a series of in-person conversations with local entrepreneurs and experts in various career fields, students will be exposed to a number of possible career paths and have the opportunity to learn from successful businesspeople face to face.

## **01065 Sports Literature** **Grades 9-12 Credits 0.5**

This course will focus on both fiction and non-fiction sports literature. It will allow students to explore the application of sports in their lives outside of the playing field. Students will read novels, short stories, poems, magazine/news articles, and essays; they will also have the opportunity to study mediums such as films and broadcasts. The course will focus on topics such as overcoming obstacles, leadership, successes and failures, rivalries, heroism, and ethics. Students enrolled in this course will write in various modes while analyzing and discussing the impact sports have on their lives and society as a whole.

## **1064 Legends and Folklore** **Grades 9-12 Credits .5**

Brave heroes and heroines, resourceful companions, and horrifying monsters. Whether in stories told at bedtime, portrayed in film, or whispered around a campfire, these character types have captured the collective imagination of humanity for thousands of years. While these tales are entertaining, they also reveal many of the cultural values of the societies that tell and re-tell these stories. In this course, students will read and analyze legends and folktales from a variety of times and locations. Study of traditional sources will include King Arthur, Robin Hood, and the Brother's Grimm, but students will also discuss cultural fascination with monster such as vampires, werewolves, and ghosts. By studying tall tales, urban legends, and national epics, students will learn to apply critical reading and cultural analysis strategies to a variety of texts.

## **1009 English Lab** **Grades 11-12 Credits .5**

Prerequisites: American Literature

This semester course is designed as a remediation course for students who did not score proficient on the Keystone English exam. This course will provide students with testing strategies and a solid foundation of English skills needed to be successful on the SAT, ACT, future English/Literature courses, and the Keystone English Exam. (Students in this course must retake the Keystone Exam)



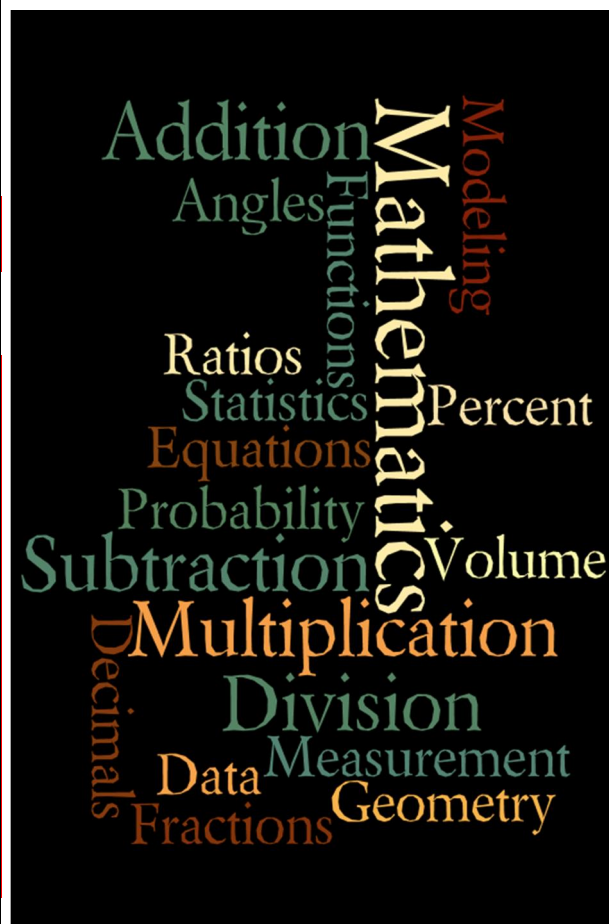
# Mathematics Department

Mathematics is a four year requirement for graduation at Sun Valley High School. Students will be challenged to develop skills in analysis, reasoning, creativity, collaboration and self-expression as they gain knowledge of mathematics.

## Mathematical Practices

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

Mathematics Courses	9	10	11	12
Pre-Algebra				
Accelerated Algebra I				
Accelerated Geometry				
Honors Geometry				
Honors Algebra II & Trigonometry				
Accelerated Algebra II				
Intro to Algebra II				
Accelerated Introduction to Calculus with Trigonometry				
Honors Calculus				
AP Calculus AB and BC				
Honors Introduction to Calculus				
Accelerated Statistics				
Honors Statistics				
AP Statistics				
SAT Prep Math				
Functions Statistics and Trigonometry				
Math Lab (.5)				
Computer Science Essentials				





# Mathematics Department

## **02051 Pre-Algebra** **Grade 9 Credits 1.0**

The Pre-Algebra course is an introduction to basic algebra concepts and a review of arithmetic algorithms. The course is designed to help students overcome deficiencies and emphasize the concepts necessary to be successful in Algebra I and II. The course helps student to develop good mathematical study skills and learning strategies as an integral part of this course. The course begins with a brief review of the number system and operations with whole numbers, fractions, decimal, positive and negative numbers. Eventually covering rational and linear exponents, ratios, proportions and percentage; solving simple and complex equations with one variable.

## **K02052X Accelerated Algebra I** **Grades 9-10 Credits 1.0**

In Algebra I, students will learn math and algebra concepts, grade-appropriate math standards, and related problem-solving skills that are aligned to state standards and eligible content related to the Keystone Algebra I Exam. Students will build onto the algebra skills learned in middle school and learn the foundations of algebra that they will need in all subsequent math courses. The course will include problem solving and reading math strands, as well as test taking strategies for a variety of test item formats. Included topics are: operations with real numbers, tools of algebra, solving equations, solving inequalities, solving and applying proportions, graphs and functions, slope and rates of change, linear equations and their graphs, systems of equations, systems of inequalities, exponents, polynomials, factoring, radical expressions, rational expressions and describing, analyzing and interpreting data. Students will be required to represent, analyze, and interpret mathematical models verbally, numerically, graphically and algebraically.

## **2072H Geometry** **Grades 9-11 Credits 1.0**

Prerequisites: Algebra I.

In Honors Geometry, students will learn geometric concepts, related problem-solving skills and real world applications of math that are aligned to state standards and eligible content for the Keystone Geometry Exam. Students will build on Algebra I skills and develop foundations needed for subsequent math courses. The course will include problem solving, reading, and test taking strategies. Included topics are: properties of angles, polygons, and circles; parallel and perpendicular lines; transversals; properties of polyhedrons, cylinders, and spheres; similar figures; congruency; proofs; coordinate geometry; right triangles and right triangle trigonometry; perimeter, circumference, area, surface area and volume.

## **2072X Accelerated Geometry** **Grades 9-11 Credits 1.0**

Prerequisites: Algebra I.

Students will learn geometric concepts, related problem-solving skills and real world applications of math that are aligned to state standards and eligible content for the Keystone Geometry Exam. Students will build on Algebra I skills and develop foundations needed for subsequent math courses. The course will include problem solving, reading and test taking strategies. Included topics are: properties of angles, polygons and circles; parallel and perpendicular lines; transversals; properties of prisms, pyramids, cylinders and spheres; similar figures; congruency; proofs; coordinate geometry; right triangles and right triangle trigonometry; perimeter, circumference, area, surface area and volume.

## **02079 Proof Geometry** **Grades 9-10 Credits 1.0**

Prerequisites: Algebra I.

The Geometry course includes an in-depth analysis of plane, solid, and coordinate geometry as they relate to both abstract mathematical concepts as well as real-world problem situations. Topics include logic and proof, perpendicular and parallel lines, polygons, perimeter and area analysis, volume and surface area analysis, similarity and congruence, trigonometry, and analytic geometry. Emphasis will be placed on developing critical thinking skills as they relate to logical reasoning and argument. Students will be required to use different technological tools and manipulatives to discover and explain the course content.

## **2106H H Algebra II & Trigonometry** **Grades 9-11 Credits 1.0**

Prerequisites: Geometry

Honors Algebra II and Trigonometry is an integrated course in which students will continue studying advanced algebraic concepts that will include the trigonometric functions and their identities. The purpose is to prepare students for advanced studies that will eventually lead to Calculus. Students will learn algebraic concepts, related problem-solving skills and real world applications of math that are aligned to state standards and eligible content for the Keystone Algebra II Exam. The course will include problem solving, reading, and test taking strategies. Topics include: operations with complex numbers; exponents; roots; absolute value; logarithms; rational and radical expressions; characteristics of quadratic and polynomial functions; solving non-linear equations; exponential growth and decay; representing, analyzing and interpreting data; applying probability and odds; trigonometric functions; trigonometric identities and solving triangles. Students will be required to represent, analyze and interpret mathematical models verbally, numerically, graphically and algebraically.

# Mathematics Department

## **2056X Algebra II** **Grades 10-12 Credits 1.0**

Prerequisites: Algebra I

In Algebra II, students will learn advanced algebra concepts, related problem-solving skills and the real-world applications of math that are aligned to state standards. The course will include problem solving, reading and test taking strategies. Topics include: operations with complex numbers; exponents; roots; absolute value; logarithms; rational and radical expressions; characteristics of quadratic and polynomial functions; solving non-linear equations; exponential growth and decay; representing, analyzing and interpreting data; applying probability and odds. Students will be required to represent, analyze and interpret mathematical models verbally, numerically, graphically and algebraically.

## **2056X Introduction to Algebra II** **Grades 10-11 Credits 1.0**

Prerequisites: Algebra I

In Academic Algebra II, students will learn advanced algebra concepts, related problem-solving skills and the real-world applications of math that are aligned to state standards, along with reinforcing fundamental principles of algebra. Topics may include: operations with complex numbers; exponents; roots; absolute value; logarithms; rational and radical expressions; characteristics of quadratic and polynomial functions; solving non-linear equations; exponential growth and decay; representing, analyzing and interpreting data; applying probability and odds. Students will be required to represent, analyze and interpret mathematical models verbally, numerically, graphically and algebraically.

## **2121I H Introduction to Calculus** **Grade 10-12 Credits 1.0**

Prerequisites: Algebra II w/Trigonometry or Algebra II with a teacher recommendation.

This course is designed to give students the necessary background to succeed in calculus. Topics include: conic sections, complex number system, an in depth study of a variety of equations and functions, graphing and solving higher order equations, analytical aspects of trigonometry and calculus topics including limits, derivatives, and applications.

## **2121X Accelerated Introduction to Calculus with Trigonometry** **Grades 10-12 Credits 1.0**

Prerequisites: Algebra II

In Introduction to Calculus with Trigonometry, students will review and expand a variety of mathematical disciplines. Topics include functions and their graphs, trigonometry, exponential and logarithmic

functions. The emphasis will be on developing skills and confidence in mathematics and how these concepts are used in society.

## **2121H Honors Calculus** **Grades 10-12 Credits 1.0**

Prerequisites: Intro to Calculus or Intro to Calculus w/Trig and teacher recommendation.

Topics include: functions (polynomial and transcendental), conic sections, limits, practical applications of the derivative, curve sketching, various techniques of integration, and finding areas under curves.

## **2124AB AP Calculus AB** **AP Grades 11-12 Credits 1.0**

Prerequisites: A or B in Honors Intro to Calculus (or an A in X Intro to Calculus); Teacher Recommendation

AP Calculus AB focuses on students' understanding of calculus concepts and provides experience with methods and applications. Through the use of big ideas of calculus (e.g., modeling change, approximation and limits, and analysis of functions), the course becomes a cohesive whole, rather than a collection of unrelated topics. Both courses require students to use definitions and theorems to build arguments and justify conclusions. The course features a multirepresentational approach to calculus, with concepts, results, and problems expressed graphically, numerically, analytically, and verbally. Exploring connections among these representations builds understanding of how calculus applies limits to develop important ideas, definitions, formulas, and theorems. A sustained emphasis on clear communication of methods, reasoning, justifications, and conclusions is essential. Students will regularly use technology to reinforce relationships among functions, to confirm written work, to implement experimentation, and to assist in interpreting results.

## **2125 AP Calculus BC** **AP Grades 11-12 Credits 1.0**

Prerequisites: Successful Completion of Calculus AB or an A or B in Honors Calculus; Teacher Recommendation

Calculus at the AP level is offered in two courses: AB and BC. Calculus BC IS A FULL-year course in the calculus of functions of a single variable. It includes and is based upon all topics taught in Calculus AB plus the additional topics of parametric, polar, and vector functions; polynomial approximations; concept of series, including series of constants and Taylor series; analysis of planar curves with velocity and acceleration; applications of derivatives including Euler's method for numerical solutions of differential equations; and differential equations.

## **2201X Statistics** **Grades 11-12 Credits 1.0**



# Mathematics Department

In this course, students will learn introductory statistics concepts, related problem-solving skills and how statistics is applied in society. Students will learn introductory statistics concepts that will be further developed in college-level statistics courses. The course will integrate the use of technology and real world data sets in the learning of statistics. Included topics are: introduction to statistics; describing, exploring and comparing data; probability; probability distributions; normal probability distributions; estimates and sample size; hypothesis testing; inferences from two samples; correlation; and regression.

## **0328 H Statistics** **Grades 11-12 Credits 1.0**

In this course, students will learn statistics concepts, related problem-solving skills and how statistics is applied in society. Students will learn statistics concepts that will be further developed in college-level statistics courses. The course will integrate the use of technology and real world data sets in the learning of statistics. Included topics are: introduction to statistics; describing, exploring and comparing data; probability; probability distributions; normal probability distributions; estimates and sample size; hypothesis testing; inferences from two samples; correlation; and regression.

## **2203AP AP Statistics** **AP Grades 10-12 Credits 1.0**

Prerequisites: A or B in Algebra II/ Trig.; Teacher Recommendation

This non-calculus based course introduces the student to the management, interpretation, and analysis of data, planning a study, how to measure data, producing models using probability and simulation, and applying techniques for statistical inference and confirming models. Students will prepare to take the AP Statistics Examination in May.

## **2994 SAT Prep (Math)** **Grades 10-11 Credits 0.5**

Co-requisite: This class will run in conjunction with the SAT Verbal class.

The objectives are two-fold: 1) to review the major areas of mathematics concentration, namely arithmetic, algebra, and geometry; and 2) to review question styles and strategies for solving problems.

## **0051 Keystone Remediation Algebra I** **X Grades 9-11**

All students must take and pass the Keystone Exam as part of the graduation requirement. Students that do not

score proficient will be placed in a Keystone Remediation course. After completing the remediation course, the student will be administered the Keystone Exam.

## **02141 Functions, Statistics, and Trigonometry** **Grades 12 Credits 1.0**

This college prep course is an extension of the study of linear, quadratic, cubic, rational, exponential, and logarithmic functions along with an introduction to circular and trigonometric functions. This course also focuses on problem solving strategies through the use of real world data and statistics and also has SAT practice and strategies. Given its focus on college prep mathematics, students will also have an opportunity to practice with mathematics placement tests offered by some universities.

## **2049 Math Lab** **Grades 9-11 Credits 0.5**

Prerequisites: Algebra I

This semester course is designed as a remediation course for students who did not score proficient on their Keystone Algebra Exam. This course will provide students with testing strategies and a solid foundation of Algebra skills needed to be successful on the SAT, ACT, future Algebra-based courses and the Keystone Algebra exam. (Students in this course must retake the Keystone Exam)

## **02156 Computer Science Essentials,** **Grades 9-12 Credits 1.0**

This course exposes students to multiple programming languages and platforms. The course will allow students to explore both block and text coding by using MIT APP Inventor, VEX Robotics and Python. Students will begin the year developing apps that will be uploaded onto Android tablets. Next students will look into artificial intelligence by programming self-driving vehicles using VEX Robotics. Students will program their vehicles to run through both predetermined courses and use AI to allow the vehicles to navigate on its own. Lastly, students will explore the language of Python where they will learn the intricacies of text based coding and develop their own programs.

# Music Department

Music is an essential part of life, integral in the development of the whole person and a vital component for the enhancement of society. A meaningful, sequential study of in music will promote creativity, interpreting works in the fine arts and cognitive growth experience.

Music Courses	9	10	11	12
Concert Choir				
Band/Choir				
Guitar (.5)				
Piano Keyboard (.5)				
Theater and Music Performance (.5)				
Digital Music (.5)				
Instrumental Woodwind & Brass				
Instrumental Percussion				





# Music Department

## **5110 Concert Choir** **Grades 9-12 Credits 1.0**

Concert Choir is the general chorus with no audition required. Music written in parts will be rehearsed and sung. Further study of the voice, sight singing, and choral tone will be a daily part of this course. Study of the voice, sight singing, choral tone, and basic music theory will be a daily part of this course. **Requirements for this course include hours outside of designated school hours. School events take precedence over non-school related events when conflicts arise.**

## **0501 Band/Choir** **Grades 9-12 Credits 1.0**

The Band/Choir is a combination course meeting for a full year and designed to provide both band and choir.

## **5108 Guitar** **Grades 9-12 Credits 0.5**

This class emphasizes musical skills and techniques, which will be helpful to the beginning guitar player. In addition to basic music notation, this course focuses on reading music, understanding tablature, playing single note melodies, basic chord playing and various strumming patterns. Quality instruments are provided to each student to use during the class time.

The songs learned in class come from a large and varied selection of traditional, folk, oldies, rock and popular music. They highlight specific skills that are needed and applied across songs that increase in difficulty as the year progresses. Students should be able to play these songs for the entire family by the end of the year.

## **5107 Piano Keyboard** **Grades 9-12 Credits 0.5**

Do you play the piano? Do you want to play the piano? Have you always wondered about getting started on piano? Time to sign up for Piano Keyboarding! The class will start with the basics. Eventually, students will work at their own pace to play all different songs. We will be looking at notes and chords, as well as proper technique to play the instrument. A history of the piano itself will be studied. Each student will play music on the computer. Students will learn the discipline and importance of practicing. You don't need a piano at home for this course, but if you do have one, dust it off, and let's get to work!

## **5053 Theater and Music Performance** **Grades 9-12 Credits 0.5**

This course is great for actors, public speakers, singers, and musicians of all types. This course required actors and musicians to research, prepare, and perform music for their peers. Students are given the opportunity to issue feedback to each other to improve their performances. Students will study ways to enhance their stage presence, projection, diction, posture, and movement with regards to public performance. We will study production and design in regards to set building, lights, costuming, and other technical aspects of theatrical performances. This course focuses on the arts involved with the theater, music and public performance. Students will explore ways to relax and handle anxiety when performing in a safe, positive, and constructive setting. Students will perform a classroom-centered recital as the culmination of the class to showcase skills and understandings gained throughout this course.

## **5149 Digital Music** **Grades 9-12 Credits 0.5**

Want to put music to film? Ever wondered how to assemble a good "beat" in a song? Are you curious about creating music on computers? Digital Music provides the opportunity for the up-and-coming musician to utilize computer music technology of the 21<sup>st</sup> century. This course will emphasize the use of computers in music, as well as recording. We will be using iTunes, GarageBand, Finale, Audacity and other music applications. Basic studies in acoustical physics, recording and diverse genres will also take place. Students will work on individual projects, and will learn self discipline in creating quality compositions.

## **5109W Instrumental Woodwind & Brass Performance** **Grades 9-12 Credits 1.0**

This course is for students who play a woodwind or brass instrument and wish to participate in the instrumental ensembles offered at the high school. The class rehearses during the school day with woodwinds and brass only, focusing on proper technique, balance, blend and timing as it pertains to them as a wind player. The class provides a concentrated approach to advanced techniques on their individual instruments. Students will rehearse individual lessons, chamber music, as well as traditional concert band literature.

**Enrollment in this class is required for participation in ALL instrumental ensembles (i.e. Concert Band, Marching Band and Jazz Band) Requirements for this course include hours outside the designated school hours. School events take precedence over non-school related events when conflicts arise.**

# Music Department

## **5109P Instrumental Percussion** **Grades 9-12 Credits 1.0**

This course is for students who play percussion and wish to participate in the instrumental ensembles offered at the high school. The class rehearses during the school day with percussionists only, focusing on proper technique, balance, blend and timing as it pertains to them as a percussionist. The class provides a concentrated approach to advanced techniques on their individual instruments. Students will focus on percussion ensemble literature as well as traditional concert band literature.

**Enrollment in this class is required for participation in ALL instrumental ensembles (i.e. Concert Band, Marching Band and Jazz Band) Requirements for this course include hours outside of designated school hours. School events take precedence over non-school related events when conflicts arise.**





# Physical Education Department

Sun Valley's Physical Education curriculum is designed to provide experiences with respect to team and individual sports, cardiovascular endurance, muscular strength and lifetime activities. Physical Education is a planned sequence of learning experiences intended to fulfill growth, development and behavioral needs of each student. Emphasis is placed on developing skills, strategies, performance and social interaction in physical activities which will prepare students for a better quality of life. The HPE Department strives to provide three activity options (team sport, individual sport and fitness) per class period dependent on class size and teacher availability.

Health & Phys. Ed. Courses	9	10	11	12
Health and Wellness (.5)				
Core Physical Education I (.5)				
Peer Buddy Physical Education (.5)				
Weight Training I (.5)				
Lifetime Activities (.5)				
Fitness for Life (.5)				
Team Sports (.5)				
Physical Education Major (.5)				

## 08051 Health & Wellness

**Grade 9**

**Credits 0.5**

\*required

Health & Physical Education, through a coeducational curriculum, provides opportunity for each student to become competent in various sports, games and life long activities. Fitness concepts are reinforced while participating in individual and team activities.

## 8001 Core Physical Education I

**Grade 10**

**Credits 0.5**

\*required

Health & Physical Education, through a coeducational curriculum, provides opportunity for each student to become competent in various sports, games and life long activities. Fitness concepts are reinforced while participating in individual and team activities.

## 08008 Peer Buddy Physical Education

**Grades 11-12**

**Credits 0.5**

\*Peer Buddy Students Only – Successful Recommendation into the Peer Buddy Program

This course is geared toward the special education students and the Peer Buddy Program. This course will introduce fundamental physical education concepts from exercise science to team sports and lifelong physical activities. Students enrolled in this class will be assisted by a peer buddy who will be working on an assignment of a similar type.

Students will explore multiple key concepts such as sportsmanship, teamwork, physical activity, and health lifestyles. This course is designed to focus on building the relationship between the special education student, his/her peer buddy, and inclusion within the regular education classroom, while providing a substantial physical education experience for these students.

## 08009 Weight Training I

**Grades 10-12**

**Credits 0.5**

Weight Training 1 is an introductory course designed to enable each student to improve muscular strength and endurance. Students will gain extensive knowledge of sound weight training theory and practice while developing a personalized weight training routine.



# Physical Education Continued

## 08016 Lifetime Activities

**Grades 10-12 Credits 0.5**

The Lifetime Activities course is designed to increase physical fitness through small group activities and individual/dual lifetime activities. These activities will promote both team building and cooperative learning through group activities and initiatives. Non-traditional activities will provide instruction for motor skill development, cooperative learning, problem solving and promote lifelong fitness and wellness. Activities are selected to foster interest and appreciation in fitness and wellness throughout healthy life spans.

## 08052 Fitness for Life

**Grades 10-12 Credits 0.5**

Fit for Life is a course which will promote lifelong wellness utilizing various forms of physical activity and exercise. The forms of activity which will be utilized will focus specifically on improving cardiovascular endurance, flexibility, muscular strength and muscular endurance.

## 08002 Team Sports

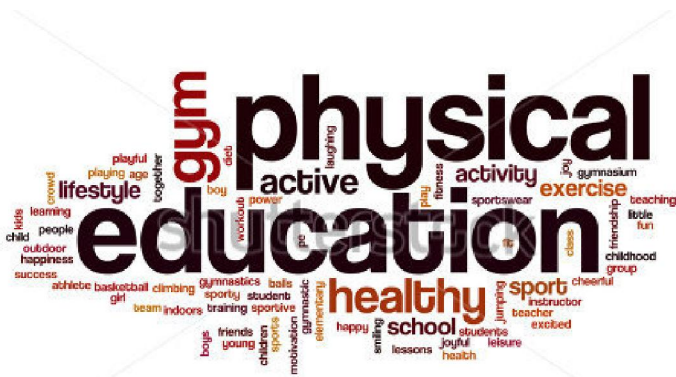
**Grades 10-12 Credits 0.5**

The Team Sports course is designed to increase physical fitness through team/small group activities. Traditional sports will be reinforced with heavy emphasis on rules, strategies and cooperative skills. Activities will promote team building and cooperative learning through traditional sports and games. Class structure will be of a recreational nature with competition to be included within each unit.

## 08017 Physical Education Major

**Grade 12 Credits 0.5**

The PE Major is designed for seniors who have a strong competitive drive and perform at the highest level of Physical Education. Class activities have a strong emphasis on team and individual sports through a competitive tournament style structure. Activities will promote team building and cooperative learning through traditional sports and games. In addition, students will complete one to two community relations projects that revolve around the Department's curriculum.. Must have recommendation of Health & Physical Education teacher.

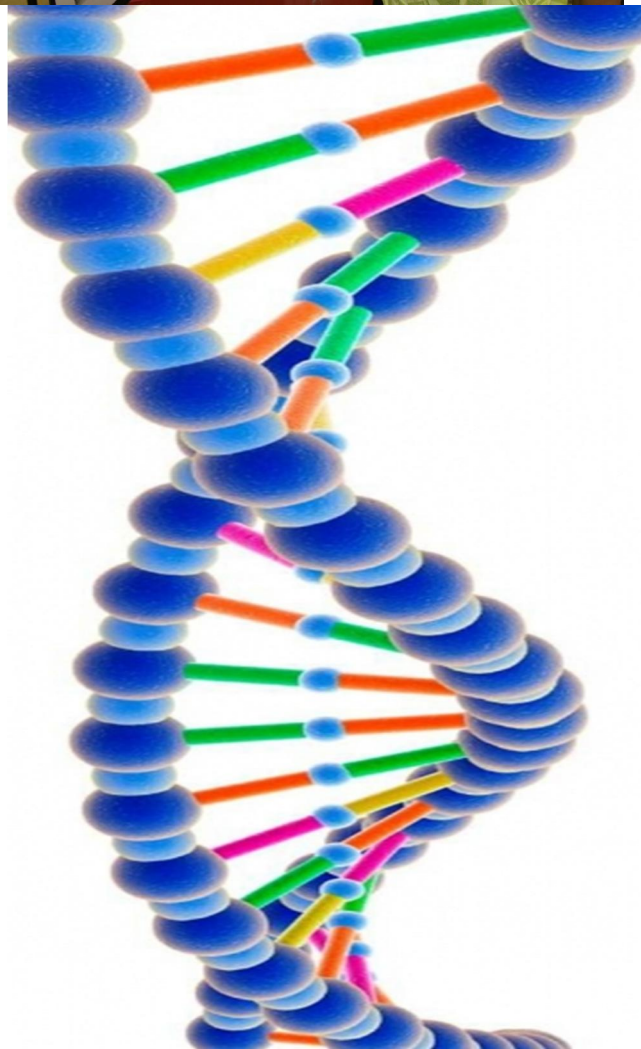




# Science Department

The Science Department provides intellectually challenging science curriculum that emphasizes the connections between the physical, biological and earth sciences. The students will use science as a process to make informed decisions, solve problems and enrich their lives.

Science Courses	9	10	11	12
Honors General Science				
Accelerated General Science				
Honors Biology				
Accelerated Biology				
AP Biology				
Honors Chemistry				
Accelerated Chemistry				
Academic Chemistry				
AP Chemistry				
Honors Physics				
Accelerated Physics				
AP Physics I				
AP Environmental				
Anatomy & Physiology				
Introduction to Forensic Science (.5)				
Sustainable Energy (.5)				
Zoology (.5)				
Botany (.5)				
Astronomy (.5)				
Astronomy II (.5)				



# Science Department

## **39992H General Science** **H      Grade 9      Credits 1.0**

Prerequisites: "B" or higher in 8<sup>th</sup> Grade Honors Science or an "A" in Regular Science with teacher recommendation

General Science is the first of 3 Science Courses required for graduation. This course focuses on learning the nature of science and the importance of scientific literacy. Units of study will include: Nature of Science, Biochemistry and Nutrition, Biogeochemical Cycles, Ecology, Natural Selection, Populations, and Changes in the Environment. This course will include many cooperative, hands-on activities as well as independent research projects. One of the major goals of this course is to provide the foundation needed to be successful in future science courses. Students will work on laboratory, data analysis, graphing, and report writing skills throughout the year.

## **39992X General Science** **X      Grade 9      Credits 1.0**

Prerequisites: Successful completion of the 8<sup>th</sup> Grade Science course

General Science is the first of 3 Science Courses required for graduation. This course focuses on learning the nature of science and the importance of scientific literacy. Units of study will include: Nature of Science, Biochemistry and Nutrition, Biogeochemical Cycles, Ecology, Natural Selection, Populations, and Changes in the Environment. This course will include many cooperative, hands-on activities as well as independent research projects. One of the major goals of this course is to provide the foundation needed to be successful in future science courses. Students will work on laboratory, data analysis, graphing, and report writing skills throughout the year.

## **K03051H Biology** **H      Grade 10      Credits 1.0**

Prerequisites: : For incoming 9<sup>th</sup> Graders, an "A" in 8<sup>th</sup> Grade Honors Science; for rising 10<sup>th</sup> Graders, a "B" or higher in Honors General Science or an "A" in Regular General Science with a teacher recommendation

This course is designed to provide a rigorous and in depth understanding of the eight characteristics of life, featuring their cellular organization, growth and development, reproduction, responding to environmental conditions, heredity, homeostatic mechanisms, energy dynamics and evolution. Strong emphasis is

placed on problem solving and analytical skills. This course is a prerequisite for AP Biology.

## **K03051X Biology** **X      Grade 10      Credits 1.0**

Prerequisites: For rising 10<sup>th</sup> Graders, successful completion of a General Science Course "C" or higher

This course is designed to provide a functional understanding of the eight characteristics of life, featuring their cellular organization, growth and development, reproduction, responding to environmental conditions, heredity, homeostatic mechanisms, energy dynamics and evolution. Utilize higher order thinking skills to expand upon the scientific process, through which scientific knowledge is gained. Observations, measurements and proper laboratory techniques lead to the development of scientific principles and concepts within the course.

## **K03056AP AP Biology** **AP      Grades 10-12      Credits 1.0**

Prerequisites: "A" or "B" in Honors Biology and teacher recommendation

This course will emphasize the major themes included in an introductory college biology course. Students will examine facts, principles and processes of modern biology; develop skills in collecting and interpreting data, recognizing problems, establishing hypotheses, developing rational theories based upon the experimental process in the laboratory; and develop an understanding that science is a human endeavor with social consequences.

The course content will include the chemical and biological basis of living systems, cellular respiration and photosynthesis, reproductive patterns and physiology, genetics, comparative anatomy, and ecology

## **3101H Chemistry** **H      Grade 11      Credits 1.0**

Prerequisites: "B" or higher in Honors Biology or an "A" in Regular Biology with a teacher recommendation and meet minimum placement test score

This course is designed to provide a functional understanding of matter, its composition, and the changes it undergoes. Emphasis is placed on the experimental process by which scientific information is gathered, accomplished through student participation in challenging laboratory settings. This laboratory work leads to the development of principles and concepts in the course. Stu-



# Science Department

dents are expected to utilize higher order thinking skills to master concepts, to develop mathematics skills necessary to solve various chemical problems, to develop scientific writing skills through laboratory reports, and to demonstrate proper laboratory techniques.

## **3101X Chemistry** **X      Grade 11      Credits 1.0**

Prerequisites: Successful completion of a Biology Course "C" or higher

This course is designed to provide a functional understanding of matter, its composition, and the changes it undergoes. Emphasis is placed on the experimental process by which scientific information is gathered, accomplished through student participation in challenging laboratory settings. This laboratory work leads to the development of principles and concepts in the course. Students are expected to utilize higher order thinking skills to master concepts, to develop mathematics skills necessary to solve various chemical problems, to develop scientific writing skills through laboratory reports, and to demonstrate proper laboratory techniques.

## **3101ACA Chemistry** **A      Grade 11      Credits 1.0**

Prerequisites: Successful completion of a Biology Course

This chemistry course is designed to provide a functional understanding of matter, its composition and the changes it undergoes. Observations and measurements made in the laboratory lead to the development of basic principles, which are then used to explain various chemical phenomena.

## **3106AP AP Chemistry** **AP      Grades 11-12      Credits 1.0**

Prerequisites: "A" or "B" in Honors Chemistry and "A" or "B" in Honors Algebra II and teacher recommendation

In eight class meetings per cycle, students will master fundamental principles and develop competence in solving chemical problems. Students will improve their ability to think and to communicate their ideas, both orally and in writing, with clarity and logic. The major areas of study include a highly rigorous treatment of the structure of matter, the states of matter, chemical reactions, and descriptive chemistry.

## **3151H Physics** **H      Grades 11-12      Credits 1.0**

Prerequisites: "A" or "B" in Honors Algebra II or "A" in Regular Algebra II

Honors Physics provides the student with a comprehensive inquiry of the study of energy in its various forms. This includes an extensive analysis of the principles of kinematics (motion) and dynamics (forces) through linear and angular mechanics. Unifying themes are examined, including the gravitational, electrical, magnetic, and nuclear forces and the fields that create them. Additional topics associated with the study of energy are also addressed. These include waves, sound, and light. Solid algebra skills are necessary for problem solving and experimental analysis. The course is laboratory intensive, including a wide variety of inquiry based experiments used to develop and reinforce the concepts studies.

## **3151X Physics** **Grades 11-12      Credits 1.0**

Prerequisites: Successful completion of an Algebra II course

Accelerated Physics provides the student with a survey of the study of energy in its various forms. This includes a broad analysis of the principles of kinematics (motion) through linear and circular mechanics. Unifying themes are introduced, including: gravitation, electricity and magnetism. Additional topics associated with the study of energy are also addressed. These include waves, sound, and light. While this course uses a conceptual approach to physics, good algebra skills are necessary for problem solving and experimental analysis. The course is laboratory intensive, including a wide variety of inquiry-based experiments used to develop and reinforce the concepts studied.

## **3210AP AP Physics I** **AP      Grades 11-12      Credits 1.0**

Prerequisites: "A" or "B" in Honors Algebra II or "A" in regular Algebra II and teacher recommendation

AP Physics I is an algebra-based, introductory college-level physics course that explores topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. Through inquiry based learning, students will develop scientific critical thinking and reasoning skills.

## **03207A AP Environmental** **Grades 10-12      Credits 1.0**

Prerequisites: A or B in Algebra 1 and A or B in previous science courses. Biology must be taken as a pre or co-requisite.



# Science Department



Advanced Placement Environmental Science is designed to be the equivalent of an introductory college course in environmental science. Environmental science is an interdisciplinary course in that it integrates a wide range of topics including earth science, biology, chemistry, sociology and economics. Core scientific principles, concepts, and methodologies required for understanding the environment will be presented to the students in this class. The primary themes of this course include: science as a process, the earth is one interconnected system, humans alter natural systems, environmental problems involve social and cultural issues, and the concept of environmental stewardship and system sustainability.

## **3053X Anatomy & Physiology** **Grades 11-12 Credits 1.0**

Prerequisites: Successful completion of a Biology Course with at least a "B"

This course will examine the anatomical structures and physiological processes of vertebrate animals. Skeletal, muscular, digestive, nervous, reproductive, and cardiovascular systems are among the major body systems that are studied. The course will stress significant hands-on laboratory experiences, including dissection\* of various vertebrate organisms.

## **0426 Introduction to Forensic Science** **Grades 9-12 Credits 0.5**

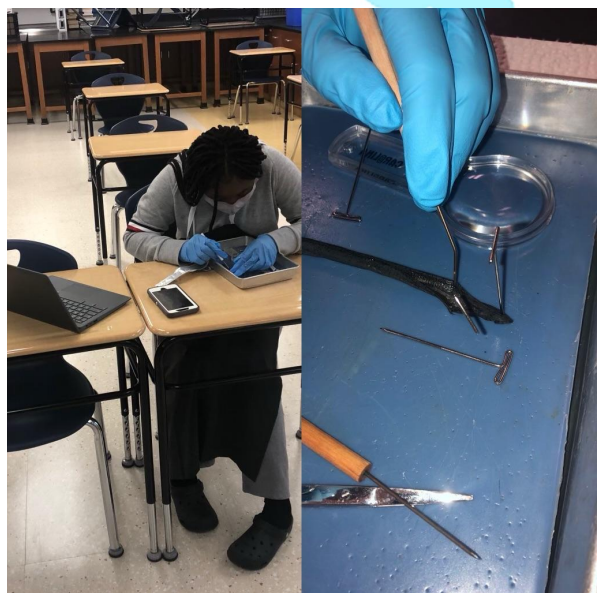
This course uses an inquiry based approach to the sciences. Students in this course will use a multidisciplinary approach investigate simulated and historical crime scenes. Case studies and laboratory exercises will cover a number of forensic topics such as fingerprints, fibers, blood serum, ballistics, dental records, and autopsy reports. Emphasis will be placed upon participation, observation, theory, technique and inductive as well as deductive reasoning.

## **20101 Sustainable Energy** **Grades 9-12 Credits 0.5**

How do solar panels work? What is the secret of geothermal energy? Can wind turbines provide power to for Sun Valley? The answers to these energy questions will be explored and many more questions will be discovered in this cutting edge science discovery classroom.

## **03061 Zoology** **Grades 9-12 Credits 0.5**

Zoology is a semester course that will survey the nine major phyla of the Kingdom Animalia. Students will identify key structures and functions of these animal groups. Zoologists research the diversity of life by studying the characteristics, taxonomic relationships, life processes, and ecological importance among organisms. While this course uses many skills developed in the Biology course, 9<sup>th</sup> grade





# Science Department

students are encouraged to take this course to better understand relationships between organisms and their environment.

## **03058 Botany** **Grades 9-12 Credits 0.5**

Botany is a one semester course that will dig into the study of plants and their relationship to humans and the environment. This will be a project-based class that will use the greenhouse for multiple activities. Students will do labs and projects that will establish a working understanding of growth, reproduction, anatomy, morphology, physiology, biochemistry, taxonomy, genetics, evolution and ecology of plants.

## **3004 Astronomy** **Grades 9-12 Credits 0.5**

What makes a star shine? For how long will the Sun keep shining? What are black holes and how can they form? Astronomy is a general introduction to the part of contemporary astronomy that includes how stars form and how they end their existence, will provide answers to these questions and more. The course gives special attention to the exciting discoveries of the past few years.

## **03008 Astronomy II** **Grades 10-12 Credits 0.5**

Prerequisites: Successful completion of the Astronomy I course

Astronomy II is a course where students explore some of the mysteries of the universe in a more in-depth manner. The course focuses more closely on the current knowledge and modern techniques used in astronomy today. Topics include, but are not limited to: the origin and evolution of the universe, galaxy types and formation, solar systems (our system and beyond) and stellar evolution. We will also study theories of modern astrophysicists regarding the unseen parts of our universe, such as dark matter, dark energy and black holes. Finally, we will discuss the possibility that our universe might not be the only one "out there"





Many colleges require four years of social studies for admission. The Sun Valley Social Studies Department offers a wide variety of college/university accepted electives for students to choose in order to meet their interests and needs.





# Social Studies Department

## **4161H Civics & Government** **Grade 9 Credits 1.0**

This course brings the ideals and ideas of our government system to life for students. The course studies the make up and operation of government, including the national bureaucracy. It includes units on the founding period and Enlightenment, how elections work, the influence of media, civil rights, justice, and how policy is enacted. Students will also explore Pennsylvania and local government.

## **4161X Civics & Government** **Grade 9 Credits 1.0**

This course brings the ideals and ideas of our government system to life for students. The course studies the make up and operation of government, including the national bureaucracy. It includes units on the founding period and Enlightenment, how elections work, the influence of media, civil rights, justice, and how policy is enacted. Students will also explore Pennsylvania and local government.

## **4057AP AP World History** **AP Grade 10 Credits 1.0**

Prerequisites: A in Honors Civics and Government (including mid-term exam); Teacher Recommendation

Students who elect to take the AP World History Course will be expected to learn the following content themes through creating historical arguments from historical evidence, chronological reasoning, comparing and contextualizing, and historical interpretation and synthesis. The themes that will be explored are: Technological and Environmental Transformations to 600 BC, Organization and reorganization of Human societies 600 BC to 600 CE, Regional and Transregional Interactions 600 CE to 1450, Global Interactions 1450 to 1750, Industrialization and Global Integration 1750 to 1900, Accelerating Global Change and Realignments 1900 to the Present. Students who take this class will be expected to take the AP Exam for this course.

## **4060X World History** **Grade 10 Credits 1.0**

Students study the history of humankind with a more concentrated focus from the Renaissance to present day. The six social studies standards of essential content knowledge and four process skills are integrated for instructional purposes. Students will utilize different methods that historians use to interpret the past, including points of view and historical context.

## **4060H World History** **Grade 10 Credits 1.0**

Prerequisites: Teacher Recommendation

Students study the history of humankind with a more concentrated focus from the Renaissance to present day. The six social studies standards of essential content knowledge and four process skills are integrated for instructional purposes. Students will utilize different methods that historians use to interpret the past, including points of view and historical context.

## **4056AP AP US History** **AP Grade 11 Credits 1.0**

Prerequisites: A or B in AP World or Honors World History; Teacher Recommendation

More than 400,000 students participate in the AP US History exam annually. The competition is keen, and the course requires student commitment to the pursuit of historical study. This course prepares students for the AP exam, which sits in May each year. Many (though not all) universities accept passing scores on the AP exam in lieu of as many as six American history undergraduate credits. The course is a *de facto* freshmen level college course, and by design provides students with skills required for a successful college career. The content covers US history from Columbus to Reagan, and incorporates an array of activities, primary source exercises, technology, and outside reading material. The historiography focuses on social economic, political, intellectual, diplomatic and cultural paradigms. A final note: students are required to fulfill a summer homework obligation, which is collected the first day of school.

## **4149H Contemporary U.S. History** **Grade 11 Credits 1.0**

Prerequisites: Teacher Recommendation

Students will study contemporary American history from 1945 to the present. The major units of study are: the origins of the Cold War, McCarthyism, the 1950s, Civil Rights, the Vietnam War (protests and counterculture), the Nixon years, the Seventies, the Reagan era, the Clinton years, and post-9/11 America. A wide variety of materials and techniques are used to move students at a rapid pace in both content and critical thinking skills. Students are required to read *Thirteen Days* by Robert F. Kennedy during the course of the school year.

# Social Studies Department

## **4149X Contemporary U.S. History** **Grade 11 Credits 1.0**

Students will study contemporary American history from 1945 to the present. The major units of study are: the origins of the Cold War, McCarthyism, the 1950s, Civil Rights, the Vietnam War (protests and counterculture), the Nixon years, the Seventies, the Reagan era, the Clinton years, and post-9/11 America. With the assistance of the textbook and supplemental materials students will complete long and short-term assignments. Critical thinking skills are honed in relation to social studies content.

## **PSYSEM Psychology Seminar** **Grades 9-12 Credits 0.5**

Psychology Seminar is open to all 9th through 12th grade students. If you took AP Psych and are looking to delve into topics a little more deeply or if you've never had a psychology course and are interested to see what the field is all about this might be the right course for you! In this class, we will learn to think like research psychologists (observe evidence, ask questions, gather information) while we explore topics of interest to you as an individual as well as topics of interest to the class as a whole.

Students should be prepared to be active participants in psych seminar. Lectures are minimal in this course. This course is driven by discussion and other forms of active learning.

## **04256AP AP Psychology** **AP Grades 11-12 Credits 1.0**

Prerequisites: Passing 10th/11th AP class or A, B or C in Honors 10th/11th SS or A in accelerated 10th or 11th SS & English. Any grade lower requires Teacher Recommendation

This class is designed for those students who wish to experience a university-level introductory course in psychology, and prepare for the rigorous AP exam in May. Psychology is the study of behavior and mental processes. It is a science with roots in the fields of biology, philosophy and physiology. Discussions, class debates, experiments, and hands-on activities will introduce the student to developing an understanding of human behavior. The primary questions addressed in the course, will be "Why do people act the way that they do in specific situations?" and "How can people change their behaviors?"

## **04149 American Society & Popular Culture** **Grades 9-12 Credits 0.5**

This thematic class will examine the intersection between pivotal events in our nation and the popular cultural expressions of those periods. Students will learn to interpret culture through a critical lens

and examine how the United States has adapted to crisis and change while retaining our national character. Students study television, film, music, fashion, dance, print, painting and other aspects of popular culture. They will examine how technology intersects with changes in popular culture, how culture affects society, and how society affects popular entertainments. Students create their own websites, films and other presentations using iPads and other related technologies to demonstrate learning.

## **04109 Terrorism, Human Rights & Human Security** **Grades 10-12 Credits 0.5**

This class will examine in detail the following four elements of 20<sup>th</sup> and 21<sup>st</sup> century terrorism and its toll on the world: people, technology, leaders and "master" plans. Students will experience the extreme results of intolerance motivated by politics religion and ideology.

## **4157AP AP U.S. Government & Politics** **AP Grade 12 Credits 1.0**

Prerequisites: "A" or "B" in AP US History or Honors Contemporary U.S. History and teacher recommendation.

AP American Government and Politics course is designed to provide students with a study of general concepts and specific analysis of the U.S. political system. It is a college political science course. The course covers the various institution, groups, beliefs, and ideas that comprise U.S. politics. Major units include: Constitutional Underpinnings; Political Beliefs and Behaviors; Political Parties, Interest Groups and Mass Media; Institutions of National Government; Public Policy; and Civil Rights and Civil Liberties. Students are required to interpret and utilize basic data relevant to government and politics in sustained written arguments. Students engage in a wide variety of experiential projects and use technology to study contemporary political science. A final note: students are required to fulfill a summer obligation through a course blog.

## **04258 Sociology** **Grades 11-12 Credits 0.5**

Students study the nature of humans and the social world in which they live. There are four learning domains: the sociological perspective and methods of inquiry; social structure (culture, institutions, and society); social relationships (self, groups, and socialization); stratification and inequality. The aforementioned four domains are the foundation for satisfying the core requirements of an introductory high school sociology course. Students will utilize different methods to acquire, interpret, and synthesize essential content and concepts from a sociological context.



# *Social Studies Department*

## **04120 Criminal Justice & The Law**

**Grades 10-12 Credits 0.5**

The course focuses on criminal law and the criminal justice system in the United States. Students will examine the application of criminal law and the rights related to the criminal justice process. Emphasis is placed upon a critical understanding of the foundations, components, processes, and goals of the criminal justice system. Students will be given the opportunity to explore various career paths by analyzing the roles of various individuals relevant to the application of criminal law.

## **04121 History Through Media**

**Grades 11-12 Credits 0.5**

Students will study history through varied media. Historians evaluate facts by selecting, arranging, and interpreting those facts for the purpose of telling the story of an era. This course will ask students to think like a historian while evaluating films, television shows, music, and other media based on historical events or figures. Students will consult various texts, collaborate with peers, and explore several modes of media to embrace and enhance their knowledge of history.



# World Languages Department

The World Language Department challenges students to develop an appreciation for world languages, cultures and global interdependence. By learning to communicate in other languages, students improve their command of English, become more aware of their culture and learn that language is a partner to any career.

World Language Courses	9	10	11	12
Accelerated Spanish I				
Accelerated Spanish II				
Honors Spanish III				
Honors Spanish IV				
Honors Spanish V				
Accelerated French I				
Accelerated French II				
Honors French III				
Honors French IV				
Accelerated Italian				





# World Languages Department

## **6101X Spanish I** **X      Grades 9-12    Credits 1.0**

The Spanish I academic course focuses on listening, speaking, reading, writing and culture skills. The class is enhanced by the use of multi-media materials and computer-assisted reinforcement. The functions, grammar, and vocabulary are linked to give the students the building blocks to develop language proficiency. Each student is required to do homework on a daily basis. Assessments will include writing passages of 75 words, projects, tests, quizzes, class participation, and tape recordings.

## **6102X Spanish II** **X      Grades 9-12    Credits 1.0** Prerequisites: Spanish I.

Spanish II builds upon the skills acquired at the previous level. Multi-media presentations and computer-assisted learning sustain the development of language functions and introduces customs of Spanish-speaking countries. Students will acquire a command of key vocabulary support and grammar structures providing a foundation for proficiency as well as appreciation of the breadth and variety of the cultures. Course requirements include daily homework, writing passages of 100 words, projects, tapes, and class presentations. Assessment instruments include class participation, portfolios, tests, and a final examination.

## **6103H Spanish III** **H      Grades 10-12   Credits 1.0** Prerequisites: Spanish II

This course is designed to strengthen and develop skills in listening, speaking, reading, and culture. The focus is using language in the areas of art, music, literature, drama, food, and shopping. The emphasis is placed on developing narrative and persuasive writing skills. Students are required to do homework on a daily basis, create scenes for videotaping, create an art project, and give a class presentation in Spanish. Students will be assessed by portfolio, chapter tests, quizzes, presentations, class participation, writing passages of 150 words, and the final examination.

## **6104H Spanish IV** **H      Grades 11-12   Credits 1.0** Prerequisites: Spanish III

This course is designed to increase students' self-expression in Spanish. Class discussion student presentations and debates are an integral part of the course. Students read excerpts of the writing of contemporary Spanish authors as well as magazine and newspaper articles in Spanish. Listening comprehension develops by watching Spanish language videos and listening to tapes. Each student is required to do several writing assignments during the course. Passages

will be 200 words in length. Assessment will be based on portfolios, final examination, class participation, essays, projects, tapes, and tests.

## **6105 Spanish V** **H      Grades 12      Credits 1.0** Prerequisites: Honors Spanish IV and teacher recommendation.

The course includes listening and speaking skills, reading comprehension, grammar and composition. The course objectives include the ability to comprehend formal and informal spoken Spanish; the acquisition of vocabulary and a grasp of structure to allow the easy, accurate reading of newspaper and magazine articles, as well as of modern literature in Spanish; the ability to compose expository passages; and the ability to express ideas orally with accuracy and fluency.

The course seeks to develop language skills that are useful in themselves and that can be applied to various activities and disciplines rather than to the mastery of any specific subject matter. Extensive training in the organization and writing of compositions is an integral part of the course.

Each student is required to submit speaking tapes on a regular basis and to work cooperatively with other students to produce a videotape project. All students are strongly encouraged to take the Advanced Placement Examination. There will be a comprehensive final examination.

## **6121X French I** **X      Grade 9-12    Credits 1.0**

The French I academic course focuses on listening, speaking, reading, writing and culture skills. The class is enhanced by the use of multi-media materials and computer-assisted reinforcement. The functions, grammar, and vocabulary are linked to give the students the building blocks to develop language proficiency. Each student is required to do homework on a daily basis. Assessments will include writing passages of 75 words, projects, tests, quizzes, class participation, and tape recordings.

## **6122X French II** **X      Grade 10-12   Credits 1.0** Prerequisites: French I

French II builds upon the skills acquired at the previous level. Multi-media presentations and computer-assisted learning sustain the development of language functions and introduces customs of French-speaking countries. Students will acquire a command of key vocabulary support and grammar structures providing a foundation for proficiency as well as appreciation of the breadth and variety of the cultures. Course requirements include daily homework, writing passages

# World Languages Department

of 100 words, projects, tapes, and class presentations. Assessment instruments include class participation, portfolios, tests, and a final examination.

## **6123H French III**

**H      Grades 11-12   Credits 1.0**

Prerequisites: French II

This course is designed to strengthen and develop skills in listening, speaking, reading, and culture. The focus is using language in the areas of art, music, literature, drama, food, and shopping. The emphasis is placed on developing narrative and persuasive writing skills. Students are required to do homework on a daily basis, create scenes for videotaping, create an art project, and give a class presentation in French. Students will be assessed by portfolio, chapter tests, quizzes, presentations, class participation, writing passages of 150 words, and the final examination.



## **6124H French IV**

**H      Grade 12      Credits 1.0**

Prerequisites: French III

This course is designed to increase students' self-expression in French. Class discussion, student presentations and debates are an integral part of the course. Students read excerpts of the writing of contemporary French authors as well as magazine and newspaper articles in French. Listening comprehension develops by watching French language videos and listening to tapes. Each student is required to do several writing assignments during the course. Passages will be 200 words in length. Assessment will be based on portfolios, final examination, class participation, essays, projects, tapes, and tests.

Each student is required to submit speaking tapes on a regular basis and to work cooperatively with other students to produce a videotape project. All students are strongly encouraged to take the Advanced Placement Examination. There will be a comprehensive final examination.

## **6141 Italian**

**X      Grades 11-12   Credits 1.0**

Prerequisites: Completion of 2 years of another foreign language

This course in Italian focuses on listening, speaking, reading, writing and culture skills. The class is enhanced by the use of multi-media materials and computer-assisted reinforcement. The functions, grammar, and vocabulary are linked to give the students the building blocks to develop language proficiency. Each student is required to do homework on a daily basis. Assessments will include writing passages of 75 words, projects, tests, quizzes, class participation, and tape recordings.



# Career & Technical Education

The Penn-Delco School District participates in a program that offers additional vocational and technical courses at the two Delaware County Area Career and Technical Schools. Each course is an extension of the high school program and credit toward high school graduation will be awarded. The courses are scheduled on a half-day basis.

Although most students pick a main cluster of interest, some programs offer dual enrollment. Dual enrollment allows students to schedule two (2) comparable programs of interest from the same cluster.

Most Technical programs are generally two years in length and open to 11th and 12th grade students. The Cosmetology Program is offered to students in Grades 10, 11 and 12.. Medical Careers Program is for Grade 12 only.

## **The School of Construction Technology** **Building Trades** **Carpentry** **Electrical Construction Technology** **HVAC & Plumbing** **Welding**

The program emphasizes career opportunities in the construction trades. The construction industry provides students multiple careers in designing, planning, managing, building, and maintaining infrastructures. The Construction Technology curriculum supports the efforts of students entering the skilled-trades by equipping them with proper safety and work ethic skills. Students learn to apply academic math solutions like, geometry and trigonometry, to real world challenges. The demand for highly skilled workers in Carpentry, Electrical Technology, HVAC, and Building Trades, especially students trained using state-of-the-art equipment and resources, continues to have a strong outlook demonstrating high growth.

## **The School of Hospitality, Tourism & Human Services** **Cosmetology** **Culinary Arts** **Early Childhood Education**

The School of Hospitality, Tourism & Human Services is a cluster of programs that prepare students to pursue a variety of career pathways in culinary arts, early childhood education and cosmetology. The service industry is the mainstay of a 21st century society. In this diverse job family, workers place people and their needs first. Students will learn the effective management and planning of educational, culinary and beauty services, as well as safety, nutrition, health and human development. The unique nature of these programs brings out the entrepreneur in those who study them and, at some point in time, self-employment is one of the many career paths that can be pursued.





# Career & Technical Education

## **The School of Logistics, Distribution & Transportation** **Automotive Technology** **Collision Repair Technology** **Logistics & Inventory Management**

The School of Logistics, Distribution, and Transportation is a cluster of programs that involve the transportation of passengers and cargo, warehousing & storage for goods, and the supportive activities related to modes of transportation. Like all career and technical education, these training programs combine classroom instruction and hands-on experience with the latest technology in state-of-the-art labs. The needs of a fast paced society require technicians who can manage, service, maintain, and ensure that people, materials, and goods arrive where they need to be safely and on time. Advancing technologies continue to change processes within the Logistic, Distribution and Transportation industry. Collision repair requires technicians to repair and refinish damaged vehicles to drive like new by straightening bent bodies, removing dents, and replacing unrepairable parts. The increasing sophistication in the automotive technology field requires technical, computer, and mechanical skills to inspect, maintain, and repair automobiles. Logistical services manage all aspects of the movement of goods between producers and consumers; computerized inventory management has improved the efficiency of those relationships.

## **The School of Health & Biosciences** **Biomedical Technology & Laboratory Sciences** **Dental Occupation** **Emergency & Protective Services** **Exercise Therapy & Sports Science** **Health Sciences** **Medical Careers**

The School of Health and Biosciences is a cluster of programs that highlights numerous exciting career pathways in medicine, nursing and allied health. It is designed to provide students with opportunities to learn foundational technical skills, build associated academic skills, earn PA Department of Education approved and industry accredited certifications, and develop the 21st century skills needed to excel in the workforce of the future. Students will be immersed in a rich curriculum designed to prepare them to be career and college ready during their training and exploration of various health related occupations. Anatomy and physiology, patient care skills, emergency response, disease control, medical ethics, documentation and records management, pharmacology, EKG and phlebotomy are just some of the topics students will study.





# Career & Technical Education

## **The School of Engineering & Computer Science Advertising Design & Commercial Art Computer Networking Digital Forensics Engineering & Robotics Management Information Systems**

The School of Engineering and Computer Science is a cluster of programs that highlights challenging and fulfilling career pathways in engineering, design, and computer network technologies. It provides a carefully structured curriculum that reflects the workforce needs for skilled engineers and computer specialists as well as adhering to Science, Technology, Engineering and Mathematics (STEM) initiatives. Instruction includes academic & technical skill training, as well as the development of 21st Century skills that are needed to excel in the workforce of the future. Students will earn PA Department of Education approved and stackable, industry accredited certifications. The Engineering pathway prepares individuals to apply knowledge and skills in the engineering field. The Computer Science pathway is an instructional framework that focuses on the design, implementation and management of linked systems of computers and associated software. Safety, ethics, problem solving & trouble shooting, operating systems, system design, communication, automated systems, engineering graphics and security are just some of the topics students will study.

### **Medical Careers**

This program is offered to students who are interested in attending college to prepare for a career in health care. It has been nationally recognized by the Life Science Career Alliance, won teaching awards from Pennsylvania Department of Education (PDE), and achieves 100% college placement. This year long program is offered at 1 of 6 area hospitals. Students attend class daily at their assigned hospital and the curriculum offers a combination of lecture, patient care skills, and clinical rotations. Students benefit from career-based presentations from an array of health care professionals including: nurses, physicians, physician assistants, physical therapists, medical technologists and pharmacists. The curriculum includes anatomy, physiology, pathophysiology, medical terminology, safety, infection control and medical law and ethics. Students graduate from the program with a solid understanding of the integral relations of the hospital team and a vision of their potential role in the health care industry.



*Empowering Partnerships For Education*



# Career & Technical Education

## Delaware County Community College (DCCC) Dual Enrollment Structured Pathways Career & Technical Programs

Sun Valley High School 11th and 12th grade students are eligible to participate in the DCCC Career and Technical Programs, which currently include Carpentry and HVAC. Students who successfully complete the program annually, will receive 3 SVHS elective credits toward high school graduation in addition to receiving transcribed college credit through DCCC. These courses are offered at no cost to SVHS students and transportation to and from DCCC will be provided.

**Students who would like to enroll in either of the DCCC programs must first contact their SVHS school counselor to begin the process.**

Please see course descriptions below:

### Carpentry

This certificate is designed to prepare the student for entry-level positions in the occupational specialty of residential carpentry. Students are offered learning experiences in the basics of blueprint reading, design concepts as well as the building, installing and repairing residential structures.

Upon successful completion of this certificate, students should be able to:

- Demonstrate knowledge of the different structural components of residential buildings.
- Demonstrate basic competencies in preparing and presenting construction drawings and designs.
- Read and interpret blueprints, building plans and specifications.
- Demonstrate skills constructing structures and their components parts.
- Demonstrate technical skills required to install and finish interiors or exteriors.
- Demonstrate understanding and competencies of energy efficient construction.
- Apply the knowledge of mathematics to carpentry tasks.
- Demonstrate knowledge of safety practices.

### HVAC

The Heating, Ventilation, Air Conditioning and Refrigeration (HVAC&R) occupations program prepares graduates for employment with HVAC&R installation and service contractors and/or facilities maintenance positions. Students completing the program

also receive EPA Refrigerant Certification. Having achieved the competencies of this program, students are prepared for full-time employment at an entry-level position or, if already in the fields, to advance in their organization.

Upon successful completion of program requirements, students should be able to:

- Demonstrate knowledge of the principles, properties and functions of residential and light commercial HVAC&R components and systems.
- Use appropriate tools and materials to size, install, service and/or repair HVAC&R equipment and systems.
- Interpret and use pressure and vacuum charts, blueprints and wiring diagrams for HVAC&R systems.
- Troubleshoot and diagnose malfunctions in HVAC&R systems.
- Use computational skills to solve problems in electrical, heating, air conditioning and refrigeration systems.
- Employ occupational health and safety principles and practices.









# Sun Valley High School

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