

# WIDEFIELD HIGH SCHOOL

615 Widefield Drive, Colorado Springs, CO 80911

[whs.wsd3.org](http://whs.wsd3.org)

# WHS



## COURSE REGISTRATION GUIDE 2023 - 2024

Courses, policies and procedures outlined in this guide are tentative and dependent upon student need, staffing, and Widefield High School building decisions. The online version of this guide is considered the most up-to-date and is considered the official version.

# WIDEFIELD HIGH SCHOOL

615 Widefield Drive, Colorado Springs, CO 80911

[whs.wsd3.org](http://whs.wsd3.org)

## Mission Statement

To develop students into successful contributors of a changing society, to help all students realize their potential within their academic and vocational goals, to foster ownership of their learning and to allow their learning to be maximized through a diverse and comprehensive educational program in a safe, structured learning environment.

Our staff is committed to engage students by continuously developing our profession to ensure that research-based, data-driven instruction is used to provide all students a relevant learning experience.

Widefield High School students will become lifelong learners equipped to further develop their skills to succeed in a competitive and demanding post-scholastic world.

## Administrative and Support Staff

Principal

Assistant Principal

Assistant Principal

Dean of Students

Athletic Director

Counselors:

College and Career Counselor

Dr. Jessica Bitting

Mrs. Brooke Felice

Mr. Sam Baldwin

Mr. John Clark

Mr. Jonathan Shub

Mr. Ben Baldwin

Mrs. Noelle Vancil

Mr. Greg Morris

Mrs. Emily Christensen

Mrs. Jill Griggs

Class of 2024

Class of 2025

Class of 2026

Class of 2027

## Important Phone Numbers

<u>Widefield High School</u>	<u>719-391-3200</u>
<u>Attendance</u>	<u>Option 1</u>
<u>Counseling Center</u>	<u>Option 2</u>
<u>Registrar's Office</u>	<u>Option 3</u>
<u>Athletics/Activities</u>	<u>Option 4</u>
<u>Dean's Office/Discipline</u>	<u>Option 5</u>
<u>Nurse's Office</u>	<u>Option 6</u>
<u>Administration Office</u>	<u>Option 7</u>
<u>Bus Transportation</u>	<u>719-391-3540</u>
<u>Nutrition Services</u>	<u>719-391-3560</u>

# WELCOME TO WIDEFIELD HIGH SCHOOL

---

All courses and policies have been reviewed and updated in this year's 2022-2023 Course Registration Guide. This book has been developed to assist students in planning for a successful high school experience. It contains the requirements that students must meet in order to graduate from Widefield High School. It also contains brief descriptions of all of the courses offered and information regarding student expectations at Widefield High School.

Students are directed to study the graduation requirements and course descriptions carefully with their parent(s)/guardian(s) before planning their program and selecting courses. Students' counselor and teachers will assist them with their decisions. Students' choice of courses should be based upon graduation requirements, post high school plans, teacher recommendations, interests and abilities, and the past achievements. It is important to note that courses, policies and procedures outlined in this guide are tentative and dependent upon student need, staffing, policies, and Widefield High School (WHS) building decisions.



## Equal Opportunity/Non Discrimination

Widefield School District #3 complies with all state and federal regulations prohibiting discrimination on the basis of race, color, national origin, creed, religion, age, sex, and disability. WSD#3 is an Equal Opportunity Employer. Inquiries concerning the application of Title IX, section 504, or Title VI may be referred to Widefield School District's administrative office at 1820 Main Street, Colorado Springs, CO 80911 or to the Regional Director of Education, Office of Civil Rights, 1961 Stout Street, Denver, CO 80294.



# TABLE OF CONTENTS

<b>Welcome to Widefield High School .....</b>	<b>1</b>
<b>Table of Contents .....</b>	<b>2</b>
<b>Graduation Requirements .....</b>	<b>3</b>
<b>Colorado Higher Education Admission Requirements .....</b>	<b>5</b>
<b>Transferring To or From Widefield High School .....</b>	<b>6</b>
<b>Scheduling .....</b>	<b>7</b>
<b>Credit Check Chart .....</b>	<b>10</b>
<b>Naviance Family Connection .....</b>	<b>11</b>
<b>PLTW, Honors and Advanced Placement (AP) .....</b>	<b>12</b>
<b>National Honor Society .....</b>	<b>14</b>
<b>Athletics .....</b>	<b>15</b>
<b>Activities &amp; Clubs .....</b>	<b>16</b>
<b>Renaissance .....</b>	<b>16</b>
<b>Online Programs .....</b>	<b>17</b>
<b>Art &amp; Design .....</b>	<b>18</b>
<b>Business &amp; Marketing.....</b>	<b>22</b>
<b>Career and Technical Education .....</b>	<b>27</b>
<b>Family &amp; Consumer Sciences.....</b>	<b>33</b>
<b>College Programs</b>	
<b>Career Start Program at PPCC .....</b>	<b>34</b>
<b>Concurrent Enrollment (CE) .....</b>	<b>35</b>
<b>Dual Credit (CU Succeed Program) .....</b>	<b>35</b>
<b>English .....</b>	<b>36</b>
<b>Mathematics .....</b>	<b>44</b>
<b>Naval Junior Reserve Officer Training Corps (NJROTC) .....</b>	<b>50</b>
<b>Performing Arts</b>	
<b>Choir .....</b>	<b>54</b>
<b>Orchestra .....</b>	<b>55</b>
<b>Band .....</b>	<b>56</b>
<b>Theatre/Piano/Music Theory .....</b>	<b>58</b>
<b>Music Production Pathway .....</b>	<b>59</b>
<b>Physical Education .....</b>	<b>60</b>
<b>PLTW-Computer Science Principles Pathway .....</b>	<b>64</b>
<b>PLTW-Engineering Pathway .....</b>	<b>66</b>
<b>Science .....</b>	<b>68</b>
<b>PLTW-Biomedical Sciences Pathway .....</b>	<b>73</b>
<b>Social Studies .....</b>	<b>75</b>
<b>World Language.....</b>	<b>80</b>
<b>Electives .....</b>	<b>85</b>
<b>Courses Not Offered 22/23 School Year.....</b>	<b>87</b>





# GRADUATION REQUIREMENTS

POLICY: Graduation Requirements

DISTRICT CODE: IKF

## District academic standards

All students must meet or exceed the district's academic standards prior to becoming eligible to graduate **or** complete the requirements and goals as listed on a student's Individualized Education Program (IEP), which may include modified academic standards.

Graduation from high school is a culminating event that results from the foundations built at the elementary and middle levels. Graduation is a collaborative effort among levels in a student's public school career. Each level of school and each staff member or parent/guardian who instructs or counsels a student shares responsibility for the ultimate ability of that student to demonstrate proficiency in the district's academic standards and to meet the expectations for graduation.

Area	Credits	Description
Communication Skills (English)	8	Three in composition, two in literature, two in composition and/or literature, and one in speech
Mathematical Development	6	Six credits
Personal Development	5	Two in physical education, one in health (9-12), two from fine arts, foreign language (9-12), and/or careers (10-12)
Scientific Development	6	Two in the area of life science (biology), two in the area of earth science, and two in the area of physical science
Social Studies and Citizenship	7	One in social studies 9, one in geography, two in world history, two in U.S. history, and one in U.S. government
Electives	16	
	<b>48</b>	<b>Total Credits to Graduate</b>

- A maximum of four credits\* may be accepted for graduation for students who satisfactorily complete approved courses through accredited distance learning (correspondence or web-based) programs. Rigorous academic classes successfully completed at all colleges/universities participating in the Postsecondary Options Act may be approved as well as certain courses from other colleges/universities. Students must complete all graduation requirements to be eligible to participate in the graduation ceremony.
- An athlete who completes two or more varsity sport seasons will only be required one semester of physical education for graduation.
- Two seasons of Marching Band equivalent to one P.E. credit waiver.

\* See Policy IHC for requirements related to WSD3 alternative educational program.



# Widefield Graduation Credit Requirements

\*Students work with their counselors to ensure that they meet these requirements.\*

Area	Credits
Communication Skills (English)	8
Mathematical Development	6
Personal Development	5
Scientific Development	6
Social Studies and Citizenship	7
Electives	16
<b>TOTAL CREDITS TO GRADUATE</b>	<b>48</b>

## Colorado Graduation Guidelines

Students must meet minimum competency requirements in BOTH English and Math.

The following options are approved by the State of Colorado:

Menu of Options	English	Math
Accuplacer (Classic)	62 on Reading Comprehension OR 70 on Sentence Skills	61 on Elementary Algebra
Accuplacer (Next Generation)	241 on Reading OR 236 on Writing	255 on Arithmetic Skills (AR) OR 230 Quantitative Reasoning (QAS)
ACT Compass	79	63
ACT WorkKeys-National Career Readiness Certificates	Bronze or higher	Bronze or higher
Advanced Placement Exams	2	2
Concurrent Enrollment	Passing per district higher education policy	Passing per district higher education policy
SAT (APRIL)	470	500
ACT	18	19
ASVAB (Military) (OCTOBER)	31	31
Industry Certificate	To be determined	To be determined
District Capstone	-Embedded within Intermediate Composition, Creative Writing, and Tech Writing -Independent Capstone Project	-Embedded within Consumer Math, Algebra 2A, and Algebra 2 -Independent Capstone Project -Need Math Today & Alg II Trig.



# COLORADO HIGHER EDUCATION ADMISSION REQUIREMENTS (HEAR)

---

The Colorado Commissions on Higher Education adopted new admissions guidelines for public, 4-year institutions of higher education at the Commission's October 2003 meeting.

Three of the most significant components of the new guidelines are:

1. Decreasing the size of the 'Window' allowing students not meeting the Admissions Index requirement to be admitted to selective and highly selective
2. Instituting a 'Floor' limiting the number of students with an index 10 point, below the minimum Admissions Index that can be admitted
3. Requiring a specific Pre-collegiate Curriculum for each high school student in order for the student to be admitted outside of the 'Window'

The adopted Pre-collegiate Curriculum for students graduating in **2008** or later would consist of:

- Four years of English
- Four years of mathematics at the level of Algebra I or higher
- Three years of science- two must be lab courses
- Three years of social studies- one of which must be US History or World Civilization
- Two years of academic electives
- Two years of one foreign language

\*\*Denotes courses that meet pre-collegiate requirements.



## TRANSFERRING TO or FROM WIDEFIELD HIGH SCHOOL

Students will be classified according to the number of years they have been in attendance in high school. Students who do not complete enough credits to graduate in May of their original graduation year will need to meet with their counselor and obtain resources for an alternate plan to complete graduation requirements.

Widefield High School must receive official transcripts from the student's previous school before credit can be given. We will accept credit from any accredited high school. Copies of transcripts may be used for enrollment purposes only. Students transferring to WHS with weighted grades, such as Honors and/or AP classes, will maintain the weight assigned to the grade if WHS offers the same or an equivalent course. If the course is not offered by Widefield High School, the student will maintain the grade awarded by the previous school for the course but the weight will not transfer. Students transferring into Widefield High School must bring a copy of all prior transcripts in order to enroll and register for classes.

The following policy applies for students transferring into Widefield High School:

- |              |   |
|--------------|---|
| 0-5 Weeks:   | <ol style="list-style-type: none"> <li>1. Student will receive a new WHS schedule.</li> <li>2. No transfer grades are necessary but will be applied if available.</li> <li>3. Students grade will begin on the students start date.</li> <li>4. Students will not be required to do makeup work but will be required to know all material for the final.</li> </ol>   |
| 6-9 Weeks:   | <ol style="list-style-type: none"> <li>1. Counselors will match the student's previous schedule as closely as possible</li> <li>2. Transfer grades will be applied for specific class or content area when available</li> <li>3. Classes that do not have a transfer grade will begin on the student start date as far as grading. No makeup work will be required but students are responsible for all content that will be tested on the final exam.</li> <li>4. For classes with no transfer grade, the student will have to pass the final exam with at least a 70% to earn credit and a letter grade in the course.</li> </ol>   |
| 10-13 Weeks: | <ol style="list-style-type: none"> <li>1. Counselors will match the student's previous schedule as close as possible.</li> <li>2. Transfer grades will be applied for specific class or content area when available.</li> <li>3. Classes that do not have a transfer grade will begin on the student start date as far as grading. No makeup work will be required but students are responsible for all content that will be tested on the final exam.</li> <li>4. For classes with no transfer grade, student will have to pass the final exam with at least a 70% to earn credit and will receive a PASS for the course.</li> </ol> |
| 14-18 Weeks: | <ol style="list-style-type: none"> <li>1. Counselor will work closely with previous school to obtain final course work and finals.</li> <li>2. When not possible, counselor will use previous schedule to match the student's classes—transfer grades will be applied.</li> <li>3. All other course work will be audited for the remainder of the semester.</li> </ol>  |

\* All guidelines are at the discretion of the principal and may be changed with approval to meet individual needs.

### Withdrawing from Widefield High School

When it is necessary for a student to transfer or withdraw from Widefield High School, the student's parent/guardian must come to the registrar's office as soon as possible **IN PERSON** to initiate the withdrawal. We request that the parent/guardian bring the name and address of the next school the student will attend.

## SCHEDULING

### Course Selection

Student course registration/selection will occur during the Spring of the 2022 school year. Students need to make certain to select courses thoughtfully and carefully. The number of classes offered are based on student's course requests and enrollment numbers. Students should be careful to include a minimum of three (3) alternate classes in order to be scheduled into the courses he/she truly wants to take. Students will be held accountable for their course selection. Please note that it will be very difficult, if not impossible, to make schedule changes once the master schedule is set.

#### Students in the 8th grade in 2022-2023

Students will receive a copy of the Course Registration Guide, registration materials, and registration instructions from their junior high counselor.

**\*\*These items may be distributed digitally for the 23-24 school year.**

#### Students in 9th, 10th & 11th grade in 2022-2023

1. Students will each receive registration materials from their grade level counselor. Students may view the Course Registration Guide online, in the WHS library or with their advisory teacher during the 2023-2024 scheduling period.
2. Students will be advised of scheduling options through their counselor during a class meeting.
3. If there are any questions regarding the students options for the next year's schedule, the student should make an appointment to see his or her counselor.
4. The majority of students will be registering for their own classes in Infinite Campus this year. Teachers, counselors and administrators will be available for help during this time.

**\*\*These items may be distributed digitally for the 23-24 school year.**

### Adding and Dropping Courses

Schedule changes will be allowed the **first 5 days** of each semester without penalty. During the 5-day grace period each semester, students requesting to drop a class must come to the counseling office and request a Drop/Add form. The Drop/Add form must include signatures from a student, parent/guardian and teacher. Dropping a class after the withdraw fail date for each semester may result in a "WF" grade for the semester. Please note that a "WF" grade will be recorded on the student's official transcript and will be included in his/her grade point average (GPA). Students dropped from a class for disciplinary reasons will receive a "WF" grade on their transcript. Books and other obligations must be submitted to the teacher before the drop is approved.





## SCHEDULING (continued)

### Schedule Changes

The school will develop a master schedule based upon the pre-registration requests.

Please note that students will only be able to make schedule changes for the following reasons:

- Empty spot in the student's schedule,
- Student has already taken the class and earned credit,
- Changes need to be made to meet graduation requirements,
- Student failed a class, and/or
- Student does not have required prerequisites for the course.

Schedule changes will NOT be considered for any of the following reasons:

- A different teacher/period request,
- Dislike of scheduled/requested class, or
- To move around class periods.

**SENIORS: Please check your graduation requirements carefully before you request a change.**

Students need to adhere to the procedure and dates for all schedule changes. Students may choose from a broad range of course offerings at Widefield High School designed to meet individual needs: Advanced Placement (AP), Honors, Area Vocational Program (Pikes Peak Community College), General, Vocational, and Special Needs (placement requires formalized assessment procedures).

The following courses may be repeated for credit: PE courses, student assistant (up to 3), library science, yearbook, KWHS, journalism, choir, band, orchestra, and selected theatre classes with instructor approval.

### Course Cancellation & Conflicts

Scheduling conflicts may preclude students from being able to take some courses of their choice. Courses may be cancelled if enrollment or staffing changes do not permit the offering. Other courses may be combined or regrouped depending on the class enrollment.

Schedule changes may occur to adjust a student's schedule by a counselor or administrator due to class sizes, staff changes, or master schedule changes. These changes are final.

**\*NOTE: Students signing up for block classes may be reassigned to single period classes in the event of conflicts.**



# SCHEDULING WORKSHEET

Students attending Widefield High School will register for their classes online with the assistance of counselors, teachers and administration. Individual student schedules will be built based upon the information received from the students at the time of scheduling. The sample schedules below show classes that are required for graduation.

## 9th Grade

Course Type	Semester 1	Semester 2
English	English 9	English 9
Science	Biology/PLTW Bio Med	Biology
Social Studies	*Social Studies 9	*Geography
Math		
PE	*PE 9	*Health
1 <sup>st</sup> Elective	Fine Art	Fine Art
2 <sup>nd</sup> Elective		

## 10th Grade

Course Type	Semester 1	Semester 2
English	English 10	English 10
Science		
Social Studies	World History	World History
Math		
1 <sup>st</sup> Elective		
2 <sup>nd</sup> Elective		
3 <sup>rd</sup> Elective		

## 11th Grade

Course Type	Semester 1	Semester 2
English	*Composition Class	*Literature Class
Science		
Social Studies	U.S. History	U.S. History
Math		
1 <sup>st</sup> Elective		
2 <sup>nd</sup> Elective		
3 <sup>rd</sup> Elective		

## 12th Grade

Course Type	Semester 1	Semester 2
English	*Speech	*Composition Class
Elective		
Social Studies	*U.S. Government	
Elective		
1 <sup>st</sup> Elective		
2 <sup>nd</sup> Elective		
3 <sup>rd</sup> Elective		

\* Classes may be assigned either 1st or 2nd semester.



# CREDIT CHECK CHART

Use the chart below to track credits earned towards graduation, based on WSD requirements.

## English (8)

☐ 9<sup>th</sup> Comp ☐ 9<sup>th</sup> Lit ☐ 10<sup>th</sup> Comp ☐ 10<sup>th</sup> Lit ☐ Comp ☐ Comp or Lit ☐ Comp or Lit ☐ Speech

## Mathematics (6)

☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

## Science (6)

☐ Biology ☐ Biology ☐ Earth/Geology ☐ Earth/Geology ☐ Physical/Chemistry ☐ Physical/Chemistry

## Social Studies (7)

☐ Social Studies 9 ☐ Geography ☐ World History ☐ World History ☐ U.S. History ☐ U.S. History ☐ Government

## Personal Development (5)

☐ P.E. ☐ P.E. ☐ Health ☐ Foreign Language/Fine Art ☐ Foreign Language/Fine Art

## Electives (16)

☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_ ☐ \_\_\_\_\_

**GRADUATION REQUIREMENTS:**

**ACADEMIC: 32**

**ELECTIVE: 16**

**TOTAL CREDITS NEEDED FOR GRADUATION: 48**

\* Please note: Students must also meet Colorado Graduation Guidelines (see pg. #4).



# Naviance Family Connection

## What is Family Connection?

Family Connection is a comprehensive online resource that can be used to help make decisions about colleges and careers. It is customized to Widefield High School students and is linked with College Planner, a service that students will use to request transcripts and submit college applications and that WHS counselors will use to track data and provide up-to-date information that is specific to WHS.

- Career Planning- Strengths Explorer Inventory, Career Interest Profiler, Resume Building
- College Planning- Compare colleges, access scholarship and financial aid resources, request transcripts and letters of recommendation and submit your applications all in one place
- Success Planning- Personalized goals and tasks, journal entries, student planner
- Family Connection a communication tool; lets us share information with students and parents/guardians about up-coming meetings and events, local scholarship opportunities, and other important information

## How Do I Start?

Family Connection on the Web:

<http://connection.naviance.com/widefieldhs>

Access through the WHS website:

[www.wsd3.org](http://www.wsd3.org) >SCHOOLS>Widefield HS>COUNSELING>Student Information >Naviance

## Student and Parent/Guardian Access:

### Students

- Access Naviance Family Connection through Web or WHS website.
- An account has already been created for you.
- Username: last name, first three letters of first name and day of birthday (example: smithjon10 for John Smith DOB 1/10/01)
- Update your personal information including you email address. This is how your counselor will communicate with you.

### Parents/Guardians

- Access Naviance Family Connection through Web or WHS website.
- An account has already been created for you.
- Contact the Counseling Center at 391-3110 prior to your first log in to obtain your unique registration code.
- Register your account.
- Start taking advantage of all Naviance Family Connection has to offer.

We hope you find Naviance Family Connection to be a useful tool in fostering a partnership between you and the Widefield High School Counseling Department.

## PLTW, HONORS AND ADVANCED PLACEMENT (AP) COURSE INFO

Honors courses are intended to meet the needs of students whose ability level requires significant acceleration of the standard curriculum. Honors classes stress academic excellence, preparation for college, and critical and independent thinking skills. Students who enroll in honors classes are expected to work at a high level of competence and to responsibly accept the academically rigorous challenges set forth.

Honors courses offered at Widefield High School have an additional grade weight of 0.5; therefore, if a student earns an A in an Honors course, the student will receive a 4.5. Because these courses are given additional grade weight, it is important that the student understands the class expectations.

\*Students must receive administrative approval in order to drop an AP or Honors course.

The following Honors courses are offered at Widefield High School; however, whether or not they are offered each year, depends upon student requests and building needs.

### Honors Courses

- Honors Athletic Training
- Honors Biology
- Honors Chemistry
- Honors Geology
- Honors Human Physiology
- Honors Algebra II Trig
- Honors Discrete Math
- Honors Pre-Calculus
- Honors World History
- Honors English 09
- Honors English 10
- Honors Spanish III
- Honors French III
- Honors German III
- Honors Chamber Strings
- Honors Chamber Winds
- Honors Teacher Cadet I

### Project Lead the Way Courses

- PLTW Principles of Biomedical Sciences
- PLTW Human Body Systems
- PLTW Medical Interventions
- PLTW CAPSTONE Biomedical Innovations
- PLTW Environmental & Sustainability
- PLTW Introduction to Engineering & Design
- PLTW Principles of Engineering
- PLTW Aerospace Engineering
- PLTW Civil Engineering & Architecture
- PLTW Cyber Security
- PLTW Computer Science Principles
- PLTW Computer Science A

The Advanced Placement (AP) program is a national program offered by Widefield High School in cooperation with the College Board. The AP program provides students the opportunity to pursue college-level studies while in high school. At the conclusion of the AP course, students will take a College Board National AP Exam administered on a national test date. Depending on scores, a student may receive college-level credit for AP classes. Acceptance of AP scores for college credit is determined by each college or university. It is the student's responsibility to research policies at individual institutions regarding AP credit.

AP courses offered at Widefield High School have an additional grade weight of 1.0; therefore, if a student earns an A in an AP course, the student will receive a 5.0.

The following AP courses are offered at Widefield High School; however, whether or not they are offered each year, depends upon student requests and building needs.

- AP U.S. Government
- AP U.S. History
- AP Biology
- AP Calculus AB
- AP Calculus II BC
- AP Chemistry
- AP Computer Science Principles
- AP Environmental Science
- AP European History
- AP French Language and Culture
- AP German Language and Culture
- AP Human Geography
- AP English Language and Composition
- AP Composition and Literature
- AP Physics
- AP Spanish Language and Culture
- AP Spanish Literature and Culture
- AP Statistics

\*Students are not permitted to retake Honors or AP courses.





# PROJECT LEAD THE WAY

## What is “Project Lead the Way (PLTW)”?-

**\*\*All PLTW classes carry an Honors weight for GPA\*\***

PLTW is a national program that has formed partnerships among public schools, institutions of higher education, and industry to increase the quantity and quality of students graduating from engineering and engineering technology institutions. The challenge to high schools and colleges today is to graduate students who are competent in the skills needed in today’s technological climate – math, science and technology, problem-solving, communication and teamwork that promote broad-based solutions to the problems and challenges of society. PLTW has developed a four-year set of courses that introduces students to the rigor and discipline of engineering and engineering technology prior to entering college. PLTW also provides ongoing instructor training and curriculum development for teachers. PLTW helps facilitate acquisition of state-of-the-art hardware and the latest software for training.

## How do Project Lead the Way courses fit into a student’s schedule?

- All courses are open to upper classmen, but only Introduction to Engineering & Design and Principles of Biomedical Sciences I are open to freshmen.
- All courses are a full year in length.



### PLTW Courses Offered 2021-2022

#### Engineering Pathway

Introduction to Engineering & Design  
Principles of Engineering  
Aerospace Engineering  
Civil Engineering & Architecture  
CAPSTONE Engineering & Architecture

#### Biomedical Sciences Pathway

Principles of Biomedical Sciences  
Human Body Systems  
Medical Interventions  
CAPSTONE Biomedical Innovations

#### Computer Science Pathway

Computer Science Principles  
Computer Science A  
Cyber Security



## NATIONAL HONOR SOCIETY

---

National Honor Society began in 1921 to create an organization that would recognize and encourage academic achievement while also developing other characteristics essential to citizens in a democracy. These ideals of character, scholarship, leadership and service remain as relevant today as they were in 1921. Membership in local chapters is an honor bestowed upon a student. Selection for membership is by a faculty committee; based on outstanding scholarship, character, leadership and service. The Widefield High School Chapter of National Honor Society has determined that outstanding achievement in the area of scholarship requires a 3.4 GPA. The juniors and seniors selected, have the responsibility to continue to demonstrate these qualities. Senior members in good standing will graduate with a NHS stole.

Transfer students already having membership in National Honor Society will automatically be accepted into membership at Widefield High School. New members, with proof of membership in good standing, will be subject to the same established guidelines as current WHS members.



**CHARACTER • SCHOLARSHIP • LEADERSHIP • SERVICE**

# ATHLETICS

Widefield's athletic program is an important part of the total curriculum of the school. Athletics are an extension of the classroom and provides healthy opportunities for students to learn lessons in sportsmanship, teamwork, competition, and self-discipline.

Widefield's athletics provides students with an opportunity to participate in a variety of sports. Widefield offers 18 varsity sports. Students are encouraged to participate in multiple sports. Participation is a privilege that brings with it responsibilities to the school, the sport, the student body, the community, and to the student-athletes.

**Successful completion of two or more varsity seasons of the same sport will waive one required PE elective.**

**\*e-sports will be available during the 2023-2024 School Year**

## FALL

Boys' Golf  
Boys' Soccer  
Boys' Tennis  
Cheerleading  
Cross Country  
Football  
Softball  
Volleyball

## WINTER

Boys' Basketball  
Cheerleading  
Girls' Basketball  
Girls' Swimming  
Wrestling

## SPRING

Baseball  
Boys' Swimming  
Cheerleading  
Girl's Soccer  
Girls' Tennis  
Track & Field

### Eligibility Policy

Any student participating on an athletic team must meet Widefield's eligibility standards to compete. Coaches will be notified of players eligibility each week.

### Athletic Lettering

Students have the opportunity to earn athletic letters throughout their high school career. Lettering requirements are determined by each program, so be sure to check with the coach.

### Athletics Elective Credit

An athlete who completes two or more varsity sports seasons will only be required one semester of physical education for graduation.

### NCAA & NAIA Eligibility Standards

If a student intends to participate in athletics as a college freshman, he or she must register and be certified by the Clearinghouse. Students may apply after their junior year. For complete and detailed information regarding the rules, visit either of the following websites:

**“Good players inspire themselves,  
Great players inspire others.”**

**-unknown**

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

or

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



## ACTIVITIES & CLUBS

We believe participating in activities and programs contributes to the development of leadership, talent, and creativity in our students. Our goal is that students acquire knowledge about themselves through working with others and cooperating with students of different interests, backgrounds, and personalities toward the attainment of a common goal. Our hope is that there is something for everyone at Widefield High School. Because many clubs and activities are formed by students with particular interests and skills, the activity offerings will grow and change each school year. Additional organizations and clubs will be available based on student interests.

<b>Art Club</b>	<b>FBLA</b>	<b>Peer Mediators</b>
<b>Athletic Training</b>	<b>FCA</b>	<b>Renaissance</b>
<b>AYPYN Afterschool Activities</b>	<b>Forensic Team</b>	<b>Robotics</b>
<b>Band and Flags</b>	<b>French Club</b>	<b>Science Club</b>
<b>Book Club</b>	<b>POWER</b>	<b>Sources of Strength</b>
<b>Class Councils</b>	<b>German Club</b>	<b>Spanish Club</b>
<b>Coding Club</b>	<b>KWHS News</b>	<b>Spirit Club</b>
<b>Culture Club</b>	<b>Link Crew</b>	<b>Student Cabinet</b>
<b>DECA</b>	<b>Math Club</b>	<b>Student to Student (S2S)</b>
<b>Drama Club</b>	<b>Military Coalition</b>	<b>Student Tutors</b>
<b>Environmental Club</b>	<b>National Honor Society</b>	<b>VICA</b>
	<b>NJROTC</b>	<b>Yearbook</b>

### RENAISSANCE

Renaissance is the WHS program that recognizes excellence in academics, attendance, activities, and volunteerism. Students must qualify and apply each semester. Students who have a Renaissance Card receive numerous discounts from community businesses as well as many in-school privileges i.e. free admission to a Widefield High School event.

The faculty committee will review all disciplinary infractions for the previous semester to determine if the applicant is eligible for a card and will verify all information provided by the applicant.

If approved, students receive a benefit card to use the next semester. Students can also qualify for an academic letter and a graduation medallion if the established criteria are met. Without our Partners for Educational Excellence, our program would not serve as the powerful impetus for students to continue demonstration excellence in education.

**\*\*WHS Renaissance would like to thank our sponsors for their donations and contributions. A current list of our sponsors can be found in the student handbook and on the Renaissance webpage.**

## ONLINE PROGRAMS

Widefield School District 3 offers two online programs. The online programs provide an opportunity for students who are credit deficient, are medically unable to attend WHS, have failed courses, and/or students who prefer an online learning environment. Class space and courses are limited.

### D3 My Way Online Program

Widefield School District 3 offers an online program called D3 My Way for students in grades 3-12. The program blends a solid online curriculum with face-to-face contact with a licensed teacher. Students participate in district and state assessments to determine their academic strengths as well as areas that may need additional support. The D3 My Way tutoring centers are located at:

SA Wilson School  
930 Leta Drive  
Colorado Springs, CO 80911

Our goal is to provide students and families the type of educational experience they desire. Parents guardians have a menu of options from which to choose. Students may take their core academic classes online and then choose to access their school's elective course offerings. Students may arrange tutoring during the online center's hours of operation.

**Log onto the D3 My Way web page for more information: [d3myway.wsd3.org](http://d3myway.wsd3.org)**

### Credit Recovery Online Program

Credit Recovery is an exceptional District 3 online program designed for students to make-up credits for classes they have previously failed. Each semester credit is earned in an 8-week course and meets national, state, and district standards. Students work at their own pace and can earn up to 2 semester credits in just 8 weeks. Teacher mentors offer personalized instruction and the option of individual attention through face-to-face meetings and online support. Each semester course is 8 weeks; tuition is \$100 per course; classes are offered in all core subjects. Sessions are offered in the fall, spring, and summer. Visit the district website for more information.

**Information can be found under the District Programs link by clicking on High School Credit Recovery or by visiting: [wsd3.org/programs/high-school-credit-recovery](http://wsd3.org/programs/high-school-credit-recovery).**

**Students must meet with their high school guidance counselor to fill out the application and register for any D3 My Way or Credit Recovery online courses.**





# Art &



# Design

# ART AND DESIGN

## **FOUNDATIONS OF ART AND DESIGN**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This semester course is designed for students who have minimal knowledge in art. Students will learn the basic elements and principles of design (examples include, line, value, texture, form, patterns, scale, special awareness, unity balance, color and proportion) that are the building blocks to a career in graphic design or commercial arts. Through critical thinking and problem solving students will gain technical experience in color theory, 3D projects, and work with techniques on further developing right versus left brain (drawing upside down, comparisons).

## **FREE HAND DRAW I**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This class will teach students how to draw what they see, how to create the illusion of light and shadow, how to analyze visual elements such as linear perspective, texture and understand principals of composition, (i.e. movement, scale, and how to render accurate proportion). A wide variety of techniques and media will be explored including graphite pencils, charcoal, pastels, pen and ink, and colored pencils. Students will learn how to apply critical and creative thinking skills, problem solving skills, critiquing skills into their work. Students will also be required to create a portfolio as well as to participate in an end of the course with the community.

## **PAINTING**

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: Foundations of Art and Design or Free Hand Draw**

In this course, students will explore various painting techniques, elements of composition, and color concepts. Materials used for painting representational, expressive, or abstracted images include but are not limited to watercolor and acrylics. Fundamentals of composition, color theory, and developmental skills will be emphasized. Art history is incorporated into the course through varied instructional media and resources.

## **CERAMICS/SCULPTURE**

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: None**

Ceramics/Sculpture is a class designed to explore three dimensional form and become familiar with the tool, techniques, and materials of sculpture and ceramics. Course content will include but not limited to casting, carving, modeling, and assemblage with a focus on clay. Students will have an opportunity to focus on hand building or learning to throw pottery on the pottery wheel. Art history will be incorporated into the course through various instructional media resources.

## **ADVANCED TECHNIQUES & APPLICATIONS**

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: Freehand Drawing and/or Painting**

This course provides an opportunity to further develop techniques learned in previous art courses and to create projects with a more independent approach. The course will cover a wide range of mediums and techniques for students to explore. Students will have an opportunity to form a complex body of work, develop a personal artistic statement, and prepare a portfolio to submit for university or career purposes.



# ART AND DESIGN (continued)

## FUNDAMENTALS OF PHOTOGRAPHY

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This course will introduce students to photography through a combination of lectures, demonstrations, assignments, and critiques. Students will learn to see photography through the demonstration of basic camera functions (aperture, shutter speed, lenses, depth of field) and techniques and aesthetics of photography (lighting and perspective). There will be an emphasis on the creative use of camera controls, exposure, and overview of film and digital processing, (printing and manipulating images in Photoshop, Illustrator and Animate). Using a DSLR camera students will have a more versatile means to take quality photographs of their work and better demonstrate their skills for future career opportunities

## PHOTOGRAPHY APPLICATIONS

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: Fundamentals of Photography**

This course will concentrate on advanced skills of photography learned from previous classes and portrait photography is also a focus. Students will demonstrate a knowledge in camera use, studio lighting, compositional skills, film exposure and working with human models. These concepts will be applied to the capabilities of Adobe programs (Photoshop, Illustrator and Animate) and students will demonstrate how these tools are used to create digital artwork (including their photographs and drawings) for careers in film, web design, print media, digital screen design or portrait photography.

## PHOTOSHOP & MULTIMEDIA

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: Fundamentals of Photography, Photography & Applications, and/or art teacher recommendation.**

Students will further demonstrate advanced techniques and will develop a portfolio to submit for career opportunities in commercial arts and to collaborate on real world problems/situations. At this point, students will focus on a career field in such areas as, photography, illustration, animation, or Multimedia design using skills they have learned in previous classes (i.e. Printmaking, Illustrator, Animate, Photoshop, etc.). They will relate these skills to industry by researching career opportunities and perfecting their portfolio to that specific field. The elements and principles of design (line value, texture, form, patterns scale, spatial awareness, unity balance, color and proportion) will be a guiding force as the process and work is critiqued along the way. Teacher and student will collaborate to illustrate a variety of skills and techniques as well as proving the worth of focusing on a chosen concentration.



---

# Business & Marketing



# BUSINESS

## Business & Marketing Progression Pathway

### 9th Grade

Accounting Principles I	Accounting Principles IA
Principles of Marketing	Event Marketing/ Communications
Introduction to PC Applications	Web Page Design I
Introduction to Business	Entrepreneurship

Personal Finance

### 10th Grade

Accounting Principles I	Accounting Principles IA
Accounting Principles II	Accounting Principles II A
Principles of Marketing	Event Marketing/ Communications
Introduction to PC Applications	Web Page Design I
Introduction to Business	Entrepreneurship

Personal Finance

### 11th Grade

Accounting Principles I	Accounting Principles IA
Accounting Principles II	Accounting Principles IIA

Accounting Principles IIB

Principles of Marketing	Event Marketing/ Communications
Introduction to PC Applications	Web Page Design I
Introduction to Business	Entrepreneurship
Personal Finance	Business Law

### 12th Grade

Accounting Principles I	Accounting Principles IA
Accounting Principles II	Accounting Principles IIA

Accounting Principles IIB

Principles of Marketing	Event Marketing/ Communications
Introduction to PC Applications	Web Page Design I
Introduction to Business	Entrepreneurship
Personal Finance	Business Law

**Note:** For business classes articulated through PPCC (for which the student earns a B or better) to receive the college credit, the student must complete the required paperwork through PPCC.

**Note:** College Credit is not automatically awarded and is not the school or teacher's responsibility to complete and submit the paperwork.







## **BUSINESS (continued)**

### **FUNDAMENTALS OF WEB DESIGN**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Students will learn the basic skills needed to design websites. Students will be guided through and demonstrate an understanding of web site production, structure, working with clients, interactivity, navigation, color schemes, user interface criteria, animations, accessibility, and hosting of websites. Students will create their own web sites using state of the art software.

### **ENTREPRENEURSHIP**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: Marketing suggested**

Teaches entrepreneurs planning skills from the development of a conceptual business to an actual comprehensive business plan. This practical approach includes one-on-one counseling with the instructor and professional volunteer counselors. Guest speakers are an integral part of the course. Additional topics include marketing strategies and tactics, liability protection, growth management, financial management and projections, networking, and funding options

### **INTRODUCTION TO BUSINESS**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This course is an entry-level business class. The following topics will be studied on a basic level: ethics, finance, technology, careers, consumerism, checking accounts, budgets, credit, insurance, and investments. Students will relate key business concepts to their own lives as citizens, wage earners, and consumers.

### **PERSONAL FINANCE**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Students will learn how to read, understand and prepare financial statements, budgeting, funding vehicles for personal and business loans, consumer credit, commercial credit, insurance and risk management. Taxation and the role it plays in finance will also be integrated into the class. Students may opt to apply knowledge gained at a State or National DECA competition.

### **INTRODUCTION TO SOCIAL IMPACT**

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: None**

Develop knowledge and understanding of the emerging 4th Sector of the Economy: Business exists to deliver value to our society. For the first time in our lifetime, we are seeing the emergence of a new sector, for profit businesses that work to make our world a better place. Social Impact combines business strategies with purpose-based thinking. As more and more businesses and nonprofits move to this model, learn how you can apply this in your community and in your future. In this course, students will explore concepts such as: Business Ownership, Intro to Social Impact; Ethics; Capitalism and Free Enterprise Evolution; History of Nonprofits. Learn how to create a sustainable business while doing well for communities.

### **LEGAL ENVIRONMENT OF BUSINESS**

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: None**

Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is given to economic regulation, social regulation, labor-management issues, environmental issues, and contract fundamentals. This course analyzes the role of law in social, political, and economic change business environments.



# CAREER CHOICES / WORK BASE LEARNING (WBL)

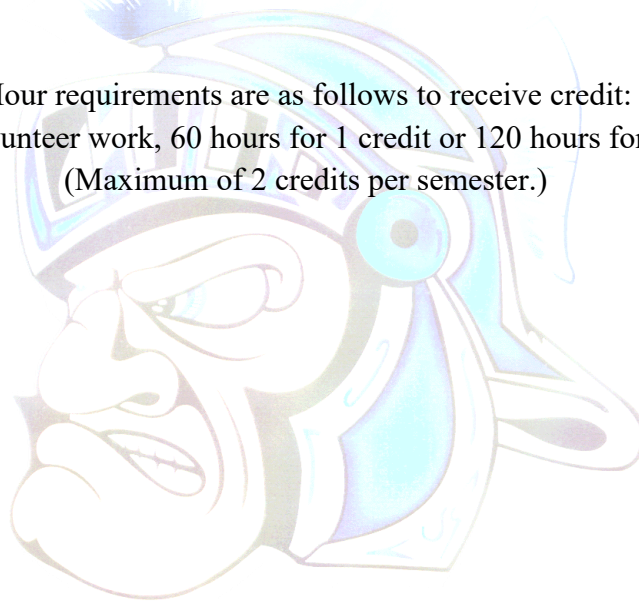
## WORK BASE LEARNING (WBL)

Grade Levels: 11-12

Semester Course

Students build on prior knowledge and skills in the program of study to further develop and apply employability and technical skills that prepare them for success in future career and postsecondary education. The Work Based Learning (WBL) for credit is a school to career partnership that provides opportunities for WSD3 students to gain work and/or career experience through a wide variety of partnerships with business, industry and the community. While WBL encompasses a wide variety of choices for students, WBL for credit, in conjunction with CTE programs can help students build skills and credentials that meet industry demand and prepare them for high skill, high wage jobs and careers. Students can earn up to two credits per semester if they meet the requirements.

Hour requirements are as follows to receive credit:  
Paid and volunteer work, 60 hours for 1 credit or 120 hours for 2 credits.  
(Maximum of 2 credits per semester.)



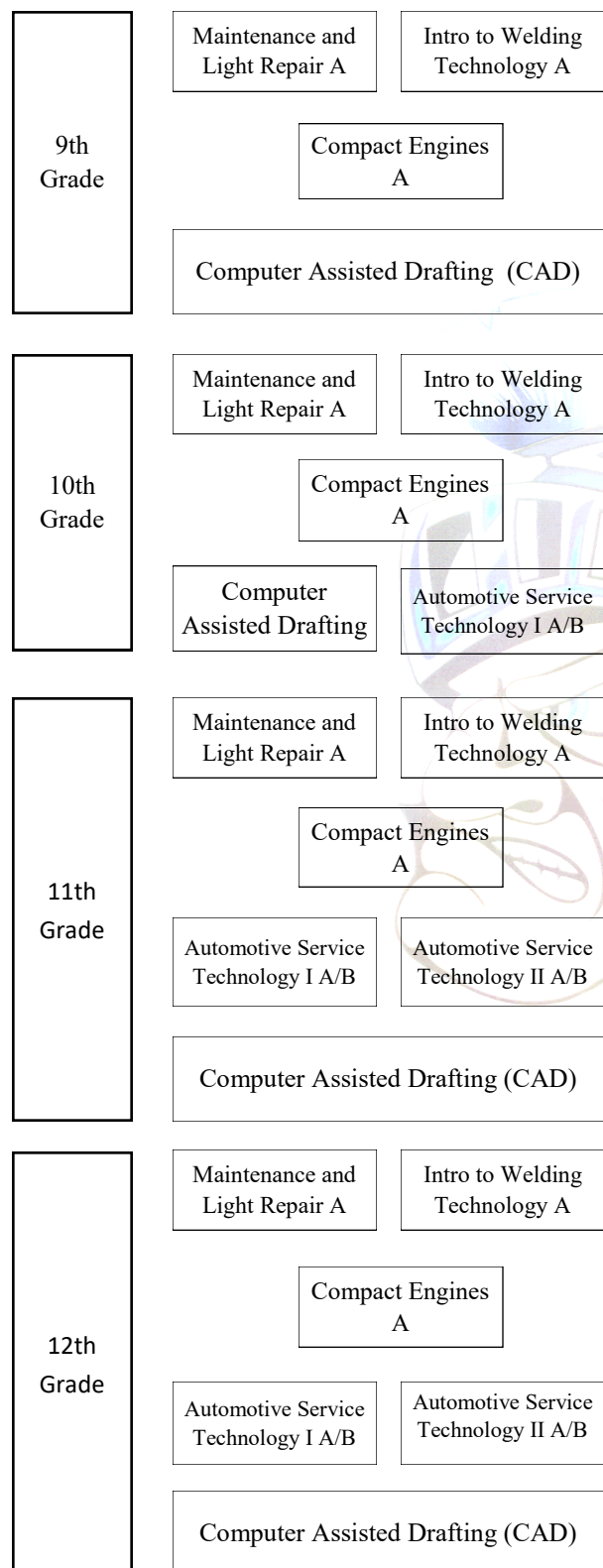
# Career and Technical



# Education

# CAREER AND TECHNICAL EDUCATION

## Career & Technical Education Progression Pathway



## MAINTENANCE AND LIGHT REPAIR A

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Automotive Maintenance and Light Repair (MLR) explores automotive industry standards and terminology, career opportunities and classifications, shop operations and safety, tool identification and usage, diagnostic equipment identification and usage, automotive systems, tires and wheels, braking systems, cooling systems, lubrication systems, and preventative maintenance. (Other possible topics could include automotive braking systems and the basics of electrical systems).

## COMPACT ENGINES A

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Provides students with safety instruction in compact engine repair and preventative maintenance to include troubleshooting, diagnosis and general shop practices. Students also learn the operation and theory of 4-stroke engines and instruction on the proper methods of repair and engine overhaul. Additional coursework covered includes compression components, Carburetor function and theory as well as pneumatic and mechanical governing systems, ignition systems, diagnostics and repair. At the conclusion of the course students will disassemble and reassemble a fully functional engine to an optimum running condition.





# CAREER AND TECHNICAL EDUCATION

## AUTOMOTIVE SERVICE TECHNOLOGY I A/B

**Grade Levels: 10-11**

Seniors by instructor approval only

**Year Course**

2 Hour Block

**Prerequisite: Maintenance and Light Repair A and/or Compact Engines A & approval of instructor**

Automotive Service Technology (AST) prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles at an INTERMEDIATE level. This course builds on concepts learned in Auto Basic, MLR, and/ or Compact Engines. Students receive instruction on basic automobile maintenance requirements, specific tool uses and safety procedures. Inspection and repair of automotive systems is stressed in the areas of brakes, electrical, suspension, fuel, emissions and tune up procedures.

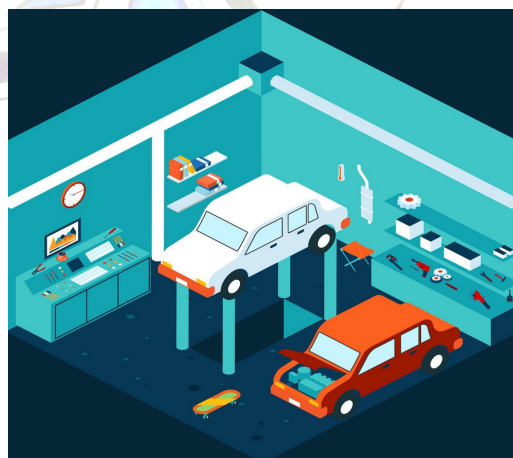
## AUTOMOTIVE SERVICE TECHNOLOGY II A/B Grade Levels: 11-12

**Year Course**

2 Hour Block

**Prerequisite: Automotive Service Technology I A/B & approval of instructor**

Automotive Service Technology (AST) prepares individuals to apply technical knowledge and skills to repair, service, and maintain all types of automobiles at an INTERMEDIATE level. This course builds on concepts learned in Auto Basic, MLR, and/ or Compact Engines. This course is designed to expand the knowledge and skills that the student achieved in Automotive Technology I. Each student will become proficient in advanced skills in the areas of electronic and computerized ignition systems, brake systems, and fuel systems. The students will continue to receive instruction in brakes, electrical/electronic systems, engine performance, and suspension and steering to continue to prepare them for the ASE certification exams.



## CAREER AND TECHNICAL EDUCATION (continued)

### CABINET MANUFACTURING Year 1—I/II

**Grade Levels:** 9-10-11-12

**Year Course**

**Prerequisite:** None

1 Elective Credit & 1 CTE Math I Credit per semester

In Cabinet Manufacturing I & II, students build a basic plywood and hardwood cabinet using Lean Manufacturing principles. Students learn to use a tape measure, produce drawings, create a bill of materials, and how to safely use high-quality machinery. The cabinet includes a hardwood face frame, legs, door, drawer and tabletop. Assembly of the cabinet utilizes rabbet and dado joints construction. Students also receive an introduction to CNC automated technology.

**\*\*Taken off site at The MiLL National Training Center\*\***

### CABINET MANUFACTURING Year 2— III/IV

**Grade Levels:** 10-11-12

**Year Course**

**Prerequisite:** Cabinet Manufacturing I

1 Elective Credit & 1 CTE Math II Credit per semester

In Cabinet Manufacturing II, students build a small profile table from solid hardwoods using Mortise and Tenon joints. Advanced manufacturing equipment is used to continue students learning of the processes involved in Lean Manufacturing and dimensioning lumber. The table includes a dovetail-jointed drawer, as well as Greene and Greene style accents that include Blacker leg indents, knuckle legs, and cloud lift style aprons. The top is made from solid hardwood. More advanced CNC technologies are learned as students produce some of the Greene and Greene accents on the Legacy CNC router. Students earn 1

**\*\*Taken off site at The MiLL National Training Center\*\***

### CABINET MANUFACTURING Year 3— V/VI

**Grade Levels:** 11-12

**Year Course**

**Prerequisite:** Cabinet Manufacturing I & II

1 Elective Credit & 1 CTE Math III Credit per semester

In Cabinet Manufacturing III, students use Lean Manufacturing practices to build a Skills USA table. The cabinet features Mortise and Tenon joinery produced on the 3 axis JDS Multi Router. It has an edge banded plywood carcass, five piece door, dovetailed drawer, external four piece legs, veneer top, and custom lathe turned handles. Students use software to produce drawings and the bill of materials.

**\*\*Taken off site at The MiLL National Training Center\*\***

### CABINET MANUFACTURING Year 4—VII/VIII

**Grade Levels:** 12

**Year Course**

**Prerequisite:** Cabinet Manufacturing I, II & III

2 Elective Credits per semester

Students will use Lean Manufacturing and will be tasked with taking an existing plan, a tool chest (replicating a customer's idea in the business world), modifying that plan, submitting a bill of materials, a bill of sale and a scale drawing. Students will learn and be expected to bid the project, establish timelines, price out materials, as well as continuing to learn new techniques involved with cabinet construction. Students will then be tasked with programming their tool chest on the CNC technology in the shop, assembling, personalizing, and finishing their tool chest. In addition to building their tool chest, students will be given plans for shop made hand tools to begin to fill their tool chest. As much work as practical and possible will be done on the CNC equipment in the shop.

**\*\*Taken off site at The MiLL National Training Center \*\***



## CAREER AND TECHNICAL EDUCATION (continued)

### **CONSTRUCTION TECHNOLOGY I A/B**

**Grade Levels: 9-10-11-12**

**Yearly Course**

**Prerequisite: None**

**1 Elective Credit & 1 CTE Math I Credit per semester**

This is the foundation course to basic residential construction. Students will demonstrate competencies that are nationally recognized by the construction industry. Students will learn and practice structural framing of floors, walls, ceilings, and roofs. This course also includes the use of basic construction tools and machinery, applied math, and an introduction to blueprint reading. This course teaches students industry safety including the use of all machines and tools.

**\*\*Taken off site at The MiLL National Training Center\*\***



### **MECHANICAL, ELECTRICAL & PLUMBING SYSTEMS A/B**

**Grade Levels: 10-11-12**

**Yearly Course  
3 Hour Block**

**Prerequisite: Construction Technology I A and I B along with teacher recommendation**

**1 CTE Math Credit II & 1 Physical Science Credit per semester**

Mechanical, Electrical, and Plumbing Systems prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Upon completion of this course, proficient students will be able to follow safety procedures and use tools to perform basic operations with electrical circuits, as well as demonstrate understanding in fundamental concepts of electricity theory (i.e. Ohm's Law). Students will be able to apply proper tools and procedures to perform basic operations with plastic piping, including measuring, cutting, and joining pipe. Furthermore, students will be able to apply mathematics concepts to solve HVAC, electrical, and plumbing problems. This course is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

**\*\*Taken off site at The MiLL National Training Center\*\***

**NOTE: Students are enrolled in Mechanical, Electrical & Plumbing Systems A for first semester and Mechanical, Electrical & Plumbing Systems B for second semester.**

## CAREER AND TECHNICAL EDUCATION (continued)

### CARPENTRY TECHNOLOGY II A/B

**Grade Levels:** 11-12

**Yearly Course**

**Prerequisite:** Mechanical, Electrical, & Plumbing Systems A and B

1 CTE Math Credit III & 1 Physical Science Credit per semester

This course of the Carpentry program will focus on stairs, residential and commercial drawings, heavy steel framing, thermal or moisture barriers, roofing system, steel stud framing, drywall installation and finishing, suspended ceilings, window, door and cabinet installation. Throughout the course, students will interpret construction drawings to complete projects, implementing material estimating procedures and safe working practices. Standards in this course also expand on principles of the construction industry and delve deeper into business and project management strategies.

**\*\*Taken off site at The MiLL National Training Center\*\***

**NOTE:** Students are enrolled in Carpentry Technology II A for first semester and Carpentry Technology II B for second semester.

### CONSTRUCTION TECHNOLOGY II A/B

**Grade Levels:** 12

**Yearly Course**  
2 Hour Block

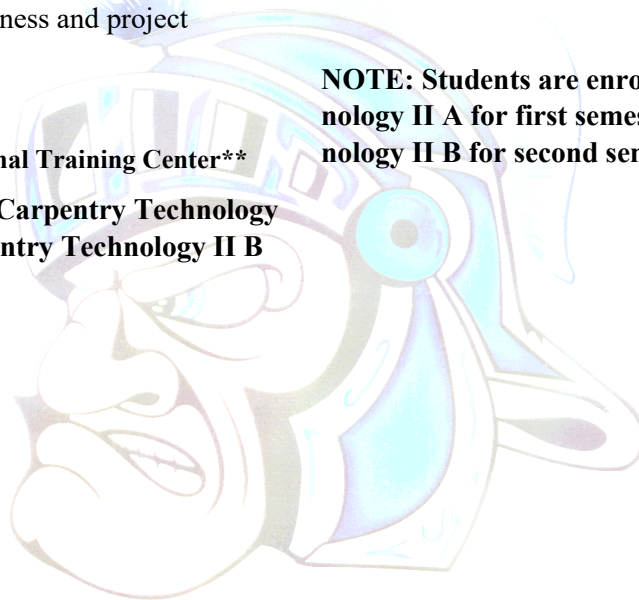
**Prerequisite:** Carpentry Technology II A & II B

2 Elective Credits per semester

In Construction Technology II, students will gain advanced knowledge and skills needed to enter the workforce as carpenters, building maintenance technicians or supervisors, or to prepare for a post secondary degree in construction management, architecture, or engineering. Students will build on the knowledge base from Construction Technology I and are introduced to exterior and interior finish out skills.

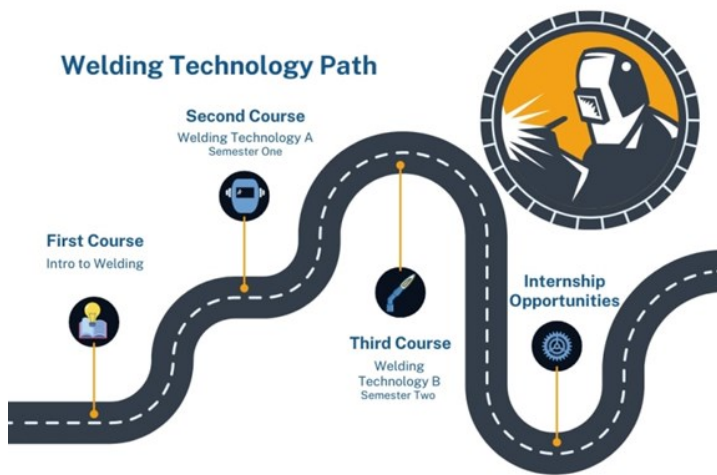
**\*\*Taken off site at The MiLL National Training Center\*\***

**NOTE:** Students are enrolled in Construction Technology II A for first semester and Construction Technology II B for second semester.





# WELDING TECHNOLOGY PROGRAM



## WELDING TECHNOLOGY A/B

**\*Yearlong course taken at the MiLL\***  
**Prerequisite: Intro to Welding Tech**

**Semester 1**

Welding Technology A takes many of the skills from the intro class and develops them further. Heavier emphasis is placed on arc welding (stick) and wire feed (MIG) techniques in flat, horizontal, vertical, and overhead positions. Oxy-acetylene cutting is introduced as well. In the second half of each semester, students design and fabricate an individual final project demonstrating their cumulative metalworking experiences. Before beginning the build, each metalworker must create hand-drawn plans, develop a bill of materials for ordering steel, calculate project costs, and create a cut list for their raw materials.

## WELDING TECHNOLOGY A/B

**\*Yearlong course taken at the MiLL\***  
**Prerequisite: Welding Technology A/B, Semester 1**

**Semester 2**

Welding Technology B was created to offer metalworking students an introduction course to the Tungsten Inert Gas Welding (TIG) process used to join mild steel, stainless steel, or aluminum using techniques similar to oxy-acetylene filler rod welding from Welding Technology A. The course structure follows the general path of the preceding courses with practice weld assignments to develop students' TIG welding skills in multiple positions and with various structural materials such as sheet metal, plate, and tubing. This course includes a final project that is assembled with newly developed TIG welding skills.

## INTRO TO WELDING TECH

**Semester class taken at the high school\***  
**Prerequisite: NONE**

The Introduction to Welding is a one semester-long, one-period class offered at Widefield and Mesa Ridge High School. This course begins with safety training and measurement review and then introduce welding areas of operation such as oxy-acetylene, arc (stick), and wire feed (MIG), along with forming, grinding, cutting, and polishing of mild steel. Students utilize multiple metalworking, and welding processes learned in the course to create an assigned final project that they customize.



## FAMILY AND CONSUMER SCIENCES

## Family & Consumer Sciences Progression Pathway

## LIFE MANAGEMENT

**Grade Levels: 9-10-11-12**

### Semester Course

**Prerequisite: None**

Students will develop decision-making skills to become educated consumers with an understanding and academic knowledge of consumer resources and financial organizations. The course focuses on personal and family resources, job and career, personal and family finances, and wellness including cooking. (Relevant topics include: independent living, healthy lifestyles, career research and job portfolios, personal financial literacy, investments, credit, insurance, leasing vs. purchasing of autos and homes.)

## CHILD AND ADOLESCENT DEVELOPMENT

**Grade Levels: 9-10-11-12**

### Semester Course

**Prerequisite: None**

The purpose of this course is to acquire knowledge and understanding of child and adolescent development necessary for strengthening the well-being of children and families. Content focuses on perspectives of human development, research and theories, understanding and nurturing development, and challenges to development.

## NUTRITION AND WELLNESS

**Grade Levels: 9-10-11-12**

### Semester Course

**Prerequisite: None**

The purpose of the course is to develop lifelong, healthy individuals with an understanding and academic knowledge of wellness as a lifestyle, exercise and fitness, nutrition including cooking, and consumer products and services. Emphasis is placed on implementing healthy nutritional choices, developing a fitness/wellness plan, integrating science principles as related to nutrition, and practicing wise consumer decisions.



## COLLEGE PROGRAMS

### **CAREER START PROGRAM AT PPSC**

**Grade Levels: 12**

**Year Course**  
(Three Hour Block)

**Prerequisite: None**

The Career Start Program at Pikes Peak State College provides occupational skill development and training for senior high school students from all over the Pikes Peak region.

In addition to teaching career-technical skills, the Career Start Program strives to prepare students for the world of work by teaching the related academics and workplace basics that are essential for employment. Instruction is provided in classrooms, laboratories, and in business and industry. High schools across Colorado Springs send students to Pikes Peak State College to partake in the various programs offered through career start. All instructors in the Career Start Program are occupationally experienced and vocationally credentialed.

Students attending the Career Start Program earn credit, which can be applied toward high school graduation. Curriculum for the courses is a compilation of various entry-level college courses for that particular area of study. The number of courses covered within each program and the grades students achieve within those individual courses throughout the year will determine the amount of college credit received. This college credit may be applied to a post secondary certificate or degree.

### **Concurrent Enrollment in High School and College:**

1. Earn high school credit in classes of interest
2. Start a career pathway
3. Obtain college credit

Classes follow a typical 5-days-per week schedule and run two hours and forty minutes daily. While some programs offer a second year of Career Start curriculum, all programs can be continued at the collegiate level following graduation. Please note that students can be a senior and enroll in the first year of a two-year program. College credit earned during enrollment in the Career Start Program relates directly to the post secondary sequence of courses.

**To apply, contact the College & Career counselor at WHS. The application process occurs in January and February for the next school year.**

**\*\* 3 College Credits = 1 WHS Elective Credit**

### **Career Start Programs**

- **Automobile Collision Technology**
- **Automobile Service Technology**
- **Construction**
- **Criminal Justice**
- **Culinary Arts**
- **Cyber Security**
- **Diesel Power Mechanics**
- **Early Childhood Education**
- **Fire Science Technology**
- **Health Careers Exploration**
- **Health Science Technology/CAN Prep**
- **Multimedia Graphic Design**
- **Veterinary Assistant**
- **Welding**
- **Zoo Keeping**



## COLLEGE PROGRAMS (continued)

### CONCURRENT ENROLLMENT (CE)

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Approval of high school counselor & College and Career Counselor**

Concurrent Enrollment is a great opportunity that provides high school students the chance to earn college or vocational credit toward a certificate or degree at a Colorado college. The credits also count toward a high school diploma.

**\* 3 Credits at PPSC = 1 WHS Elective or Equivalent Core Credit**

#### **What do you need to know before applying?**

1. Students in the 11th or 12th grade must have the approval of high school counselor and college and career counselor.
2. Placement in college courses will depend on student individual career and academic plan, courses taken at Widefield on their pathway, and schedule availability.
3. Classes must be college level (remedial or basic skills courses are not eligible for Concurrent Enrollment).

#### **How and When do I sign up for CE Courses?**

1. Students must turn in completed applications to the CE counselor at WHS by the end of November for the spring semester and by the end of May for the fall semester.
2. For full details see the College & Career counselor in the WHS counseling center.



### DUAL CREDIT (CU SUCCEED PROGRAM)

**Grade Levels: 10-11-12      Semester or Year Course**

**Prerequisite: None**

The CU Succeed program is a unique opportunity for students to earn college credit while attending high school classes. Widefield High School has partnered with both the University of Colorado at Colorado Springs (UCCS) and the University of Colorado at Denver (UCD) to provide this opportunity for students. Students who choose the dual credit option will be required to pay tuition to the university at a reduced rate. Most classes are three to four credit hours. It is important to note that the universities provide the guidelines for how students are graded on these courses; therefore, the rigor is greater in these courses than in a traditional high school course. Upon completion of the course, students will have a college transcript that will be accepted by most, of the public colleges and universities in the state of Colorado. Students who are considering going to a private school or attending college out of state should consult with their counselor prior to registering for dual credit.

#### **Courses offered for Dual Credit:**

- **AP U.S. Government**
- **AP U.S. History**
- **AP Biology**
- **AP Calculus AB**
- **AP Calculus II BC**
- **AP Environmental Sciences**
- **AP Spanish Language**
- **AP Spanish Literature**
- **AP Statistics**
- **AP German Language & Composition**
- **Honors Pre-Calculus**
- **PLTW Bio Med Courses**
- **PLTW Computer Science A**
- **PLTW Engineer Courses**
- **PLTW Principles of Computer Science**

++Denotes Dual Credit (CU Succeed Program) offered  
Students are not permitted to retake Honors or AP courses



# English





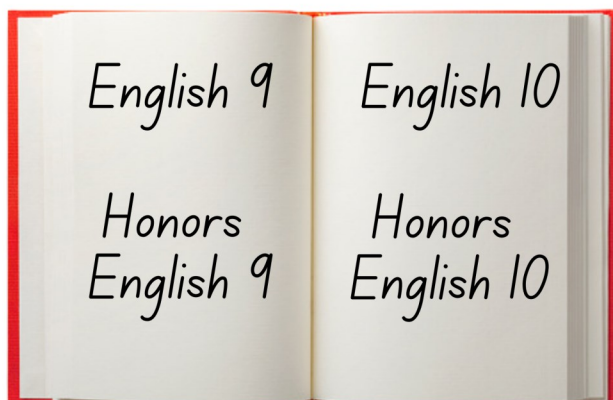


# Widefield High School English Program Flowchart



9th Grade

10th Grade



9th-12th Grade

Beginning Oral Interpretation  
Competitive Forensics Team  
& Speech Credit

11th Grade

12th Grade

## REQUIERMENTS:

- 1 Composition
- 2 Composition AND/OR Literature
- 1 Speech

11th-12th Grade

Speech  
(Graduation Requierment)

AP

Language  
& Composition

AP

Composition &  
Literature

## Literature

- American Lit
- British Lit
- Multi-Cultural Lit
- World Lit

## Composition

- Creative Writing
- Creative Writing II
- Intermediate Comp
- Technical Writing
  - Workforce Ready

Need an  
opinion on  
what you  
should take?

Ask your  
English Teacher





## English Progression Pathway

### 9th Grade:

English 9/Honors English 9

### 10th Grade:

English 10/Honors English 10

### 11th Grade:

AP English Language & Composition

### 12th Grade:

AP Composition & Literature

### 11th or 12th Grade:

1 COMPOSITION + 2 COMPOSITION or LITERATURE + 1 SPEECH= 4 CREDITS TOTAL

American Literature  
 British Literature  
 Multi-Cultural Literature  
 World Literature  
 Creative Writing  
 Advanced Creative Writing  
 Intermediate Composition  
 Technical Writing  
 Speech (Required)  
 Beginning Oral Interpretation  
 Advanced Oral Interpretation

Nothing great was ever achieved without enthusiasm.  
 ~ Ralph Waldo Emerson

### ADVANCED PLACEMENT and HONORS COURSE EXPECTATIONS:

- \* AP/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.
- \* You may be required to do summer reading/preparation work in order to prepare for AP/Honors classes in the fall.
- \* In the event that you must drop an AP/Honor class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.
- \* AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.
- \* AP/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.

\*\* Course meets pre-collegiate requirements  
 ++ Course meets dual credit requirements



## ENGLISH (continued)

### **\*\*\*BEGINNING ORAL INTERPRETATION (COMPETITIVE SPEECH TEAM) / FORENSICS**

**Grade Levels: 9-10-11-12**

**Semester 1 Course**

**Prerequisite: None**

Participants in this course will be introduced to certain areas of competitive speech, emphasizing oratory, the interpretation of humor, drama, poetry, DUO interpretation and elements of debate. Students will select one or more area(s) for intensive study and practice, and they will eventually perform in these area(s) in actual tournament competition. Each student will be required to compete in a minimum of three tournaments in order to earn credit for the course. Individual practices will be conducted in class.

\*\*\*Class members will automatically become part of Widefield High competitive speech team, recognized by the Colorado High School Activities' Association; consequently, academic eligibility must be maintained in order to participate in tournament competition. Because of the extensive, out of class required activity, students who attend nine or more tournaments throughout the year, will be able to earn one elective English credit, in addition to earning a speech credit in the English department.



### **\*\*\*ADVANCED ORAL INTERPRETATION (COMPETITIVE SPEECH TEAM) / FORENSICS**

**Grade Levels: 10-11-12**

**Semester 1 Course**

**Prerequisite: Beginning Oral Interpretation**

Participants in this course will be introduced to certain areas of competitive speech emphasizing oratory, the interpretation of humor, drama, poetry, and DUO interpretation. Students will select one or more area(s) for intensive study and practice, and they will eventually perform in these area(s) in actual tournament competition. The advanced oral interpretation students will be able to perform 2 events at the competitive level. Each student will be required to compete in a minimum of three tournaments in order to earn credit for the course. Individual practices will be conducted in class.

**After school practice will also be required.**

\*\*\*Class members will automatically become part of Widefield High competitive speech team, recognized by the Colorado High School Activities' Association; consequently, academic eligibility must be maintained in order to participate in tournament competition. Because of the extensive, out of class required activity, students who attend nine or more tournaments throughout the year, will be able to earn one elective English credit, in addition to earning a speech credit in the English department.

### **SPEECH\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: English 10, Honors English 10, and/or teacher recommendation**

This course continues to examine the broad field of communication. Students will increase their knowledge and ability to communicate with others through spoken language. Intra/interpersonal communication, group discussion, and conflict resolution skills will be studied in depth. Individual public speaking (including informative, demonstrative, and/or persuasive speeches) will be an integral part of this course. Effective delivery and listening skills will also be emphasized.

\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements



## ENGLISH (continued)

### ENGLISH 9\*\*

**Grade Level: 9**

**Year Course**

**Prerequisite: None**

This year-long course stresses the fundamentals of communication in the key areas of writing, reading, speaking, and listening. Through the writing process, students will explore the methods of organizing, developing, and supporting in analysis, expository, and persuasive paragraphs and essays. Correct usage, grammar, spelling, and punctuation will be stressed as part of the revision process. In addition, the research process will be practiced. Students will also read and evaluate a variety of literary genres to practice literary analysis. Oral presentations and interpersonal discussion skills will be introduced to create a more solid foundation for communication.

### ENGLISH 10\*\*

**Grade Level: 10**

**Year Course**

**Prerequisite: English 9**

This year-long course builds upon the fundamentals of communication in the key areas of writing, reading, speaking, and listening. Through the writing process, students will explore the methods of organizing and developing support in narrative, descriptive, expository, and persuasive paragraphs and essays. Correct usage, grammar, spelling, and punctuation will continue to be stressed as part of the revision process. In addition, the research process will culminate in a research project. Students will also read and evaluate a variety of literary genres to practice literary analysis. Moreover, oral presentations and interpersonal discussion skills will be practiced to improve communication skills.

### HONORS ENGLISH 9\*\*

**Grade Level: 9**

**Year Course**

**Prerequisite: None**

The same content standards and curriculum as regular English 9 will be addressed. However, due to the weighted grade and rigorous nature of the class, a stronger emphasis will be placed on analysis, synthesis, cooperative learning, interdisciplinary study, and higher-level thinking skills. Students enrolling in this course are expected to be independent and responsible learners able to complete and apply class ideas to significant work outside of class.

### HONORS ENGLISH 10\*\*

**Grade Level: 10**

**Year Course**

**Prerequisite: Successful completion of English 9 or Honors English 9**

Students enrolled in this honors course will address the same content standards and curriculum as English 10 through additional and higher level literary selections. A stronger emphasis will be placed in the areas of analysis, synthesis, and higher level thinking skills. The research process will culminate in a persuasive essay. Students planning to take AP Literature and Composition should take this course, and students in the course should be self-motivated learners.



\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements



## ENGLISH (continued)

### **AMERICAN LITERATURE\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 10, Honors English 10, and/or teacher recommendation**

This traditional upper level literature course is the study of American heritage and traces the development of American literature from the Puritans to the end of the 20th century. The literary selections read, studied, analyzed, and evaluated reflect the changes of American moods and themes. These selections, particularly the poetry and novels, will be somewhat challenging to read and write about, requiring higher level thinking and writing skills. The major emphasis of this course will be the study of great, American literature and its predominant themes.

### **BRITISH LITERATURE I/II\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 10, Honors English 10, and/or teacher recommendation**

This traditional upper level literature course outlines the development of English history, language, and literary forms. Emphasis will be placed on reading, discussing, and analyzing selected classic British literary works, including epics, tales, poetry, plays, essays and novels. Students will be required to demonstrate strong reading and writing skills through a variety of assignments.

### **WORLD LITERATURE\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 10, Honors English 10, and/or teacher recommendation**

This literature course of both classic and contemporary literary works is comprised of a wide array of selections from regions around the world. Due to the challenging and thought-provoking nature of the literature selections, students will be expected to make use of higher level reading comprehension and thinking skills. Emphasis will be placed on in-depth analysis through both discussion and writing.

### **MULTICULTURAL LITERATURE\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 10, Honors English 10, and/or teacher recommendation**

This intermediate level course studies the literature of various racial and ethnic cultures that comprise America. The literary selections read will include the genres of poetry, drama, essays, short stories, novels, biographies, and autobiographies. The course will emphasize the theme of unity through understanding diversity to develop a greater appreciation for all types of literature as a record of human experience. This understanding will be accomplished through reading, discussing and analyzing, researching, writing, and speaking.



\*\* Course meets pre-collegiate

++ Course meets dual credit requirements



## ENGLISH (continued)

### AP ENGLISH LANGUAGE AND COMPOSITION\*\*

**Grade Level: 11**

**Year Course**

**Prerequisite:** Successful completion of English 10 or Honors English 10. This class is for Juniors only.

AP Language and Composition is a course designed to increase each student's ability to think and communicate logically and effectively, and to increase his/her insight into the human condition. Students will become skilled readers of prose written in a variety of periods, disciplines, and rhetorical contexts. The course will also give them the practice and helpful criticism necessary to make them flexible writers who can compose in a variety of modes and for a variety of purposes. Both their reading and their writing will make them aware of the interaction between authorial purpose, audience needs, and the subject itself, generic conventions, and the resources of language: syntax, word choice, and tone. The work will benefit both students taking the AP exam and those who choose not to take the AP exam.

**This course exceeds Colorado State Content Standards and is specifically designed to prepare students to take the AP Literature and Composition exam.**

### AP LITERATURE AND COMPOSITION\*\*

**Grade Level: 12**

**Year Course**

**Prerequisite:** This class is for seniors only.

This year-long English course will provide college preparatory students with a traditional background of some of the world's greatest authors and their literature. Students will explore the genres of short stories, novels, dramas, poetry, and essays. Students will be expected to write essays and a variety of other creative forms of composition to demonstrate their ability to analyze, understand, and evaluate great literature. Specifically, students will study the techniques of formal critical analysis in order to write analytical responses to literature. Because of the intensive nature of the course, students must make a strong commitment of both time and effort.

**This course exceeds Colorado State Content Standards and is specifically designed to prepare students to take the AP Literature and Composition exam.**



\*\* Course meets pre-collegiate requirements  
++ Course meets dual credit requirements





## ENGLISH (continued)

### CREATIVE WRITING\*\*

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 9 & 10 or Honors English 9 & 10 and/or teacher recommendation**

This is an upper level writing course designed for those who have mastered grammar, usage and mechanics, and who have developed a sense of writing style. The course aims at allowing students to experience various styles of writing and fostering creativity, especially in description and narration. Students will create a written portfolio, which meets the Colorado competency requirements for graduation.

### ADVANCED CREATIVE WRITING\*\*

**Grade Levels: 11-12**

**Semester 2 Course**

**Prerequisite: Creative Writing and teacher recommendation**

This advanced writing course is for those who wish to further their knowledge and ability in the creative writing forms. Students will also be expected to edit and produce a class edition of a creative writing anthology as well as an individual creative portfolio.

### TECHNICAL WRITING

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 10, Honors English 10, and/or teacher recommendation**

In this course, students develop skills that are applicable to a variety of technical documents. Students extend their vocabulary and learn principles of organizing, writing, revising, and presenting clear, readable, oral, and written documents for industry, business, and government. Students will create a written portfolio, which meets the Colorado competency requirements for graduation.

### INTERMEDIATE COMPOSITION\*\*

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Successful completion of English 10 or Honors English 10 and/or teacher recommendation**

In this course, sentence structure is emphasized, and by using the writing process, the four forms of discourse (narration, description, exposition, and persuasion) are refined. Considerable emphasis is placed upon developing essays in more sophisticated modes, including a research-based persuasive essay and/or a research based informative/persuasive writing project. Students will also become proficient at evaluating their own writing. This class focuses on the students' ability to work independently on the writing process. Emphasis is placed on peer conferencing, teacher conferencing, editing, and revision. Students will create a written portfolio, which meets the Colorado minimum competency requirements for graduation.



\*\* Course meets pre-collegiate requirements

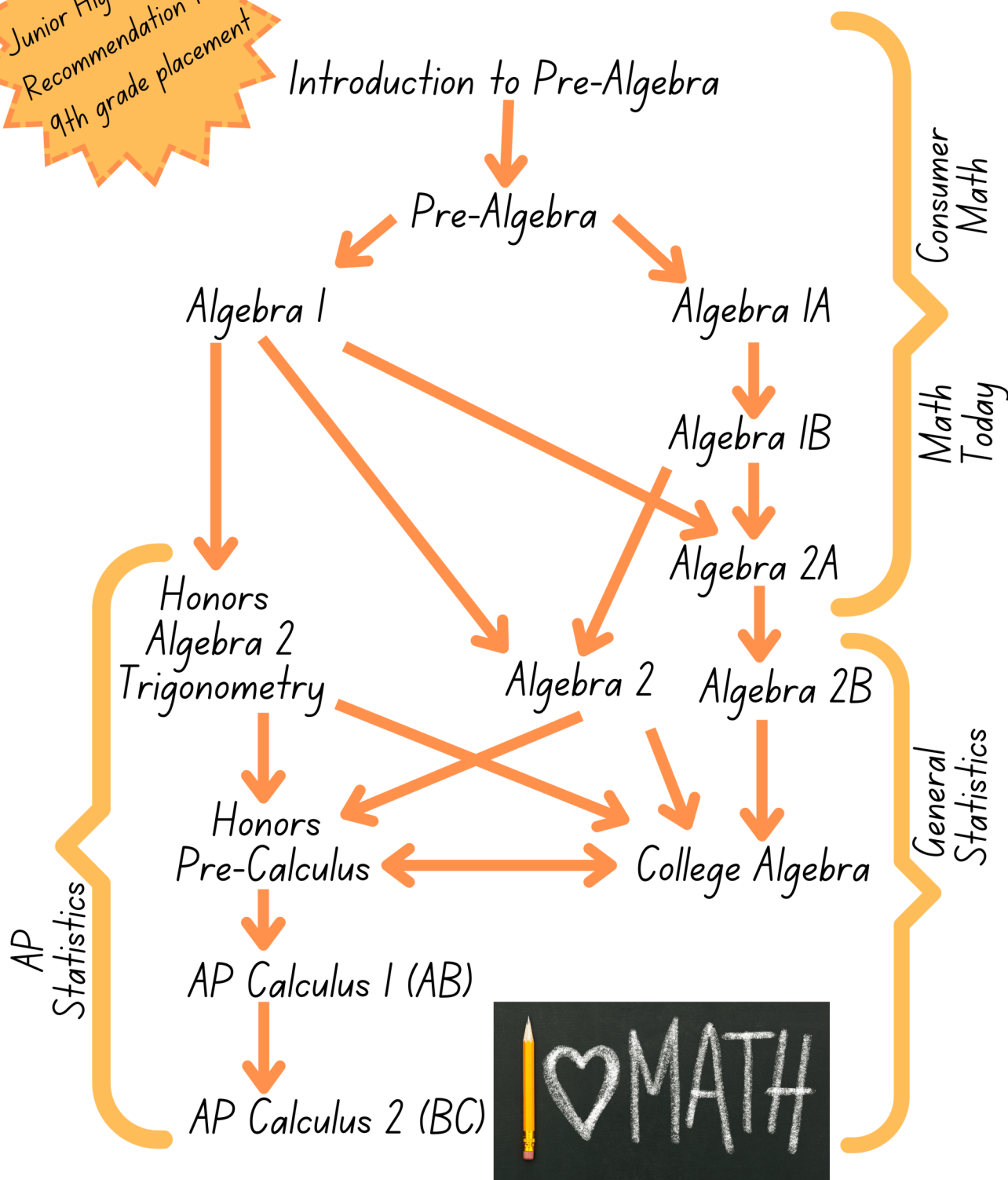
++ Course meets dual credit requirements



# Mathematics



# Widefield High School Math Program Flowchart



# MATHEMATICS

## ADVANCED PLACEMENT and HONORS COURSE EXPECTATIONS:

- \* AP/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.
- \* You may be required to do summer reading/preparation work in order to prepare for AP/Honors classes in the fall.
- \* In the event that you must drop an AP/Honor class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.
- \* AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.
- \* AP/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.

## INTRODUCTION TO PRE-ALGEBRA

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Successful completion of Arithmetic Skills or teacher recommendation**

This class is designed to help students obtain the skills necessary for solving equations, combining expressions, fractions, rational numbers, decimals, and percentages. A student entering this class should be able to perform all whole number operations with 90% accuracy without the aid of a calculator.

**A scientific calculator is required.**

## PRE-ALGEBRA

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Successful completion of Intro to Pre-Algebra or teacher recommendation.**

Pre-Algebra is a course to serve as a bridge between elementary mathematics and Algebra. Students will explore topics including integers, order of operations, proportions, percentages, linear equations and the basics of graphing. These skills will serve as the foundation of supporting master of algebraic concepts.



## ALGEBRA 1A

**Grade Levels: 9-10-11**

**Year Course**

**Prerequisite: Successful completion of both semesters of Math 8 or Math 8a**

This is the first of a two-year sequence of coursework.

Together the two years of Algebra IA and Algebra IB will be equivalent in content to the traditional one-year Algebra I. The pace of the course allows students to investigate topics in great depth as well as spend time reviewing 7th and 8th grade standards. Topics include the (x,y) coordinate plane, patterns, problem solving with guess and check tables, simplifying expressions, solving 1- and 2- variable equations, proportional reasoning, graphing, extending patterns and finding rules, multiple representations of data (tables, rules, graphs),  $y = mx + b$ , systems of equations, distributive property, and writing rules from word problems. Collaborative teamwork is essential to success in this course (Chapters 1-6).

**A scientific calculator is recommended.**

## ALGEBRA 1B

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Successful completion of both semesters of Algebra 1A**

This is the second of a two-year sequence of coursework.

Together the two years of Algebra IA and Algebra IB will be equivalent in content to the traditional one-year Algebra I. The pace of the course allows students to investigate topics in greater depth. Continued development of algebraic concepts and processes that can be used to solve a variety of real world and mathematical problems. Topics include writing and solving equations, systems of equations,  $y = mx + b$ , slope as a measure of rate, parallel and perpendicular lines, finding equations of lines, factoring and solving quadratics, solving and graphing inequalities, rational expressions, absolute value inequalities, exponents, and functions. Collaborative teamwork is essential to success in this course (Chapters 6-11).

**A scientific calculator is recommended.**

**\*\* Course meets pre-collegiate requirements**





# MATHEMATICS (continued)

## ALGEBRA I\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Successful completion of both semesters of Math 8**

Algebra I is designed to help students enhance their abstract thinking skills through the use of algebraic concepts (i.e. variables, setting up equations from word problems). Topics covered in this course are integers, solving equations and inequalities, factoring, combining rational expressions, graphing linear equations, real numbers, ratio and proportion, quadratic equations, exponents, and radicals.

**A scientific calculator is required.**

**A graphing calculator is recommended.**

**(TI 84 is recommended)**

## ALGEBRA II\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Successful completion of both semesters of algebra I or completion of Algebra 1A and Algebra 1B sequence**

Algebra II is an extension of Algebra I, covering linear relations, linear functions and their graphs, absolute value equations and inequalities and their graphs, systems of equations and inequalities, quadratic equations and graphs, real and imaginary roots, rational polynomial expressions and operations on them, exponents, radicals, and basic properties, of and may cover logarithms, matrices, and trigonometry.

**A graphing calculator is required. (TI 84 is recommended)**

## ALGEBRA 2A

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Successful completion of Algebra I, or Algebra 1A and 1B**

This is the first of a two year sequence of coursework. Together, the two years of Algebra 2A and Algebra 2B will be equivalent in content to the traditional one year Algebra II. Topics will be the first half of those covered in the traditional one year Algebra II course.

## ALGEBRA 2B

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Successful completion of Algebra 2A**

This is the second of a two year sequence of coursework. Together, the two years of Algebra 2A and 2B will be equivalent in content to the traditional one year of Algebra II. Topics will be the second half of those covered in the traditional Algebra II course.

## HONORS ALGEBRA II/TRIGONOMETRY\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Grade of A or B in Algebra I**

**\*Requested AP/Honors classes will not be changed in the fall**

Algebra II Trigonometry is a robust extension of Algebra I, covering linear relations, linear functions and their graphs, absolute value equation and inequalities and their graphs, systems of equations and inequalities, quadratic equations and graphs, real and imaginary roots, rational and polynomial functions and their graphs, logarithms and an in depth study of trigonometric functions and their graphs.

**A graphing calculator is required. (TI 84 is recommended)**



**\*\* Course meets pre-collegiate requirements**





## MATHEMATICS (continued)

### COLLEGE ALGEBRA

**Grade Levels: 11-12**

**Year Course**

**Prerequisite:** Successful completion of both semesters of Algebra II or sequence of Algebra 2A & 2B

College Algebra includes the study of functions, relations, matrices, linear systems, conic sections, trigonometric functions and identities, patterns and recursion. Students solve problems by making connections and developing techniques that are meaningful to them. Emphasizes reasoning about mathematics in the context of experimental or real-world data. This will be done by the use of technology, Microsoft Excel, modeling and investigation approach, and working in cooperative groups.

**A graphing calculator is required. (TI 84 is recommended)**

### STATISTICS\*\*

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite:** B or higher in both 1st and 2nd semester of Algebra II or a C+ in Algebra II Trig

**\*Requested AP/Honors classes will not be changed in the fall.**

Honors Pre-Calculus is a review and an in-depth study of some topics from previous mathematics courses. It includes a study of linear and polynomial equations, trigonometric functions, sequences and series, analytic geometry, and the use of graphing calculators to graph both polynomial equations and trigonometric functions. This course is weighted and requires out of class work for success.

**A graphing calculator is required. (TI 84 is recommended)**

### STATISTICS\*\*

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite:** Successful completion of Algebra II or Algebra 2A

Statistics introduces students to random sampling, surveys, experiments, descriptive statistics, normal distributions, linear regressions, probability, and basic statistical inference. This course requires some out of class reading to be successful.

**A graphing calculator is required. (TI 84 is recommended)**

### AP CALCULUS AB \*\*\*++

**Grade Level: 11-12**

**Year Course**

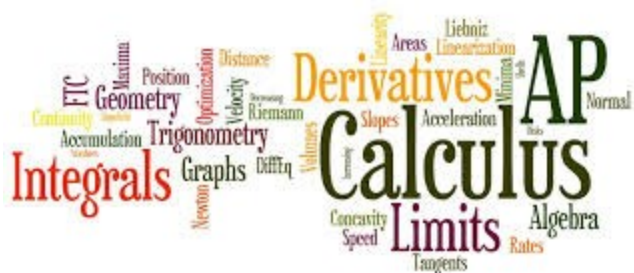
**Prerequisite:** Successful completion of Honors Pre-Calculus or teacher recommendation.

**\*Requested AP/Honors classes will not be changed in the fall.**

Calculus introduces students to differentiation, limits, integration, applications of transcendental functions, and continuity. In addition, many of the mathematical concepts and skills introduced in previous courses will be further developed. This course is weighted and requires out of class work for success.

**A graphing calculator is required.**

**(TI 84 or 89 is recommended)**



\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements

\*\*\*Course meets pre-collegiate and exceed Colorado State Content Standards and are specifically designed to prepare students to take the AP examinations.





# Naval Junior Reserve



## Officer Training Corps

# NAVAL JUNIOR RESERVE OFFICER TRAINING CORPS

NJROTC is an interesting and rewarding way to earn elective credit. Practical leadership and personal development opportunities accompany academic work. There is no obligation incurred, either to continue the program at Widefield High or to be involved in the Navy in any way after graduation. Opportunities for school and community service, interesting field trips, early leadership positions, personal recognition, and numerous extra-curricular activities are all available. A uniform is provided without cost and worn once a week. Completion of the program makes students eligible for advance standing should they choose to enter any military service. Significant assistance is given to those students interested in fully paid college scholarship or service academy appointments.

## NAVAL SCIENCE I

**Grade Levels: 9-10-11-12**

**Prerequisite: None**

Naval Science I is a co-ed beginning program in Naval Junior ROTC containing academic, service education, and military instruction. The academic portion includes customs, traditions, courtesies, organization, citizenship, leadership, naval missions, and U.S. Government. Community service (service education), participation in the cadet corps activities, and field trips are required. Trips include visits to a naval base and local military bases to promote awareness of technology, principles of teamwork, and application of classroom subjects. The military portion includes basic drill, physical fitness, military bearing, and courtesies. The naval uniform must be worn, for the full school day once a week. Uniforms and tests are provided. Basic standards of military grooming are required. Top academic performance and continuing education as goals are the focus of this program.

## NAVAL SCIENCE II

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Naval Science I**

This co-ed course is an expansion of Naval Science I, which includes maritime history, maritime geography, oceanography, meteorology, astronomy and physical sciences. Community service (service education), unit participation, and field trips are required. Field trips include visits to, local military bases and “high tech” businesses to promote awareness of technology, principles of teamwork, and application of classroom subjects. Computers will be used to prepare presentations. Grooming and uniform requirements are the same as Naval Science I. Continuing education as a goal is the focus of this program. Students must maintain a “C” average to remain in the program.





# NAVAL JUNIOR RESERVE OFFICER TRAINING CORPS (continued)

## NAVAL SCIENCE III

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: Naval Science II and approval of the Naval Science Instructor**

This course involves instruction in seamanship, meteorology, and advanced leadership and draws upon the skills mastered in Naval Science I and II. Maritime history, leadership, astronomy, and other military subjects from a Naval perspective are also covered. Students in this course are charged with the mid-level leadership and administration of the Cadet Corps and the extracurricular programs. Grooming and uniform requirements are the same as Naval Science I. Continuing education as a goal is the focus of the program.

## NAVAL SCIENCE IV

**Grade Level: 12**

**Year Course**

**Prerequisite: Naval Science III and approval of the Naval Science Instructor**

This course builds on the basic qualities of a good follower and an effective leader provided in Naval Science I, II, and III. The student will take a more in-depth look at leadership principles, traits, and practices. Case studies and seminar techniques are used in the classroom. Students will learn how to maximize leadership skills following the leadership curriculum used in college level ROTC and at the Naval Academy. Students are expected to provide leadership to the Naval Science I-III cadets.

## NAVAL SCIENCE ENRICHMENT

**Grade Levels: 10-11-12**

**Semester Course**

**(May be entered second semester by freshman Naval Science I students with Naval Science instructor approval.)**

**Prerequisite: Naval Science I (1 semester) and currently enrolled in Naval Science I, II, or III. Naval Science instructor approval is required.**

This is an advanced leadership-training program in Naval Junior ROTC focusing on military precision and exhibition drill ceremonies, physical training, and community service. Field trips for community performances and inter-school competition of military drill and academic events are included as well as experiential visits to military and civilian organizations. Students will form into performing teams to execute precision, exhibition, and armed, unarmed, color guard, and competitive drill. Students will perform at civic, community, and military ceremonies. Students will be eligible for a school letter if criteria for participation and competitive performance are maintained. Student's research and report on current events and leadership as well as the history, tradition, and customs of naval and military ceremonies. Military standards of grooming and appearance will be required of the student. Students will be required to participate in fund raising activities to acquire special uniform items and to defray the cost of field events.

**Cadets are highly encouraged to sign up for both semesters in order to complete activities.**

**\*\* NOTE: Students who successfully complete 2 semesters of NJROTC are eligible to waive one credit of P.E.**





# Performing



# Arts

# PERFORMING ARTS—CHOIR



## TREBLE CONCERT CHOIR

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Concert Choir or auditioned from junior high and permission of the director**

This course introduces the concepts of choral singing at the high school level. This is an intermediate choir for students who have completed a year in concert choir, or auditioned by the director at the junior high. The course introduces advanced independent sight-singing and aural recall. Many styles of choral music will be studied and performed. Concerts are required, as well as, tours and competitions.

## ENSEMBLE CHOIR

**Grade Levels: 9-10-11-12**

**Year Course**

This course introduces the concepts of choral singing, and is a beginning choir. Students will be able to read choral music, understand basic music theory concepts, and understand and produce vocal music by the completion of this course. Performances are required. Although members are often experienced (usually through junior high involvement), new singers are welcomed and can be successful.

## TREBLE ENSEMBLE

**Grade Levels: \*9-10-11-12**

**Year Course**

**\*9th-with recommendation**

**Prerequisite: Must be approved by director**

This group of women's voices involves students who have completed the learning skills in Ensemble Choir or Treble Concert Choir. This course introduces the most advanced concepts in choral singing and music theory. Singers are experienced and able to sight-sing independently. The group studies all forms of vocal literature and styles. Performances are required and include home concerts, tours, and competitions.

## TENOR BASS CONCERT CHOIR

**Grade Levels: 9-10-11-12**

**Year Course**

This course introduces the concepts of choral singing. Students will be able to read choral music and understand basic music theory concepts and understand and produce vocal music by the completion of this course. Performances are required and will include home concerts. Although members are often experienced (usually through junior high involvement), new singers are welcome and can be successful.

## CLASSIC CHORALE

**Grade Levels: \*9-10-11-12**

**Year Course**

**\*9th-with recommendation**

**Prerequisite: Men's Concert Choir, Women's Ensemble, Chamber Singers, and permission of the director**

This group of mixed voices involves students who have completed the learning skills in Treble Ensemble or Ensemble Choir singers. The group mainly consists of upper classmen. This course introduces the most advanced concepts in choral singing and music theory. Singers are experienced and able to sight-sing independently. The group studies all forms of vocal literature and styles. Performances are required and include home concerts, tours, and competitions.



# PERFORMING ARTS—ORCHESTRA (continued)

## STRING ORCHESTRA

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Summer Engagement Program**

String Orchestra is offered to students in grades 9-12 to continue and refine their study of string technique. Educational emphasis is placed on further development of music reading and comprehension skills, independent musicianship, style and deeper understanding of ensemble music. They will be introduced to orchestral literature of varying musical periods.

**Home practice and performances are required.**

## SYMPHONIC ORCHESTRA

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: String Orchestra and/or by audition**

Symphonic Orchestra is offered to 9-12th grade orchestra students as a continuation for students with previous orchestral experience. Educational emphasis is placed on the advancement of instrumental technique, further development of music reading and comprehension skills, independent musicianship, style, and a deeper understanding of orchestral literature of varying musical periods.

**Home practice and performances are required and may include competitions.**

## PHILHARMONIC ORCHESTRA

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: String Orchestra or Symphonic Orchestra or by audition**

Philharmonic Orchestra is offered to 9-12 grade orchestra students as an advancement of orchestral skill and technique. This orchestra is designed for medium-advanced level students who have a string orchestral background and demonstrate a proficient level of string technique and musical skills. Home practice and performances are required and may include competitions. Honors credit for the course is available by meeting additional requirements.

**Home practicing and performances are required.**

## CHAMBER STRINGS

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: String Orchestra, Symphonic Orchestra or Philharmonic by audition only**

Chamber Strings is offered to 10-12 grade orchestra students who play at an advanced level. This orchestra offers students the opportunity to study and perform a variety of musical literature at an elevated of difficulty. Home practice is required, and students will be required to participate in a number of public performances throughout the year. Students may also have the opportunity to perform at solo and ensemble competition and audition for either All-City Honor Orchestra, All State Orchestra or both. Honors credit for the course is available by meeting additional requirements.

## HONORS CHAMBER STRINGS

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Chamber Orchestra and by audition only**

Orchestra students continue their study of string technique on the violin, viola, cello, or string bass. They will be introduced to orchestral literature of the baroque, classic, romantic, and contemporary eras of music.

**Home practice and performances are required and may include away concerts and competition in the spring.**



## PERFORMING ARTS—BAND (continued)

### CONCERT BAND

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Some experience playing a band instrument in a school band program preferred and/or director approval.**

The Concert band is for basic to proficient musicians who have at least 1 year of experience playing a band instrument in a school band program, and/or have the director's approval. This ensemble performs grade 1.5 to grade 3 level literature and will primarily focus on building skills and techniques required to advance to an auditioned ensemble. Students are expected to practice outside of rehearsal time. All performance and rehearsal dates are required and include home concerts, festivals, and district concerts. Skills that will be developed are tone, rhythm, scale proficiency, phrasing, ensemble and individual techniques required to be a proficient to advanced high school musician.

### SYMPHONIC BAND

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Concert Band , Concert Band II, and/or by audition**

The Symphonic Band is for proficient to accomplished musicians who have been selected to the ensemble based on an audition. This ensemble performs high school to advanced high school level literature, and students are expected to practice outside of rehearsal time. All performances and rehearsal dates are required and include home concerts, festivals, and competitions. Participation in city, college, and state honor groups, as well solo ensemble is also encouraged. Students will continue to develop tone production, sight-reading, ensemble and individual techniques needed to perform music at an accomplished level.

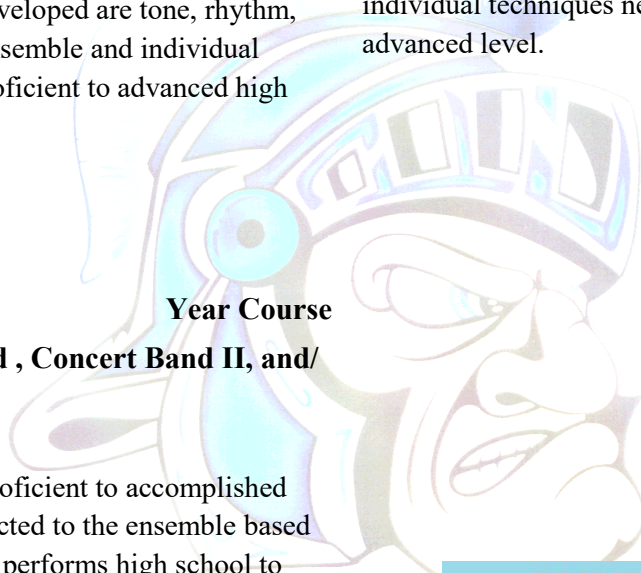
### WIND SYMPHONY

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Symphonic Band and/or by audition**

The Wind Symphony is for advanced musicians who have been selected to the ensemble based on an audition. This ensemble performs advanced high school and college level literature. Students are expected to practice outside of rehearsal time, and encourage to take private lessons. All performance and rehearsal dates are required and include home concerts, tours, festivals, and competitions. Participation in city, college, and state honor bands, as well as solo and ensemble is encouraged. Students will continue to develop tone production, sight-reading, ensemble and individual techniques needed to perform music at an advanced level.





## GLADIATORS



# PERFORMING ARTS—THEATRE/PIANO/MUSIC THEORY (continued)

## BEGINNING DRAMA

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This course is an introduction to basic theatre principles. Students will apply those principles through performances before their peers and through critiquing. Attendance to at least one high school drama production is required. One hour performing arts/general credit is given. Class may not be repeated.

## ADVANCED DRAMA

**Grade Levels: 9-10-11-12**

**Semester Course**  
(9th – 2nd Semester)

**Prerequisite: None**

This class is a performance class. The students will learn to act for different styles and genres of theatre. Student will have at least one performance for an audience. They will also learn to crew their performances. Attendance to at least one high school drama production and 5 hours of tech outside of class is required. One hour performing arts/general credit is given for each semester. Class may be repeated each semester.

## THEATRE PRODUCTION

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: None**

This class is responsible for producing a full-length play with participants doing all the acting and crew work. Only members of this class may audition. This class may be repeated each semester. Students will have many outside of class rehearsals and performances that require attendance and performance for a grade. Students will also be required to complete 15 hours of tech outside of class. This is a two-hour block class. Students must maintain a grade of B+ or above for the semester to repeat this class.

## CLASS PIANO

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Class Piano is a semester long course that has been created to develop students' keyboard skills so that their enjoyment and level of musical expertise will be enhanced. It is an independent study-type of instruction which allows each student to progress at his/her own pace. Any student is welcome in this class regardless of previous musical/piano experience. However, current music students are encouraged to take this class sometime during high school to further progress in skill development. Class Piano fulfills an elective requirement for Widefield High School.

## MUSIC THEORY

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: Must be a current member of an ensemble, or at director's discretion**

This course is for music students who wish to further their understanding of music theory, including notation, analysis and composition. Some elements of music history may also be discussed. This course is recommended for students interested in pursuing music after high school.

## MUSIC THEORY II

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Demonstrated proficiency in Music Theory**

This course is a semi-independent study allowing students to progress at their own pace. Basic midi skills will also be introduced allowing students to compose and arrange their own music. This course is for music students who wish to learn music theory. All students wishing to add to their musical understanding will benefit.



## PERFORMING ARTS—MUSIC PRODUCTION PATHWAY (continued)

### PRINCIPLES OF ACOUSTICS

**Grade Levels:** 9-10-11-12

**Semester Course**

**Prerequisite:** Concurrent enrollment in a performing arts class, band, choir, orchestra or theatre

Principles of acoustics is designed to introduce the fundamentals of acoustics and sound, with a focus on spaces designed for recording music vs. spaces designed for live performance. The class covers theoretical study and practical experimentation that contributes to positive acoustics; including control of noise, manipulation of sound and isolation of sound. You will learn how to measure and quantify these key components in existing spaces and how to predict acoustical behavior in new spaces. Included will be characteristics of musical instruments and sound effects of rooms/halls. The acoustics of stringed instruments, wind instruments, singing and electronic instruments will be discussed.

**Materials Fee:** \$20

### COMPUTER MUSIC APPLICATIONS (New 2020-2021)

**Grade Levels:** 10-11

**Yearly Course**

**Prerequisite:** Concurrent enrollment in a performing arts class, band, choir, orchestra or theatre

Computer Music Applications introduces students to the ProTools Digital Audio Workstation, current practices with MIDI instruments, MIDI sequencing, MIDI editing, and music notation programs, Advanced music notation software techniques, creating unique synthesizer timbres, and audio/video synchronization will be among the topics explored. In addition, refining recording engineering skills, and improve editing and mixing concepts such as a frequency, harmonics, and pitch will be a part of the course curriculum.

### MUSIC AUDIO PRODUCTION (New 2021-2022)

**Grade Levels:** 11-12

**Semester Course**

**Prerequisite:** Successful completion of Principles of Acoustics and Computer Music Application

Music Audio Production focuses on preparing the student portfolio for the college application process. This includes further development of program skills (Pro Tools, etc.), and the addition of new program skills (Reason/ Virtual Drumline/etc.). Also includes learning how to setup, run and record live audio using critical listening for a school performance. Develops further post production skills including mixing, editing, digital and analog technology, and producing tracks based on live audio as well as samples (MIDI or other).

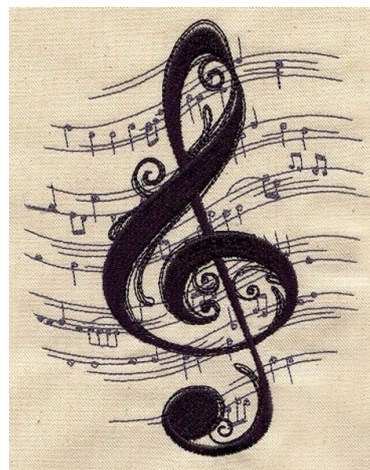
### MUSIC BUSINESS INTERNSHIP

**Grade Levels:** 11-12

**Semester Course**

**Prerequisite:** Successful completion of Principles of Acoustics, Computer Music Applications, and Music Audio Production

Music Business Internship will provide an introductory overview of the commercial music industry, including its history and development within the context of the production of multiple popular and traditional styles. Students will consider how music (as well as musicians) has evolved into “product.” In an effort to give students a sense of practical direction for their futures, the course will also include an exploration of the various career options within the music industry. A capstone will be included to fulfill the requirements of this course.



# Physical Education



## & Health

# Widefield High School Physical Education Flowchart



## P.E. 9

Skill development and implementation, as well as physical fitness through a variety of indoor and outdoor activities.

## HEALTH

Study of the whole person, including both a person's physical and mental well-being.

Offered Hybrid in the summer.



## ATHLETIC TRAINING

Prevention, evaluation, treatment, and rehabilitation of athletic injuries.

## 10th - 12th Grade

## AEROBICS

A system of exercise that stimulates the heart and lung activities for a time period long enough to produce beneficial changes to the body

## INDIVIDUAL SPORTS

Promote skill implementation in the various indoor and outdoor activities through individual lifetime sports activities.

## SWIMMING

Development of recreational and physical water skills to keep you safe learning 6 strokes.

## TEAM SPORTS

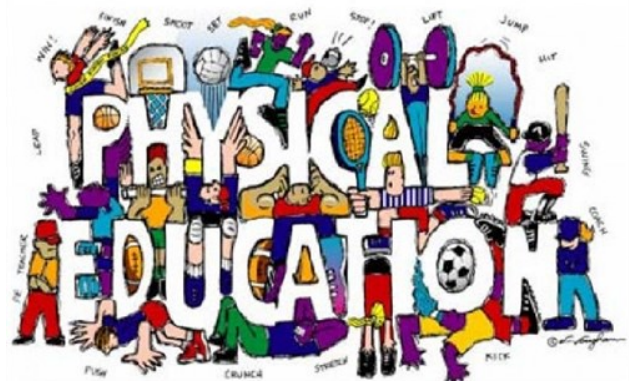
Promote skill implementation in the various indoor and outdoor activities through team lifetime sports activities.

## WEIGHT LIFTING

Transforming body composition through strength and resistance training.







## GLADIATORS



## PHYSICAL EDUCATION (continued)

### TEAM SPORTS

**Grade Levels: 10-11-12 Semester Course**

**Prerequisite: None**

**Prerequisite: None**

This course focuses on the fundamentals and techniques of team sport activities. The development and implementation of skills necessary for a lifetime of enjoyable participation in team activities will be the focus. A variety of conditioning aspects will be reviewed.

### WEIGHT LIFTING/CONDITIONING

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: None**

This course is designed for the student with an interest in changing their body composition and increasing their strength through resistance training. Students will engage in a curriculum based on improving muscle strength, muscle endurance, agility, speed, coordination training and cardiovascular endurance.



### ATHLETIC TRAINING

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

**\*Athletic Training and Honors Athletic Training will receive an elective credit upon completion.**

Athletic training refers to the prevention, evaluation, treatment, and rehabilitation of athletic injuries. This course will provide the student with an opportunity to learn how to recognize and treat athletic-related injuries through both classroom work and practical experience in the training room. Students will also become Red Cross certified in first aid and cardiopulmonary resuscitation.

**\*\*This course will be beneficial to students considering a career in the medical field by exposing them to many common medical procedures.**

### LIFEGUARD

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: Basic Principles of Athletic Training**

Provides entry-level participants the knowledge and skills to prevent, recognize and respond to aquatic emergencies and to provide care for breathing and cardiac emergencies, injuries, and sudden illnesses until EMS personnel take over. Participants who successfully complete the Lifeguarding course receive an American Red Cross certificate for oxygen administration, valid for 1 year, and Lifeguarding/First Aid/CPR/AED, valid for 2 years. A student can still earn 1 elective credit even if they do not pass the American Red Cross Lifeguard test. (The ARC test is to certify as a lifeguard).

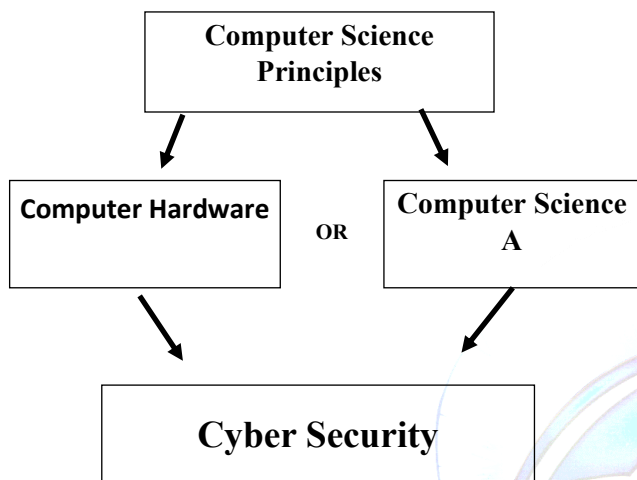
**\*Successful completion of two or more varsity seasons of the same sport will waive one required PE elective.**



# PROJECT LEAD THE WAY- COMPUTER SCIENCE PATHWAY

## ADVANCED PLACEMENT, PLTW and HONORS COURSE EXPECTATIONS:

- \* AP/PLTW/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.
- \* You may be required to do summer reading/preparation work in order to prepare for AP/PLTW/Honors classes in the fall.
- \* In the event that you must drop an AP/PLTW/Honor class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.
- \* AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.
- \* AP/PLTW/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.



## COMPUTER SCIENCE A

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Computer Science Principles**

Computer Science A focuses on further developing computational– thinking skills through the medium of Android App development for mobile platforms. The course utilizes industry-standard tools such as Android Studio, Java programming language, XML, and device emulators. Students collaborate to create original solutions to problems of their own choosing by designing and implementing user interfaces and Web-based databases.

## COMPUTER SCIENCE PRINCIPLES

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Using Python as a primary tool and incorporating multiple platforms and languages for computation, this course aims to develop computational thinking, generate excitement about career paths that utilize computing, and introduce professional tools that foster programming and explore the workings of the internet. Projects and problems include app development, visualization of data, cybersecurity, and simulation. PLTW is recognized by the College Board as an endorsed provider of curriculum and professional development for AP Computer Science Principles (AP CSP). This endorsement affirms that all components of PLTW CSP's offerings are aligned to the AP Curriculum Framework standards and the AP CSP assessments.

## CYBER SECURITY

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Computer Science Principles or Computer Hardware**

Cybersecurity introduces the tools and concepts of cybersecurity and encourages students to create solutions that allow people to share computing resources while protecting privacy. Nationally, computational resources are vulnerable and frequently attacked; in Cybersecurity, students solve problems by understanding and closing these vulnerabilities. This course raises students' knowledge of and commitment to ethical computing behavior. It also aims to develop students' skills as consumers, friends, citizens, and employees who can effectively contribute to communities with a dependable cyber-infrastructure that moves and processes information safely.



## PROJECT LEAD THE WAY- COMPUTER SCIENCE PATHWAY (cont.)

### ADVANCED PLACEMENT, PLTW and HONORS COURSE EXPECTATIONS:

- \* AP/PLTW/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.
- \* You may be required to do summer reading/preparation work in order to prepare for AP/PLTW/Honors classes in the fall.
- \* In the event that you must drop an AP/PLTW/Honor class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.
- \* AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.
- \* AP/PLTW/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.

### COMPUTER HARDWARE

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

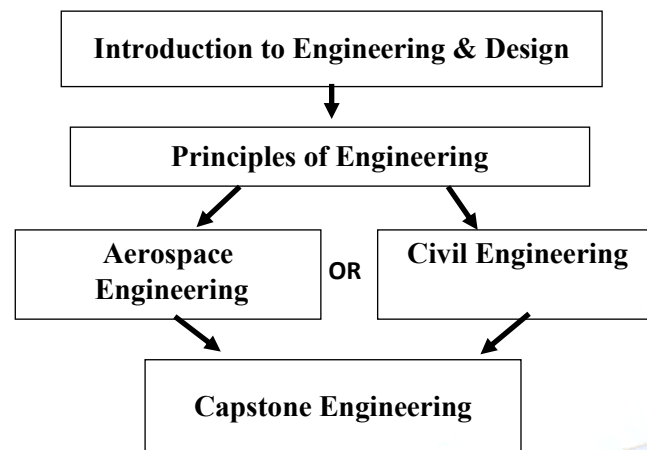
With an emphasis on hands on application, students will build their skills and understanding with basic hardware and software computer components. Students will build, test and diagnose computer hardware while learning several different operating systems such as Windows and Linux. Students will learn terminology of hardware and software components as they build computers, networks, servers and create secured environments. In addition, students will learn about storage devices, mobile computing, security threats and best security practices. At the completion of this course, students should be able to successfully test for the A+ Certification.



## PROJECT LEAD THE WAY - ENGINEERING PATHWAY

PLTW has developed a four-year set of courses that introduces students to the rigor and discipline of engineering and engineering technology prior to their entering college. PLTW also provides ongoing instructor training and curriculum development to keep them current. PLTW helps facilitate acquisition of state-of-the-art hardware and the latest software for training.

Students are expected to complete a college preparatory sequence of core Mathematics and Science in addition to courses in PLTW.



### PRINCIPLES OF ENGINEERING

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: None**

Principles of Engineering is a broad-based survey course designed to help students understand the field of engineering and engineering technology and its career possibilities. Students will develop engineering problem solving skills that are involved in post-secondary education programs and engineering careers. They will explore various engineering systems and manufacturing processes. They will also learn how engineers address concerns about the social and political consequences of technological change. The main purpose of this course is to experience through theory and hands-on problem-solving activities what engineering is all about and to answer the question “Is a career in engineering or engineering technology for me?”

**NOTE:** This course is the recommended second core course in the Engineering Pathway.

### COMPETITION ROBOTICS

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

Focuses on the process of building an autonomous robot from the initial design to final evaluation. Includes design and building of the mechanical structure, electrical system as well as programming and integration of all systems to produce a fully functional autonomous robot capable of performing a series of prescribed tasks. Students will also have the opportunity to compete in both district and state robotics competitions.

### INTRODUCTION TO ENGINEERING & DESIGN

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: None**

This course teaches problem-solving skills using a design development process. Models of product solutions are created, analyzed and communicated using a 3D, solid-modeling Computer-Aided-Design (CAD) System (AutoCAD Inventor). This modern computer-based process replaces traditional drafting methods.

**Notes:** Introduction to Engineering Design is an introductory course which develops student problem solving skills through hands-on and computer based projects. Students will work from sketching simple geometric shapes to applying a solid modeling computer software package. They will learn a problem solving design process and how it is used in industry to manufacture a product. Computer Aided Design (CAD) will be used to create, analyze and evaluate the product design. The equipment used and techniques learned are state of the art and are currently being used by engineers throughout the United States. **NOTE:** This is considered the foundational core course for the Engineering Pathway program, PLTW.

**All courses are subject to be offered based on implementation stages and building/district needs.**





# PROJECT LEAD THE WAY - ENGINEERING PATHWAY (continued)

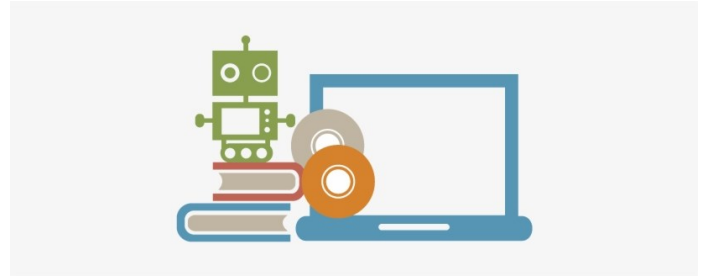
## AEROSPACE ENGINEERING

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite:** Students must take Algebra II before or at the same time as taking Civil Engineering and Architecture

This course propels students' learning in the fundamentals of atmospheric and space flight. As they explore the physics of flight, students bring the concepts to life by designing an airfoil, propulsion system, and rockets. They learn basic orbital mechanics using industry-standard software. They also explore robot systems through projects such as remotely operated vehicles.



## COMPUTER ASSISTED DRAFTING & DESIGN I (CAD I)

**Grade Level: 10-11-12      Year Course**

**Prerequisite:** Algebra I or teacher recommendation

This course gives students the opportunity to learn Mechanical and Architectural drawing using Auto CAD. The students will develop CAD skills to draw floor plans, working drawings, blue prints, and other objects. Applied mathematics will be incorporated with dimensioning as they apply to specific drawing fields. This class is recommended to students interested in pursuing an Engineering field, Architecture, Computer Animation, Structural design and Computer Graphics. This class is articulated with Pikes Peak Community College for college credit.

## CIVIL ENGINEERING & ARCHITECTURE

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite:** Students must take Algebra II before or at the same time as taking Civil Engineering and Architecture or teacher recommendation

Students learn important aspects of building and site design and development. They apply math, science, and standard engineering practices to design both residential and commercial projects and document their work using 3D architecture design software.

## CAPSTONE ENGINEERING & ARCHITECTURE

**Grade Levels: 11-12**

**Year Course**

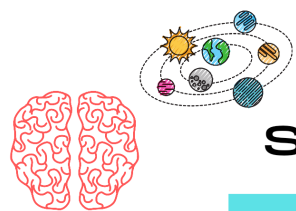
**Prerequisite:** None

The knowledge and skills students acquire throughout PLTW Engineering come together in EDD as they identify an issue and then research, design, and test a solution, ultimately presenting their solution to a panel of engineers. Students apply the professional skills they have developed to document a design process to standards, completing EDD ready to take on any post-secondary program or career.

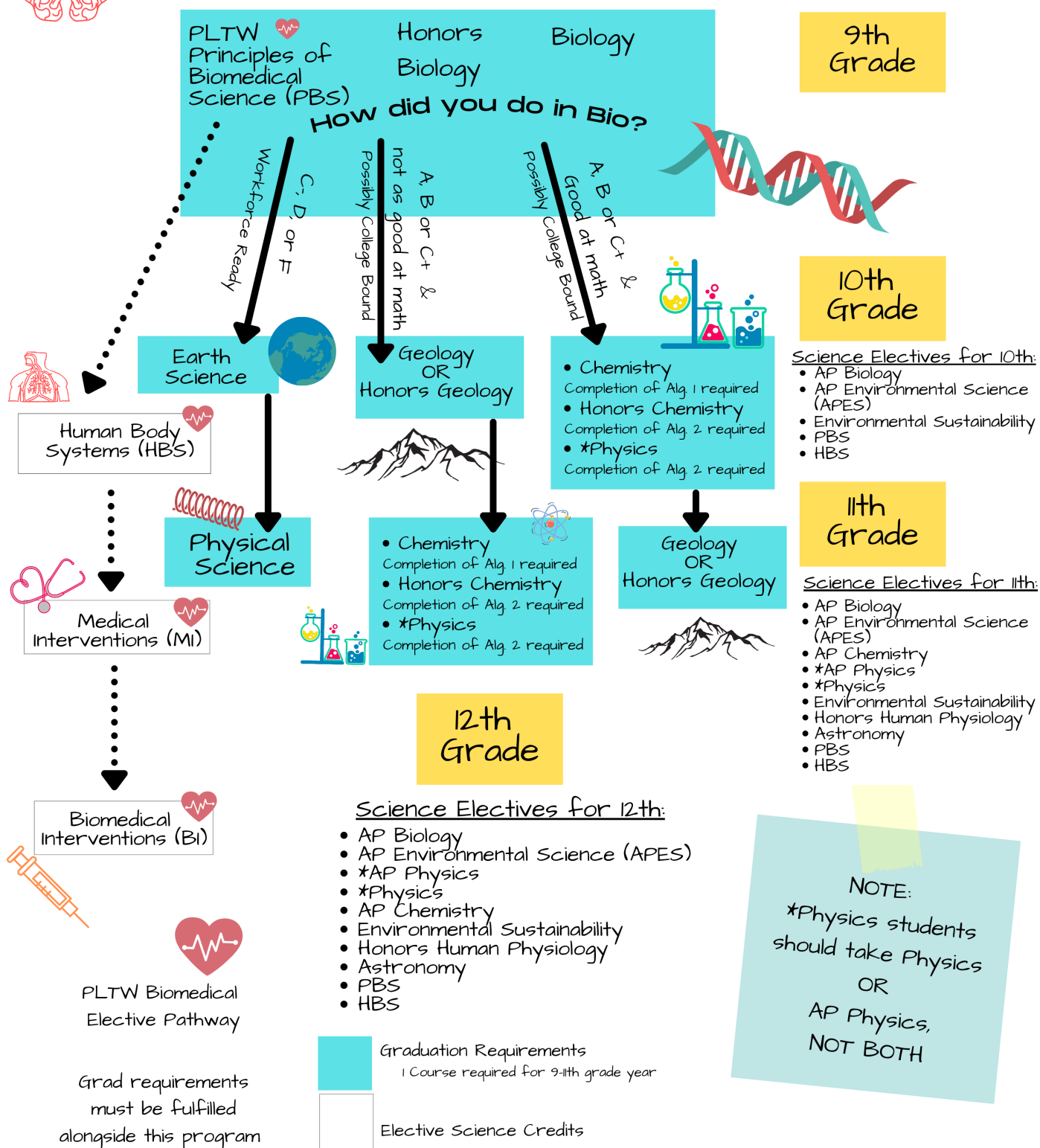


# Science





# Widefield High School Science Program Flowchart



**ADVANCED PLACEMENT, PLTW and HONORS COURSE EXPECTATIONS:**

\* AP/PLTW/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.

\*You may be required to do summer reading/preparation work in order to prepare for AP/PLTW/Honors classes in the fall.

\* In the event that you must drop an AP/PLTW/Honors class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.

\*AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.

\* AP/PLTW/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.

**BIOLOGY\*\*****Grade Level: 9****Year Course****Prerequisite: None**

In Biology various topics will be explored, such as ecology, biomolecules, natural selection, the cell, genetics and heredity, genetic technology, and human body systems. Students will participate in projects, laboratory exercises, and other activities. Every effort will be made to relate materials covered to student life and our society.

**HONORS BIOLOGY\*\*****Grade Levels: 9-10-11-12****Year Course****Prerequisite: None**

Honors Biology will include general topics of biology as outlined in general biology with an emphasis placed on open-ended / inquiry laboratory work, conducting authentic research, problem solving, and critical thinking. 21st Century skills will be an integral part of Honors Biology. Students will perform individual and group projects. (This course is more in-depth than general biology and more rigorous.) In order for students to be successful, they must have good attendance and study habits. Students who pass this course will earn a weighted grade.

**AP BIOLOGY\*\*++****Grade Levels: 10-11-12****Year Course**

**Prerequisite: Successful completion of Biology. Students are also encouraged to take Chemistry before or at the same time as taking AP Biology.**

AP Biology is a course designed for those students with a basic background in Biology and Chemistry who demonstrate a desire for advanced study in biology and an ability to do so successfully. It is equivalent to a first year college biology course. Students will develop and refine the skills needed to understand and use biological concepts and vocabulary, use biological lab apparatus and techniques, carry out independent experimental research projects, communicate effectively in the subject area, analyze and solve biological problems, and become responsible, self-motivated learners. **NOTE: This course exceeds Colorado State Content Standards and is specifically designed to prepare students to take the AP Biology examination.**

**PHYSICAL SCIENCE****Grade Levels: 10-11-12****Year Course****Prerequisite: None**

This entry-level course is designed to expose students to the physical world around them. The first semester will have emphasis on Chemistry and second semester will have an emphasis on Physics concepts. Emphasis is placed upon frequent classroom demonstrations, discussions, and many lab experiences throughout the year. It is set up to be a practical, hands-on course.

**CHEMISTRY\*\*****Grade Levels 10-11-12****Year Course****Prerequisite: Successful Completion of Alg. I**

This course covers topics such as matter, atomic structure, the periodic table, bonding, chemical equations and reactions, and stoichiometry. Labs and activities are used frequently to enhance understanding of these concepts.

**Students should have access to a scientific calculator.**

**HONORS CHEMISTRY\*\*****Grade Levels 10-11-12****Year Course****Prerequisite: Successful completion of Algebra II**

Honors Chemistry will include general topics of chemistry as outlined in General Chemistry with the emphasis placed on open-ended/inquiry laboratory work, conducting authentic research, problem solving, and critical thinking. Students will perform individual and group projects. The ability to apply mathematical skills is very important. Students who pass this course will earn a weighted grade.

**Students should have access to a scientific calculator.**

\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements



**AP CHEMISTRY\*\*++****Grade Levels: 11-12****Year Course****Prerequisite: Successful completion of general chemistry or honors chemistry and Algebra II with a C or better.**

The course is designed to be the equivalent of the general chemistry course usually taken during the first college year. This course enables them to undertake as college freshmen, second-year work in the chemistry sequence at their institutions or to register in courses in other fields where general chemistry is a prerequisite.

**A TI-84 graphing calculator is recommended****NOTE: This course exceeds Colorado State Content Standards and is specifically designed to prepare students to take the AP Chemistry examination.****PHYSICS\*\*****Grade Levels: 10-11-12****Year Course****Prerequisite: Successful completion of Algebra II**

This course consists of a quick review of math, including scientific notation and significant figures, and measurement. Requires basic understanding of trig and algebra. Ability to graph and interpret graphs. The course covers an in-depth study of waves, sound, light, heat, forces, motion, work, kinetic theory, electricity, and magnetism. This class is an intensive lab course.

**AP PHYSICS I\*\*****Grade Levels: 11-12****Year Course****Prerequisite: Pre-Calculus or instructor approval**

The AP Physics course is equivalent to an intro level college physics course covering the following topics: Newtonian mechanics, motion, work, energy, waves & electricity. Knowledge of algebra and basic trigonometry is required for the course; the basic ideas of calculus may be introduced in connection with physical concepts such as acceleration and work. Understanding of the basic principles involved and the ability to apply these principles in the solution of problems will be the major goals of the course. **NOTE: This course exceeds Colorado State Content Standards and is specifically designed to prepare students to take the AP Physics examination.**

**EARTH SCIENCE****Grade Levels: 10-11-12****Year Course****Prerequisite: None**

Earth Science is divided into four main areas: astronomy, meteorology, geology, and oceanography. A wide variety of audiovisual aids, labs, lectures and activities are used to present these topics to the students.

**GEOLOGY\*\*****Grade Levels: 10-11-12****Year Course****Prerequisite: None**

This is a more detailed and in depth coverage of geologic topics introduced in the Earth Science course. The course covers mostly physical geologic concepts, but some time is spent on historical geology. Environmental problems will be discussed throughout the course.

**HONORS GEOLOGY\*\*****Grade Levels: 10-11-12****Year Course****Prerequisite: None**

This class will include general topics of Geology as outlined in General Geology with an emphasis placed on inquiry-based labs laboratory work, conducting authentic research, problem solving, and critical thinking activities relevant to today's society.



\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements





## SCIENCE (continued)

### HONORS HUMAN PHYSIOLOGY\*\*

**Grade Levels:** 11-12

**Year Course**

**Prerequisite:** Successful completion of Biology or PBS

This course consists of the study of structure and function of the human body. Instruction includes the use of laboratory activities including dissection of fresh as well as preserved specimens enabling students to visualize basic anatomical structures comparable to those in the human. Emphasis is placed on the physiology of the major organ systems.

**NOTE:** Students who pass this course will receive a weighted grade.



### ASTRONOMY \*\*

**Grade Levels:** 11-12

**Semester Course**

**Prerequisite:** Algebra I or teacher recommendation

This course is an in-depth study of astronomical phenomena and related areas. Topics that are studied include constellations, the moon, seasons, light and telescopes, planets, stellar evolution, galaxies, and space exploration.

### AP ENVIRONMENTAL SCIENCE\*\*++

**Grade Levels:** 10-11-12

**Year Course**

**Prerequisite:** Successful completion of Biology or PBS is required; however, it is recommended that students take chemistry before or at the same time as taking AP Environmental Science.

AP Environmental Science is a course designed to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving or preventing them.

**NOTE:** This course exceeds Colorado State Content Standards and is specifically designed to prepare students to take the AP Environmental Science examination.



\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements



# PROJECT LEAD THE WAY—BIOMEDICAL SCIENCES PATHWAY

**Biomedical Sciences Pathway- \*\* All 4 Biomedical Sciences classes can possibly earn dual credit through UCCS. 3 Credits per Class\*\***

The rigorous and relevant four-course PLTW Biomedical Science sequence allows students to investigate the roles of biomedical professionals as they study the concepts of human medicine, physiology, genetics, microbiology, and public health. Students engage in activities like investigating the death of a fictional person to learn content in the context of real-world cases. They examine the structures and interactions of human body systems and explore the prevention, diagnosis, and treatment of disease, all while working collaboratively to understand and design solutions to the most pressing health challenges of today and the future.

Each course in the Biomedical Science sequence builds on the skills and knowledge students gain in the preceding courses. Schools offer the three PLTW Biomedical Science foundation courses within a period of three academic years from the start of implementation and may also offer the capstone course. Students who complete this program will have a competitive advantage when they apply to college, not only for the preparatory skills gained, but also because of PLTW's reputation for maintaining high standards.

## PRINCIPLES OF BIOMEDICAL SCIENCES

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: None**

Students investigate various health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases. They determine the factors that led to the death of a fictional person, and investigate lifestyle choices and medical treatments that might have prolonged the person's life. The activities and projects introduce students to human physiology, medicine, and research processes. This course provides an overview of all the courses in the Biomedical Sciences program and lays the scientific foundation for subsequent courses. This course is designed for 9th or 10th grade students.

## HUMAN BODY SYSTEMS

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Principles of Biomedical Sciences or teacher recommendation**

Students examine the interactions of body systems as they explore identity, communication, power, movement, protection, and homeostasis. Students design experiments, investigate the structures and functions of the human body, and use data acquisition software to monitor body functions such as muscle movement, reflex and voluntary action, and respiration. Exploring science in action students build organs and tissues on a skeletal Maniken®, work through interesting real world cases and often play the role of biomedical professionals to solve medical mysteries.

**All courses are subject to be offered based on implementation stages and building/district needs.**



# PROJECT LEAD THE WAY—BIOMEDICAL SCIENCES PATHWAY (continued)

## MEDICAL INTERVENTIONS

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: Principles of Biomedical Sciences and Human Body Systems**

Students will investigate the variety of interventions involved in the prevention, diagnosis and treatment of disease as they follow the lives of a fictitious family. A “How To” manual for maintaining overall health and homeostasis in the body, the course will explore how to prevent and fight infection, how to screen and evaluate the code in our DNA, how to prevent, diagnose and treat cancer, and how to prevail when the organs of the body begin to fail. Through these scenarios, students will be exposed to the wide range of interventions related to Immunology, Surgery, Genetics, Pharmacology, Medical Devices, and Diagnostics.

## CAPSTONE BIOMEDICAL INNOVATIONS

**Grade Levels: 12**

**Year Course**

**Prerequisite: Principles of Biomedical Sciences & Principles of Human Body Systems and Medical Interventions**

In the final course of the PLTW Biomedical Science sequence, students build on the knowledge and skills gained from previous courses to design innovative solutions for the most pressing health challenges of the 21st century. Students address topics ranging from public health and biomedical engineering to clinical medicine and physiology. They have the opportunity to work on an independent design project with a mentor or advisor from a university, medical facility, or research institution.



**All courses are subject to be offered based on implementation stages and building/district needs.**



# Social



# Studies





# Widefield High School Social Studies Program Flowchart

## 9th Grade

- Social Studies 9
- Geography



## 10th Grade

- World History  
OR
- Honors World History
  - Successful completion of Geography, Social Studies 9, and Honors English 9 is highly recommended.



## 11th & 12th Grade

- American History  
OR
- AP American History
  - Successful completion of Honors World History and Honors English 9/10 is highly recommended.
- American Government  
OR
- AP American Government
  - Successful completion of social study courses & English is highly recommended.



## Electives

- AP Human Geography
  - Strong reading and writing skills recommended.
- Economics
  - Recommended for college-bound students with solid math skills.
- General Psychology
- Sociology
- Black Studies



## ADVANCED PLACEMENT and HONORS

### COURSE EXPECTATIONS:

- \* AP/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.
- \* You may be required to do summer reading/preparation work in order to prepare for AP/Honors classes in the fall.
- \* In the event that you must drop an AP/Honor class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.
- \* AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.
- \* AP/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.

## GEOGRAPHY\*\*

**Grade Levels: 9**

**Semester Course**

**Prerequisite: None**

This course is a study of the environmental systems of climate, and landforms and the cultural aspects of world geography. Through a regional or thematic studies approach, human-environment interaction and spatial order are examined to explain the conditions that shape people's lives and affect people's futures. Geographic vocabulary and map skills are stressed.

**NOTE: Geography is required for graduation.**

## AP HUMAN GEOGRAPHY\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: None**

**NOTE: This course meets Geography requirements for graduation**

This is a college-level introductory course in Human Geography. Objectives of this course are to introduce students to the systematic study of patterns and processes that have shaped human understanding, use and alteration of the Earth's surface. Students will also learn how to employ the methods of geographers, including map-making, interpretation of spatial data and technical writing. Students will apply knowledge to spatial concepts, geographic vocabulary, and landscape interpretation to a variety of locations and situations around the globe and local areas. Final objective is to develop a "Geographic Perspective" with which to view the landscape and understand current events.

## SOCIAL STUDIES 9

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This Social Science class is divided into four units each lasting four weeks. Students will explore various resources for media, research, and current events followed by a brief exploration into Sociology, Psychology and Economics. Upon completion of this course, students will have a better understanding of these subjects and how they relate to their lives.

**NOTE: Social Studies 9 is required for graduation.**

## WORLD HISTORY\*\*

**Grade Level: 10**

**Year Course**

**Prerequisite: None**

This course is a survey of world history from prehistory to present. Topics include Ancient Civilizations, Classical Civilizations, Medieval Europe, Renaissance, Reformation, Enlightenment, Industrialism, World Wars, and an ongoing analysis of the connection between events of the past and the events of modern world.

**NOTE: World History is required for graduation.**

## HONORS WORLD HISTORY\*\*

**Grade Levels: 10**

**Year Course**

**Prerequisite: Students must have successfully completed 9th grade social studies classes. Successful completion of Honors English 9 is strongly recommended.**

Like the traditional World History course, Honors World History is a survey of world history from prehistory through the postmodern era. This course, however, requires the development of advanced historical inquiry skills for deeper understanding and preparation towards AP American History and AP European History. Upon completion of this course, the student will be expected to demonstrate proficiency in historical inquiry skills to include research skill specific to analysis, synthesis and evaluation of primary and secondary sources. To master these skills, the student will be responsible for significant outside reading and original research, which demonstrates advanced writing skills.

**NOTE: World History is required for graduation.**

\*\* Course meets pre-collegiate requirements  
++ Course meets dual credit requirements



## SOCIAL STUDIES (continued)

### **U.S. HISTORY\*\***

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: None**

This course is a survey of the development of the United States from pre-Columbian to the Twentieth Century emphasizing social, political, and economic development of the history of the United States. Topics include: Three worlds meet, colonization, nation forming, expansion, Civil War Reconstruction, WWI, 20's, depression, WWII, Cold War, Vietnam War and 20th Century.

**NOTE: American History is required for graduation.**

### **AP U.S. HISTORY\*\* ++**

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: None. Successful completion of Honors World History and Honors English 9 or 10 is strongly recommended**

**\*Requested AP/Honors classes will not be changed in the fall.**

AP American History is a college level course designed for students intending to take the AP exam in May.

This course is a survey of the development of the United States from the pre-Colombian period to present. The reading requirements will be assigned from numerous primary and secondary sources. The teaching and study techniques have been chosen to prepare students to do superior work in college. The examinations and assignments will test students' ability to think, learn, and apply knowledge in creative and abstract ways. AP American History will be a constant challenge toward which you will be expected to continually apply yourself. The goals of this course are to lead students beyond the superficial exposure to a richer and deeper understanding and more lasting retention of knowledge, and provide the college-bound student with requisite skills to pass the AP exam in May.



### **U.S. GOVERNMENT\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: None**

This course is an in-depth look at the American governmental system. Citizenship, civil rights, and the political processes of American democracy are examined. Colorado's state and local government is examined. An emphasis is placed on those "current events" that have a significant impact on domestic and foreign affairs. Critical analysis and higher level thinking skills are required throughout the course.

**NOTE: American Government is required for graduation.**

### **AP U.S. GOVERNMENT\*\*++**

**Grade Level: 12**

**Semester Course**

**Prerequisite: Students must have completed all junior credit requirements and be considered a senior by credits at the beginning of the course**

**\*Requested AP/Honors classes will not be changed in the fall.**

This is a college-level introductory course in U.S. Government. Central to the course is the concept of political interaction - the interaction of the political system and the socioeconomic structures of society. The course examines political interaction from four viewpoints: the basic governmental system; liberty, equality and justice; ideology and participation; and the governmental system in action. Other topics to be addressed may include things such as public policy and historical change.

This course is also part of the CU Succeed program. Students earning a "C" or better can earn 3 credits of college if they sign up and pay the fee through UCCS. This credit is honored at all state funded colleges and universities.

**NOTE: This course exceeds Colorado State Content Standards and is specifically designed to prepare students for the AP American Government examination.**

\*\* Course meets pre-collegiate requirements  
++ Course meets dual credit requirements



## SOCIAL STUDIES (continued)

### **ECONOMICS\*\***

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite:** Recommended for students intending to attend a major four year institution. Students should be able to calculate percentages and multiply by percentages. In addition, students will need to be able to graph and interpret data from tables, diagrams and graphs.

Economics is a broad ranging course that covers basic economic principles, encompassing a variety of business related topics. This course is comprised of the fundamentals of economics, scope of business, economics systems and structures, banking, taxation, stock market, trade, and current economic dilemmas in the United States. In addition, this course will include personal finance, money management, investments, consumerism, and personal debt. Current events and real world applications will also be strongly emphasized. The purpose of this course is to provide a fundamental understanding of economics and business in order to create responsible, informed and productive citizens.

### **American Perspective: The African American Historical Experience**

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: None**

The purpose of this course is to deepen the understanding and appreciation of the Black historical experience and the role and contributions of African-Americans to the growth and development of the United States. The course offers opportunities to examine the historical significance of African-Americans from ancient origins through present times.

### **GENERAL PSYCHOLOGY\*\***

**Grade Level: 11-12**

**Semester Course**

**Prerequisite:** Students must have completed all sophomore credit requirements and be considered a first semester junior at the beginning of the course. January graduates or any other students who are unable to commit to both semesters will not be accepted.

Psychology is a study of behavior and mental processes. This course furnishes insight and a better understanding of our own behavior. Topics to be examined include conditioning, memory, problem solving, motivation and emotion, body and behavior, altered states of consciousness, sensations and perception, development, personality theory, stress disorders, and therapy along with social psychology.

### **SOCIOLOGY\*\***

**Grade Level: 11-12**

**Semester Course**

**Prerequisite:** Students must have completed all sophomore credit requirements and be considered a first semester junior at the beginning of the course.

This course is a study of human relationships, their causes, and consequences. Topics examined are sociology as a science, society and culture, socialization process and organization, social group, social institutions, social interactions, social change, and application.



\*\* Course meets pre-collegiate requirements  
++ Course meets dual credit requirements





# World



# Language

# Widefield High School World Language Program Flowchart

## FRENCH

\*French I  
9th-12th  
Grades

\*French II  
9th-12th Grades  
C OR BETTER IN FRENCH I AND/OR  
TEACHER RECOMMENDATION

\*Honors French III  
10th-12th Grades  
C OR BETTER IN FRENCH II AND/OR  
TEACHER RECOMMENDATION

\*AP French Language and Culture  
11th-12th Grades  
C OR BETTER IN FRENCH III AND/OR TEACHER RECOMMENDATION

## GERMAN

\*German I  
9th-12th  
Grades

\*German II  
9th-12th Grades  
C OR BETTER IN GERMAN I AND/OR  
TEACHER RECOMMENDATION

\*Honors German III  
10th-12th Grades  
C OR BETTER IN GERMAN II AND/OR  
TEACHER RECOMMENDATION

\* + AP German Language and Culture  
11th-12th Grades  
C OR BETTER IN GERMAN III AND/OR TEACHER RECOMMENDATION

## SPANISH

\*Spanish I  
9th-12th  
Grades

\*Spanish II  
9th-12th Grades  
C OR BETTER IN SPANISH I AND/OR  
TEACHER RECOMMENDATION

\*Honors Spanish III  
10th-12th Grades  
C OR BETTER IN SPANISH II AND/OR  
TEACHER RECOMMENDATION

\* + AP Spanish Language and Culture IV  
11th-12th Grades  
C OR BETTER IN SPANISH III AND/OR TEACHER RECOMMENDATION

\* + AP Spanish Literature and Culture V  
12th Grade  
C OR BETTER IN SPANISH IV AND/OR TEACHER RECOMMENDATION

\*Course meets pre-collegiate recommendations  
+Course meets dual credit requirements

# WORLD LANGUAGE

## ADVANCED PLACEMENT, PLTW and HONORS COURSE EXPECTATIONS:

- \* AP/Honors courses are a rigorous course of study that requires a significant commitment in and out of class.
- \* You may be required to do summer reading/preparation work in order to prepare for AP/Honors classes in the fall.
- \* In the event that you must drop an AP/Honor class following the start of the school year, you may experience a drop in your GPA, loss of credit, a W/F for the entire academic year, and an inability to sign up for future honors classes.
- \* AP courses follow the AP outline. Students are strongly encouraged to take the AP exam in the spring.
- \* AP/Honors coursework is an enriching, challenging experience. We look forward to your success in this endeavor.

### FRENCH I\*\*

**Grade Levels: 9-10-11**

**Year Course**

**Prerequisite: None**

Classes are communication based and focus on interpretative, interpersonal and presentational communication. Grammar and culture are embedded into communication based learning and activities.

### FRENCH II\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: C or better in French I and/or teacher recommendation**

This course is a continuation and more comprehensive study of communication based skills. Students will be expected to create more language than in French I.

### AP FRENCH LANGUAGE AND CULTURE\*\*

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: C or better in French III and/or teacher recommendation**

The AP French Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP French Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in French.

The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

### HONORS FRENCH III\*\*

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: C or better in French II and/or teacher recommendation**

The communication based course is designed to prepare students for the AP course and exam. Skills are polished through literature, authentic resources, projects and creation of language.

\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements



## WORLD LANGUAGE (continued)

### HONORS GERMAN III\*\*

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: C or better in German II and/ or teacher recommendation**

This course refines the student's speaking, reading, listening and writing skills both in style and grammar. The skills for normal communication are "polished" through the use of magazines, short stories, recordings, and other forms of authentic literature. Idiomatic and slang expressions are taught, as well as some characteristics of some regional dialects.

### GERMAN I\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: None**

Students are gradually introduced to the primary skills of reading, writing, listening, and speaking. A beginner's text, comics, songs, and games are used to teach about the Germans and their culture.

The AP German Language and Culture course emphasizes

### AP GERMAN LANGUAGE AND CULTURE \*\*++

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: C or better in German III and/ or teacher recommendation**

communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication in real-life situations. The AP German Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in German.

The AP German and Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students; awareness and appreciation of cultural products (e.g. of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

### GERMAN II\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: C or better in German I and/ or teacher recommendation**

This course continues the reading, writing, listening and speaking skills begun in German I. Speaking and comprehension skills are brought up to an intermediate level. Students begin to dissect complicated grammatical structures, and the student is ready to use the language with more confidence.

\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements





## WORLD LANGUAGE (continued)

### SPANISH I\*\*

**Grade Levels: 9-10-11**

**Year Course**

**Prerequisite: None**

The beginning class will focus on communicative competence. Students completing the course will use each of the four language skills of listening, speaking, reading, and writing. Additionally, cultural information will be presented throughout the course.

### SPANISH II\*\*

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: C or better in Spanish I and/ or teacher signature**

The second year course builds upon the basic skills learned in level one. The four language skills will be used actively with an emphasis on reading and writing. Cultural information will be presented through the use of the textbook and supplementary materials.

### HONORS SPANISH III\*\*

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: C or better in Spanish II and/or teacher signature**

The third year course will further refine oral and written skills. Supplementary reading materials will be used in addition to the textbook.

### AP SPANISH LANGUAGE & CULTURE IV\*\*

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: C or better in Spanish III and/ or teacher recommendation**

The AP Spanish Language and Culture course emphasizes communication (understanding and being understood by others) by applying interpersonal, interpretive, and presentational skills in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.

### AP SPANISH LITERATURE AND CULTURE V\*\*

**Grade Levels: 12**

**Year Course**

**Prerequisite: C or better in Spanish IV and/ or teacher recommendation**

The AP Spanish and Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g. tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).

The AP Spanish Literature and Culture course uses a thematic approach to introduce students to representative texts (short stories, novels, poetry, and essays) from Peninsular Spanish, Latin American, and United States Hispanic literature. Students develop proficiencies across the full range of communication modes (interpersonal, presentational, and interpretative), thereby honing their critical reading and analytical writing skills. Literature is examined within the context of its time and place, as students reflect on the many voices and cultures present in the required readings. The course also includes a strong focus on cultural connections and comparisons, including exploration of various media (e.g., art, film, articles, literary criticism).

\*\* Course meets pre-collegiate requirements

++ Course meets dual credit requirements

*¡Gracias!*



## ELECTIVES

### STUDENT ASSISTANT

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: None**

Student assistants will be used in the following areas: Attendance Office, Main Office, Counseling Center, and by teachers. Assistantships are designed to provide experience and opportunities to students in the operations of office and classroom management. Only one assistantship can be scheduled per semester per student. Students must apply and be accepted to serve in this capacity. A maximum of three credits can be accumulated toward graduation.

### STUDENT CABINET

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Must be elected by student body**

This course offers students training in leadership, problem solving, and large group decision-making. Students will also have opportunities to attend leadership workshops through CHSAA and other civic groups in the community. Students will learn and practice the principles of democratic government.

#### **REQUIREMENTS TO RUN FOR STUDENT CABINET**

- A. All candidates must have an overall G.P.A. of 3.0.
- B. All candidates may not have missed more than ten days of school, unless excused by a physician.
- C. Students elected to Student Cabinet must enroll in the Student Cabinet class and must also enroll in 5 credit-earning classes each semester.
- D. Candidates running for a class office must be a member of that class the following year (i.e. Senior Class President will be a senior next year, Junior Class Treasurer will be a Junior next year).
- E. All candidates running for office must obtain a minimum of 75 student signatures on a petition. Candidates running for Student Cabinet may have signatures from both sophomores and juniors. Signatures from seniors are not allowed and will disqualify a candidate.
- F. All candidates are subject to a staff evaluation for final approval to run for any and all offices. Students will be notified of eligibility by letter.

### HONORS TEACHER CADET I

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: Permission of Instructor (Completion of application process)**

**\*Requested AP/Honors classes will not be changed in the fall.**

Interested in teaching as a possible profession? Interested in the role education plays in society? If so, this is the class for you. Students will be involved in a fast paced, innovative, hands-on curriculum where they gain knowledge about teaching and learning. Teacher Cadets will develop and master skills that will be helpful in college and beyond, such as presentation, public speaking, writing, communication and reasoning. This is a yearlong, sequential honors elective course with college credit options. Each student will make a difference with children as they “try out” teaching in a “mini-teaching” experience. Passing this class with a B or better may qualify students for articulated credit at Pikes Peak Community College, UNC Greeley, or CSU Pueblo. Please see instructor for details.

### EDUCATION EXPLORATION

**Grade Levels: 10-11-12**  
**Course**

**Semester**

**Prerequisite: None**

Education Exploration is a semester course designed to provide students with an overview of professions within education. Students will discover their own learning style and how learning styles impact teaching and the delivery of lessons. Experiences with various education professionals will enhance the understanding of classroom planning, licensure requirements, and career opportunities within schools systems. With exemplary performance and instructor recommendation students may apply for the Teacher Cadet program without meeting the 3.0 G.P.A. requirement.



## ELECTIVES (continued)

### **TELEVISION PRODUCTION I**

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: Approval by TV Production instructor only through an application process**

Television Production, a year-long course, provides students with rudimentary skills to conceptualize and produce a variety of video projects. Instruction includes care and use of equipment, scriptwriting, production techniques and editing skills. The second semester builds upon the skills learned from the first semester and culminates in an exhaustive final project. Given the technical and rigorous nature of this course, a serious amount of work and dedication is expected from the student, both during and after class.

### **K.W.H.S. TV NEWS PRODUCTION (TV PROD II)**

**Grade Levels: 9-10-11-12**

**Year Course**

**Prerequisite: Approval by TV News instructor only through an application process**

This year-long course produces the Widefield High School morning news program. Students participate in filming, editing, producing, and presenting broadcasts. Average typing skills and fundamental computer knowledge are needed. Television News requires an abundance of work and time. Often, students are required to work on projects outside of the regular class period. The fall semester focuses on filming and editing. The spring semester focuses on incorporating individual projects.

**Equipment Fee: \$15.00**

### **YEARBOOK**

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Approval by course instructor only**

Students will learn and practice journalistic and industry standards for yearbook production. This course will teach skills in standard journalistic yearbook writing, interviewing, organization, team cooperation, page layout design, photography, and skills for using various types of computer equipment and software such as Online Design, Photoshop, and email.

### **MEDIA TECHNOLOGY AND LIBRARY SCIENCE I**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This course provides work experience in library operations. Work skills include filing, organization, time management, shelving, research, workplace etiquette, and other needed skills. Students will learn to work with multiple programs (Destiny and other google apps) to help with accuracy and efficiency in maintaining records of items received, stored, issued, returned, and cataloged. The student will learn to work with patrons on using reference sources, card catalogs, automated information systems and equipment used in the library learning center and learn real world skills. Students will complete a personal research project.

### **MEDIA TECHNOLOGY AND LIBRARY SCIENCE II**

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: Media Technology and Library Science I**

This course continues to provide experience in library operations. Work skills include a review of the skills from level one as well as utilizing programs (Destiny and Google Apps) on a more consistent basis and assist patrons and staff with questions and concerns. Students will learn more advanced procedures in regard to maintaining records as well as collection management. The student will continue to work with patrons on using reference sources, catalogs, automated information systems and various equipment used in the library learning center while practicing real world skills. Students will research career options in the field and visit local organizations such as university or county libraries.

### **STUDY HALL**

**Grade Levels: 10-11-12**

**Semester Course**

**Prerequisite: None**

Study hall is a non-credit offering during the regular school day to give students extra time to study.



# **COURSES NOT OFFERED THIS YEAR**

## **ACCOUNTING PRINCIPLES II**

**Grade Levels: 10-11-12 Semester Course**

**Prerequisite: Accounting Principles IA**

This course continues the application of accounting principles to business organizations. Major topics include corporate equity and debt financing, investments, cash flow statements, financial analysis, budgeting, cost and managerial accounting.

## **ACCOUNTING PRINCIPLES IIA**

**Grade Levels: 10-11-12 Semester Course**

**Prerequisite: Accounting Principles II**

This course continues the application of accounting principles to business organizations. Major topics include corporate equity and debt financing, investments, cash flow statements, financial analysis, budgeting, cost and managerial accounting.

## **ACCOUNTING PRINCIPLES IIB**

**Grade Levels 11-12 Semester Course**

**Prerequisite: Accounting Principles IIA**

This course continues the application of accounting principles to business organizations. Major topics include corporate equity and debt financing, investments, cash flow statements, financial analysis, budgeting, cost and managerial accounting.

## **INTERPERSONAL RELATIONSHIPS**

**Grade Levels: 10-11-12**

**Prerequisite: None**

The purpose of the course is to acquire academic knowledge and understanding for healthy, respectful, and caring relationships across the life span. Emphasis is placed on family and friendly dynamics, effective communication, and healthy interpersonal relationships.

## **HONORS DISCRETE MATH\*\***

**Grade Levels: 11-12**

**Prerequisite: A or B in Algebra II or teacher recommendation**

Formal Geometry covers the concepts of shapes, constructions, organization and development of geometry, logic and proofs, parallel and perpendicular lines, triangles, transformations, vectors, polygons, right triangles and trigonometry, circles, areas, and volumes. Honors will emphasize advanced constructions, more rigorous proof throughout the course, more in-depth trigonometry, and advanced applications of area and volume.

## **MATH TODAY**

**Grade Level: 12**

**Prerequisite: Has NOT passed a class beyond Geometry and does NOT have 6 math credits (exception for IEP/504 students).**

Math Today is a consumer based math class taught primarily in an online format. The course covers the following topics: Semester 1: Basic Math Review, Personal Finance, Taxes & Insurance, Banking Services & Investments, and Banking and Credit Costs. Semester 2: Consumer Math review, Purchase/Sale of Goods, Leisure/Travel & Retirement, and Job Related Services. There is a project for each topic culminating in an extensive budget project to complete the course.

## **CONSTRUCTION TECHNOLOGY I B**

**Grade Levels: 9-10-11-12 Spring Semester Course**

**Prerequisite: None**

**1 Elective Credit & 1 CTE Math I Credit per**

This is the foundation course to basic residential construction. Students will demonstrate competencies that are nationally recognized by the construction industry. Students will learn and practice structural framing of floors, walls, ceilings, and roofs. This course also includes the use of basic construction tools and machinery, applied math, and an introduction to blueprint reading. This course teaches students industry safety including the use of all machines and tools

**\*\*Taken off site at The Mill National Training Center\*\***





# COURSES NOT OFFERED THIS YEAR

## INTRO TO WELDING TECHNOLOGY A

**\*\*Course taken at WHS\*\***

**Grade Levels: 9-10-11-12**

**Semester Course**

**Prerequisite: None**

This introductory welding class teaches students the basics of Oxy-Acetylene welding and cutting, Wire Feed/Mig welding, SMAW (stick arc welding) and Plasma cutting. It also covers general and welding safety as well as general metal working procedures.

\*A \$10 personalized equipment fee

2 Elective Credits per semester

## CARPENTRY TECHNOLOGY II B

**Grade Levels: 11-12**

**Fall Semester Course**

**Prerequisite: Mechanical, Electrical & Plumbing Systems A and B**

This course of the Carpentry program will continue to focus on stairs, residential and commercial drawings, heavy steel framing, thermal or moisture barriers, roofing system, steel stud framing, drywall installation and finishing, suspended ceilings, window, door and cabinet installation. Throughout the course, students will interpret construction drawings to complete projects, implementing material estimating procedures and safe working practices. Standards in this course also expand on principles of the construction industry and delve deeper into business and project management strategies.

**\*\*Taken off site at The MiLL National Training Center\*\***

**NOTE: Students are enrolled in Carpentry I A for first semester and Carpentry Technology II B for second semester.**

## MECHANICAL, ELECTRICAL & PLUMBING SYSTEMS B

**Grade Levels: 10-11-12**

**Spring Semester Course**

**Prerequisite: Construction Technology A and B along with teacher recommendation.**

**1 CTE Math Credit II & 1 Physical Science Credit per semester.**

Mechanical, Electrical, and Plumbing Systems prepares students for electrical, plumbing, and HVAC careers by introducing students to the physical principles of these systems and the fundamental skills needed to work with them. Upon completion of this course, proficient students will be able to follow safety procedures and use tools to perform basic operations with electrical circuits, as well as demonstrate understanding in fundamental concepts of electricity theory (i.e. Ohm's Law). Students will be able to apply proper tools and procedures to perform basic operations with plastic piping, including measuring, cutting, and joining pipe. Furthermore, students will be able to apply mathematics concepts to solve HVAC, electrical, and plumbing problems. This course is intended to provide an introduction and lay a solid foundation for those students entering the construction or craft skilled areas. The course provides a strong knowledge of construction safety, construction mathematics, and common hand and power tools. This course also provides communication and occupation skills to assist the student in obtaining and maintaining employment.

**\*\*Taken off site at The MiLL National Training Center\*\***

**NOTE: Students are enrolled in Mechanical, Electrical & Plumbing Systems A for first semester and Mechanical, Electrical & Plumbing Systems B for second semester.**



# COURSES NOT OFFERED THIS YEAR

## INTRO TO INFORMATION TECHNOLOGY

**Grade Levels:** 9-10-11-12

**Year Course**

**Prerequisite:** None

Students will build their skills and understanding of basic hardware and software computer components. Students will also learn about different operating systems such as Windows and Linux. Students will learn terminology of hardware and software components as they build computers, networks, servers and create secured environments. In addition, students will learn about storage devices, mobile computing, security threats and best security practices. At the completion of this course, students may be able to successfully test for the A+ Certification.

## NETWORK ADMINISTRATION

**Grade Levels:** 10-11-12

**Year Course**

**Prerequisite:** Introduction to Information Technology (IT)

This course teaches students the fundamentals of network systems, design, components, and troubleshooting. Emphasis is placed on practical application of the theory. With an emphasis on application, students will build out their systems and be able to obtain internships, or part-time employment in IT fields. Networking concepts learned in previous classes will be leveraged to put system administrations in the context of a networked world. With additional study to fill in obscure technologies and concepts.

## HONORS WIND SYMPHONY

**Grade Levels:** 9-10-11-12    **Year Course**

**Prerequisite:** Symphonic Band and/or by audition

This class is for more advanced instrumentalists. A high level of skill development and motivation is needed to succeed in this class. This group studies more difficult wind literature in a large group. Applied music theory is also a part of the daily work. Performances are required and may include concerts, special events, tours, and competitions.

## SYSTEM AND NETWORK SECURITY

**Grade Levels:** 11-12

**Year Course**

**Prerequisite:** Network Administration

This course provides an overview of security administration and fundamentals of designing security architectures. Topics include networking technologies, TCP/IP concepts, protocols, network traffic analysis, monitoring, and security best practices. The goal of this course is to introduce challenges in securing computer systems and networks. Topics will address various types of the vulnerabilities in existing software interfaces, such as buffer overflows, unsafe lib functions, file system design issues, etc. We will also discuss modern-day defenses against attacks exploiting these vulnerabilities. In network topics will address security problems in network protocols and routing, such as sniffing, denial of service, viruses, worms, and defenses against them. Upon completion, students should be able to identify normal network traffic using network analysis tools and design basic security defenses. Students will also be able to:

- Analyze your exposure to security threats
- Protect your organization's systems and data
- Deploy firewalls and data encryption to minimize threats
- Assess alternative user and host authentication mechanisms
- Manage risks originating from inside the organization and the internet

Completion of this course will give students the ability to successfully test for the A+, Network + and Security + certification exam.



# COURSES NOT OFFERED THIS YEAR

## ART PORTFOLIO PREP I

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Foundations of Art and Design, Freehand Draw, and Painting**

Students will further demonstrate advanced techniques and will develop a portfolio to submit for career opportunities in commercial arts. At this point, students will focus on a career field in such areas as, photography, 3D art, or Multimedia design using skills they have learned in previous classes (i.e. fusion, casting, vitalizing elements, Adobe Illustrator or Animate). They will relate these skills to industry by researching career opportunities and perfecting their portfolio to that specific field. The elements and principles of design (line value, texture form, patterns scale, special awareness, unity balance, color and proportion) will be a guiding force as the process and work is critiqued along the way. Teacher and student will collaborate to illustrate a variety of skills and techniques as well as proving the worth of focusing on a chosen concentration

## ART PORTFOLIO PREP II

**Grade Levels: 11-12**

**Semester Course**

**Prerequisite: Foundations of Art and Design, Freehand Draw, Painting, and Art Portfolio Prep II**

Students will further demonstrate advanced techniques and will develop a portfolio to submit for career opportunities in commercial arts. At this point, students will focus on a career field in such areas as, photography, 3D art, or Multimedia design using skills they have learned in previous classes (i.e. fusion, casting, vitalizing elements, Adobe Illustrator or Animate). They will relate these skills to industry by researching career opportunities and perfecting their portfolio to that specific field. The elements and principles of design (line value, texture form, patterns scale, special awareness, unity balance, color and proportion) will be a guiding force as the process and work is critiqued along the way. Teacher and student will collaborate to illustrate a variety of skills and techniques as well as proving the worth of focusing on a chosen concentration. Students are required to complete the application process to have their work displayed within the community in such areas as; Colorado Springs, Fine Arts Center, a local art show, restaurants in the area the sell local artwork

## HONORS ATHLETIC TRAINING

**Grade Levels: 11-12**

**Year Course**

**Prerequisite: Basic Principles of Athletic Training**

**\*Requested AP/Honors classes will not be charged in the fall.**

This course is designed to give students an in-depth look at the prevention, evaluation, treatment, and rehabilitation of athletic injuries. Students interested in pursuing a career in any medical profession will benefit greatly from this course

## ENVIRONMENTAL SUSTAINABILITY

**Grade Levels: 10-11-12**

**Year Course**

**Prerequisite: Successful completion of Biology, Principles of Biomedical Science, or Introductions to Engineering and Design**  
**Prerequisite: Successful completion of Biology, Principles of Biomedical Science, or Introductions to Engineering and Design**

Environmental sustainability is a rapidly developing field that involves creating environmentally friendly and sustainable solutions to ensure food security for a growing world population; provide affordable, renewable energy; and provide clean, safe drinking water. You will examine how biological and environmental engineers address and solve important global problems as presented by the National Academy of Engineering and the National Research Council. This course can be taken as one of the PLTW Pathway or a stand-alone course.



**Notes:**







# 2023

January						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

March						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

April						
Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

May						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

June						
Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

July						
Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

August						
Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

September						
Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

October						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

November						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

December						
Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

# 2024

January						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

February						
Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29		

March						
Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

April						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

May						
Su	M	Tu	W	Th	F	Sa
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June						
Su	M	Tu	W	Th	F	Sa
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July						
Su	M	Tu	W	Th	F	Sa
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August						
Su	M	Tu	W	Th	F	Sa
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October						
Su	M	Tu	W	Th	F	Sa
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November						
Su	M	Tu	W	Th	F	Sa
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December						
Su	M	Tu	W	Th	F	Sa
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				