



Niwot High Course Catalog

2023-2024

This course catalog is subject to change without any notice. The courses listed are to provide students with information, however please note that due to resources, low numbers of registrants, and teacher availability some courses may be modified, changed, or not offered without prior notice. The school schedule is built from student requests, hence why it is important to select your classes wisely. Please consult with your current teachers if you are unsure which level is appropriate for next year. If you have questions please see your school counselor.

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St. Vrain Valley Graduation Requirements

English: 4 credits 9th Grade English 10th Grade English 11th Grade English 12th Grade English	Physical Education: 2 credits Personal Financial Literacy: .5 credit Practical Arts: .5 credit Fine Arts: .5 credit Health: .5 credit Individual and Career Academic Plan (ICAP): Completed ICAP in Grades 9-12
Social Studies: 3 credits World Studies (History and Geography) United States History United States and Colorado Government	
Mathematics: 3 credits (Algebra I or higher)	
Science: 3 credits	

These are the minimum standards for graduation from Niwot High School. Students planning to further their education should challenge themselves academically and research specific college requirements. Colleges are now starting to require *4 Years of English, 4 years of Math at the Algebra 1 and higher level, 3-4 years of lab science, 2-3 years of Social Studies, and 2-4 Years of a World Language, some schools require courses in the Arts**. For highly selective colleges please check the specific requirements on the college webpage and consider challenging yourself with honors, Advanced Placement, or International Baccalaureate courses. [*NACAC](#) General College Entrance Requirements.

Seal of Biliteracy

St. Vrain Valley School District will recognize students who have studied and attained proficiency or higher in English and at least one other language with the Seal of Biliteracy. This award, given at graduation, provides students with a competitive advantage in the employment market as well as increased opportunities for higher education.

Requirements

Demonstrate proficiency or higher in English by completing all of the English Language Arts required for graduation with an overall GPA of least 3.0 (weighted) or higher in the required ELA courses and one of the requirements listed below:

- 470 or higher on SAT EBRW
- 3 or higher on AP English Language Exam
- 3 or higher on AP English Literature Exam
- 4 or higher on IB English Exam
- 100 level or higher on Accuplacer Basic Skills Assessment

Demonstrate proficiency or higher in a language other than English by achieving one of the following:

- 3 or higher on World Language AP Exam
- 4 or higher on World Language IB Exam
- Intermediate Mid on AAPPL (Arabic, German, Korean, Portuguese, Russian, Thai)
- If an identified language exam is not available, students can submit a body of evidence demonstrating proficiency in each mode of communication for that language
- Successfully completing a four-year high school course of study in the world language and attaining an overall grade point average of at least 3.0 in the course of study

Concurrent Enrollment

The State of Colorado provides several options for students who meet high school standards to begin college early. The purpose of these options includes promoting content standards, academic challenge and enrichment, and providing access to academic courses that may not be available at a local high school to meet high school graduation requirements. **The final grade received will appear on the district's official high school and post-secondary transcripts.** To enroll at an eligible post-secondary institution a student must have completed the minimum course prerequisites and all required assessments. Fifth-year seniors do not qualify. Night classes must begin by 6:30 p.m. for approval. For any questions related to process, eligibility, and prerequisites, please work directly with your school counselor. Please review [Concurrent Enrollment](#) information, complete the checklist, and observe the important dates and deadlines each semester.

Non-Concurrent Enrollment Courses

If a student wishes to take a class outside of Niwot High School, any SVVSD program and district approved Concurrent enrollment courses they must notify their counselor and fill out a [non-concurrent enrollment form](#) before enrolling and taking the course. District policy allows students to transfer in up to 2.0 credits from approved programs/schools. The cost incurred and management of these courses is the responsibility of the students and guardians.

NCAA

To be eligible at Division I or Division II level you need to be certified by the [NCAA eligibility center](#). You will want to create an [account](#) with the NCAA eligibility center and they will guide you through the process. Remember you will need to create a certification account to make official visits or to sign a national letter of intent at Division I or II levels. If you are undecided or interested in athletics at the Division III level you will want to create a [profile page](#) with NCAA eligibility center, which will give you an NCAA ID and send you important reminders as you complete high school. Most classes at Niwot High School are NCAA approved. If you have questions or are unsure of the course requirements for college NCAA eligibility please see your counselor. All courses below are NCAA approved unless otherwise noted.

Honors and Advanced Placement

Students may elect to challenge themselves with honors and Advanced Placement (AP) courses throughout their high school career. These courses are weighted at 4.5 for honors and 5.0 for Advanced Placement. Honors courses move at a faster pace and cover more material than general level classes and prepare students to take AP or IB courses in the future. Advanced Placement courses are considered to be “college-level” and require an end-of-the-year exam.

Helpful links when considering Advanced Placement courses:

Read more about specific [AP courses](#)

General information about [AP Exams](#)

Information about [earning college credit for AP courses at Colleges & Universities](#)

<u>NHS NPIB/Honors Courses</u>	<u>NHS Advanced Placement Courses</u>
<i>4.5 weighted courses</i>	<i>5.0 weighted courses</i>
NPIB/Honors English 9	AP Language and Composition
NPIB/Honors English 10	AP U.S. Government and Politics
NPIB/Honors Biology	AP Literature and Composition
NPIB/Honors Chemistry	AP Psychology
Honors World Geography/History	AP Micro/Macro Economics
NPIB/Honors US History	AP Precalculus
NPIB/Honors Spanish 1 & 2	AP Calculus AB
NPIB/Honors French 1 & 2	AP Calculus BC
Honors Geometry	AP Statistics
Honors Algebra 2	AP Spanish Language
Honors Pre-Calculus	AP Computer Science Principles
	AP Computer Science A
	AP Environmental Science

NPIB and IB DP Programme

Niwot Pre-IB (NPIB)

The Niwot Pre-IB (NPIB) course sequence is designed to prepare students in grades 9 and 10 to participate in the IB Diploma Programme in grades 11 and 12. NPIB/Honors courses are weighted at 4.5. For a list of NPIB courses, please see the honors courses section above. Students interested in enrolling in the NPIB course sequence are expected to complete and submit an electronic NPIB Enrollment Form (NHS Class of 2027) to initiate the NPIB enrollment process.

Please check the Niwot IB website for the most up-to-date information about NPIB and be mindful of the due dates and deadlines.

Prospective NPIB students currently not attending any of the SVVSD middle schools are required to submit their academic records (including middle school transcript, attendance records, standardized test scores) to be considered for NPIB Enrollment. Students and families residing outside of the Niwot High School's attendance area must also complete an Open Enrollment Application. More information regarding [Open Enrollment](#) can be found on the NHS website.

All students in NPIB 9th and 10th grade are required to take the following academic courses:

English	Social Studies	Science	Math	World Language
NPIB/Honors Eng. 9 NIB/Honors Eng. 10	Honors World Geo/Hist NPIB/Honors U.S. History	NPIB/Honors Biology NPIB/Honors Chemistry	Appropriate Level	NPIB/Honors French 1 or 2 NPIB/Honors Spanish 1 or 2

IB Diploma Programme

The International Baccalaureate (IB) Diploma Programme (DP) is for students in 11th and 12th grade. The IB Diploma Programme curriculum is made up of six subject groups and the IB DP Core, which includes theory of knowledge (TOK), creativity, activity, service (CAS), and the extended essay (EE). NHS IB DP students work with the NHS IB Diploma Coordinator to establish their two year long IB DP plan. At NHS, IB Diploma Candidates do not submit the NHS IB Course Commitment forms for individual IB courses and instead receive and complete the IB DP Commitment Form. NHS Sophomores who did not participate in the NPIB course sequence in grades 9 & 10 must reach out to the NHS IB Coordinator if interested in enrolling in the IB Diploma Programme to determine readiness for the IB DP.

The NHS IB DIPLOMA CANDIDATE **IB DP FORM** for the NHS IB Class of 2025 will be distributed by and can be obtained from the NHS IB DP Coordinator via email: towlen_elzbieta@svvdsd.org NHS IB Diploma

[NHS IB Course & IB Exam Commitment form](#)- this form is intended only to be used by NHS students interested in taking individual IB courses and not for the NHS student who plans to pursue the IB Diploma. Completion and submission of this form is a required first step in the process of adding any IB courses to student schedules. **IB Course requests entered in IC without submitting this form to the NHS IB Coordinator via email before 2/1/23, will not be processed.**

Helpful links when considering the IB Diploma Programme and/or individual IB courses:

[IBO website](#)

Niwot High School's IB webpage

Information on the IB [DP Curriculum](#)

Individual IB Subject Briefs

[IB Assessments & Exams](#)

Recognition of IB at Colleges & Universities

Individual IB Courses: Niwot High School students can also access IB education via individual IB Courses. All IB courses are weighted on a 5.0 scale. Most of the IB courses are a 2 year long commitment and each has an IB subject fee (\$119). Please read the individual IB course descriptions in the course catalog and individual Subject Briefs for more detailed information. [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course. There are no restrictions on the level (HL or SL) or type of IB courses taken when not in the IB Diploma Programme. IB courses can be taken in combination with AP level courses to create the best pathway for individual students. Please be advised that all IB courses include a subject fee of \$119 each and culminate with an IB exam in May.

IB Diploma Candidates:

IB Diploma students follow the official IB DP curriculum:

- DP Core Elements
 - Theory of Knowledge
 - Extended Essay
 - Creativity, Activity, Service (CAS)

- Six Subject Groups

Different courses are available within each subject group. IB Diploma Candidates are required to take at least three, but no more than four subjects at the high level (HL) and the remaining of the minimum of six subjects at the standard level (SL).

Group 1: Studies in Language and Literature	Group 2: Language Acquisition
English <u>Standard Level</u> IB Language A: English Language & Literature SL 1 (11th grade) IB Language A: English Language & Literature SL 2 (12th Grade) <u>Higher Level</u> IB Language A: English Literature HL 1 (11th grade)	Spanish & French <u>Standard Level</u> IB Language B: Spanish SL 1 (10th or 11th grade) IB Language B: Spanish SL 2 (11th or 12th grade) IB Language B: French SL 1 (10th or 11th grade) IB Language B: French SL 2 (11th or 12th grade)

IB Language A: English Literature HL 2 (12th Grade) <i>Note: IB English SL and HL courses is a 2-year commitment, which includes a subject fee of \$119 each and culminates with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	<i>Note: Only offered at Standard Level (SL), 2-year commitment, IB exams are taken when the student has completed IB level 2. IB World Languages which include a subject fee of \$119 each and culminate with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.
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Group 3: <u>Individuals and Societies</u>	
IB History <u>Standard Level</u> IB History SL (11th or 12th grade) <u>Higher Level</u> IB History of Europe (11th grade) IB History SL (12th grade) <i>Note: IB History HL is a 2-year commitment.</i> <i>IB History SL & HL include a subject fee of \$119 each and culminate with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	Psychology <u>Standard Level</u> IB Psychology SL (11th or 12th grade) <u>Higher Level</u> IB Psychology SL (11th grade) IB Psychology HL (12th grade) <i>Note: IB Psychology HL is a 2-year commitment</i> <i>IB Psychology SL & HL include a subject fee of \$119 each and culminate with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

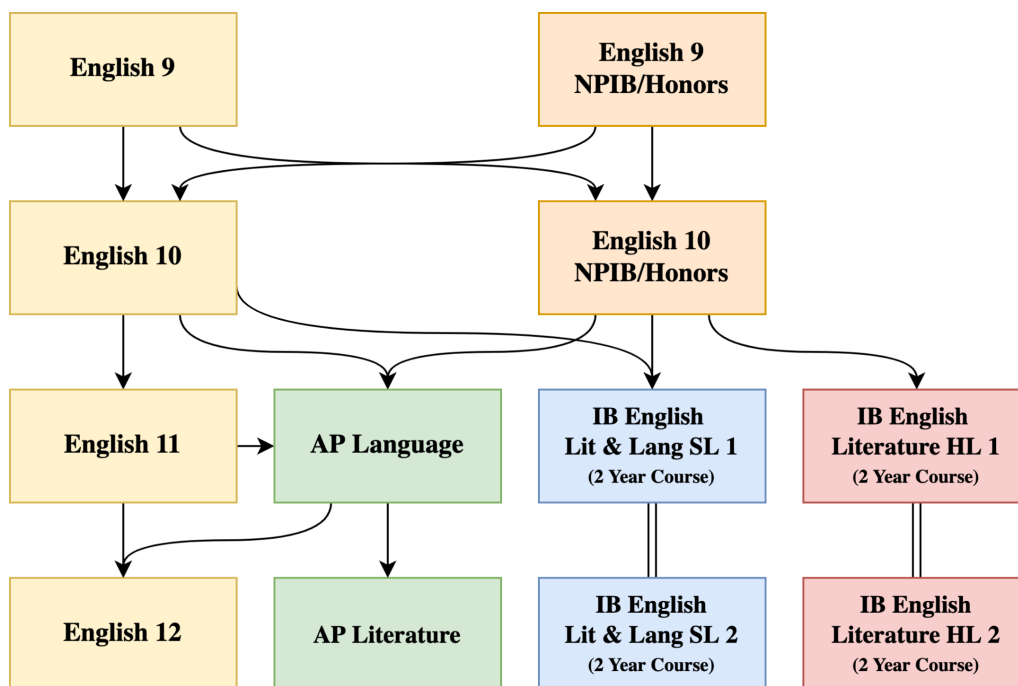
Group 4: <u>Sciences</u>			
Biology <u>Standard Level</u> IB Biology SL 1 (11th grade) IB Biology SL 2 (12th grade) <u>Higher Level</u> IB Biology HL 1 (11th grade) IB Biology HL 2 (12th grade) <i>Note: IB Biology SL and HL are 2-year commitments including a subject fee of \$119 each and culminating with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	Chemistry <u>Standard Level</u> IB Chemistry SL (11th or 12 grade) <u>Higher Level</u> IB Chem SL (11th grade) IB Chem HL (12th grade) <i>Note: IB Chemistry HL is a 2-year commitment including a subject fee of \$119 and culminating with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	Physics <u>Standard Level</u> IB Physics SL (11th or 12th grade) <u>Higher Level</u> IB Physics SL (11th grade) IB Physics HL (12th grade) <i>Note: IB Physics HL is a 2-year commitment including a subject fee of \$119 and culminating with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	Sports, Exercise, & Health Science <u>Standard Level</u> IB SEHS SL (11th or 12th grade) <i>Note: IB SEHS SL included a subject fee of \$119 each and culminates with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Group 5: <u>Mathematics</u>	
IB Math Applications & Interpretations (A & I) <u>Standard Level</u> IB Math A & I SL 1 (taken after Algebra 2) IB Math A & I SL 2 (taken after Math A&I SL 1)	IB Math Analysis & Approaches (A&A) <u>Standard Level</u> IB Math A & A SL (taken after pre-calc) <u>Higher Level</u>

<i>Note: IB Math A & A SL is a 2-year commitment including a subject fee of \$119 and culminating with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	IB Math A & A SL (11th grade) IB Math A & A HL (12th grade) <i>Note: IB Math SL & HL are a one -year courses including a subject fee of \$119 and culminating with an IB exam in May.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.
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Group 6: <u>The Arts</u>	
Visual Arts <u>Standard Level</u> IB Visual Art SL (11th or 12 grade) <i>Note: IB Art SL is a one -year course including a subject fee of \$119.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course. <u>Higher Level</u> IB Visual Art SL (11th grade) IB Visual Art HL (12th grade) <i>Note: IB Visual Arts HL is a 2-year commitment including a subject fee of \$119.</i> <u>NHS IB Course & IB Exam Commitment form</u> must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.	Please note that if you are an IB Diploma Candidate you can take an additional Group 2, 3, or 4 course to satisfy the Group 6 course requirement.

English/Language Arts



English 9

LA1110 A/B

Details: Grade 9, Full Year, NCAA

Description: In Grade 9, instructional time should focus on four critical areas: (1) Oral Expression and Listening which requires effective preparation strategies and listening critically to comprehend a speaker's message; (2) Reading for All Purposes which requires analyzing and comparing increasingly complex literary elements in traditional and contemporary works of literature and informational texts; (3) Writing and Composition of literary, narrative, informational and persuasive texts using proper grammar, usage, and mechanics; (4) Research and Reasoning which requires collecting, evaluating, and analyzing a variety of informational materials for accuracy, relevance, and effectiveness. Students will also use effective problem-solving strategies that require high-quality reasoning. These concepts and associated skills are aligned with the Colorado Academic Standards for Language Arts, incorporating 21st century skills and postsecondary and workforce readiness competencies.

NPIB/Honors English 9

LA3315 A/B

Details: Grade 9, Full Year, Weighted 4.5, NCAA

Prerequisite: *A or B in English 8 or teacher recommendation*

Description: The first course in the NPIB/Honors English curriculum, NPIB/Honors English 9 uses an international approach to the study of literature. Its intent is to prepare students for the IB Diploma and/or AP and IB Courses in 11th and 12th grades. To meet these rigorous standards of these courses, students will write and perform strong speeches, extend their writing formats and use of textual evidence, interpret and analyze literature using literary concepts, and identify thematic connections among various literary genres.

English 10

LA1120 A/B

Details: Grade 10, Full Year, NCAA

Prerequisite: *English 9*

Description: English 10 will continue to focus on analytical reading skills in the genres of world literature. Writing will be intensive and will incorporate sentence and paragraph structure, along with a variety of modes of essay composition (e.g. persuasive, compare/contrast, narrative, etc). This course will also provide oral communication fundamentals and public speaking. Students should successfully complete English 10 before continuing with English 11.

NPIB/Honors English 10**LA3325 A/B****Details:** Grade 10, Full Year, Weighted 4.5, NCAA**Prerequisite:** *NPIB/Honors Eng 9 (A or B) or an A in English 9*

Description: NPIB/Honors English 10 uses a thematic approach to the study of literature. Its intent is to continue the preparation for the IB and AP courses in grades 11 and 12. To meet the rigorous standards of these courses, students will continue to develop their literary analysis skills, write and perform strong speeches, extend their understanding of writing formats and use of textual evidence, interpret and analyze literature using literary concepts, and identify thematic connections among various literary genres. Summer homework may be required.

English 11**LA1130 A/B****Details:** Grade 11, Full Year, NCAA**Prerequisite:** *English 10 or Honors English 10*

Description: This class provides an introduction to American literature and continues to build writing skills acquired in English 10. Students can expect a variety of writing topics and situations, including ideas and themes connected to the study of American literature. Major themes, movements, and writers representing the American cultural heritage will be considered in a variety of genres (story, poetry, essay, drama, novel, biography). Emphasis is on understanding and appreciation of literature and includes the use and application of literary terms. Students will be expected to complete assignments on time so that they can contribute to class discussions and can perform well on writings and tests. Students should successfully complete CP English 11 before continuing with English 12.

AP Language and Composition**LA5100 A/B****Details:** Grade 11 or 12, Full Year, Weighted 5.0, NCAA

Prerequisite: *AP English Language is available to all students who are willing to do the intensive literary work required. Summer reading assignments are encouraged for students entering this course.*

AP Exam: *AP Exam Fees apply*

Description: The AP English Language and Composition course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytical and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

IB English A: Lang Lit SL 1**LA4110 A/B****IB English A: Lang Lit SL 2****LA4120 A/B****Details:** Grade 11 & 12, Two-year course commitment, Weighted 5.0, NCAA**Prerequisite:** *English 10, or NPIB/Honors English 10***Fee:** *\$119 IB subject fee, IB Exam Required Senior year.*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

This course aims to develop skills of textual analysis and the understanding that texts, both literary and non-literary, can relate to culturally determined reading practices. The course also encourages students to question the meaning generated by language and texts. An understanding of the ways in which formal elements are used to create meaning in a text is combined with an exploration of how that meaning is affected by reading practices that are culturally defined and by the circumstances of production and reception.

IB English A: Literature HL 1**LA4130 A/B****IB English A: Literature HL 2****LA4140 A/B****Details:** Grade 11 & 12, Two-year course commitment, Weighted 5.0, NCAA**Prerequisite:** *NPIB/Honors English 10 (A or B) or an A in English 10***Fee:** *\$119 IB subject fee, IB Exam Required Senior year.*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB English HL 11 covers two of the required IB literature units in 11th grade: first semester—literature in translation, first semester—school's choice of literature. Summer homework may be required.

Objectives:

- Investigate the cultural and contextual underpinnings of the texts
- Analyze and comment independently on literary texts
- Apply knowledge and understanding of literary forms to texts
- Demonstrate knowledge and understanding in oral and written presentations

English 12

LA1140 A/B

Details: Grade 12, Full Year, NCAA

Prerequisite: *AP Language, or English 11*

Description: This course is designed for college-bound and/or career ready seniors who will develop skills in literature, writing, and professionalism in preparation for their future. Its intent is to provide students with the tools necessary to be successful post-graduation. The course includes American, British, and European works. Writing assignments are based on essays, short stories, poetry, and plays. Students will be expected to explore their role in and how they will contribute to society. Critical thinking, research, and reasoning skills will be emphasized throughout the course. Students will be expected to complete assignments on time so that they can contribute to class discussions and can perform well on writings and tests.

AP Literature and Composition

LA5410 A/B

Details: Grade 11 or 12, Full Year, Weighted 5.0, NCAA

Prerequisite: *Strongly recommended for students who successfully completed AP Language. Recommended for students who earned a strong grade in eleventh grade English.*

AP Exam: *AP Exam Fees apply*

Description: The AP English Literature and Composition course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Summer homework may be required. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

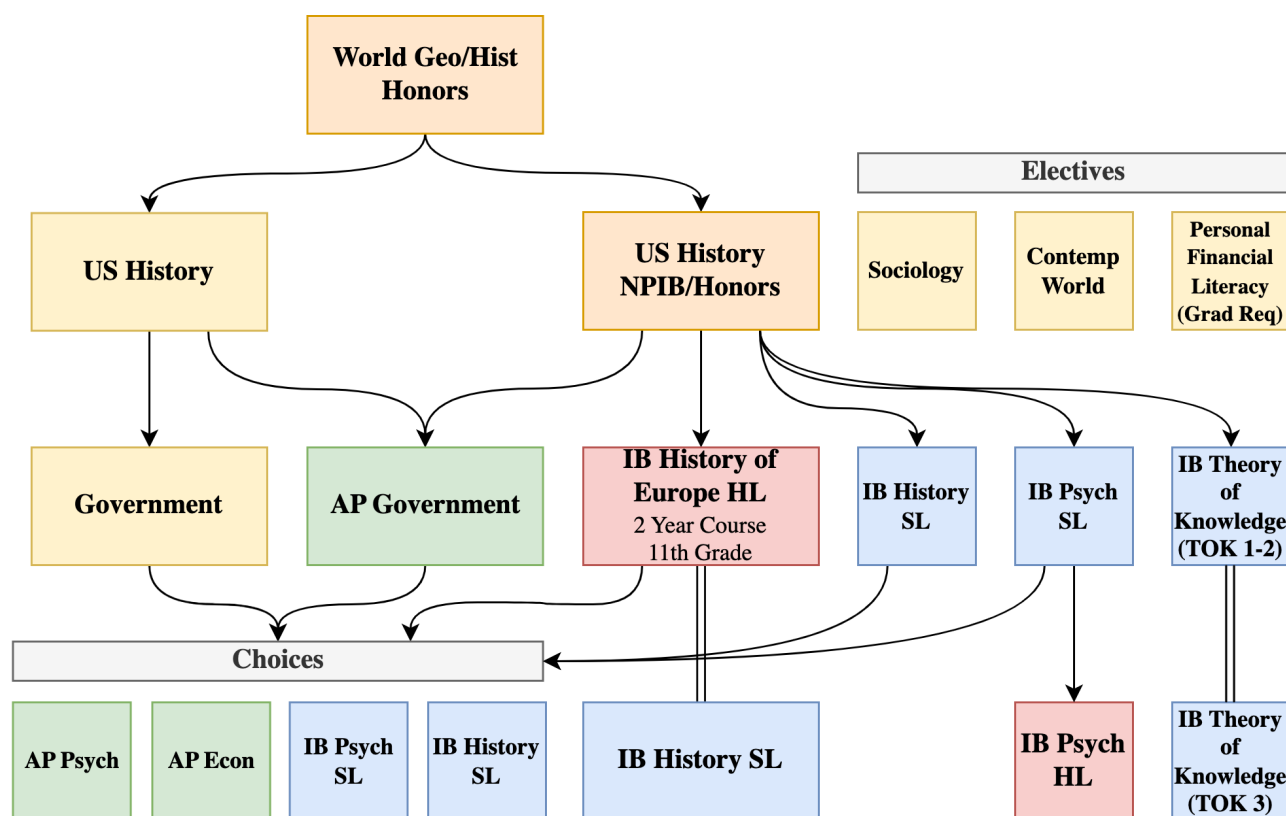
Creative Writing

LA2106

Details: Grade 12; 11 and 10 space available, Semester, NCAA

Description: Explore your creative potential and gain experience in writing short stories, poetry, and screenplays. Whether you have experience writing creatively or are interested in getting started, all are welcome. The course includes exercises in the techniques of characterization, plot, suspense, symbolism, rhythm, figurative language, and imagery. Create your own unique writer's voice in a community of student writers.

Social Studies



World Geography/History Honors

SS1111 A/B

Details: Grade 9, Full Year, Weighted 4.5, NCAA

Description: This honors-level course provides a base of knowledge about the geography and history of the Americas, Europe, the Middle East, Africa, and Asia. The emphasis on human geography and history will address issues of economic, political, and social relevance, with an emphasis on connection to current global issues. Students will develop critical thinking and organizational skills, through research, writing, and argumentation.

United States History

SS1220 A/B

Details: Grade 10, Full Year, NCAA

Description: U.S. History covers the historical growth of the United States with an emphasis on the 20th century. Topics of study include the Depression Era, the World Wars, the Cold War, the Civil Rights Movement, and more. The role of government is explored throughout the study of historical events. The course is structured around district social studies standards and objectives, which are interwoven with content and selected issues in history, as well as current events. A variety of teaching methods are used.

NPIB/Honors United States History

SS3107 A/B

Details: Grade 10, Full Year, Weighted 4.5, NCAA

Prerequisite: *A or B in World Geog/Hist Honors*

Description: NPIB/Honors U.S. History is an advanced level survey course that covers post Reconstruction through the 20th century. Political, social, economic, and intellectual themes are addressed throughout the course, including war, immigration, industrialization, capitalism, labor, race, ethnicity, and gender. Special emphasis is placed on civic and governmental themes in order that students appreciate the history, functions, and responsibilities inherent in our federal system of government. Critical thinking skills are developed through numerous writing assignments, including document-based question tests (DBQs). Students will also practice the craft of history by studying primary and secondary sources and writing historical essays. In addition, students will learn the steps of writing a research paper.

U.S. and Colorado Government

SS1330 A/B

Details: Grade 11, Full Year, NCAA

Description: This course prepares students to be active citizens using a working knowledge of government. Topics include the Constitution and the branches of government, as well as federal, state, and local levels of U. S. Government. Other units include the responsibilities of citizenship in the family and community, economics, world political systems, discovery of a student's individual political ideology, and a civic field experience. Students will integrate current news items with textbook chapters for class discussions, and use technology and skills from their English classes to research and present their own views.

Personal Financial Literacy

SS1440

Details: Grade 10-12, Semester

Personal Financial Literacy focuses on four critical areas: (1) designing and analyzing financial plans for short and long-term goals; (2) analyzing spending, saving, and investment options; (3) analyzing the components of credit and debt; and (4) identifying, developing, and evaluating risk-management strategies. The course emphasizes the analytical and evaluation skills to become "fiscally fit." These concepts and associated skills are aligned with the Colorado Academic Standards for Social Studies, incorporating 21st century skills and postsecondary and workforce readiness competencies.

AP U.S. Government & Politics

SS5205 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, NCAA

Prerequisite: *A or B in US History or NPIB/Honors US History*

AP Exam: *AP Exam Fees apply*

Description: AP U.S. Government and Politics is a course built on the foundations of the Constitution, that allows students to dissect the branches of government, analyze how citizens interact with the government and compare and contrast institutions of government. Through independent reading, class discussions, and inquiry-based group projects, students will become campaign strategists, political scientists, and engaged citizens. The course will fulfill the graduation requirement for U.S. Government. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

IB History SL

SS4125 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, NCAA

Prerequisite: *NPIB/Honors U.S. History*

Fee: *\$119 IB subject fee, IB Exam Required if taking this course.*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB History is the SL history course and, when combined with IB History of Europe, completes the requirements for HL History. The focus of the course is the major global conflicts of the 20th century emphasizing the causes, practices, and results of wars, the events of the Cold War, and conflict and intervention in the late 20th century. This course will prepare students for the history internal assessment and papers 1 and 2 of the History exam.

** This is an SL IB course which can be taken in 11th or 12th grade. For those who are completing HL History, IB History of Europe is a prerequisite.*

IB History of Europe

SS4110 A/B

Details: Grade 11, Full Year, Weighted 5.0, NCAA

Prerequisite: *NPIB/Honors U.S. History*

Fee: *\$119 IB subject fee, IB Exam Required if taking this course.*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: The course explores topics of 19th and 20th century European history. IB History of Europe prepares students for the higher-level IB history exam. To qualify to take the HL IB history exam, a student must complete both History of Europe during their junior year and IB History SL during their senior year. Students' critical thinking skills will be refined through challenging readings, analytical writings, and seminar discussions. This course will prepare students for the history internal assessment and paper 3 of the HL History exam.

**If interested in History HL, this course precedes IB History SL. This is the only instance in which students take the HL component before the SL component of the class for the 2 year long HL option.*

IB Psychology SL

SS4115 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, NCAA

Prerequisite: *NPIB/Honors U.S. History*

Fee: \$119 IB subject fee, IB Exam Required if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Psychology SL can be taken in isolation or as the first year in a two-year course. Students will study biological, cognitive, and sociocultural approaches to behavior. The focus is on current research in areas that include emotion, memory, intelligence, cult behavior, stereotyping, cultural differences, and bullying. We will also look at the specialty area of human relationships with queries like: What causes people to become violent? What are the social and cultural factors that influence attraction? Under what circumstances are people more likely to be altruistic? As part of the course, students will also be conducting their own research study which allows for the opportunity to examine research methods and biases.

IB Psychology HL

SS4120 A/B

Details: Grade 12, Full Year, Weighted 5.0, NCAA

Prerequisite: *IB Psychology SL*

Fee: \$119 IB subject fee, IB Exam Required if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Psychology HL is the second course in the two-year Psychology IB offering. Students will have an opportunity to design their own psychological experiment and explore a behavior topic of their choosing through research methodology. A brief review of the first-year levels of analysis is included.

AP Psychology

SS5725 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, NCAA

Prerequisite: *An attitude and desire to work in a college-level class.*

AP Exam: *AP Exam Fees apply*

Description: The Advanced Placement Psychology course is intended to provide the scope and level of academic rigor expected in an introductory college-level psychology course. The aim is to instill knowledge, skills, and attitudes to better understand human behavior. Course activities include class demonstrations, simulations, and projects on behavior modification, human development skill assessment, and breaking social norms. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

AP Macro/Micro Economics

SS5830 & SS5831

Details: Grade 11-12, One Semester Each, Weighted 5.0, NCAA

Prerequisite: *An attitude and desire to work in a college-level class.*

AP Exam: *AP Exam Fees apply, two exams, one for Macro, one for Micro*

Description: This course prepares students for the AP Micro and AP Macroeconomics exams. This rigorous course introduces students to the intricacies of economics and includes topics such as supply, demand, market failure, imperfect markets, and competition. In the spring we cover topics such as Gross Domestic Product, inflation, unemployment, and government philosophy towards economics. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

Contemporary Global Issues

SS2100

Details: Grade 9-12, Semester, NCAA

Description: In this class, students will focus on current national and global issues, along with comparative politics and internationalism. Students will examine political, economic, and social points of view while thinking and writing critically.

Sociology

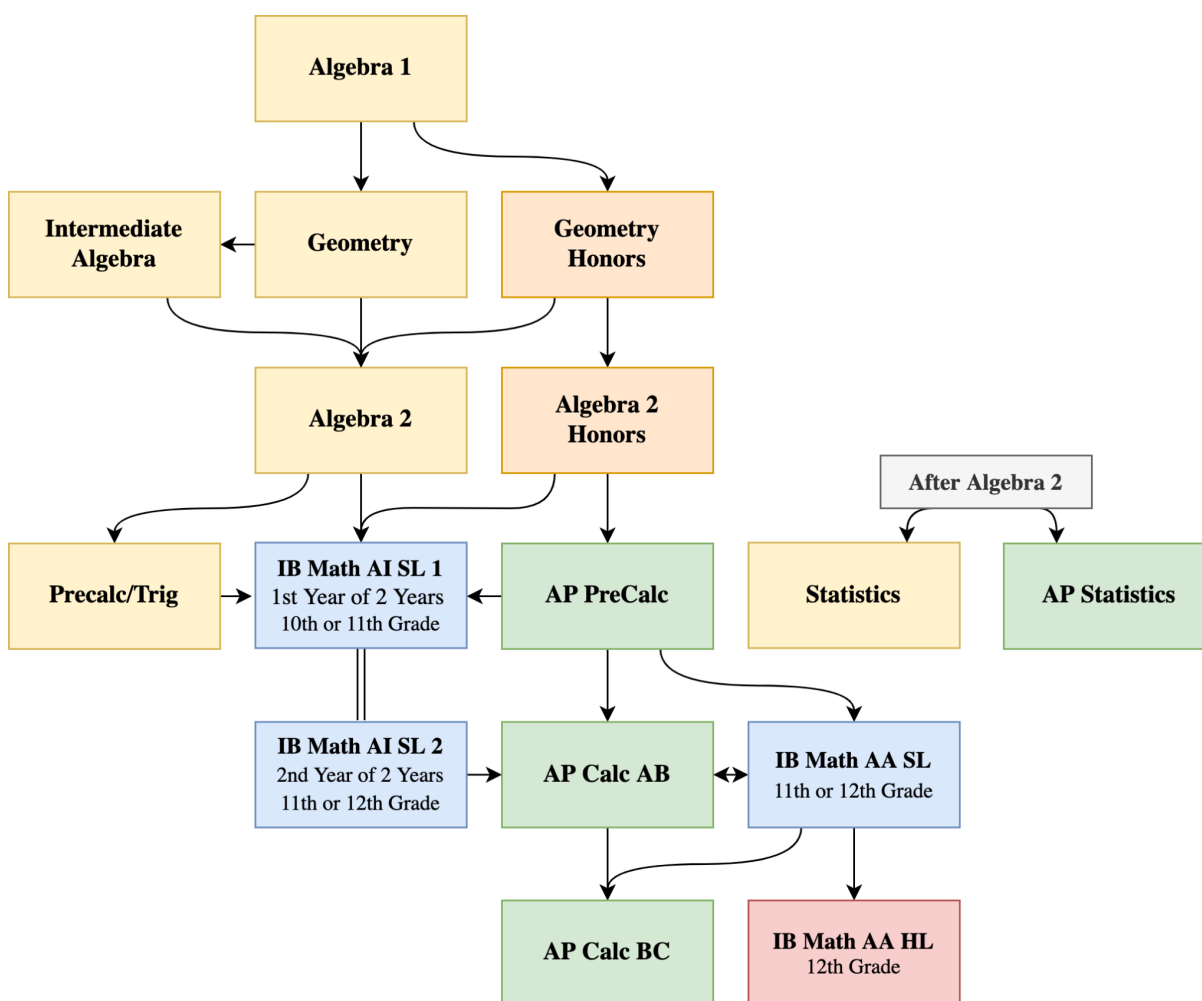
SS2135

Details: Grade 10-12, Semester, NCAA

Description: This course examines the science of understanding society and group behavior.

Emphasis will be on society's culture, institutions, and organization. Students will examine values and norms, socialization, social change, social problems, and contemporary issues.

Mathematics



Graphing Calculators: Graphing calculators are often utilized in math classes, especially for Algebra 2 courses and above. Students are required to have a graphing calculator for all IB and AP math courses. To avoid compatibility problems, we advise that you purchase a Texas Instruments model TI-83 Plus or TI-84 Plus. Any CAS graphing calculators are NOT allowed on IB or AP exams. NHS has a limited number of calculators that can be rented for the year for \$15.

Algebra 1

MA1110 A/B

Details: Grade 9-12, Full Year, NCAA

Description: Algebra 1 is the foundation for all of high school mathematics. Algebra 1 topics center around the four representations of a function: tables, graphs, equations, and problem situations. By the end of the year, students should be able to enter into any of the four representations and navigate to any other representation of a function. Topics include linear functions (first semester), exponential functions, quadratic functions, and statistical analysis (second semester).

Geometry

MA1210 A/B

Details: Grade 9-12, Full Year, NCAA

Prerequisite: *Algebra 1*

Description: Geometry enables students to gain a basic understanding of geometric principles and problem solving through discovery and investigations. Topics include inductive reasoning, geometric terminology, algebra review, line and angle relationships, triangles, polygons, circles, transformations, right triangle trigonometry, area and volume, Pythagorean Theorem, and similarity. *Consult with your current math teacher before deciding between Geometry and Honors Geometry.*

Geometry Honors

MA1213 A/B

Details: Grade 9-12, Full Year, Weighted 4.5, NCAA

Prerequisite: *A or B in Algebra 1*

Description: Honors Geometry is the best choice for students who desire a challenging and rigorous Geometry experience. The Honors course covers much of the same concepts as regular Geometry but at a more abstract level of thinking as well as a more rigorous and challenging pace. Students in Honors Geometry end the year studying deductive reasoning and formal proofs of geometric concepts and properties. *Consult with your current math teacher before deciding between Geometry and Honors Geometry.*

Intermediate Algebra

MA1310 A/B

Details: Grade 11-12, Full Year

Prerequisite: *Algebra 1 and Geometry*

Description: This class is a bridge between Algebra 1/Geometry and Algebra 2. Students will extend their learning through real-world applications of algebraic, geometric, and statistical concepts. The course will include an in-depth study of families of functions (linear, quadratic, and exponential functions) that were studied in Algebra 1 and frontload students' knowledge to help them be successful for Algebra 2. *Note: This course does not meet NCAA academic eligibility requirements.*

Algebra 2

MA1410 A/B

Details: Grade 10-12, Full Year, NCAA

Prerequisite: *Algebra 1 and Geometry or Geometry Honors*

Description: Algebra 2 is a continuation of algebra and geometry courses. Topics include linear equations, systems of equations, quadratics, polynomial and rational functions, data analysis and probability, basic sequences and series, exponential functions, and logarithmic functions. Students will need a graphing calculator for this course. *Consult with your current math teacher before deciding between Algebra 2 and Honors Algebra 2.*

Algebra Honors 2

MA1412 A/B

Details: Grade 9-12, Full Year, Weighted 4.5, NCAA

Prerequisite: *A in Algebra 1 and B or higher in Geometry Honors*

Description: Honors Algebra 2 is best suited for highly motivated students who desire a challenging and rigorous mathematical experience. The Honors course covers all of the same material as regular Algebra 2 and many additional topics focused on Trig and Pre-Calc preparedness. The class moves at a more rigorous and challenging pace. Topics include linear equations, systems of equations and matrices, quadratics, polynomial and rational functions, data analysis and probability, functions and operations, sequences and series, exponential functions, and logarithmic functions. Students will need a graphing calculator for this course. *Consult with your current math teacher before deciding between Algebra 2 and Honors Algebra 2.*

Statistics

MA1510 A/B

Details: Grade 11-12, Full Year, NCAA

Prerequisite: *Algebra 2 or Honors Algebra 2*

Description: Statistics is designed for students who wish to see how statistics can be applied to problem solving and real-world topics. Elementary statistics provides a study of the basic concepts of descriptive and inferential statistics. An understanding of the meaning of statistics in everyday life is an inherent part of the course. Statistics courses are often required for business, psychology, and other majors in college; this course is a good preparation for college.

Precalculus w/ Trig

MA1720 A/B

Details: Grade 10-12, Full Year, NCAA

Prerequisite: *Algebra 2*

Description: Precalculus with Trigonometry focuses on six critical areas: (1) the complex number system; (2) arithmetic with polynomials and rational expressions; (3) operations with functions; (4) conic sections; (5) trigonometric functions; and (6) applications of trigonometry. These concepts and associated skills exceed the Colorado Academic Standards for mathematics, incorporating 21st-century skills and postsecondary and workforce readiness competencies.

AP Precalculus**MA5005 A/B****Details:** Grade 10-12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *A or B in Honors Algebra 2***AP Exam:** *AP Exam Fees apply*

Description: AP Precalculus is a rigorous course which contains content and conceptual understandings that colleges and universities typically expect students to master to qualify for college credit and/or placement. Topics include polynomial and rational functions, exponential and logarithmic functions, trigonometric and polar functions, functions involving parameters, vectors, and matrices. Students will need a graphing calculator for this course. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

AP Statistics**MA5215 A/B****Details:** Grade 10-12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *Algebra 2 or Algebra 2 Honors***AP Exam:** *AP Exam Fees apply*

Description: AP Statistics involves an in-depth study of statistics and is equivalent to a 1-semester introductory college statistics course. Students will study four main topics throughout the year: exploring data, data collection methods and analysis, probability, and inference. These topics surround two main types of data: categorical and quantitative. Students will use the TI-83/TI-84 calculator extensively to analyze data and draw inferences from data. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

AP Calculus AB**MA5105 A/B****Details:** Grade 11-12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *AP PreCalculus or Honors Pre-Calculus w/ Trig***AP Exam:** *AP Exam Fees apply*

Description: AP Calculus AB is a rigorous course that covers material traditionally covered in a Calculus I college course. This course covers differential and integral calculus. This course will prepare students to pursue further mathematics in college. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

AP Calculus BC**MA5110 A/B****Details:** Grade 11-12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *A or B in AP Calculus AB or IB Math A&A SL***AP Exam:** *AP Exam Fees apply*

Description: AP Calculus BC is a rigorous, fast-paced, and highly demanding course. AP Calculus BC covers material traditionally covered in Calculus I and Calculus II college courses. This course covers differential and integral calculus as well as sequences and series. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

IB Math Applications & Interpretations (A&I) SL 1**MA4110 A/B****IB Math Applications & Interpretations (A&I) SL 2****MA4220 A/B****Details:** Grade 11 and 12, Two-Year Course Sequence, Weighted 5.0, NCAA**Prerequisite:** *Algebra 2***Fee:** *\$119 IB subject fee, IB Exam Required Senior year if taking this course.*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Math Applications & Interpretations SL is a standard level IB course and is designed for students with varied backgrounds and abilities who may not pursue a mathematically based career. The course develops the skills needed to cope with the mathematical demands of a technological society with an emphasis on the application of mathematics to real-life, everyday situations. Course topics include families of functions, probability and statistics, mathematical modeling, sequences, finance, geometry, trigonometry, basic differential and integral calculus. Students may take the IB Math A & I SL exam at the end of the second year of this course.

IB Math Analysis and Approaches (A&A) SL**M4330 A/B****Details:** Grade 11-12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *PreCalculus w/Trig Honors or AP PreCalculus***Fee:** \$119 IB subject fee, IB Exam Required if taking this course.**Note:** [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

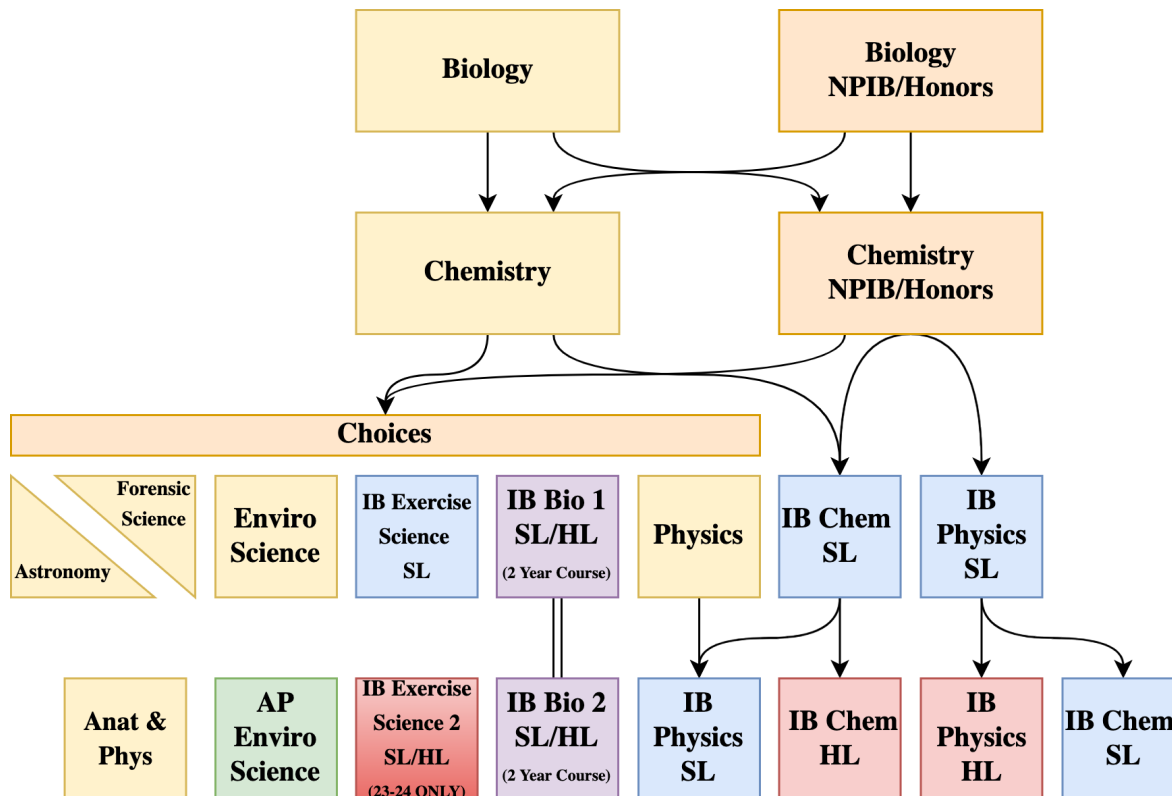
Description: This course is intended for students who wish to pursue studies in mathematics at university or subjects that have a large mathematical content. It is for students who enjoy developing mathematical arguments, problem solving and exploring real and abstract applications, with and without technology. Topics include differential and integral calculus, bivariate statistics, discrete random variables, normal distribution, reasoning and proof. A mathematical exploration/investigation is a requirement. This course is designed to prepare students for the IB AA SL Mathematics exam in the spring. This course also serves as the first of two years of the IB Mathematics HL program.

IB Math Analysis and Approaches (A&A) HL**MA4440 A/B****Details:** Grade 12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *IB Mathematics SL***Fee:** \$119 IB subject fee, IB Exam Required if taking this course.**Note:** [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

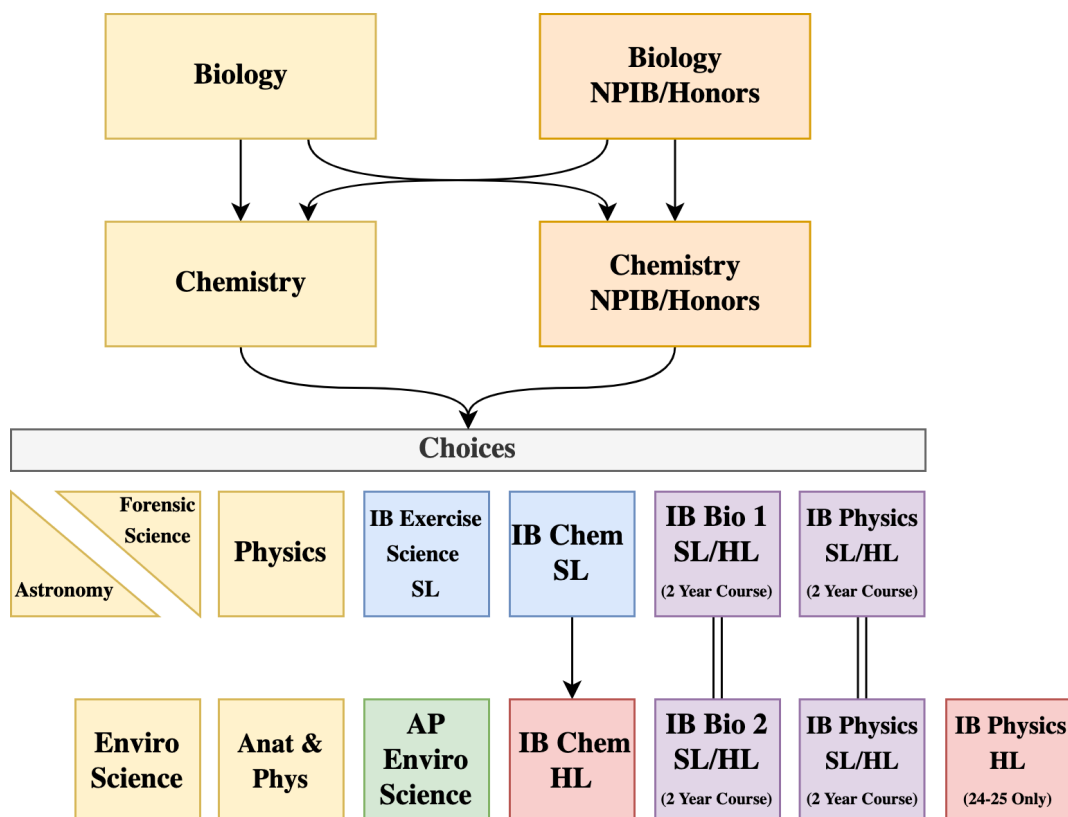
Description: This course is the second of 2 years of the IB Mathematics HL program designed to prepare students for the IB Mathematics HL exam. A mathematical exploration/investigation involving the student to research, connect and prove mathematics will be required. This course further explores differential and integral calculus, including differential equations and series. It also further explores statistics, including continuous random variables.

Science

2023-2024 Course Pathway



2024-2025 Course Pathway



Biology**SC1120 A/B****Details:** Grade 9, Full Year, NCAA**Fee:** \$10

Description: This lab-based course develops the inquiry and critical thinking skills of students. Students learn the structure and function of living things and their relationship to the environment. Students are exposed to biological knowledge that is important for being an informed and contributing citizen in today's society.

NPIB/Honors Biology**SC3102 A/B****Details:** Grade 9, Full Year, Weighted 4.5, NCAA**Prerequisite:** *A or B in Science 8 or Teacher Recommendation***Fee:** \$10

Description: This lab-based course prepares the college-bound student for higher-level scientific investigation. Emphasis is placed on allowing students to plan investigations, analyze data, critically analyze conclusions, and write lab reports. Students learn about the developing field of biochemistry which includes biological molecules, enzyme activity, photosynthesis, cellular respiration, DNA replication, and protein synthesis. Students explore the relationship between structure and function by investigating plant and animal systems and cells. Students discover the diversity and unity of life while learning mitosis, genetics, evolution, and taxonomy.

Chemistry**SC1130 A/B****Details:** Grade 10, Full Year, NCAA**Fee:** \$10**Prerequisite:** *Biology*

Description: Chemistry is a lab-based class that emphasizes inquiry. This course is an introduction to chemistry designed for students who plan to pursue non-science careers. Chemistry topics addressed include atomic structure, periodic law, chemical calculations, energy, and gas behavior. Each unit includes major concepts, basic vocabulary, and intellectual and lab skills expected in an introductory chemistry course.

NPIB/Honors Chemistry**SC3110 A/B****Details:** Grade 10, Full Year, Weighted 4.5, NCAA**Prerequisite:** *NPIB/Honors Biology***Fee:** \$10

Description: This lab-based course will consist of a study of the following topics: Matter and Measurements; Atomic Structure; Bonding and Molecular Shape; Gas Laws; Acids and Bases; Chemical Reactions and Stoichiometry; Redox Reactions, Nomenclature, Thermochemistry and Kinetics; and Periodicity. These concepts and associated skills are aligned with the Colorado Academic Standards for physical science, incorporating 21st-century skills and in line with the standards taught in IB Chemistry SL and HL courses.

AP Environmental Science**SC5100 A/B****Details:** Grade 11 or 12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *Biology & Chemistry***Fee:** \$10, plus optional Exam Fee

Description: AP Environmental science is a hands-on look at human-made environmental problems, and the relative risks associated with these problems to find alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography. Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

IB Sports, Exercise, and Health Science SL**SC4140 A/B****IB Sports, Exercise, and Health Science SL/HL 2 (23-24 is the last time this is offered)****SC4142 A/B****Details:** Grade 11 or 12, Full Year, Weighted 5.0, NCAA**Prerequisite:** *A or B in NPIB Biology and either A or B in NPIB/Honors Physics/Chemistry or A in Chemistry***Fees:** \$10, plus \$119 IB subject fee, IB Exam Required Senior year if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Sports, Exercise and Health Science explores the science underpinning physical performance and provides the opportunity to apply these principles. The course incorporates the disciplines of anatomy and physiology, biomechanics, psychology and nutrition. Students cover a range of core and option topics, and carry out experimental investigations in both laboratory and field settings. The course offers a deeper understanding of the issues related to sports, exercise and health in the 21st century and addresses the international dimension and ethics related to both the individual and global context. Apart from being worthy of study in its own right, SEHS is good preparation for courses in higher or further education related to sports fitness and health, and serves as useful preparation for employment in sports and leisure industries.

IB Biology SL/HL 1

SC4111 A/B

IB Biology SL/HL 2

SC4112 A/B

Details: Grade 11 and 12, Two-Year Course Sequence, Weighted 5.0, NCAA

Prerequisite: *Chemistry, NPIB/Honors Biology, NPIB/Honors Physics/Chemistry*

Fees: \$10, plus \$119 IB subject fee, IB Exam Required Senior year if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Biology is offered over two years. This is a lab-based science class that studies life at its varied levels with an emphasis on written communication. Living systems are explored from the molecular level to the global level. Investigations for this course cover the biochemical processes for life, cellular structure and function, homeostasis, genetics and genetic engineering, evolution, taxonomy and comparative anatomy, reproduction and development, population studies, environment and ecosystems, and the structure and function of human systems. Forty hours of labs, dissections, and a project are required for this class.

IB Chemistry SL

SC4120 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, NCAA

Prerequisite: *Chemistry, NPIB/Honors Chemistry/Physics*

Fees: \$10, plus \$119 IB subject fee, IB Exam Required if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Chemistry SL is a lab-based science course. Chemical systems are studied from the aspect of electron configuration, thermochemistry, kinetics, oxidation-reduction, and organic chemistry. Forty hours of labs including an individually designed investigation and a separate interdisciplinary project are required.

IB Chemistry HL

SC4125 A/B

Details: Grade 12, Full Year, Weighted 5.0, NCAA

Prerequisite: *IB Chemistry SL*

Fees: \$10, plus \$119 IB subject fee, IB Exam Required Senior year if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Chemistry HL is the second year of the two-year IB Chemistry offering. This is an investigation-based science class. Chemistry topics that are covered in greater depth than in IB Chemistry SL include atomic theory, equilibrium, bonding, oxidation-reduction, organic chemistry and thermodynamics. A minimum of twenty lab hours and an individual investigation are required. This class will complete requirements for IB Chemistry HL.

IB Physics SL

SC4130 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, NCAA **(Note: In 24-25, this will be a 2-year SL/HL)**

Prerequisite: *Physics or NPIB/Honors Chemistry/Physics, Completed Algebra 2*

Fees: \$10, plus \$119 IB subject fee, IB Exam Required if taking this course.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB Physics SL is a very fast paced class that covers the first year of algebra-based college physics. The primary goal of this course is to provide a comprehensive introduction to physics. Forty hours of labs including an individually designed investigation and a separate interdisciplinary project are required. This class will complete the requirements for IB Physics SL exam or the first year of IB Physics HL.

IB Physics HL**SC4135 A/B****Details:** Grade 12, Full Year, Weighted 5.0, NCAA (**Note: In 24-25, this will be a 2-year SL/HL**)**Prerequisite:** *IB Physics SL***Fees:** \$10, plus \$119 IB subject fee, IB Exam Required Senior year if taking this course.**Note:** [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.**Description:** IB Physics HL is the second year of a two-year IB Physics HL offering. It is equivalent to an advanced 1st year college physics course. This is an investigation-based science class with additional laboratory hours. This class will offer a physics approach to studying science, students will design investigations, collect data, analyze results, evaluate and communicate findings.**Physics****SC1140 A/B****Details:** Grade 11-12, Full Year, NCAA**Fee:** \$10**Description:** This course is designed to give students an opportunity to develop a conceptual understanding of the principles of physics through observation, experimentation, and some limited mathematical analysis. The course includes topics on mechanics, light and sound, electricity and magnetism, as well as atomic and nuclear physics, and other topics.**Astronomy****SC2010****Details:** Grade 11-12, NCAA, **Semester****Fee:** \$10**Description:** Astronomy is a course for students who are interested in the planets and the universe around us. Topics will include characteristics of the solar system, a study of the sun to better understand stars and their life cycles, the nature and origin of the universe, and the technology involved in discovering our universe.**Forensic Science Lab Based****SC2140****Details:** Grade 11-12, NCAA, **Semester****Fee:** \$10**Description:** Forensic Science is a laboratory-based science class designed for students who are interested in forensic science. The purpose of this course is for students to gain experience in the major investigative techniques currently used by forensic scientists and crime scene investigators, and to develop an understanding of the scientific concepts that serve as the basis for these techniques.**Environmental Science****SC2120 A/B****Details:** Grade 11-12, Full Year, NCAA**Fee:** \$10**Description:** This course is designed for students who wish to apply past science course experience to environmental studies. Environmental Science carefully analyzes the relationship of modern humans and their interactions with the environment. The course develops concepts in ecology and the basic laws that govern energy resources use in nature. First semester stresses ecosystem analysis techniques and field studies. The second semester focuses on basic energy/resource use concepts, pollution sources and impacts, and energy alternatives. Laboratory investigations and Citizen Science projects will culminate with a portfolio web page.**Anatomy & Physiology****SC2150 A/B****Details:** Grade 11-12, Full Year, NCAA**Fee:** \$10**Description:** This is an elective science course that will build on concepts learned in biology and chemistry. It will focus specifically on human anatomy and physiology. Through lectures, labs, and activities students will learn how structures (anatomy) of the human body fit their function (physiology) to maintain homeostasis of the organism and continue the species.

Physical Education and Health

Two (2) credits of physical education courses are required for graduation. Since the goals of P.E. classes are to promote both physical and mental well-being, activities that include cardiovascular and muscular endurance and flexibility are a part of each class period.

P.E. Participation Policy

Throughout the school year, students may develop health/medical concerns prohibiting full participation in their scheduled physical education class. Alternative assignments are available to students who provide a doctor's note to the school nurse during the time of injury/medical condition prohibiting full participation.

Health

H1100

Details: Grade 9-10, Semester, Graduation Requirement

Description: This course is designed to provide you with essential learning in the area of health. The expectation is that the course work will help you in making informed decisions in regards to behaviors, which affect various aspects of your health and well being. The major unit topics to be covered include physical and mental wellness, understanding sexuality (as outlined by Board of Education Policy), destructive behaviors and addictions, and safety and well-being.

High School Core PE

PE1100

Details: Grade 9, Semester

Description: This class is designed to give students the opportunity to improve personal fitness and participate in a variety of team/dual sports. Students will learn the basic rules and skills for many of the games they could play in our other activities classes that we offer. The goal of having both a games and fitness component is to ensure students can make an educated decision when choosing their future P.E. courses.

Recreational Games

PE1135

Details: Grade 9-12, Semester

Description: This course is designed for the student to experience a wide variety of recreational sports. These sports will include but are not limited to golf, badminton, pickleball, tennis, frisbee golf, kickball, spikeball and yard games. Course will also include knowledge of safety practices, applications of skills, techniques, strategies, rules and health related physical fitness components.

Game On

PE1180

Details: Grade 9-12, Semester

Description: This course will focus primarily on team sports. Instructional time should focus on four critical areas while: (1) Participating at a competent level in a variety of lifelong physical activities and understanding the cognitive impact of movement, (2) Applying rules, principles, problem-solving skills and concepts to traditional and nontraditional movement settings, (3) Demonstrating responsible behavior and respect for others as well as collaboration, cooperation, and leadership skills, (4) Understanding the risks and safety factors that may affect participation in physical activity. Activities may include but are not limited to: volleyball, nitroball, basketball, soccer, flag football, softball, ultimate Frisbee, Kickball, handball, and lacrosse.

Yoga & Nutrition

PE1185

Details: Grade 9-12, Semester

Description: These classes will help build body strength and work on flexibility. The yoga postures are designed to tone, strengthen, and align the body. In addition to the yoga portion of the course, there will also be a nutrition component to the class. Students will seek to improve their knowledge and mindset when it comes to healthy nutrition.

Ironworks I

PE1131

Details: Grade 9-12, Semester

Description: The course will include weight training, circuit training, anatomy, aerobic fitness, agility plyometrics and flexibility work. Students must have a strong desire to increase their overall total body strength and fitness. The class is strenuous, with weightlifting and fitness workouts daily.

Ironworks II

PE1132

Details: Grade 9-12, Semester

Prerequisite: *Iron Works I*

Description: This is an intermediate-level course designed to familiarize students with more advanced weight lifting techniques. It will include emphasis on weightlifting, flexibility, running technique, agility, and speed training. This level course is strenuous; therefore, students must have a strong desire to increase overall body fitness and composition.

Ironworks III

PE1133

Details: Grade 10-12, Semester, **0 Period Course, 6:50 - 7:35 AM Monday - Thursday**

Prerequisite: *To request please see your counselor and [fill out permission form](#)*

Description: This is an advanced/varsity-level course designed for students who want to enhance their athletic performance through advanced weight lifting techniques. It will include emphasis on weightlifting, flexibility, running technique, agility, and speed training. This level course is strenuous; therefore, students must have a strong desire to increase overall body fitness and composition.

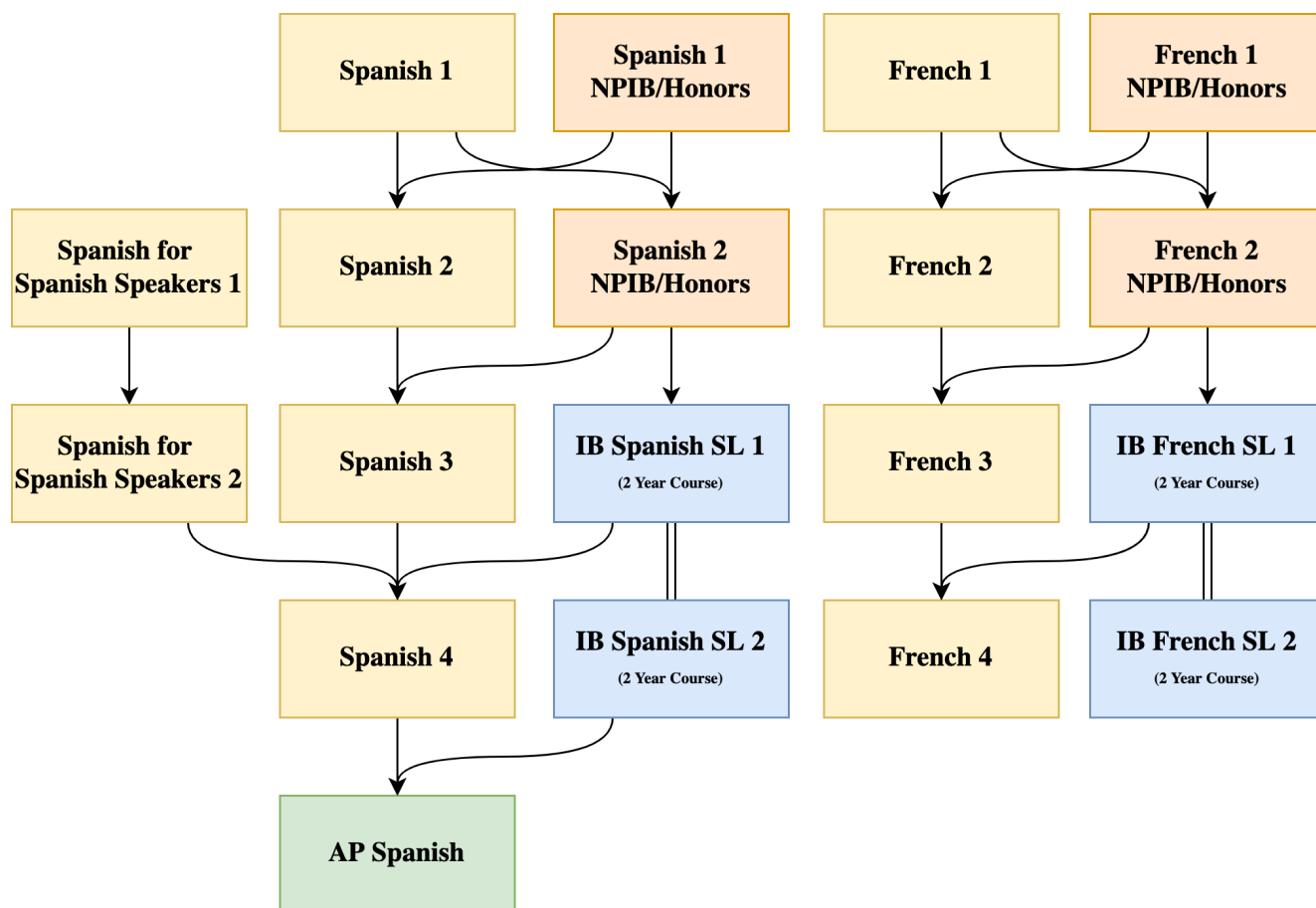
[PE Waiver Policy: IKF-R](#)

The St. Vrain Valley School District requires all students to complete two (2) physical education credits to graduate. However, students have the opportunity to waive up to 1.0 physical education credit. Students who maintain full-time student status during all four years of high school and meet all other graduation requirements may waive a .5 physical education credit by successfully completing one of the following criteria:

- ___ One (1) St. Vrain Valley School District athletic program at the high school level; or
- ___ 72 hours during an 18-week period of an appropriate, pre-approved, structured, and supervised physical activity outside of the school district.

Successfully completing two different sports, the same sport for two seasons, or a combination of the above criteria will allow students to waive a maximum of 1.0 physical education credit. The activities to waive physical education credit may be met during any of a student's four years of high school. Schools will provide information regarding the physical education waiver to students and parents annually during course registration to allow time for planning. The physical education waiver application may be acquired in the counseling offices of every high school. Once the physical education waiver requirements have been met, the student will submit the application and time log to the building principal (including all required signatures) for verification and approval. Whether or not a student has received a physical education waiver, all students are still required to successfully complete 24.5 credits in order to earn their high school diploma.

World Languages



Students may select Spanish and French courses as elective classes. Many four-year colleges recommend or require two or three years of a world language. Students must continue in the *same* language to meet those requirements. In the world today, a second language is important for all students. Please refer to the [World Language Placement Guide](#) for accurate placement in World Language courses. Please read about the requirements for the [seal of biliteracy](#). Note: *All world language offerings are year-long courses. Students must complete the first semester with a passing grade of a D or better in order to continue with the course in the second semester.*

Spanish 1

WL1151 A/B

Details: Grade 9-12, Full Year

Description: This course is designed for students who want an introduction to a second language and its culture. Its intent is to expose students to the four basic language skills—listening, speaking, reading, and writing—and to a culture different from their own. The course includes grammar concepts, vocabulary, culture, and speaking activities. By the end of the year, students should be proficient enough to make purchases, order food, and carry on simple conversations and brief written dialogues about hobbies, sports, families, classes, and other basic events of everyday life.

NPIB/Honors Spanish 1

WL3226 A/B

Details: Grade 9-12, Full Year, Weighted 4.5

Description: This accelerated Spanish 1 class is an introduction to the Spanish language and the culture of Spanish-speaking countries. Students focus on the four C's of basic language skills-- communication, culture, connections and comparisons--to cover Spanish 1 topics. They will do this through the three modes of communication: interpersonal, interpretive, and presentational. Speaking and writing assignments, such as dialogues and journals, begin to prepare students for the writing and speaking assessments of IB Spanish SL. By the end of the year, students should be proficient enough to make purchases and carry on simple conversations about hobbies, sports, families, classes, and other basic events of everyday life.

Spanish 2

WL1152 A/B

Details: Grade 9-12, Full Year

Prerequisite: *Spanish 1*

Description: Spanish 2 reinforces basic language skills and further develops the ability to communicate in a different language. The course includes an expansion of material covered in the first year and the introduction of new vocabulary, grammar structures, and cultural aspects. Emphasis is placed on grammar, expansion of oral and listening skills, and development of reading and writing skills. By the end of the year, students should be proficient enough to ask for and give directions, go shopping, and carry on simple conversations about their families, daily routines, leisure activities and childhood—both in the present and past tense.

NPIB/Honors Spanish 2

WL3227 A/B

Details: Grade 9-12, Full Year, Weighted 4.5

Prerequisite: *NPIB/Honors Spanish 1 or Two Years of Middle School Spanish (1A and 1B)*

Description: This accelerated Spanish 2 class reinforces basic language skills and further develops the ability to communicate in a different language. Emphasis is placed on grammar, expansion of oral and listening skills, and the development of reading and writing skills. By the end of the year, students should be proficient enough to ask for and give directions, go shopping, and carry on simple conversations about their families, daily routines, food, leisure activities and technology. Throughout the year, students are expected to journal, write compositions in Spanish and give presentations and demonstrate speaking skills i.e. interviews in Spanish. All these activities will help students prepare for the assessments of IB Spanish SL.

Spanish 3

WL1153 A/B

Details: Grade 10-12, Full Year

Prerequisite: *Spanish 2*

Description: Spanish 3 provides continued development of interpretive, interpersonal and presentational modes in both written and oral format. The course reinforces material previously covered and presents further vocabulary and more complex grammar structures. By the end of the year, students should be able to narrate past events, describe how people express themselves, give advice, and discuss how they feel. Some of the themes they will discuss include art, health, friendships, and family relationships. *Students will participate primarily in Spanish in classroom activities.*

Spanish 4

WL1154 A/B

Details: Grade 10-12, Full Year

Prerequisite: *Spanish 3, or Teacher Recommendation*

Description: Students will advance their Spanish skills through literature, film, and other relevant media sources. Spanish 4 will continue an in-depth study of complex grammar points encountered in the first three years of language study, including the preterite, imperfect, future, conditional, present subjunctive, perfect tenses, and past subjunctive. Additionally, there will be vocabulary acquisition through the study of the core topics and through readings. Assessment will be based on performance in the areas of writing, speaking, listening, and reading comprehension. Class activities will include oral presentations, journals, papers, grammar instruction, and vocabulary acquisition. *Students will participate in Spanish in classroom activities.*

IB Language B: Spanish SL 1

WL4230 A/B

IB Language B: Spanish SL 2

WL4235 A/B

Details: Grade 10-11, Two-Year Course Sequence, Weighted 5.0

Prerequisite: *NPIB/Honors Spanish 2, or Teacher Recommendation*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: This language B program is designed for students who have successfully completed NPIB Spanish 2, or have received a teacher recommendation. It is a two year course sequence.. IB Spanish reinforces material previously covered and presents further vocabulary acquisition and more complex grammar structures. Throughout the year, students will talk about important ideas that affect them, their society and the world. Some of the themes they will discuss include the environment, health, art and their role in the community. To aid in preparing for the IB Spanish SL exam, all students will be expected to give oral presentations, write in-class journals and papers, read short stories, and speak Spanish. *This class will be conducted primarily in Spanish and is for students **acquiring** Spanish as an additional language.*

Spanish for Spanish Speakers 1**WL1156 A/B****Details:** Grade 9-11, Full Year**Fee:** *workbook fee to be determined*

Description: This language course is for students who have a strong foundation in Spanish. Spanish for Spanish Speakers develops Spanish speakers in an academic setting to prepare students to continue their coursework in either Spanish 4 or AP Spanish. Students will focus on in-depth reading comprehension and writing in a variety of literary formats while building vocabulary acquisition with a strong focus on grammar progression. Throughout the year, students will talk about important topics that affect them, their society, and world events. Some of the themes discussed will include literary works, the media, the migrant experience, and their role in the community. All students will be expected to give oral presentations, write in-class journals and papers, and read literature--all in Spanish. *This class will be conducted in Spanish.*

Spanish for Spanish Speakers 2**WL1157 A/B****Details:** Grade 9-11, Full Year**Fee:** *workbook fee to be determined*

Description: This course is designed for students who already speak, read and write fairly well in Spanish, but still need help with vocabulary, spelling and writing for specific purposes. We will continue the grammar overview that began in Spanish for Spanish Speakers 1. Particular attention will be given throughout the course to spelling, accent marks and expanding students' vocabulary beyond their particular region of origin. Students will also read about Hispanics from around the world that gained fame from their literary achievements. Spanish is a language spoken on several continents. Students will learn to speak and write in standard Spanish. *This class will be conducted in Spanish.*

AP Spanish Language**WL5210 A/B****Details:** Grade 11-12, Full Year, Weighted 5.0**Prerequisite:** *Spanish 4, or Spanish for Spanish Speakers with Teacher Recommendation***AP Exam:** *AP Exam Fees apply*

Description: A.P. Spanish provides practice in advanced language skills while communicating in college-level Spanish. By the end of the year, students will be able to discuss and write about Spanish and Latin American literature and culture. Their language skills will include a wide vocabulary and the ability to use all verb tenses appropriately. Class activities will focus on extensive reading, writing, speaking, listening and preparation for the A.P. Spanish Language and Culture Examination, taken in May. Students who earn a qualifying score on the exam may earn credits when they enter participating colleges and universities. ***Students will participate solely in Spanish.*** Students enrolled in an AP class are also required to join and participate in the accompanying AP Classroom course. Specific join codes and information on how to sign up for AP Classroom will be given the first week of class.

French 1**WL1101 A/B****Details:** Grade 9-12, Full Year

Description: This course is designed for students who want an introduction to a second language and its culture. Its intent is to expose students to the four basic language skills—listening, speaking, reading, and writing—and to a culture different from their own. The course includes grammar concepts, vocabulary, culture, and speaking activities. By the end of the year, students should be proficient enough to make purchases, order food, and carry on simple conversations and brief written dialogues about hobbies, sports, families, classes, and other basic events of everyday life.

NPIB/Honors French 1**WL3106 A/B****Details:** Grade 9-12, Full Year, Weighted 4.5

Description: This accelerated French 1 class is an introduction to the French language and the culture of French-speaking countries. Students focus on the four C's of basic language skills-- communication, culture, connections and comparisons--to cover French 1 topics. They will do this through the three modes of communication: interpersonal, interpretive, and presentational. Speaking and writing assignments, such as dialogues and journals, begin to prepare students for the writing and speaking assessments of IB French SL. By the end of the year, students should be proficient enough to make purchases and carry on simple conversations about hobbies, sports, families, classes, and other basic events of everyday life.

French 2

WL1102 A/B

Details: Grade 9-12, Full Year

Prerequisite: *French 1*

Description: In this course the emphasis is on developing more active communication skills and widening the students' proficiency in written French. Some class sessions will be conducted in French with frequent class and individual conversation. Students will be evaluated through an oral grade and through written assignments and tests.

NPIB/Honors French 2

WL3107 A/B

Details: Grade 9-12, Full Year, Weighted 4.5

Prerequisite: *NPIB/Honors French 1, or Two Years of Middle School French (1A and 1B)*

Description: The goal of this class is to provide students with a broader knowledge of the French language and culture in preparation for the IB exam, while focusing on the skill areas of reading, writing, speaking, and listening. Students are challenged to expand their knowledge of vocabulary within the context of themes from everyday life. They are asked to write more complex passages in French, using newly acquired grammatical structures. Students work on improving their ability to speak French, and they begin to understand longer and more challenging texts.

French 3

WL1103 A/B

Details: Grade 10-12, Full Year

Prerequisite: *French 2, or NPIB/Honors French 2*

Description: French 3 provides continued development of interpretive, interpersonal and presentational modes in both written and oral format. The course reinforces material previously covered and presents further vocabulary and more complex grammar structures. By the end of the year, students should be able to narrate past events, describe how people express themselves, give advice, and discuss how they feel.

Students will participate primarily in French in classroom activities.

French 4

WL1104 A/B

Details: Grade 10-12, Full Year

Prerequisite: *French 3, IB French 3, or IB French 4*

Description: This multimedia class is designed to meet the needs of French language learners with different proficiency levels. If you want four years of high school French or if you need to keep your French skills current before or after your IB exam, this class is for you. Students will watch French-language films, listen to news clips, read and discuss newspaper articles, and work with websites to build on current skills. Classes will include vocabulary acquisition, introduction and review of grammar concepts, discussions in French, and focused writing assignments.

IB Language B: French SL 1

WL4103 A/B

IB Language B: French SL 2

WL4104 A/B

Details: Grade 10-12, Two-Year Course Sequence, Weighted 5.0

Prerequisite: *NPIB/Honors French 2, or Teacher Recommendation*

Fees: *Workbook fee to be determined, plus \$119 IB subject fee, IB Exam Required if taking this course.*

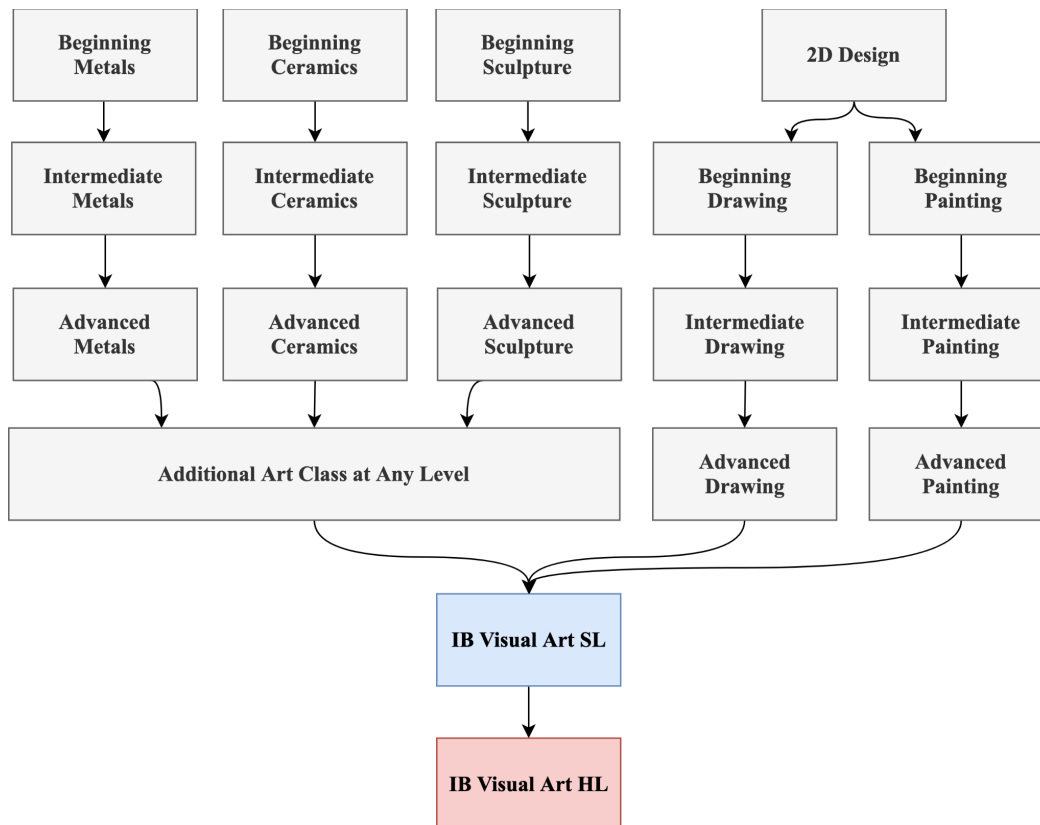
Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: IB French builds upon the proficiencies acquired in previous classes. Students expand their knowledge of French grammar, giving them the ability to express more complex thoughts. We continue to work on the interpretive, interpersonal and presentational modes in both oral and written format. Students increase their vocabulary in order to discuss and express opinions about a variety of subjects that affect them, their society and the world. Students learn about art, music, history and film from French-speaking countries. Students also begin their exploration of French literature. *This class will be conducted in French and is for students **acquiring** French as an additional language.*

Fine Arts

The Fine Arts include Art, Music, and Drama courses. One semester of Fine Arts is required for graduation. You may select any Fine Art course (Art, Music, or Drama) to meet the graduation requirements. Please note that some colleges are now requiring art courses for admission.

Art Courses



2D Design

A1810

Details: Grade 9-12, Semester, Fine Arts Credit

Fee: \$30.00

Description: This course creates a foundation for students in both drawing and painting. Students will maintain a sketchbook that chronicles their growth, skills, and explorations. Students will use graphite and tempera paint in the foundational course. This course focuses on the Art Elements, Principles of Design, Composition, and Color Theory, through both drawing and painting projects. You must take this course before advancing to Drawing or Painting courses!

Beginning Drawing

A1211

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: 2D Design

Fee: \$25

Description: This course focuses on realistic drawings with an understanding of the mechanics of light, shadow, and proportion. This approach allows beginning students to develop technical and compositional skills to make drastic improvements in their drawing abilities and more experienced artists to refine their skills. Drawing projects are taught through various techniques such as right-brain drawing, value gradients, portrait art, and still life. Mediums covered may include graphite, charcoal, pastel, and colored pencil.

Intermediate Drawing

A1212

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: *2D Design and Beginning Drawing*

Fee: \$25

Description: This course is for students serious about taking their drawing skills to the next level. Students who choose to take this course should be confident with their drawing skills and ready to produce more complex finished drawings. An emphasis will be on the development of a more personal style, sophisticated approaches to the development of ideas, development of a greater awareness of art beyond school, and the introduction of new techniques and media.

Advanced Drawing

A1213

Details: Grade 10-12, Semester, Fine Arts Credit

Prerequisite: *2D Design, Beginning Drawing, and Intermediate Drawing*

Fee: \$25

Description: This course is recommended for students who excel in Drawing. Students who take this course should have a high level of motivation, diligence, commitment, and independence. Students will be encouraged to develop a personal direction or “voice” in their work. In addition to work created in class, students will be expected to work outside class time, participate in critiques and discussions, complete daily exercises to advance skills, maintain a sketchbook, and mat their work for showings.

Beginning Painting

A1401

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: *2D Design*

Fee: \$25

Description: Students will continue to explore basic painting techniques building on their previous knowledge of color theory, hone brush use skills, and paint application. Emphasis will be placed on light, color theory, and observational painting.

Intermediate Painting

A1402

Details: Grade 10-12, Semester, Fine Arts Credit

Prerequisite: *2D Design and Beginning Painting*

Fee: \$25

Description: Students will continue to build skills in the areas of paint application, brush and technique exploration, as well as build an understanding of different styles of painting through a historical view. Students will construct their own canvases, and begin to take more ownership of their project choices. Emphasis will be placed on historical exposure, palette and style development, and portraiture. Students will be expected to work outside class time, participate in critiques and discussions, maintain a sketchbook with skill building exercises and mat/wire their work for showings.

Advanced Painting

A1403

Details: Grade 10-12, Semester, Fine Arts Credit

Prerequisite: *2D Design, Beginning Painting, and Intermediate Painting*

Fee: \$25

Description: This course is recommended for students who excel in Painting. Students who take this course should have a high level of motivation, diligence, commitment, and independence. Students will be encouraged to develop a personal direction or “voice” in their work. In addition to work created in class, students will be expected to work outside class time, participate in critiques and discussions, complete daily exercises to advance skills, maintain a sketchbook, and mat/wire their work for showings.

Beginning Ceramics

A1101

Details: Grade 9-12, Semester, Fine Arts Credit

Fee: \$25

Description: This course will provide an in-depth study of ceramics using stoneware clay. Techniques may include, pinch, coil, slab, wheel throwing, and glazing. Students will be encouraged to create original designs while producing useful and/or decorative objects.

Intermediate Ceramics**A1102****Details:** Grade 9-12, Semester, Fine Arts Credit**Prerequisite:** *Beginning Ceramics***Fee:** \$25

Description: This course is for students serious about taking their ceramic skills to the next level. Students will investigate more advanced topics in design, concept development and use of materials and techniques. Materials, techniques and processes may include stoneware, porcelain, alternative firing, glass inclusion, pottery wheel, hand building, digital and experimental options.

Advanced Ceramics**A1103****Details:** Grade 10-12, Semester, Fine Arts Credit**Prerequisite:** *Beginning Ceramics and Intermediate Ceramics***Fee:** \$25

Description: This course is recommended for students who excel in Ceramics. Students who take this course should have a high level of motivation, diligence, commitment, and independence. Students will be encouraged to develop a personal direction or “voice” in their work. In addition to work created in class, students will be expected to work outside class time, participate in critiques and discussions, complete daily exercises to advance skills, maintain a sketchbook, and prepare their work for showings.

Beginning Metals**A1301****Details:** Grade 9-12, Semester, Fine Arts Credit**Fee:** \$30

Description: Students will explore various metalsmithing techniques. Cutting, soldering, polishing techniques, and Bezel Stone Setting are just a limited listing of the different techniques and processes explored. Many of the materials and equipment used are potentially dangerous to people with health concerns like breathing disorders or motor skills disorders. Limited to only 28 students per class.

Intermediate Metals**A1302****Details:** Grade 9-12, Semester, Fine Arts Credit**Prerequisite:** *Beginning Metals***Fee:** \$30

Description: Intermediate Metals pushes your artistic talents and knowledge into new and exciting territories as well as expanding on your skills from Beginning Metals. Techniques that will be explored may include casting methods, alternative jewelry, and stone settings.

Advanced Metals**A1303****Details:** Grade 9-12, Semester, Fine Arts Credit**Prerequisite:** *Beginning Metals and Intermediate Metals***Fee:** \$30

Description: Advanced Metals pushes your artistic talents and knowledge into new and exciting territories. Techniques that will be explored may include casting methods, alternative jewelry, and stone settings.

Beginning Sculpture**A1601****Details:** Grade 9-12, Semester, Fine Arts Credit**Fee:** \$25

Description: This course provides an opportunity for students to work with a variety of media in the development of three-dimensional forms. Starting with the basic design principles, the student will apply additive, subtractive, modeling, and assemblage techniques. Media projects will include, but are not limited to, plaster, wood, paper, and clay.

Intermediate Sculpture**A1602****Details:** Grade 9-12, Semester, Fine Arts Credit**Prerequisite:** *Beginning Sculpture***Fee:** \$25

Description: This course provides an opportunity for students to continue work with a variety of media in the development of three-dimensional forms. The course begins with reviewing the basic design principles and builds on skills developed in Beginning Sculpture, students will apply and further develop additive, subtractive, modeling, and assemblage techniques. Media projects can include, but are not

limited to plaster, wood, paper, metal and clay. Students who take this course should have the prerequisite Beginning Sculpture, and show initiative, diligence and a desire to develop their artistic voice.

Advanced Sculpture

A1603

Details: Grade 10-12, Semester, Fine Arts Credit

Prerequisite: *Intermediate Sculpture*

Fee: \$25

Description: This course is recommended for students who excel in Sculpture. Students who take this course should have a high level of motivation, diligence, commitment, and independence. Students will be encouraged to develop a personal direction or “voice” in their work. In addition to work created in class, students will be expected to work outside class time, participate in critiques and discussions, complete daily exercises to advance skills, maintain a sketchbook, and prepare their work for showings.

Independent Study Art

A9900

Details: Grade 10-12, Semester, Fine Arts Credit

Prerequisite: *Teacher Approval*

Fee: *Varies*

Description: This course provides opportunities for self-motivated students, who have successfully completed advanced level courses, to explore in-depth the media of their preference. Emphasis will be placed on portfolio preparation and post-secondary options.

Video Production

A5130

Details: Grade 9-12, Semester, Fine Art Credit

Prerequisite: None

Fee: \$25

This course is designed to acquaint students with the basics in the area of video production and to give them experience in producing short films. Students will learn basic elements of using a video camera, lighting, effects, operation switching units, editing, audio mixing, and operating a production studio. Students will create videos and edit them using Final Cut Pro. This will be a hands-on, project-based class with students being responsible for the production of several kinds of videos. These projects will include, but are not limited to , news items, feature stories, public service announcements, composting projects, music videos and short stories.

Beginning Digital Photography

CTE1221

Details: Grade 9-12, Semester, **Practical Art Credit**

Fee: \$25

Description: With almost everyone owning a phone with a camera, we all have become photographers. However, with this class you will advance your skills in composition, editing, and style. Learn how to take and edit photos worthy of the best instagram account. Students will be taught how to use Photoshop and Adobe Lightroom. Students should look forward to taking photos outside of class time, but it is possible to complete the course with work during class time.

IB Visual Art SL/HL 1

A4300 A/B

Details: Grade 11-12, Full Year, Weighted 5.0, Fine Arts Credit

Prerequisite: *Any three art classes, at least one of them should be an Intermediate or Advanced level course*

Fees: \$30 art supply fee per semester plus \$119 IB subject fee.

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: In this yearlong course each student prepares for the IB Arts Examination. It consists of an individual art show and the production of an investigation workbook that centers on researching a chosen thesis to support the artwork and producing artwork to support the thesis. Part of the research must include studying the art of classic to contemporary artists and at least two cultures and their art. The art show is the external assessment. It is evaluated by an IB-appointed, visiting art examiner who spends a half-hour talking with each student about her/his thesis and artwork. The internal assessment is the investigation workbook (IW) that is due in late March and is assessed by the IB art teacher. By the end of the year, candidates who have completed the IB Visual Arts SL will be expected to demonstrate an interrelationship between their research and their artistic production. The IW and art projects must show the student’s journey and growth as an artist.

IB Visual Art SL/HL 2

A4305 A/B

Details: Grade 12, Full Year, Weighted 5.0, Fine Arts Credit

Prerequisite: *Successful completion of IB Visual Art SL*

Fee: *\$30 art supply fee per semester plus \$119 IB subject fee.*

Note: [NHS IB Course & IB Exam Commitment form](#) must be completed and submitted to the NHS IB Coordinator in order to be registered for any IB course.

Description: The IB Diploma Programme visual arts course encourages students to challenge their own creative and cultural expectations and boundaries. It is a thought-provoking course in which students develop analytical skills in problem-solving and divergent thinking while working towards technical proficiency and confidence as art-makers. In addition to exploring and comparing visual arts from different perspectives and in different contexts, students are expected to engage in, experiment with, and critically reflect upon a wide range of contemporary practices and media. The course is designed for students who want to study visual arts in higher education as well as for those who are seeking lifelong enrichment through visual arts.

AP Art History (ONLINE AGILE COURSE)

A5310 A/B

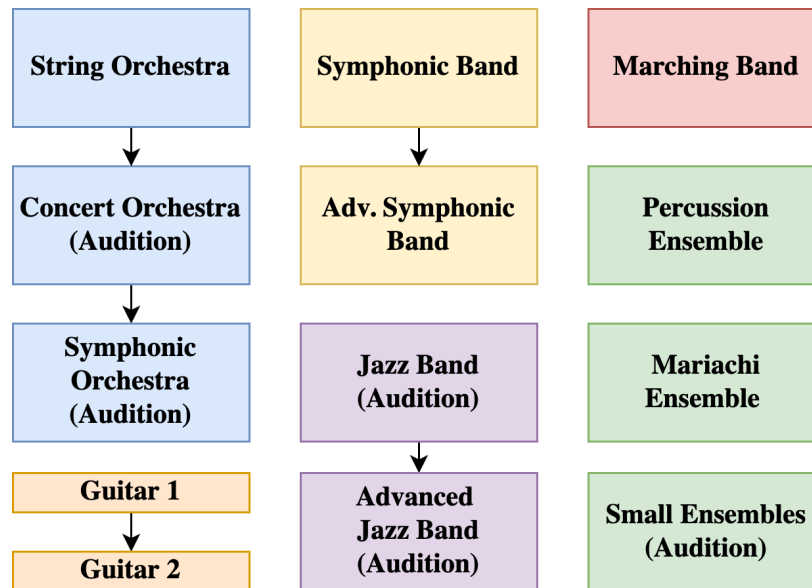
Details: Grade 11-12, Full Year, Weighted 5.0, **Fine Arts Credit**

Prerequisite: Completion of previous art classes

Note: This is an online course offered through the SVVSD AGILE Program. Students are required to be on-site at Niwot High when this course is scheduled. Students will login through Webex to take this course from another SVVSD school site. There is limited space available for this course, priority will be given to students interested in pursuing art after High School.

Description: The AP Art History course welcomes students into the global art world to engage with its forms and content as they research, discuss, read, and write about art, artists, art making, and responses to and interpretations of art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, students develop in-depth, holistic understanding of the history of art from a global perspective. Students learn and apply skills of visual, contextual, and comparative analysis to engage with a variety of art forms, developing understanding of individual works and interconnections across history. AP Art History is the equivalent of a two-semester introductory college or university art history survey course. No art making is required for this course. Students will have the opportunity to take the AP exam in Spring, 2023, to earn college credit.

Instrumental Music Courses



Marching Band

MU1008

Details: Grade 9-12, Fall Semester, Fine Arts Credit

Fees: \$50 program; \$15 uniform rental/cleaning; \$38 marching shoes; \$3 for black gloves

Description: Marching Band (outdoor) takes place in the first quarter with a transition to Adv. Symphonic Band (indoor) during the 2nd quarter. The Cougar Marching Band performs at all home football games and several parades and exhibitions in the late summer/fall. Students will learn challenging music to march and perform. Attending summer practices is highly recommended and attendance at the weeklong summer band camp to prepare our Fall field show is required. There are weekly evening rehearsals in August, September, and October. Improving musicianship, playing skills, and commitment to the ensemble are a priority. Attendance for all performances is required; exceptions can be made for student participation in sports and other school activities.

Symphonic Band

MU1401 A/B

Details: Grade 9-12, Full year, Fine Arts Credit

Fees: \$20 and Students will also need to purchase Technique and Musicianship for his or her instrument.

Description: Symphonic Band is an instrumental band class for students not interested/able to take Marching Band. Symphonic Band will focus on music of various genres and cultures in a full ensemble setting. Emphasis is placed on technique and fundamentals. Students will perform in two concerts each semester.

Advanced Symphonic Band

MU1403

Details: Grade 9-12, Spring Semester, Fine Arts Credit

Prerequisite: Audition: <https://www.niwotbands.org/advanced-symphonic-band-audition-info>

Fees: \$50 program; \$15 uniform rental/cleanin

Description: Marching Band and Symphonic Band are offered Fall semester with a transition to Symphonic Band during the Spring semester. Improving musicianship, playing skills, and commitment to the ensemble are a priority. Attendance for all performances is required; exceptions can be made for student participation in sports and other school activities. Please visit www.niwotbands.org for more information.

Percussion Ensemble

MU1300

Details: Grade 9 - 12, Spring Semester, Fine Arts Credit

Prerequisite: Previous percussion experience

Fee: \$20

Description: Percussion students will build knowledge and techniques studying modern percussion ensemble music. Battery percussion, keyboard/mallet percussion, hand drums, world and found percussion will all be used. There are many performances during the semester.

Color Guard

MU1104

Details: Grade 9-12, Fall Semester, Fine Arts Credit

Prerequisite: *Audition and instructor approval*

Fee: *\$20 plus uniform (assistance available)*

Description: Color Guard is a vital part of any excellent marching band. Performing at parades and home football games are but a few of the experiences you'll be able to enjoy as a member of the Color Guard. No previous musical or dance experience is needed, but it is helpful. Learn how to march and perform on the football field for hundreds of people every week. There is a weeklong summer camp to prepare for the marching show. There are also evening rehearsals one night a week in late August and September. Auditions for Color Guard are open to all students and take place in the spring. This class meets at the same time as Marching/Symphonic Band. Please visit www.niwotbands.org in March for more information. [Check out a brief intro video.](#)

Jazz Band

MU1201 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *Audition:* <https://www.niwotbands.org/jazz-band-audition-info>

Fee: *\$20*

Description: Students will improve basic improvisational skills while learning to play a variety of musical styles. Improving skills and a commitment to the ensemble is a priority. Several concerts will be performed throughout the year. Students who play saxophone, trumpet, trombone, guitar, bass, piano, or drums are encouraged to audition. Attendance for all performances is required, but exceptions can be made for student participation in sports and other school activities.

Advanced Jazz Band

MU1203 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *Audition:* <https://www.niwotbands.org/jazz-band-audition-info>

Fee: *\$20*

Description: Students will continue to improve improvisational skills while learning to play a vast array of musical styles at an advanced level. Improving individual skills and a commitment to the ensemble is a priority. There will be many opportunities to perform around the community and our own school concerts. Attendance for all performances is required.

Small Ensembles (Pro Arté Chamber Ensembles)

MU1310 A/B

Details: Grades 10-12, Full Year, Fine Arts Credit

Prerequisite: *Audition/Instructor Approval Required*

Description: This year-long course provides an opportunity for all intermediate and advanced symphonic instrumentalists who wish to challenge themselves with chamber music studies such as Duet, Trio, Quartet, Quintet, and etc. Students will develop skills and knowledge related to score study, ensemble listening, rehearsal strategies, working effectively in small groups, and performances. The chamber orchestra and small groups perform at all orchestra concerts and as well as other performance opportunities in the Boulder-Longmont communities.. All rehearsals and performances are required. This class generally requires concurrent enrollment in a larger instrumental ensemble, such as Concert Orchestra or Symphonic Orchestra.

String Orchestra (Sinfonia Orchestra)

MU1510 A/B

Details: Grade 9-10, Full Year, Fine Arts Credit

Prerequisite: *1 year string experience*

Fees: *\$25 program*

Description: This is an ensemble consisting of string instruments (violin, viola, cello, bass), and is highly recommended for all incoming freshmen who wish to enroll in the NHS Orchestra Program. However, it is not limited only to the freshmen class. No audition needed (however, strongly recommended for students with previous instrumental and ensemble training experiences). String Orchestra will perform with Symphony Orchestra on at least one piece of music composition for the December, March, and May concerts. Students will be highly encouraged to prepare and audition for various honors groups.

Concert Orchestra (Conservatory Orchestra)

MU1520 A/B

Details: Grade 9-12 Strings; 9-12 Winds and Percussion, Full Year, Fine Arts Credit

Prerequisite: *Audition and/ instructor approval required*

Fees: *\$25 program*

Description: This is an intermediate level symphonic orchestra that is open to all grades and open to all symphonic instruments (Strings, Wind & Brass, Percussions, Harp, and Piano). Students in this class will explore a variety of musical styles and literature while developing listening skills, leadership, cooperation, and their understanding and enjoyment of music. Each student will receive individual feedback and suggestions for growth throughout the year.

Symphony Orchestra

MU1515 A/B

Details: Grade 9-12 Strings; 9-12 Winds and Percussion, Full Year, Fine Arts Credit

Prerequisite: *Audition and/ instructor approval required*

Fees: *\$25 program*

Description: This is our most advanced orchestra that mainly focuses on standard and major symphonic works in their original forms. Open to all grades and all symphonic instruments. This ensemble is designed to give the orchestral musicians an opportunity to learn and experience some of the greatest works of music. Improving individual playing skills and commitment to this ensemble are a priority in this class. This is a performance-oriented learning experience and includes orchestra performances, community programs, and music festivals.

Mariachi Ensemble

MU1411 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *Beginner/Intermediate knowledge of a Mariachi instrument required for enrollment. Trumpet, violin, and vocal students that are beginners are encouraged to enroll in an orchestra, band, guitar, or choir class to learn the basic music fundamentals.*

Fee: *\$20 for materials*

Description: Music of all mariachi genres is explored. Mariachi is a traditional music of Mexican culture, incorporating a rhythm section that comprises guitarron, guitar, and vihuela, a violin section, trumpets, and singers.

History of Rock and Roll

MU2305

Details: Grade 9-12, Semester, **Fine Arts Credit**

Description: This is a music-oriented class focusing on rock and roll, jazz, blues, and other forms of popular music. This class is a great opportunity for someone who is interested in music but may not be participating in a performance group. The goal of this class is to give students a new understanding of popular music and its role in shaping modern history. Course content will include watching documentary videos, historical movies, music listening, and lecture. Students will study the history of individual performers and groups, musical style and analysis, and the political and social climate that helped shape the music of the times. Music from the 1920's to the present will be used.

Music Theory

MU3010

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: *One year of music ensemble performance or private lessons recommended*

Description: This class is a study of the fundamentals of music. It breaks down the parts of music from the basics of music notation, scales, tonality, keys, counterpoint, transitions, and the history behind them. Students can expect to: learn the common procedure used in analysis and composition. The study of music theory interacts with your musical intuition—honing, sharpening, and enhancing it with insights and perception. It is expected that you do not simply memorize terms—that you go one step further and make these terms and ideas a familiar part of your entire approach to music.

Guitar 1

MU2201

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: *Students need their own acoustic guitar*

Fee: *\$20 for materials (lesson book, picks, capo)*

Description: This class is designed for students with little to no experience on the guitar. Students will learn how to play melodies, basic finger picking techniques, and a variety of basic (open string) chords as well as basic music notation and tablature. Students will need to supply their own acoustic guitar, however, a few school-owned instruments are available to rent for the semester on a first-come, first-served basis. No amplifiers will be used at school.

Guitar 2

MU2202

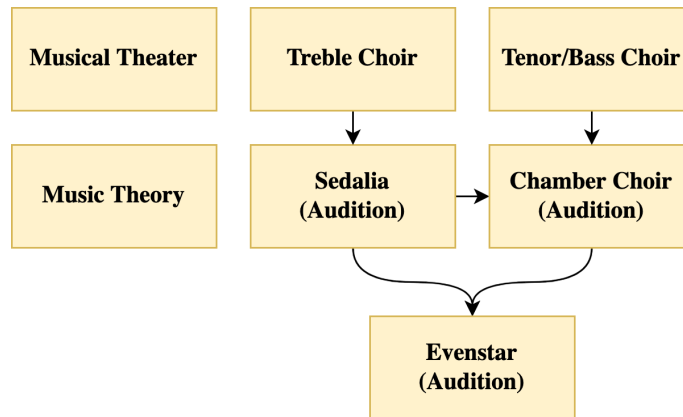
Details: Grade 9-12, Spring Semester, Fine Arts Credit

Prerequisite: *Guitar 1 or Instructor Approval; Students need to own their own acoustic guitar*

Fee: *\$20 for materials*

Description: Guitar 2 builds on the playing and reading skills developed in Guitar 1. The class will review basic techniques as well as introduce intermediate and advanced concepts such as barre chords, moveable shapes, fingerstyle, and alternate tuning. Students will also have the opportunity to work on guitar ensemble music.

Vocal Music Courses



Tenor/Bass Choir

MU2060 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *No audition required.*

Fee: \$20 course fee. *Approximately \$70 for concert attire.*

Description: Begin your high school singing experience here! No audition is required. This course is designed for 9 – 12th grade Bass/Tenor singers who are interested in choral singing. This choir will give students an opportunity to develop ensemble skills through exposure to various styles of music. Tenor Bass Choir is a performance-oriented experience and requires attendance at approximately four evening programs per year.

Treble Choir

MU2085 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *No audition required.*

Fee: \$20 course fee. *Approximately \$70 for concert attire.*

Description: Begin your high school singing experience here! This course is designed to give students the opportunity to develop the voice through exposure to various styles of music. Treble Choir is a performance-oriented experience and requires attendance at approximately four-six evening programs per year.

Chamber Singers

MU2035 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *Audition and Instructor Approval*

Fee: \$20 course fee. *\$100 - 150 for concert attire*

Description: From Bach to rock, Chamber Singers is an exciting way to further your musical talents! This auditioned mixed course gives the advanced singers an opportunity to develop ensemble skills through exposure to various styles of music. Classical choral literature from various time periods and geographic regions will be studied. Chamber Singers is a performance-oriented learning experience and includes four-eight evening programs annually, as well as occasional community events and music festivals.

Evenstar

MU2045 A/B

Details: Grade 10-12, Full Year, Fine Arts Credit

Prerequisite: *Audition and Instructor Approval*

Fee: \$20 course fee. *\$100 - \$150 for concert attire*

Description: This course is designed to give advanced students experience singing popular music, musical theatre, and jazz literature. Students will also be exposed to classical and historic choral literature. Evenstar is a performance-oriented learning experience and includes four-eight evening programs annually, as well as occasional community events and music festivals.

Sedalia

MU2075 A/B

Details: Grade 9-12, Full Year, Fine Arts Credit

Prerequisite: *Audition and Instructor Approval*

Fee: \$20 course fee. Approximately \$70 for concert attire

Description: This auditioned course is intended for singers who have demonstrated an advanced-level musical ability and a desire for advanced instruction and performance in choral singing. Sedalia gives experienced treble singers an opportunity to further develop the voice through the performance of various styles of music. This curriculum emphasizes stylistic performance of difficult three-four part choral literature from all historic periods. Sedalia is a performance-oriented learning experience and includes four-eight evening programs annually, as well as occasional community events and music festivals.

Musical Theatre

PA2015

Details: Grade 9-12, Fall Semester, Fine Arts Credit

Prerequisite: *Audition and instructor approval*

Fee: \$20 course fee

Description: Students selected for this course will learn more about the musical theater genre through a focus on audition techniques, audition songs, monologues, and basic acting. The class will perform a musical revue during the fall semester. Most rehearsals will take place during the school day. Please visit www.niwotchoir.weebly.com or email the instructor to set up an audition.

Music Theory

MU3010

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: *One year of music ensemble performance or private lessons recommended*

Description: This class is a study of the fundamentals of music. It breaks down the parts of music from the basics of music notation, scales, tonality, keys, counterpoint, transitions, and the history behind them. Students can expect to: learn the common procedure used in analysis and composition. The study of music theory interacts with your musical intuition—honing, sharpening, and enhancing it with insights and perception. It is expected that you do not simply memorize terms—that you go one step further and make these terms and ideas a familiar part of your entire approach to music.

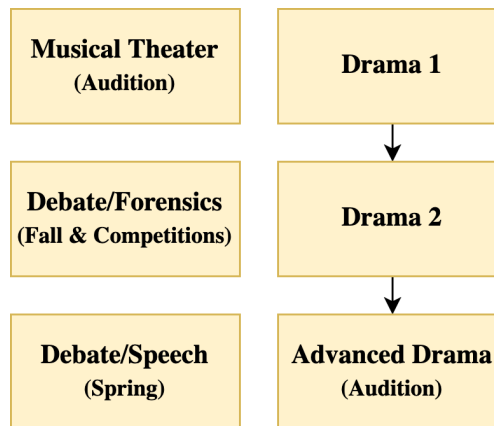
History of Rock and Roll

MU2305

Details: Grade 9-12, Semester, **Fine Arts Credit**

Description: This is a music-oriented class focusing on rock and roll, jazz, blues, and other forms of popular music. This class is a great opportunity for someone who is interested in music but may not be participating in a performance group. The goal of this class is to give students a new understanding of popular music and its role in shaping modern history. Course content will include watching documentary videos, historical movies, music listening, and lecture. Students will study the history of individual performers and groups, musical style and analysis, and the political and social climate that helped shape the music of the times. Music from the 1920's to the present will be used.

Performing Arts



Drama 1

PA1101

Details: Grade 9-12, Semester, Fine Arts Credit

Description: This is an introductory course for students wishing to learn more about the craft of acting. The course explores the groundwork to acting and developing basic acting skills. Through analysis, critique, and creation, students will learn acting techniques from theorists like Hagen and Stanislavski. They will develop these skills through performance in improvisation, monologues, and scene work. Students will collaborate to create their own original works, showcasing skills acquired in class.

Drama 2

PA1102

Details: Grade 9-12, Semester, Fine Arts Credit

Prerequisite: Drama 1

Description: This course is designed to expound and build the acting techniques and course material introduced in Drama One. Its intent is to familiarize students with intermediate acting skills, as well as introduce specific genres of plays through the works of classic and contemporary playwrights. Attention will be given to the history of theater and how theater has evolved from ancient civilizations to modern day. Over the course of the semester students will be exploring five different plays from different important time periods and analyzing the cultural and historical influences these playwrights faced.

Advanced Drama

PA1103

Details: Grade 10-12, Semester, Fine Arts Credit

Prerequisite: Drama 1 AND 2 or teacher's approval to audition. Auditioning does not guarantee placement in the class.

Description: This course is designed for the serious drama student who would like to explore advanced acting methodologies in the creation of complex characters for the stage. Students who are interested in theater-making, acting, or directing on the collegiate or professional level should register for this course. Upon the completion of performance assessments, this course will allow for the modification of assignments and course content to best serve the interests, personal objective plans, and current skill level of the advanced drama student. Depending on the semester, students will create, rehearse, and execute a piece of original theater on a topic approved by the teacher. Additionally, advanced drama students are invited to participate and compete in Thescon, the International Thespian Society state theater conference. Students may repeat the course and receive elective credit. Auditions may be submitted in person or electronically. Please visit the theater website <https://niworthstheater.weebly.com/> for information on audition requirements.

Musical Theater

PA2015

Details: Grade 9-12, Fall Semester, Fine Arts Credit

Prerequisite: *Audition and instructor approval*

Fee: \$20 course fee

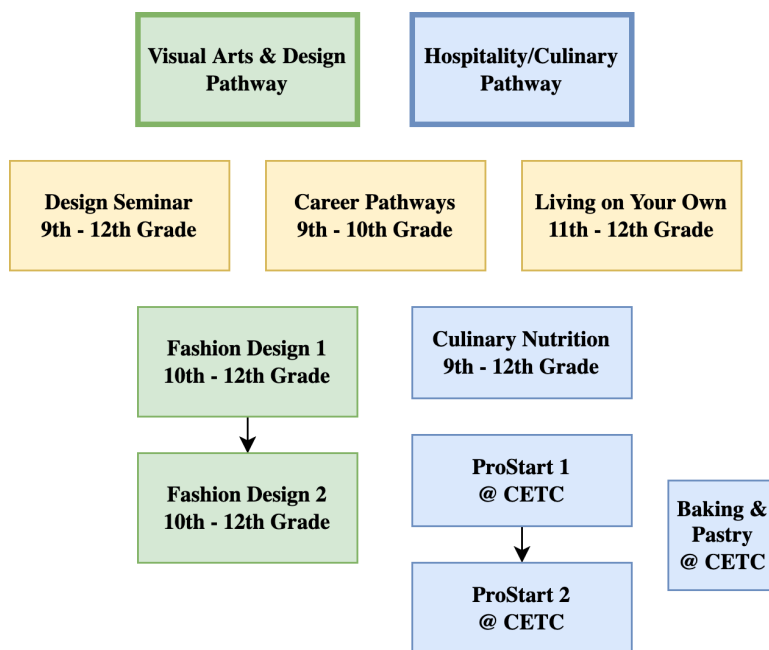
Description: Students selected for this course will learn more about the musical theater genre through a focus on audition techniques, audition songs, monologues, and basic acting. The class will perform a musical revue during the fall semester. Most rehearsals will take place during the school day. Please visit www.niwotchoir.weebly.com or email the instructor to set up an audition.

Debate/Forensics**PA3010****Details:** Grade 10-12, Fall Semester, Fine Arts Credit**Prerequisite:** *Students will be expected to schedule extracurricular time as an important adjunct to class time. Competitions on Saturdays and after school practices are a requirement of the course. Students may repeat the course and receive elective credit.***Fee:** \$120.**Description:** This course is designed to develop a wide repertoire of speaking skills while developing poise and confidence. Its intent is to give students a variety of speech experiences both in the classroom and in competition through engagement in the multiple speech events sanctioned by the Colorado High School Activities Association and the National Speech and Debate Association. Essentially an extension of the high school speech curriculum, this course includes performance and debate categories. Preparation for performance in the interpretive categories will include the analysis of literature as a means of achieving mature understanding. Preparation for performance in the non-literary categories will include research and the study of logic and strategies for writing effective persuasive discourse.**Debate/Speech****PA3020****Details:** Grade 9-12, Spring Semester, Fine Arts Credit**Prerequisite:** *None***Description:** In this course, students will learn how to write, organize, prepare, and deliver quality public speeches. Students will study how to actively persuade, inspire, inform, and engage an audience through the art of public speaking. We will begin by studying the fundamentals of public communication. Next we will learn how to speak articulately when one has time for adequate preparation. Students will also learn to think quickly and speak with little preparation. Finally, students will learn how to argue their points effectively through debate. It is my hope and expectation that students acquire the skills necessary to communicate in a public setting for years to come.

Practical Arts

One semester of practical arts is required for graduation. In addition to the classes listed here, students may also take Career Elevations and Technical Center (CETC) classes (listed later in this catalog).

Family and Consumer Sciences (FCS)



The FCS Department offers classes that prepares students for careers in education, human services, visual arts, and culinary arts, and also prepares them to make educated decisions, practice problem solving, build financial skills, develop successful relationships, and live healthier lives. An emphasis is placed on learning how to balance life's competing priorities. These classes give students foundational life skills to use in all careers and relationships. Students will participate in intra-curricular FCCLA (Family, Career, and Community Leaders of America) activities in all FCS classes. It is recommended that students take at least two FCS courses that align with their postsecondary goals and take advantage of work-based learning opportunities. Career and Technical Education programs provide work-based learning (WBL) opportunities within the classroom. Some programs offer WBL outside of the classroom. Students interested in any of the following opportunities should check with their CTE instructor or counselor for more information: Internships, Apprenticeships, Work Study and School-Based Enterprises.

Culinary Nutrition

CTE9413

Details: Grade 9-12, Semester, Practical Arts Credit

Fee: \$20

Description: The purpose of this course is to develop lifelong, healthy individuals with an understanding of healthy and nutritious preparation techniques utilizing various resources and skills. Emphasis is placed on implementing healthy nutritional choices, preparing nutrient-dense, seasonal foods, sports nutrition, exploring careers related to culinary nutrition, and practicing wise consumer decisions. It is recommended that students take this course along with one of the other FCS courses offered to complete their educational opportunity.

Career Pathways

CTE9060

Details: Grade 9-10, Semester, Practical Arts Credit

Description: This course is designed to identify career interest areas based on your goals, individual skills, and aptitudes. Investigate interests, abilities and goals through various projects, and career testing procedures. Students will develop a usable education and career portfolio containing items necessary for post-secondary education and job searching. Students will interact with professionals who work in various career areas through career panels, a job shadow, and a mock interview

Living on Your Own**CTE9421****Details:** Grade 11-12, Semester, Practical Arts Credit**Fee:** \$10

Description: This course is designed for 11th and 12th grade students who want to develop skills necessary for living on their own. Learning experiences include opportunities in clarifying values and goals, career exploration, personal finances, and money management, consumer skills, housing, and living environments, care for clothing, and making wise nutrition and wellness decisions. All topics apply to practical, everyday life skills. Once students take this course, they are better prepared to “move out” and make it on their own. It is recommended that students who take this course also take one of the other FCS courses offered to complete their educational opportunities.

Design Seminar**CTE9455****Details:** Grade 9-12, Semester, Practical Arts Credit**Fee:** \$20

Description: This course will give students an introduction to the elements and principles of design as seen in Interior Design, Fashion Design, and Culinary Design. . In addition it will introduce students to the many careers that require design thinking and allow them to analyze their own career pathways to determine where design might fit. This course is recommended as an introduction to the Visual Arts and Design pathway.

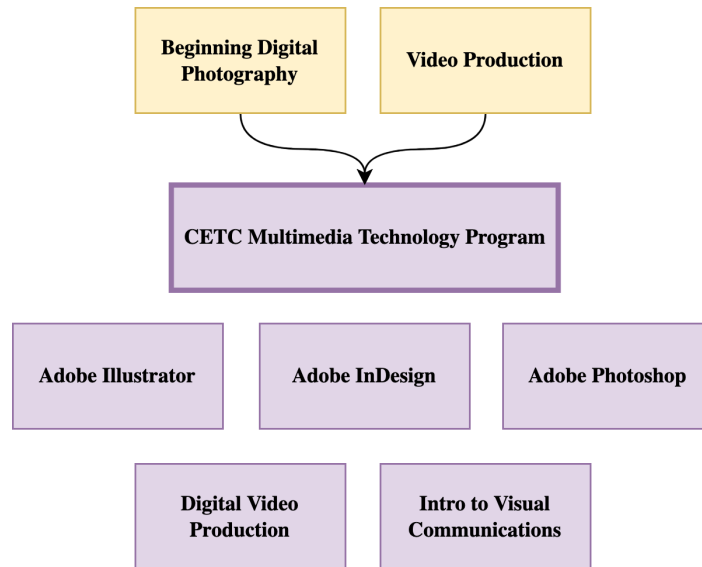
Fashion Design 1**CTE9451****Details:** Grade 10-12, Semester, Practical Arts Credit**Fee:** \$20

Description: The purpose of this course is to expose students to various aspects of the fashion design and merchandising industry. Students integrate knowledge, skills, and practices to evaluate potential career opportunities. Emphasis is placed on an introduction to fashion, fashion and textile selection, product construction and fashion merchandising.

Fashion Design 2**CTE9452****Details:** Grade 10-12, Semester, Practical Arts Credit**Fee:** \$20**Prerequisite:** Fashion Design 1

Description: The purpose of this course is to expose students to various aspects of the fashion design and merchandising industry. Students integrate knowledge, skills, and practices to evaluate potential career opportunities. Emphasis is placed on an introduction to fashion, fashion and textile selection, product construction and fashion merchandising.

Digital Production & Editing



Beginning Digital Photography

CTE1221

Details: Grade 9-12, Semester, **Practical Art Credit**

Fee: \$25

Description: With almost everyone owning a phone with a camera, we all have become photographers. However, with this class you will advance your skills in composition, editing, and style. Learn how to take and edit photos worthy of the best instagram account. Students will be taught how to use Photoshop and Adobe Lightroom. Students should look forward to taking photos outside of class time, but it is possible to complete the course with work during class time.

Video Production

A5130

Details: Grade 9-12, Semester, **Fine Art Credit**

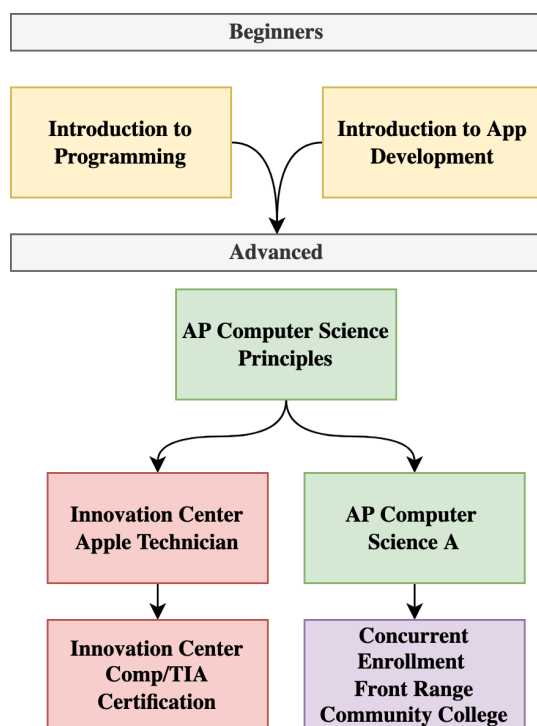
Prerequisite: None

Fee: \$25

This course is designed to acquaint students with the basics in the area of video production and to give them experience in producing short films. Students will learn basic elements of using a video camera, lighting, effects, operation switching units, editing, audio mixing, and operating a production studio. Students will create videos and edit them using Final Cut Pro. This will be a hands-on, project-based class with students being responsible for the production of several kinds of videos. These projects will include, but are not limited to , news items, feature stories, public service announcements, composting projects, music videos and short stories.

Computer Science

Computer science opens more doors for students than any other discipline in today's world. Learning even the basics will help students in virtually any career—from architecture to zoology. In a rapidly changing global economy, it is important for every 21st-century student to have a chance to design an app or an algorithm or learn how the Internet works.



Introduction to Programming

CS1203

Details: Grade 9-12, Semester, Practical Arts Credit

Description: This introductory class is intended for beginning programming students interested in computer graphics and visual design. Students will learn to code in the Processing programming language, a beautiful and dynamic computer language created by and for visual artists and graphics designers. Students will also learn the fundamentals of Computer Science, such as binary numbers, data types, conditional branching, loop structures, and state machines. Because Processing is built on top of the Java programming language, students who complete this course are well equipped for AP Computer Science Principles.

Introduction to App Development 1

CS1225

Details: Grade 9-12, Semester, Practical Arts Credit

Prerequisite: *Introduction to Programming strongly recommended but not required. Not recommended for students who have taken AP CS or who have programming experience.*

Description: The world is officially mobile and almost every major company with an internet presence also has an associated app or website that extends its services to the mobile user. In this class, you will learn how to make mobile Apps and dynamic websites - no programming experience required! Students will first build a solid foundation in the design process and programming fundamentals, learning HTML, CSS, and Javascript to create webpages from scratch. Students will then explore App creation for Android and iOS devices.

AP Computer Science Principles

CS5110 A/B

Details: Grade 9-12, Full Year, Weighted 5.0, Practical Arts Credit

Prerequisite: *Intro to Programming or two years of middle school programming*

AP Exam: *AP Exam Fees apply*

Description: Computer science is everywhere, from our smartphones and video games to music, medicine, and much more. AP Computer Science Principles (AP CSP) can help you understand how computing and technology influence the world around you. Learn how to creatively address real-world issues while using the same tools and processes that artists, writers, computer scientists, and engineers use to bring

ideas to life. This intermediate class is designed for students already familiar with basic programming. The course covers the fundamentals of computing, including problem-solving, working with data, understanding the Internet, cybersecurity, and programming. Broadening your understanding of computer science for use in a diversity of majors and careers using Javascript/HTML and CSS.

AP Computer Science A

CS5010 A/B

Details: Grade 10-12, Full Year, Weighted 5.0, Practical Arts Credit

Prerequisite: *Students should have 2 years of experience coding and a solid understanding of object-oriented programming*

AP Exam: *AP Exam Fees apply*

Description: The goals of this course are comparable to a first-year college course in Computer Science. It emphasizes hands-on-programming in Java to teach students rigorous object-oriented programming and program development and to prepare students to take the College Board AP Computer Science An examination. Systematic analysis of large-scale computer programs, as well as troubleshooting, problem-solving, and algorithm development skills are included in this course to help prepare students for both college/university programming and/or computer-related careers. Students will be evaluated through programs they create, along with regular practice tests and quizzes.

Technical Theater Courses

Production Theater

PA1320

Details: Grades 9-12, Semester, **Practical Art Credit**

Prerequisites: *None*

Fee: \$30 per semester

Description: In this class, we will learn how to create and execute design plots for costumes, properties, (props), and makeup for a specific theatrical presentation. Filled with hands-on activities, this course will help you learn the finer points of how to create and use these design elements to enhance a show and give you the opportunity to use these plots on an actual school performance. It is required that you work on at least one production a semester, which will require you to be available for the tech weeks of those shows.

Basic Technical Theater

CTE 9961 A/B

Intermediate Technical Theater

CTE 9971 A/B

Advanced Technical Theater

CTE 9981 A/B

Details: Grades 10-12, Full Year, **Practical Art Credit**

Prerequisites: *Application & interview process.*

Fee: \$30 per semester

Description: Students will learn the principles of technical theater and theatrical design. The topics covered include; scenic construction and painting, lighting and sound technology, production and stage management, and scenic and lighting design. Students will also take an active leadership role in the production of a variety of performances in the theater. This is a hands-on kinesthetic course that will teach students specialized vocabulary and techniques specific to theatrical productions. In the process, students will learn to use hand and power tools, operate lighting and sound equipment, and learn safety in the theater.

General Electives

The following courses are elective credits and will count towards the 24.5 credit graduation requirement if they are credit-bearing courses. Please note you will not receive credit for time release or study hall. You may select other courses in various areas (Math, Science, English, Social Studies, Fine Arts, PE, and Practical Arts) to count towards your overall graduation credit requirements.

IB Theory of Knowledge 1- only applicable to the IB Diploma Candidates

MS4301

IB Theory of Knowledge 2- only applicable to the IB Diploma Candidates

MS4302

Details: Grade 11, Full Year, Weighted 5.0

Description: The TOK course plays a special role in the IB Diploma Program by providing an opportunity for students to critically examine what they know. Using the knowledge framework (scope, methods/tools, perspectives, ethics) students examine themselves as knowers, as well as language, technology, and the areas of knowledge (arts, math, natural and human sciences, history). The course encourages students to be curious and to think deeply about complicated issues, and encourages them to discover and articulate their own views on knowledge. TOK students are expected to engage in regular discussion and reflection. While TOK content is the primary focus, the course also aims to broadly support IB students by using some class time for the other components of the IB Core, CAS and Extended Essay.

Aide Counselor

MS1202

Aide Teacher

MS1206

Aide Office

MS1208

Details: Grade 9-12, Semester, .25 credit

Prerequisite: *Permission of staff/teacher*

Description: Only one aide period per day per semester is allowed. Grading will be pass/fail, and students receive .25 credit per semester.

Students must obtain permission before enrolling.

Assistant Media

MS1305

Details: Grade 9-12, Semester, .5 credit

Prerequisite: *Librarian permission*

Description: Students will learn to assist teachers and fellow students in the Library. They will learn to use telecommunications and electronic databases. They may also learn some media production and equipment operation skills. Enrollment is limited. Students receive letter grades for this course. Click [here](#) for the application.

Assistant Special Education

MS1315

Details: Grade 9-12, Semester, .5 credit

Prerequisite: *Permission from Ms. Holle*

Description: All students are invited to participate in inclusion by volunteering in the center-based special education classroom at Niwot High School. Students assist with academics, life skills instruction, and forming friendships with students with disabilities. Students must submit an application to be considered for Special Education Assistant.

Guided Study Hall

MS1144

Details: Grade 9, Semester, .5 credits

Description: Guided Study Halls are supervised, quiet study times offered in the school day for 9th grade students only. Study Hall students are expected to use this time productively to study and do homework. Study Hall is not a time or an environment for inappropriate behavior, and attendance is mandatory for all students. Unexcused absences result in parent contact and in-school suspension.

Study Hall

MS1147

Details: Grade 10, Semester, .25 credits

Description: Study Halls are supervised, quiet study times offered in the school day. Study Hall students are expected to use this time productively to study and do homework. Study Hall is not a time or an environment for inappropriate behavior, and attendance is mandatory for all students. Unexcused absences result in parent contact and in-school suspension.

Time Release Period (1,2,3,4)**MS2011, MS2012, MS2013, MS2014****Details:** Grade 11-12, Semester, No Credit

Description: Seniors and juniors may register for up to two Time Release Periods each semester. Every student who registers for a Time Release Period must be sure they have enough credits to graduate and is taking enough classes to be a full time student. *Time Release Periods may be revoked if students do not comply with rules governing them.*

Work Study**MS2270****Details:** Grade 11-12, Semester, .5 credit**Prerequisite:** *Completed Work Study Form*

Description: Work Study gives credit to students who hold a part-time job while attending school. Students must work a minimum of 270 hours in a semester to earn .5 credit. Semester evaluations are completed based on employer recommendations. *Students must complete an application, available in the counseling office, and receive administrative approval. The application must be returned by the deadline given on the form, or no credit will be granted.*

CTE Work Study**CTE9994****Details:** Grade 11-12, Semester, .5 credit**Prerequisite:** *Approval from FCS/CETC Teacher*

Description: Work Study gives credit to students who hold a part-time job while attending school. Students must work a minimum of 270 hours in a semester to earn .5 credit. Semester evaluations are completed based on employer recommendations. *Students must complete an application, available in the counseling office, and receive administrative approval. The application must be returned by the deadline given on the form, or no credit will be granted.*

Student Council**MS1172 A/B****Details:** Grade 9-12, Full Year**Prerequisite:** *Application required; interviews and elections pending*

Description: Student Council is the governing body of students that organizes events and activities throughout the school year. Officers and representatives are elected by the student body and from each grade level. The class allows students a chance to learn, demonstrate leadership qualities, and be a part of a decision-making group. Students willing to make personal, as well as group, commitments are encouraged to apply. There is a minimum of 15 hours per semester expected outside of class.

Yearbook**LA2429 A/B****Details:** Grade 9-12, Full Year, **Practical Art Credit****Prerequisite:** *Submission of application, teacher recommendation, and interview with adviser and staff.*

Description: Students who have visual and verbal creativity, sound writing skills, and a desire to serve on the yearbook staff are encouraged to apply. All staff members must have a *verifiable* history of being responsible, organized, and able to solve problems creatively. *The class is designed for independent, self-motivated students who are organized and able to complete assignments by specific deadlines and who are committed to journalistic excellence.* Each staff member must also have an identifiable talent such as art, photography, or written composition. Students in this course work cooperatively to produce a yearbook that meets the highest standards of the Colorado High School Press Association. Students are assigned a section of the yearbook and are also involved in design, production, funding, and distribution. Students are expected to work in a manner that contributes to the completion of the group's assigned tasks according to deadlines and standards of excellence. *This course does not meet NCAA academic eligibility requirements.*

CTE Internship**CTE 9999****Details:** Grades 11-12, Full Year**Prerequisites:** *Teacher approval*

Description: Internships are on or off-campus work-based learning activities designed to provide students with opportunities to make connections between the theory and practice of study and the practical application of that study in a professional work environment. Internships offer the opportunity to "try out" a career while gaining relevant experience and professional connections. Internships are completed under the guidance of an on-site supervisor (off campus) and school district personnel, who in combination with the student will create a framework for learning and reflection. Internships may be paid or unpaid.



Career Education & Technology Center

[CETC Course Catalog](#)



Innovation Center

[Innovation Center Course Catalog](#)