

2021-2022



# Pine Valley Jr./Sr. High School Curriculum Guide

COURSE DESCRIPTIONS, DEPARTMENT  
PATHWAYS & SCHEDULING PROCEDURES

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*Pine Valley Central School | Counseling Office  
7827 Route 83 \* South Dayton, NY 14138  
Phone: 716-988-3276 extension 4334*

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# COUNSELING DEPARTMENT

## School Counselors

Mr. Shane Gallivan - Odd Graduation Years

Phone: 716-988-3276 ext. 4310

Email: [sgallivan@pval.org](mailto:sgallivan@pval.org)

Miss Alexis Smith - Even Graduation Years

Phone: 716-988-3276 ext. 4335

Email: [asmith@pval.org](mailto:asmith@pval.org)

## Counseling Office Secretary

Mrs. Stacy Chase

Phone: 716-988-3276 ext. 4334

Email: [schase@pval.org](mailto:schase@pval.org)

In accordance with New York State educational mandates, the Pine Valley Central School District provides guidance and counseling services for each student. These services are based on the commitment that each student is a unique individual with varying interests, skills, and talents. Each student possesses unique potentials and limitations. School Counselors help students learn about themselves, their interests, their values, and their abilities so that each student can reach his/her potential.

School Counselors provide students with opportunities to secure and interpret information, to explore alternatives, to reach decisions and to carry out plans of action. School Counselors help students in the decision-making process and work with them to accept responsibility for their decisions and actions as they mature.

In addition, School Counselors assist parents and teachers through their specialized knowledge and skills. School Counselors keep up to date on the constantly changing information about individual students, careers, academic requirements, and post-secondary education that will benefit the student. School counselors provide:

1. A friendly, non-judgmental atmosphere where students can seek assistance dealing with personal questions or problems.
2. Opportunities for students experiencing academic difficulties to explore alternatives that will help them rectify the difficulties.
3. Opportunities for students to examine interests, values, aptitudes and abilities and the relationship of these personal traits to post-high school plans.
4. Assistance to each student in program planning and the selection of high school courses. This assistance ensures that students meet graduation requirements and develop appropriate plans for their future.
5. Opportunities for students, parents and teachers to share concerns and information regarding the academic, personal needs and progress of the student in a confidential and professional setting.
6. Information and suggestions for referrals to other services available to parents and students.

# MIDDLE SCHOOL REQUIREMENTS

## Grades 7 and 8:

All students shall be provided instruction designed to enable them to achieve, by the end of grade eight, State intermediate learning standards. The table below outlines the curriculum areas mandated by the New York State Education Department.

SUBJECT AREA	REQUIRED UNITS	GRADE 6	GRADE 7	GRADE 8
English language arts	2 units		☺	☺
Social studies	2 units		☺	☺
Science	2 units		☺	☺
Mathematics	2 units		☺	☺
Career and Technical Education (CTE)	1 ¾ units	☺	☺	☺
Physical Education	(every other day, both years)	☺	☺	☺
Arts- visual and music	½ unit of each	Music ☺	Visual ☺ Music optional	Music optional
Health education	½ unit		☺	
Languages other than English (LOTE)	2 units & pass locally developed test		☺	☺
Career development and occupational studies		<i>Integrated within courses above ☺</i>	<i>Integrated within courses above ☺</i>	<i>Integrated within courses above ☺</i>
Library and information skills	Equivalent of one period per week in grades 7 & 8	<i>Integrated within courses above ☺</i>	<i>Integrated within courses above ☺</i>	<i>Integrated within courses above ☺</i>

# COURSE DESIGNATIONS/ACCRONYMS

## Regents (R)

These courses are offered to prepare students for the New York State Regents examinations and the NY Regents Diploma.

## Honors (H)

These courses are enriched for students who have a strong, scholarly approach to the subject and who demonstrate a strong work ethic. Honors level courses are at a higher level than the Regents course.

## Advanced Placement (AP)

These upper-level courses are offered at Pine Valley to further challenge students in the core content areas and to prepare them for college level coursework. Students must be dedicated to the coursework as they require a substantial commitment of time and effort.

All students enrolled in an AP course are expected to take the AP exam for that course at the end of each year; the school will cover the costs of the exams for students enrolled in AP courses. If the AP course content is also one to which a Regents examination is tied, students would be required to take the Regents exam also (IE: US History, Global Studies, English Language Arts). AP exams are administered nationwide in May by the College Board and testing will take place during the school day, here at Pine Valley. Students will register online with the College Board in order to enroll and order their exams; this process will be shared with students at the beginning of each year, in their AP class.

If students score a 3 or higher (on a scale of 1-5), they could earn college credit, skip intro-level courses, or both at thousands of U.S. colleges and universities. Earning credit in high school means paying for fewer credits in college. It also opens their college schedule, allowing them to take more electives, pursue a second major or study abroad. Regardless of the AP exam score, taking AP courses can have a positive impact on college applications. Admissions officers know college faculty play a big role in developing AP courses, so they know students who took AP pushed themselves to in challenging, college-level courses. This is something colleges like to see.

## College Connections with Jamestown Community College (JCC)

Pine Valley has partnered with Jamestown Community College to offer students the opportunity to earn college credits concurrently with high school credits. These dual enrollment courses are taught by PV faculty who are approved by and work closely with JCC. Please see the following section for more information about JCC Dual Enrollment.

## Distance Learning (DL)

We offer some courses which are taught via the Distance Learning Network. Students from multiple districts connect in real time by video conference. The instructor may either be a PV faculty or one from a near district. There will always be a PV staff member present in all DL classes.

## Academic Intervention Assistance (AIS)

Teachers, counselors and administration work together to identify students in grades 7-8 to receive Academic Intervention Services in English Language Arts and Mathematics each year. Scores from New York State assessments, as well as iReady assessments, are used to help identify students needing further assistance. Each child's progress within ELA and/or math interventions will be monitored to help determine the length of time that continued interventions will be needed. These courses meet NYSED part 100 regulations and are not credit-bearing.

## Credit Recovery (CR)

Students who were unsuccessful obtaining or completing a credit required for graduation may be given the option to enroll in a Credit Recovery program. This program is an online, self-directed course with a PV teacher supervising student progress. This type of course may or may not have a designated time within the student's schedule, depending on the student's academic availability. Credit Recovery courses may also be offered during the summer.

# DUAL ENROLLMENT PROGRAMS

## Jamestown Community College's College Connections Program

### What is the College Connections program?

JCC's concurrent enrollment program offers a wonderful opportunity for students to get a head-start on their post-secondary education by earning college credits while still in high school. These courses are taught at Pine Valley, during the regular school day, by PV faculty. There is no charge for students to enter these courses; however, there is a placement test requirement as well as general course pre-requisites students must meet. Generally, these courses are reserved only for Juniors and Seniors. Students who successfully complete these courses may earn college credits.



Available courses are listed throughout this curriculum guide and are designated as "JCC".

### How do students pursue enrollment?

The first step is for students to meet with their counselor to discuss their personal graduation plan and which courses they are interested in taking for the next school year. If the student expressed interest in one of these courses, the next step is to plan to take the ACCUPLACER (JCC's placement test). Again, students must also meet the course pre-requisite requirements prior to enrolling in one of these courses.

### How does the ACCUPLACER test work?

The ACCUPLACER will be given at the school during the Winter or Spring (for placement the following school year). Each course has its own ACCUPLACER score requirement. Students may take the test twice in one school year to obtain the required scores. If a student is absent or misses their test session, it is their responsibility to sign up for a make-up test with the Counseling Office.

### How do students receive college credit?

If students successfully complete a JCC course, they will be awarded college credit through JCC; a transcript will be generated at JCC. Students who may not be going to JCC after graduation should check with their intended colleges regarding the transferability of these credits to the programs they are interested in. However, even if the JCC credits will not transfer, college admissions counselors tend to look more favorably at student who challenge themselves to take college coursework in high school.

## SUNY Fredonia's 3-1-3 Program

### Program Description

The State University of New York at Fredonia started the 3-1-3 program in 1972 to give high school seniors a unique experience. The program combines high school classes, taken with a student's familiar friends and faculty, with on-campus college courses where 3-1-3 students meet exactly the same demands as a full-time college freshman. This program is not only about putting college credits on a high school transcript, but to also prepare students for future success in the college atmosphere.



### Who should consider applying?

Admission standards are the same for 3-1-3 prospective students as they are for any incoming freshmen. Therefore, students interested in this program must be committed and motivated students with a strong academic history. This program can give academically focused students the opportunity to complete upper level coursework which may not be offered in the high school, and which will prepare them for the expectations and demand of college coursework.

It is also important for students to research their post-secondary options when considering the 3-1-3 program to verify that earned college credits would transfer to the future institution.

### Balancing High School and College

There are many variations and possibilities to a student schedule as a 3-1-3 student. Students are required to take a 4<sup>th</sup> year of ELA and Social Studies. They are encouraged to continue into a 4<sup>th</sup> year of math and science as well. Students, parents, the PV School Counselor and the Admissions Counselor at SUNY Fredonia will work closely together to guarantee a schedule that will meet the student's graduation requirements while also enriching their academic coursework.

Many 3-1-3 students are very active in their high schools and their schedules can be arranged in order to allow participation in most school activities. These students also find ways to be active and involved on the college campus as well. Students are able to choose for themselves the extent to which they want to stay involved with high school and to identify with the college.

### Transportation

Students are responsible for their own transportation to the college campus for their classes.

### Credits

Students who successfully complete their coursework at SUNY Fredonia will receive college credits and will generate a college transcript. These credits may or may not transfer to other colleges, universities and institutions because every college has a transferability policy. Students should do thorough research into their future college plans when considering the 3-1-3 program.

### Further information

An informative session occurs annually in February to share information, experiences, etc. with potential students. Please refer to [www.fredonia.edu](http://www.fredonia.edu) for more information or call their office at 716-673-3550.

# PINE VALLEY HIGH SCHOOL GRADUATION REQUIREMENTS

The Principal, in cooperation with the Superintendent, will determine a pupil's eligibility for Pine Valley High School graduation. This determination will be based upon the student's official high school record. There are various pathways to graduation and the table below outlines the credit and examination requirements in NY state.

<u>REGENTS</u>	<u>REGENTS DIPLOMA W/ ADVANCED DESIGNATION</u>
<p><b><u>Credits</u></b></p> <p>4.0 English            4.0 Social Studies            3.0 Math            3.0 Science            1.0 Language other than English            2.0 Physical Education            0.5 Health            1.0 Art or Music            3.5 Electives</p> <p><b>Total: 22 credits for graduation</b></p>	<p><b><u>Credits</u></b></p> <p>4.0 English            4.0 Social Studies            3.0 Math            3.0 Science            3.0 Language other than English *            2.0 Physical Education            0.5 Health            1.0 Art or Music            1.5 Electives</p> <p><b>Total: 22 credits for graduation</b></p>
<p><b><u>Regents Exams</u></b>            5 required Regents exams with a score of <b>65 or higher</b> as follows:                1 math, 1 science, 1 social studies, ELA and 1 <b>Pathway Assessment</b> (an additional math, science, social studies, LOTE, Art, or CTE)</p> <p>OR</p> <p>4 required Regents exams with a score of <b>65 or higher</b> as follows:                1 math, 1 science, 1 social studies, ELA and meet all the requirements of the CDOS Commencement Credential +</p>	<p><b><u>Regents Exams</u></b>            8 required Regents exams with a score of <b>65 or higher</b> in one of the combinations as follows:</p> <p><b>Traditional Combination:</b>                ELA, Global History and Geography, US History and Government, 3 mathematics, 2 science (1 must be life science and 1 must be physical science)</p> <p><b>Pathway Combination (other than STEM):</b>                ELA, 1 social studies, 3 mathematics, 2 science (1 must be life science and 1 must be physical science), and either 1 Pathway (other than science or mathematics) or meet the requirements for the CDOS Commencement Credential</p> <p style="text-align: right;"><i>(continued on next page)</i></p>

	<p><b>STEM (Mathematics) Pathway Combination:</b>          ELA, 1 social studies 4 mathematics, 2 science (1 must be life science and 1 must be physical science)</p> <p><b>STEM (Science) Pathway Combination:</b>          ELA, 1 social studies, 3 mathematics, 3 science (1 must be life science and 1 must be physical science)</p>
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\* Language other than English Credit:

Students with a specific 5 credit sequence in Art, Music, or Career and Technical Education may substitute this coursework for the second language requirement. Please see the pathways outlined within the course descriptions for these pathways.

+ CDOS Credential:

The NYS CDOS Commencement Credential is a credential recognized by the NYS Board of Regents that certifies a student has the standards-based knowledge and skills necessary for entry-level employment. The CDOS learning standards will be achieved through access to career and technical education (CTE) coursework and through opportunities to engage in school supervised work-based learning experiences, either in school and/or in the community. In addition, students must participate in career planning and preparation and have an employability profile demonstrating readiness for entry-level employment. In addition to the required 22 units of diploma credit, students may also be required to:

- Develop a career plan
- Complete 216 hours of CTE coursework
- Participate in work-based learning experiences (minimum of 54 hours)
- Complete an employability profile

More information about graduation requirements can be found on the NYS Education Department website.

Visit <http://www.nysed.gov/common/nysed/files/programs/curriculum-instruction/diploma-and-credentials-summary-requirements.pdf> to access a chart that includes information on the required units of credit and examinations for a Regents diploma, a Regents diploma with advanced designation, a local diploma the CDOS Commencement Credential and the Skills and Achievement Commencement Credential.

## Sample Four Year Plan

Students can use this chart as a guide to which classes they should be taking each year. Because each student is different, there are various ways in which students can obtain the Regents or Advanced Regents diploma. If there are multiple classes listed in a box below it is because it depends on the student and whether they are on an advanced academic path or a traditional path; students would only be taking one course per subject, per year.

If a Regents exam is attached to a course it is designated with an **(R)**; locally develop proficiency exams are designated with a **(P)**. Students must also remember to reference the exam requirements for each diploma type, as in the chart on page 10.

REQUIREMENT	9 <sup>th</sup> Grade	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade
<b>ENGLISH</b> 4 Credits	English 9	English 10	- English 11 <b>(R)</b> - JCC English 1510/1530 <b>(R)</b>	- English 12 - JCC English 1530/ AP Lit
<b>SOCIAL STUDIES</b> 4 Credits	Global Studies 9	Global Studies 10 <b>(R)</b>	- US History <b>(R)</b> - AP US History <b>(R)</b>	- Government/Eco nomics - AP Gov/ Economics
<b>MATH</b> 3 Credits	- Algebra I <b>(R)</b> - Algebra I A	- Geometry <b>(R)</b> - Algebra I B <b>(R)</b>	- Algebra II <b>(R)</b> - Geometry <b>(R)</b>	- Trigonometry/ Pre-Calculus - Algebra II <b>(R)</b>
<b>SCIENCE</b> 3 Credits	Earth Science <b>(R)</b>	Living Environment <b>(R)</b>	Chemistry <b>(R)</b>	Physics <b>(R)</b>
<b>WORLD LANGUAGE</b> 1 credit <i>*ADV-3 credits</i>	Spanish I <b>(P)</b>	Spanish II	Spanish III <b>(P)</b>	Spanish IV
<b>PHYSICAL EDUCATION</b> 2 credits	Physical Education	Physical Education	Physical Education	Physical Education
<b>HEALTH</b> ½ credit		Health		
<b>ART/MUSIC</b> 1 credit	- Studio in Art - Design & Drawing - Band - Chorus	<i>Student's choice to continue in art or music pathways throughout high school.</i>		
<b>ELECTIVES</b> 3 ½ credits	<i>Student's choice each year.</i>			

For Advanced Regents Pathway, students may substitute either of the below pathways for the LOTE sequence:				
<b>ADV Pathway using Art Sequence</b> 5 credits*	Studio in Art	Drawing & Painting	- Digital Media & Film - Sculpture	AP Studio in Art
<b>ADV Pathway using Technology Sequence</b> 5 credits*	Design & Drawing	- CAD - Robotics	- Advanced CAD - Advanced Robotics	2 More Tech Electives

\*The credits earned in the Art or Technology sequence above may also be used as elective credits in the chart above; these are not necessarily five additional credits required above the 22 required credits for graduation.

# SCHEDULING INFORMATION

This course catalog has been prepared to give you an overview of the courses that will be offered for Pine Valley Jr./Sr. High School students in the 2021-2022 academic year. This curriculum guide provides students with a brief description of course content, prerequisites, and expectations. Students should become familiar with the course catalog and other scheduling materials when planning out their high school pathway to graduation. This Curriculum Guide and the Course Request Form can be accessed through the Counseling Department website or a hard copy may be issued upon request.

## Course Selection

It is very important for students to discuss their strengths, weaknesses, and interests with their parent or guardian(s) and to involve adults in the critical decisions students face regarding pathways to graduation. Additionally, students should discuss their options with other adults whose opinions they value, such as teachers, employers, job coaches, mentors, and college admissions counselors.

Spend time reviewing this booklet carefully. Use all the resources you need to develop your academic schedule. Make sure that you include courses that:

- enable you to meet graduation requirements
- enable you to meet your post-secondary goals
- assist you in exploring new areas of interest
- assist you in developing new and/or special skills
- assist you in developing an appreciation of other academic areas

## Course Load

Students are encouraged to take advantage of the programs offered by carrying a course load consistent with their abilities and interests and that allows them to meet all minimum requirements for New York State and the school district.

**Students are required to take a minimum of seven (7) academic courses per semester.**

***Remember: High School Graduation Requirements do not equal College Admissions Requirements.***

*It is important to note that MOST four-year colleges require 4 units of math, 4 units of science, and 3-4 units of foreign language; therefore, it is crucial that students aim high and take challenging courses.*

## Preliminary Steps for Students

1. Become familiar with the course planner
2. Study requirements for graduation
3. Review elective course offerings
4. Discuss ability levels and course selections with teachers and counselors to ensure that you are maximizing your academic potential. Also, involve parents/guardians in the process
5. Develop a sequence of required and elective courses to meet graduation requirements and to facilitate post-graduation plans
6. Plan optimistically and realistically.

## The Scheduling Process

A master schedule is developed based upon student course requests and NYSED requirements. While we wish to offer our students as many courses as possible, we cannot guarantee that all course listed in this Curriculum Guide will ultimately run or that all student requests will be satisfied. We will make our best effort to ensure student's schedules are enriching and that they meet educational requirements.

### Annual Course Selection Meeting

Individual course selection sessions with the school counselor are meant to provide a thorough review of students' academic progress, graduation pathway options, career planning and a discussion of future goals. Parents are encouraged to make appointments with a counselor to take part in this discussion.

Additional items included in this meeting:

1. Review the recommendations of teachers and the counselor.
2. Completion of the course selection sheet.
  - a. A copy of students' course selections can be mailed or sent home, as requested.
3. Students will be asked to make alternate choices in case there are conflicts, or situations in which a course will not be offered due to insufficient enrollment.

Usually the choices made in this session reflect the best interest of the student at the time, but students are given ample opportunity to make any necessary adjustments to his/her course selections prior to May 1st. Requests to change course selections or graduation pathways should be made through the school counselors and will be considered until May 1st. Building a school master schedule is based upon the entire student body's needs and interests. Therefore, we expect students to honor their commitment to taking their requested courses.

### Final Schedule Release

Students will receive a copy of their next year's schedule through PowerSchool in August, prior to the start of school and in ample time to make necessary changes. Due to the school counselors' limited schedule over the summer, any requests for a schedule change should be communicated to the Counseling Department prior to the start of school. All requests should be directed to the counseling department secretary, Mrs. Chase at 716-988-3276 ext. 4334. An appointment will be made with the school counselor, the student and their parent or guardian to discuss the change and how it may impact their graduation pathway.

## Schedule Changes Once the School Year has Started

Student schedules will not be changed after the first 10 days of school in September. Schedules may only be changed at this time for the following reasons:

- Because of an error or omission
- Adding a course required for graduation
- Requirement for post-graduation placement
- Required by a formal instructional planning committee (CSE, 504, AIS)
- Add a course in place of a study hall during the same period if room is available and the teacher can make accommodations for the addition

## Dropping a Course

Dropping a course after the first 10 days of the year is only allowed under extenuating circumstances. Failing is *not* an extenuating circumstance. If a student is struggling in a class, she/he is encouraged to seek academic assistance with her/his teacher after school or during a free period.

The following steps must be taken before course drops/changes will be considered:

1. Student must express concerns with teacher and actively seek remediation.
2. Student should discuss concerns with parents or guardian.
3. If problem persists, a parent conference must be arranged between student, parent, and teacher.
4. If a solution cannot be found, the student must make an appointment with the School Counselor. The student can request an official "Petition to Drop a Course Form" after such meeting.
5. The student will complete this form and return it to the Counseling Office for final determination by the Principal.

If a decision is made to drop a course:

1. Before the end of the 5th week of a 1st or 2nd semester course, the course will not be noted on the report card or transcript.
2. After the 5th week of the course, a drop will be noted on both the report card and the transcript.
3. No drops will occur after the 10-week point.
4. The School Counselor and Principal, in cooperation with the students and parents, will make every effort to fill the time slot with another course, not simply another study hall (should scheduling, course availability, and class size permit). *Remember, students are required to be enrolled in SEVEN academic courses per semester.*

## Other Notes/Considerations for Dropping a Course:

Dropping a course after the first 10 weeks will result in a designation on the student's report card and/or transcripts. If a student has a failing grade in the course prior to the drop, a "DF" or Drop-Failing Score will be designated. If a student has a passing grade in the course prior to the drop, a "DP" or Drop-Passing Score will be designated.

## Promotion Policy

High school students will advance each year based on cumulative credits earned. In order to be determined a senior, students must be eligible and on schedule to graduate at the end of that year.

# NCAA ELIGIBILITY

The National Collegiate Athletic Association is an organization dedicated to providing a pathway to opportunity for college athletes. More than 1,100 colleges and universities are members of the NCAA to support college athletes. There are multiple divisions of college athletics and each offers a unique opportunity for athletes. Schools in Division I and II may provide scholarships annually to student athletes.



## Eligibility Basics

College-bound student-athletes who want to compete at a NCAA Division I or II school need to meet certain division-wide and amateurism standards and must register with the NCAA Eligibility Center. *Students who plan to attend a Division III school need to meet the admission standards of the school they plan to attend, but they are not required to register with the NCAA Eligibility Center.*

1. Complete a total of 16 core courses in the following areas (each division determines separate amounts of each subject area):
  - a. English
  - b. Math
  - c. Natural/physical science
  - d. Social science
  - e. Additional courses in any area listed above, foreign language, or religion/philosophy
2. Complete all courses above in eight academic semesters or four consecutive years.
3. Earn an SAT combined score or ACT sum score that meets the criteria listed by the NCAA.
4. Grade point average is based only on the grades you earn in NCAA-approved core courses; DI minimum 2.3; DII minimum 2.2.

## Student Application Process: Grade 9

- Students should speak with their school counselor to ensure they are taking the right courses and are on the right path to apply with the NCAA.
- Sign up for a free profile page at [www.eligibilitycenter.org](http://www.eligibilitycenter.org)

## Grade 10

- Students should register with NCAA Eligibility Center at [www.eligibilitycenter.org](http://www.eligibilitycenter.org)

## Grade 11

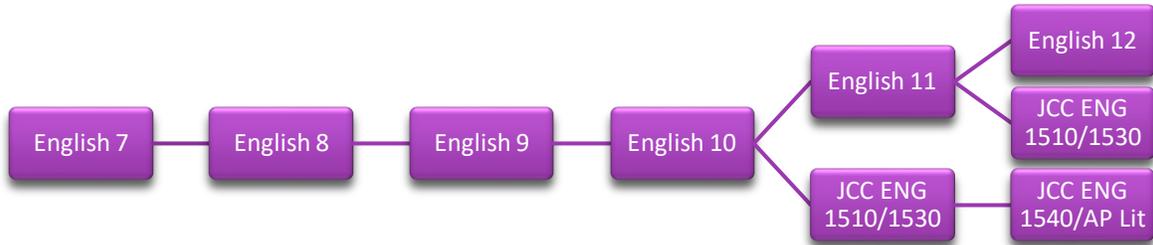
- Students check with counselor to make sure he/she will graduate on time and have all the required NCAA core courses.
- Students should take the ACT or SAT. During the registration process, students should fill in the school code 9999 to share their scores with the NCAA.
- At the end of the year, the school counselor will provide the student's official school transcripts to the NCAA.

## Grade 12

- Students should finish the last NCAA core courses.
- Students could take the ACT or SAT again, if necessary, and should submit his/her scores to the NCAA again using the school code 9999.
- After April 1, students should request final amateurism certification decision from the NCAA.
- After graduation, the counselor will provide a final official transcript to the NCAA.

# COURSE DESCRIPTIONS

# ENGLISH



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## ENGLISH 7

Grade: 7

Full Year / 1 MS unit of study

In English 7, we learn to reflect upon our strategies and skills for writing and reading. Works of literature will be explored as well as essential questions that correspond with the social studies class to learn cross-curricular skills. Standards-based grading helps us reflect upon our skills. The foundation for writing will be set with learning formats and processes for writing arguments, narratives, informational texts, and speeches that will be built upon for the remainder of our high school careers. We begin to discuss the relevance of words used in both what we write and read, and we evaluate the use of literary elements within pieces of writing.

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## ENGLISH 8

Grade: 8

Full Year / 1 MS unit of study

In English 8, we continue to reflect upon our strategies and skills for writing and reading and begin to home in on the ones that are best for ourselves as learners. Students will learn to advocate for themselves by reviewing and identifying how others are or are not advocated for in the past and present. Standards-based grading helps us reflect on our learning along the way and to better understand our own strengths and struggles. Works of literature will be explored as well as essential questions that correspond with the social studies class to learn cross-curricular skills. Students will continue refining writing skills through learning formats and processes which include writing arguments, narratives, informational texts, and speeches. We continue to evaluate the relevance of words and literary elements used in both what we write and read.

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## ENGLISH 9

Grade: 9

Full Year / Potential Credit: 1

English 9 is the exploration of literature with a focus on analysis and interpretation using literary elements. Students should expect to be immersed in reading, writing and speaking activities. Students will hone their listening skills and further develop their spelling, grammar, vocabulary and research skills. Students will begin to prepare for post-high school education and will establish preliminary skills necessary to be successful on the Regents Comprehension Exam taken in 11th grade.

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## ENGLISH 10

Grade: 10

Full Year / Potential Credit: 1

This course explores world literature with a strong focus on analysis and interpretation. Units on freedom, tolerance and diversity will expose students to a variety of multicultural literature. Students should expect to do considerable amounts of writing and speaking. Basic skills such as grammar, vocabulary, usage, and research will be covered through literature, drama, and poetry. The goal is to prepare students for post-high school education and to be successful on the Regents Comprehension Exam taken in 11th grade.

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## ENGLISH 11

Grade: 11

***Regents Exam***

Full Year / Potential Credit: 1

English 11 is a continuation of and refinement of previously learned skills in writing and composition (including grammar when necessary), reading for detail and meaning, discussion and clear thought. Creativity and individuality in thought and communication will be encouraged and rewarded. Substantial reading, writing, speaking and listening will be expected. Both semesters involve critical thinking and high expectations. However, the first semester is a comprehensive Regents Exam preparation program.

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## ENGLISH 12

Grade: 12

Full Year / Potential Credit: 1

English 12 is the exploration of a variety of specialized topics including journalism, career preparation, Shakespeare, research, criticism, creative writing, and a senior project. The goal of this class is to prepare students to succeed in any post graduate path chosen through an appreciation and knowledge of literature, composition, technology, and lifelong learning. \*The Senior Project will be developed throughout the year as it has several components that require students to reflect on high school accomplishments and future goals. This project is a graduation requirement.

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## ENG1510: ENGLISH COMPOSITION I (JCC)

College  
Level

Grade: 11-12

Semester / Potential Credit: 0.5 HS/ 3 college

This first semester course employs basic collegiate writing as its focal point. Although partially modal, the class is constructed to incorporate argumentative entities in preparation for semester two. Its primary goal is to improve writing skills of the individual, including – but not limited to – thesis construction, organization, critical reading and writings, and specific mechanical and grammatical skill builders.

**Prerequisite: To enter as a Junior:** completion of English 10 with an average of 85% or higher; teacher recommendation; AND Accuplacer Reading score of 250+. **To enter as a Senior:** Successful completion of English 11; AND Accuplacer Reading score of 250+.

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## ENG1530: COLLEGE COMPOSITION II (JCC)

College  
Level

Grade: 11-12

Semester / Potential Credit: 0.5 HS/ 3 college

This course will either follow ENG1510 or will be the first in the sequence determined by the placement test score (ENG1530 then ENG1540). Argumentative writing is the focal point of this course. Students will learn to write essays with precision, clarity, substance, and logic, as per Pine Valley and JCC’s course description. In addition, students will work on the development of critical thinking and writing skills which will be beneficial in other avenues, including academia, employment, and life. Students also will learn to conduct research and to extrapolate necessary information from a variety of sources in order to complete an original argumentative research paper.

**Prerequisite:** Admission based on successful completion of ENG1510

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## A.P. ENGLISH LITERATURE & COMPOSITION (JCC 1540 ALSO)

Advanced  
Placement

College  
Level

Grade: 12

**AP Exam**

Full Year / Potential Credit: 1 HS/ 3 college

This course follows ENG1510 & ENG1530 with literature as a focal point. Students will be exposed to a variety of literature (i.e. novels, short stories, children’s stories, and poetry) from a diverse expanse. Students will be expected to exemplify perception and scrutiny in their reading. Works will be analyzed on variant levels through multifarious techniques.

Advanced Placement English Literature and Composition centers on fostering the ability to read closely and analyze insightfully what the College Board calls “imaginative literature”. Most of the content of this course is designed to provide a college level English experience: the reading, writing, and thinking require considerable abilities in literary studies, concerted effort, and the dedication necessary to flourish in a demanding academic environment. The literature in the curriculum draws from American and British traditions and ranges from the dawn of British literature to the twentieth century. While much of the course is organized according to the chronology of British literature, supplemental works and texts are included to facilitate a proficiency in literary pursuits. Students will read a comprehensive range of short fiction,

poetry, excerpts from longer works, plays, and novels. Students are expected to take the AP Exam in May.

**Prerequisite:** Successful completion of JCC's ENG1510 & ENG1530 with an 85+ average.

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## COMMUNICATIONS IN THE MODERN WORLD

Grade: 9-12

Elective

Semester / Potential Credit: 0.5

This course will provide students the opportunity to explore communication in today's modern world. Students will learn to develop communication skills through research and presentations. Students will learn to properly use social media and the world wide web to effectively and professionally communicate. Students will explore professional expectations and effective communicating in today's workplace. Various methods of human communication, from face-to-face interaction to television news broadcasting, employment and social media formats will be studied.

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## CREATIVE WRITING

Grade: 9-12

Elective

Semester / Potential Credit: 0.5

Do you enjoy writing without a teacher hovering? Are you interested in how to bring your ideas to life and share them with others? Do you want to really perfect your messages to readers in more fun and creative ways? If so, this class is for you. This class will dive deeper into various forms of literature including dramas, short stories, and poetry. You will be allowed to explore and write within this space and eventually publish a class book of writings to keep forever.

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## JOURNALISM

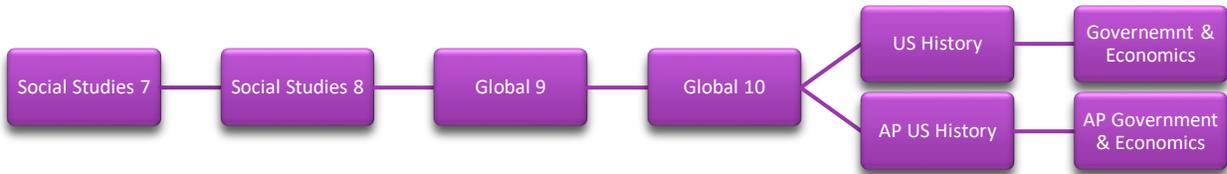
Grade: 9-12

Elective

Semester / Potential Credit: 0.5

Want to learn to be a reporter, or at least have an excuse to go to school events? Then this is the class for you. We will be reporting on various school events, conducting interviews, and investigating what is most important to the students here in the Valley! Learn to craft stories, lay out a paper, and edit it all in this fun class!

# SOCIAL STUDIES



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## SOCIAL STUDIES 7

Grade: 7

Full Year / 1 MS unit of study

This is the first year of a two-year course on the culture and history of America, with a focus on the United States and New York State. In 7<sup>th</sup> grade we will begin with the study of America before the arrival of the Europeans. In June we will end at the beginning of the Civil War. In 8<sup>th</sup> grade students will continue from the civil war to modern times.

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## SOCIAL STUDIES 8

Grade: 8

Full Year / 1 MS unit of study

This is the second year of a two-year course on the culture and history of America, with a focus on the United States and New York State. In 7<sup>th</sup> grade, we began with the study of America before the arrival of the Europeans. In 8<sup>th</sup> grade, students will continue from the civil war to modern times.

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## GLOBAL HISTORY AND GEOGRAPHY 9

Grade: 9

Full Year / Potential Credit: 1

Grade 9 begins with the Paleolithic Era and the development of the first civilizations, continues with an examination of classical societies, and traces the expansion of trade networks and their global impact. The course emphasizes the key themes of interactions over time, shifts in political power, and the role of belief systems. A Regents Exam will be taken at the end of the 10<sup>th</sup> grade year.

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## GLOBAL HISTORY AND GEOGRAPHY 10

Grade: 10

**Regents Exam**

Full Year / Potential Credit: 1

This course begins with a brief look back while focusing on the early 1700s and provides a snapshot of the world circa 1750. The course continues chronologically up to the present. Several concepts are woven throughout the course including industrialization, nationalism, imperialism, conflict, technology, and the interconnectedness of the world. The last four key ideas focus on global issues and a more thematic approach is taken.

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## US HISTORY & GOVERNMENT

Grade: 11

**Regents Exam**

Full Year / Potential Credit: 1

Grade 11 begins with the colonial and constitutional foundations of the United States and explores the government structure and functions provided in the Constitution. The development of the nation and the political, social, and economic factors that led to the challenges our nation faced in the Civil War are addressed. Industrialization, urbanization, and the accompanying problems/solutions are examined, along with America's emergence as a world power, the two world wars of the 20th century, and the Cold War. Students explore the expansion of the federal government, evolving social beliefs and behaviors, and the nation's place in an increasingly globalized and interconnected world.

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## A.P. U.S. HISTORY

Advanced  
Placement

Grade: 11

**Regents Exam & AP Exam**

Full Year / Potential Credit: 1

The AP U.S. History course focuses on the development of historical thinking skills (chronological reasoning, comparing and contextualizing, crafting historical arguments using historical evidence, and interpreting and synthesizing historical narrative) and the development of students' abilities to think conceptually about U.S. history from approximately 1491 to the present. Students are required to reason historically about continuity and change over time and make comparisons among various historical developments in different times and places. This course will cover topics over nine different periods in U.S. history with a further deep-dive into a few select periods.

**Prerequisite:** Students wishing to enter this course in must have completed AP Global with a 90% or higher or a 95% or higher in Global 10 and acquire prior teacher's recommendation.

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## PARTICIPATION IN GOVERNMENT

Grade: 12

Semester / Potential Credit: 0.5

This course examines the foundations of our American democracy, calling attention to the importance of voting and other methods of participation in government and civic life. In order to equip students to navigate in the digital age, the importance of information and the need to be

able to access and evaluate information should be integrated throughout the course. All levels of government are encompassed within the course affording the opportunity to utilize local resources. Each unit provides an opportunity for comparison of our governmental system with that of other countries. Content specifications are not included so that the course can adapt to present local, national and global circumstances, allowing teachers to select flexibly from current events to illuminate key ideas and conceptual understandings.

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## ECONOMICS

Grade: 12

Semester / Potential Credit: 0.5

“The Economics of Free Enterprise in a Global Economy” examines the principles of the United States free market economy in a global context. Students will examine their individual responsibility for managing their personal finances in a global economy as well as study how to make personal choices (buying a car/house, filing taxes, etc) as they enter adulthood. Students will analyze the role of supply and demand in determining the prices individuals and businesses face in the product and factor markets, and the global nature of these markets. Students will study changes to the workforce in the United States and the role of entrepreneurs in our economy, as well as the impact of globalization. Students will explore the challenges facing the United States free market economy in a global environment and various policy-making opportunities available to government to address these challenges. Content specifications are not included so that the course can adapt to present local, national and global circumstances, allowing teachers to select flexibly from current events to illuminate key ideas and conceptual understandings.

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## A.P. GOVERNMENT & POLITICS

Advanced  
Placement

Grade: 12

**AP Exam**

Full Year / Potential Credit: 1

AP United States Government and Politics introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning assess causes and consequences of political events and interpret data to develop evidence-based arguments.

**Prerequisite:** *Students wishing to enter this course in must have completed AP US History with a 90% or higher or a 95% or higher in US 11 and acquire prior teacher’s recommendation.*

**Prerequisite:** *Students wishing to enter this course in must have completed Honors Global 9 with a 90% or higher or a 95% or higher in Global 9 and acquire prior teacher’s recommendation.*

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## HISTORY OF SPORTS

Grade: 10-12

Elective

Semester / Potential Credit: 0.5

This course will focus on the development of sports over the course of the 20th century and into the 21st century. Topics covered will be heavily based on the ESPN “30 for 30” sports history documentary series. This class is a student project inquiry based elective where the students choose which documentaries we watch and create projects on. Students vote on their 10 favorite topics to view/create projects on. Through this course, students will strengthen their knowledge of sports history, its evolution over time and the impact sports have on society. Students will also develop inquiry and research skills.

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## HISTORY OF WAR

Grade: 10-12

Elective

Semester / Potential Credit: 0.5

This course will take students through the development of military history, including tactics, weaponry, as well as an overview of various wars over time. This will be accomplished through the viewing and study of war films, such as “Saving Private Ryan,” “The Patriot,” etc. Upon viewing these films, students will be completing various projects including but not limited to PowerPoint presentations, essays, web-based projects, etc.

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## HUMAN RIGHTS

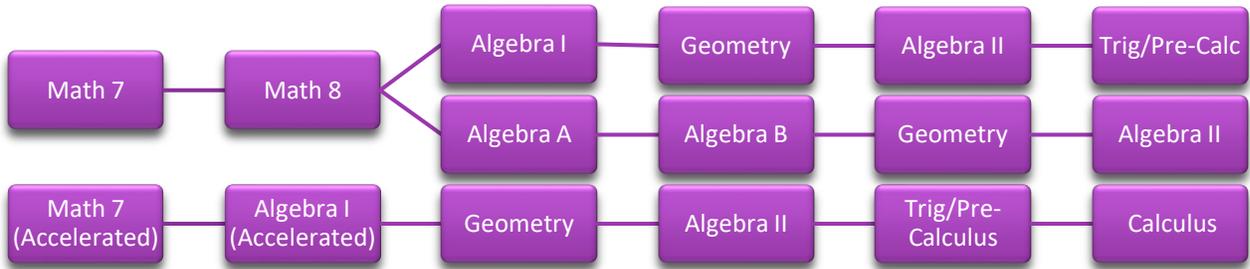
Grade: 10-12

Elective

Semester / Potential Credit: 0.5

This semester course is open to students in grades 10-12 and will focus on the current and past human rights violations and restrictions which are placed on humans throughout the world. Focus will include but is not limited to the Rohingya in Myanmar, censorship and communist regulations in China, the oppressive government of North Korea, the border crisis in the US, the usage of chemical weapons, torture, corruption, censorship, prison conditions, women’s rights, security and surveillance, forced labor, neglect of the aged, water rights, war crimes. These topics will be explored in this discussion-based seminar.

# MATHEMATICS



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## MATH 7

Grade: 7

Full Year / 1 MS unit of study

In 7th Grade Math, students will build on the concepts they learned in sixth grade math, expanding their prior knowledge on topics such as Rational Numbers, Proportional Relationships, Expressions and Equations, and Inequalities. Students will also begin to more deeply explore percentage's, angle measurements, volume and areas of polygons, probability, and statistics. There is a strong emphasis on how these topics connect to students' lives outside of the classroom.

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## ADVANCED MATH 7

Grade: 7

Full Year / 1 MS unit of study

In 7th Grade Advanced Math, students will work at a rigorous pace to explore the power standards of both the 7th and 8th Grade Math curriculum in order to prepare them to move directly into Algebra. Students will deeply explore the concepts of Proportional Relationships, Percentage's, Expressions and Equations, Inequalities, Probability and Statistics, Plane Geometry, Angle Relationships, The Real Number System, Exponents, Linear Relationships and Equations, Functions, and Systems of Equations. In this course, students move at a faster pace while also more deeply exploring the connections across mathematical concepts and domains.

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## MATH 8

Grade: 8

Full Year / 1 MS unit of study

In 8th Grade Math, students begin exploring Pre-Algebra concepts, focusing heavily on Linear Relationships and Equations, Functions, Systems of Equations, and Transformations. Students will also continue to build on their understanding of The Real Number System, Exponents, Geometry, and Statistics. 8th Grade Math celebrates the culmination of a cross-conceptual study of mathematics before beginning a more topic-focused approach in high school.

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## ALGEBRA I- A

Grade: 9

Full Year / Potential Credit: 1

Algebra 1A is the first year of a two-year program. Students who are deemed in need of more time to complete the State requirement in Math will be enrolled in this course. The slower pace will allow time for additional practice and more individual assistance. The topics covered will include number systems, operations and properties, algebraic expressions, geometric figures, problem solving, trigonometry of the right triangle, and graphing linear functions and relations.

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## ALGEBRA I- B

Grade: 10

**Regents Exam**

Full Year / Potential Credit: 1

Algebra 1B is the second year of a two-year program. The slower pace of this course will allow time for additional practice and more individual assistance. This course covers the remaining topics of algebra and includes a comprehensive review for the Integrated Algebra Regents examination in June. Graphing calculators are highly recommended.

**Prerequisite:** Algebra I-A

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## ALGEBRA I

Grade: 9 (or Accelerated 8)

**Regents Exam**

Full Year / Potential Credit: 1

Topics covered in this course include solving equations, factoring quadratic equations, graphing linear and quadratic equations, graphing a scatter plot and writing a line of best fit. Right triangle trigonometry topics include the Pythagorean Theorem and the sine, cosine, and tangent ratios. Probability topics include permutations, empirical probability, probabilities of independent and dependent events. Graphing calculators are highly recommended.

**Prerequisite:** Math 8

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## GEOMETRY

Grade: 10-11

**Regents Exam**

Full Year / Potential Credit: 1

Students will have the opportunity to make conjectures about geometric situations and prove in a variety of ways, both formal and informal, that their conclusion follows logically from the hypothesis. Students will justify geometric relationships and properties of geometric figures, including congruence and similarity of triangles as well as properties of triangles, quadrilaterals, and circles. An integrated review of algebra topics will be incorporated throughout the course of study. Graphing calculators are highly recommended.

**Prerequisite:** Algebra I or the complete Algebra I-A & B sequence

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## ALGEBRA II

Grade: 11-12

**Regents Exam**

Full Year / Potential Credit: 1

Some of the topics covered include complex numbers, relations and functions, trigonometric functions and inverses, trigonometric identities and equations. Additional topics include the advanced study of probability theory and statistics. Graphing calculators are highly recommended.

**Prerequisite:** Geometry

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## GENERAL APPLIED MATH

Grade: 10-12

Elective

Full Year / Potential Credit: 1

This general applied mathematics course reinforces general mathematics skills in our everyday lives and jobs through use of skills in a variety of practical, consumer, business, and occupational applications. Course topics covered are those which might be used in trade jobs (electricians, plumbers, contractors, etc.) and helps prepare students for exams they must pass to enter those careers. Course topics include rational numbers (fractions and decimals), measurement, basic statistics, ratio and proportion, basic geometry, formulas and simple equations.

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## MAT1590: COLLEGE ALGEBRA/TRIGONOMETRY (JCC)

College  
Level

Grade: 11-12

Semester / Potential Credit: 0.5 HS / 4 college

Students will learn algebra and trigonometry topics necessary to prepare them for the study of Pre-Calculus. Topics include one-to-one functions and their inverses and graphs, polynomial and rational functions and their applications, radicals and exponents, complex numbers, and trigonometric functions, including graphs and basic identities. Problem-solving and applications are emphasized. An approved graphing calculator is required.

*Students will take this course in the first semester of the year and then will also be enrolled in MAT1600 (see below) for the second semester; these courses run consecutively.*

**Prerequisite:** Successful completion of Algebra II AND one of the following: Accuplacer QAS Math score 280+; Algebra II course average 80+; Algebra II Regents score 80+

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## MAT1600: PRE-CALCULUS (JCC)

College Level

Grade: 11-12

Semester / Potential Credit: 0.5 HS / 4 college

This is a fourth-year mathematics course for students. This is a good preparation for those who plan to take college Calculus courses. Students will study topics such as: Linear Relationships and Functions, Systems of Equations and Inequalities the Nature of Graphs and their families. Students will also revisit and expand on Trigonometric Functions and Identities and Logarithms. Conics and Polar Coordinates and Complex numbers finish up the course. Students will take a local final exam upon completion of the course.

*Students will take this course in the second semester of the year after completion of MAT1590 (see above) in the first semester; these courses run consecutively.*

**Prerequisite:** Successful completion of Algebra II & JCC MAT1590

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## MAT1710: CALCULUS & ANALYTIC GEOMETRY I (JCC)

Distance Learning

College Level

Grade: 11-12

Elective

Semester / Potential Credit: 0.5 HS / 4 college

*(Distance Learning Course)* Students will study the fundamental concepts of calculus. Topics include an introduction to analytic geometry, functions, limits and continuity, and derivatives and integrals and their applications. An approved graphing calculator is required. A computer algebra system such as DERIVE is incorporated into the course.

*Students will take this course in the first semester of the year and then will also be enrolled in MAT1720 (see below) for the second semester; these courses run consecutively.*

**Prerequisite:** Successful completion of HS Pre-Calculus or MAT 1600

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## MAT1720: CALCULUS & ANALYTIC GEOMETRY II (JCC)

Distance Learning

College Level

Grade: 11-12

Elective

Semester / Potential Credit: 0.5 HS / 4 college

*(Distance Learning Course)* Students will further their study of calculus. Topics include applications of the definite integral such as volume, surface area and arc lengths, logarithmic and exponential functions, trigonometric and hyperbolic functions, techniques of integration, polar coordinates, parametric equations, improper integrals, and sequences and series including power series and Taylor series. An approved graphing calculator is required. A computer algebra system such as DERIVE is incorporated into the course.

*Students will take this course in the second semester of the year after completion of MAT1710 (see above) in the first semester; these courses run consecutively.*

**Prerequisite:** Successful completion of JCC MAT1710

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## MAT1500: PROBLEM SOLVING WITH MATH (JCC)

College  
Level

Grade: 11-12

Elective

Semester / Potential Credit: 0.5 HS / 3 college

Students will develop problem solving skills through a detailed study of specific problem-solving strategies such as drawing diagrams, making systematic lists, looking for patterns, identifying sub-problems, and working backwards. Solution presentations and communication are emphasized.

*Students will take this course in the first semester of the year and then will also be enrolled in MAT1540 (see below) for the second semester; these courses run consecutively.*

**Prerequisite:** HS GPA 80+ and either Algebra I Regents 75%+ or Algebra I course average 80+; Accuplacer test scores= Reading 250+ and QAS Math 246+

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## MAT1540: ELEMENTARY STATISTICS (JCC)

College  
Level

Grade: 11-12

Elective

Semester / Potential Credit: 0.5 HS / 3 college

Students will investigate various topics in both descriptive and inferential statistics including measures of central tendency and spread, graphical analysis of data, probability, random sampling, correlation and regression, hypothesis testing and confidence intervals. Practical applications are emphasized throughout the course. A significant part of the course is taught in a laboratory setting using the software package Minitab. Upon completion of this course, students should be able to make decisions using statistics and model real-life situations. In studying statistics, we also develop logical and problem-solving skills. Note: Students will complete a real-life application project at the end of this course.

*Students will take this course in the second semester of the year after completion of MAT1500 (see above) in the first semester; these courses run consecutively.*

**Prerequisite:** Successful completion of MAT 1500

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## ACCELERATED JR. HIGH MATHEMATICS PROGRAM

### PRE-REQUISITES FOR ACCELERATED JR. HIGH MATH IN 7<sup>TH</sup> GRADE- ADVANCED MATH 7:

The following will be reviewed but are not limited to:

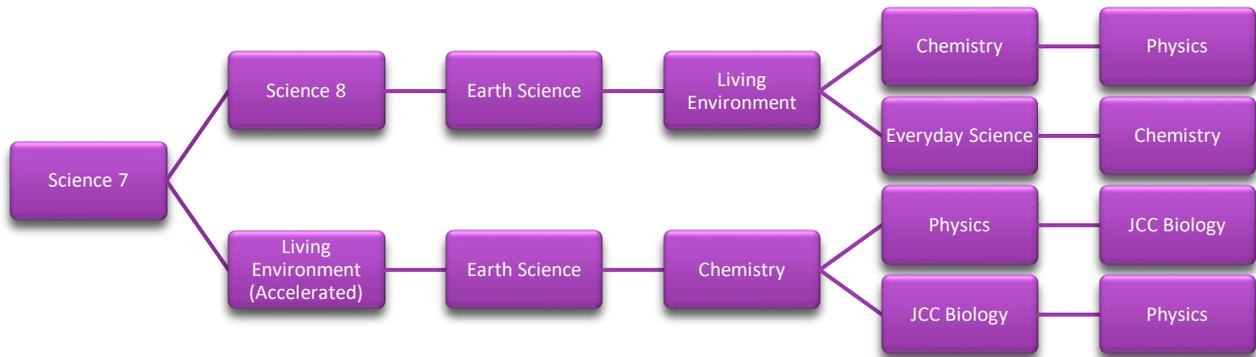
- Placement test administered by PV Math Department
- 6<sup>th</sup> grade math teacher recommendation

### PRE-REQUISITES FOR ACCELERATED JR. HIGH MATH IN 8<sup>TH</sup> GRADE- ALGEBRA I:

Upon successful completion of Accelerated Math 7, students will be placed in Algebra I if:

- Continued advancement is recommended by the teacher
- Performance on the course final exam is satisfactory

# SCIENCE



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## SCIENCE 7

Grade: 7

Full Year / 1 MS unit of study

This course will cover fundamental topics in Earth Science (minerals and rocks, plate tectonics, fossils and Earth's history), Chemistry (atoms and the Periodic Table, matter, waves and physical and chemical changes) and Biology (cells, cell organization, human body systems, classification and plants). Most topics are supplemented with labs for a more in-depth understanding of the concepts.

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## SCIENCE 8

Grade: 8

Full Year / 1 MS unit of study

This course will cover fundamental topics in Biology (lab safety, heredity, evolution, reproduction and nutrition), Physics (Newton's Laws, motion and density) and Earth Science (Earth, Sun and Moon relationships, the Solar System and weather). Most topics are supplemented with labs for a more in-depth understanding of the concepts. There is an NYS Science 8 Exam at the conclusion of the 8<sup>th</sup> grade year.

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## EARTH SCIENCE

Grade: 9

**Regents Exam**

Full Year / Potential Credit: 1

This is a laboratory course of study that will prepare students for the Regents examination and future science classes. By handling materials and doing experiments, the successful student will learn to identify rocks, minerals, fossils, stars and planets. The student will develop a basic understanding of major theories that explain weather, earthquakes, volcanoes, and the history

of the Earth. Human effect on the environment, conservation, and climate change will also be investigated. The student is required to work with various pieces of scientific equipment with an emphasis on accurate measurements. The use and interpretation of references tables to answer multi-step questions is required.

*\*NYS requires a lab component to this class which must include 1200 minutes of hands-on laboratory with satisfactory laboratory reports. All lab work must be completed in order to be eligible for the Regents examination.*

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## LIVING ENVIRONMENT

Grade: 10 (or Accelerated 8)

**Regents Exam**

Full Year / Potential Credit: 1

Class instructions are based on a series of lab investigations and class activities. Upon completing the course, the successful student will have developed a basic working knowledge of the biological basis to problems in medicine, public health, agriculture and conservation. Seven key ideas will be studied:

- Living things are similar to and different from each other and from non-living things.
- Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parent and offspring.
- Individual organisms and species change over time through the process of evolution.
- The continuity of life is sustained through reproduction and development.
- Organisms maintain a dynamic equilibrium that sustains life.
- Plants and animals depend on each other and their physical environment.
- Human decisions and activities have had a profound impact on the physical and living environment.

*\*NYS requires a lab component to this class which must include 1200 minutes of hands-on laboratory with satisfactory laboratory reports. All lab work must be completed in order to be eligible for the Regents examination.*

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## CHEMISTRY

Grade: 10-12

**Regents Exam**

Full Year / Potential Credit: 1

This is a college preparatory course of study leading to a Regents exam. Topics include atomic structure, bonding properties of the elements, states of matter, energy in chemical reaction, nuclear science, solutions, acid-base theory, electro-chemistry, and organic compounds.

Emphasis is placed on developing precise laboratory techniques. Topics to be studied include:

- Atomic structure
- The periodic table
- Bonding
- Formulas and equations
- Physical behavior of matter
- Kinetics and equilibrium

- Oxidation-reduction chemistry
- Nuclear chemistry
- Acid-based chemistry
- Organic chemistry

*\*NYS requires a lab component to this class which must include 1200 minutes of hands-on laboratory with satisfactory laboratory reports. All lab work must be completed in order to be eligible for the Regents examination.*

**Prerequisites:** Successful completion of Earth Science and Living Environment.

## PHYSICS

Distance Learning

Grade: 11-12

**Regents Exam**

Full Year / Potential Credit: 1

**(Distance Learning Course)** This course will explore the laws that govern our everyday lives. Students will delve into the science of car crashes and collisions, roller coasters, race cars, electricity, and even bending light. In the lab portion of the course they will get to experiment with these concepts, often developing their own experiments. Physics does require basic algebra (solving for “x”), but discovers many real world applications of algebra. The course will prepare students for the physics regents in both content, and lab required time. Primary topics include Motion, Forces, Energy and Momentum, Electricity, Waves, and Modern physics.

*\*NYS requires a lab component to this class which must include 1200 minutes of hands-on laboratory with satisfactory laboratory reports. All lab work must be completed in order to be eligible for the Regents examination.*

**Prerequisite:** Successful completion of Algebra II and Chemistry.

## BIO 1570: PRINCIPLES OF BIOLOGY I (ICC)

College Level

Grade: 11-12

Full Year / Potential Credit: 1 HS/ 4 college

Students will identify, understand, and interpret fundamental biological principles such as biodiversity, evolution, ecology, chemical foundations of life, cell structure and function, cellular metabolism, photosynthesis, respiration, cellular reproduction, and classical, human and molecular genetics. Laboratory may include one or more outdoor experiences.

**Prerequisite:** Successful completion of HS Chemistry and successfully completed or co-enrolled in ENG 1510. Accuplacer Reading score of 250+ & QAS Math score of 238+.

*-This course may only be offered every other year.*

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## FORENSIC SCIENCE

Grade: 10-12

Full Year / Potential Credit: 1

This course surveys key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Through online lessons, virtual and hands-on labs, and analysis of fictional crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

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## EVERYDAY SCIENCE

Grade: 10-12

Full Year / Potential Credit: 1

There is science in everyday life experiences. In this hands-on class, “everyday life” will be used as a guide to investigate the connection of science to everything we do. Each chapter will offer a different theme, like food, medications and health, soaps and cleaning products, etc. Students will select a topic of interest, do research on it, and use the information in a project which will culminate with the presentation of their work to the rest of the class.

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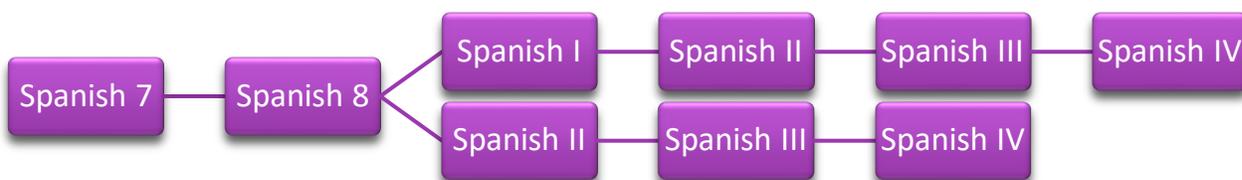
## ANATOMY AND PHYSIOLOGY

Grade: 11-12

Full Year / Potential Credit: 1

Study of structure and function of cells, tissues, skeletal, muscular, and nervous systems. Introduces common human disease processes.

# WORLD LANGUAGE



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## SPANISH 7

Grade: 7

Full Year / 1 MS unit of study- LOTE

This one-year course introduces students to basic Spanish vocabulary and grammar. They also learn about Hispanic cultures. Students develop speaking, listening, reading and writing skills.

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## SPANISH 8

Grade: 8

**Regional Proficiency Exam**

Full Year / 1 MS unit of study- LOTE

This is a one-year course and the second part of a two-year middle school foreign language sequence. Students at this level continue to learn about Hispanic cultures and expand their knowledge of vocabulary and grammar. They also continue to develop speaking, listening, reading and writing skills. Students take a Regional Proficiency Exam at the end of Spanish 8.

*Note: Students that successfully complete the two-year sequence in MS Spanish and pass the Regional Proficiency Exam earn one high school second language credit applicable towards graduation requirements.*

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## SPANISH I

Grade: 9

Full Year / Potential Credit: 1

This is a full year course covering material in the two-year middle school program. Students learn basic vocabulary and grammar. They develop speaking, listening, reading and writing skills in order to become proficient in the language.

*Note: This class is for students that did not pass Spanish 7, Spanish 8 and the Regional Assessment or those needing 1 unit of high school credit in a second language.*

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## SPANISH II

Grade: 9-10

Full Year / Potential Credit: 1

Students will continue to expand their knowledge of vocabulary and improve their speaking and listening skills. There is more emphasis on grammar, reading and writing skills. Students will develop skills necessary to be successful on the Regional Comprehensive Exam in Spanish given at the end of Spanish III.

***Prerequisite:*** Successful completion of Spanish I or after a Spanish I credit was granted after success in Middle School Level Spanish.

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## SPANISH III

Grade: 10-11

***Regional Assessment***

Full Year / Potential Credit: 1

Students in Spanish III continue to prepare for the Regional Comprehensive Exam in Spanish. This exam evaluates speaking, listening, reading and writing skills. At this level there is a strong emphasis on grammar, reading and writing.

***Prerequisite:*** Successful completion of Spanish II and teacher recommendation.

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## SPANISH IV

Grade: 11-12

Full Year / Potential Credit: 1

This course is for students who want to enhance their Spanish communication skills (listening, speaking, reading and writing). Students will study and compare Hispanic cultures.

***Prerequisite:*** Students must pass Spanish III, pass the Regional Assessment, and have teacher recommendation.

# PHYSICAL EDUCATION & HEALTH

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## MS PHYSICAL EDUCATION

Grade: 7-8

Every Other Day / MS PE Requirement

Students will demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities. These activities include and are not limited to the following: game concepts, team sports, swimming, and life-long appreciation for physical fitness. Students will gain an understanding of movement concepts, principles, strategies and tactics as they apply to the learning and performance of physical activities. While students are regularly participating in physical activity, they will achieve and maintain a health enhancing level of physical fitness as well as exhibit responsible personal and social behavior that respects self and others in the physical activity setting. Most importantly students will learn the values of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

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## MS HEALTH EDUCATION

Grade: 6

Every Other Day / 0.5 unit of study- Health

Middle School health provides students with knowledge to prepare them for situations and events in their life. Health covers a broad range of topics that include Healthy Lifestyles, Mental/Emotional Health, Nutrition, Physical Activity, Drugs/Alcohol, Disease/Disorders, Human Sexuality, Parenting/Family Life, Consumer Health and Environmental Health. Students will engage in open discussions, slide shows, videos, group and independent projects. This class allows students to take a close look at their own current state of health and take all the necessary steps to make healthy lifestyle changes in order to achieve optimal health. Middle school health will provide the necessary information so that students can make smart healthy choices for their future.

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## HS PHYSICAL EDUCATION

Grade: 9-12

Every Other Day / Potential Credit: 0.5

Students will demonstrate competency in motor skills and movement patterns needed to perform a variety of physical activities. These activities include and are not limited to the following: game concepts, team sports, swimming, and life-long appreciation for physical fitness. Students will gain an understanding of movement concepts, principles, strategies and tactics as they apply to the learning and performance of physical activities. While students are regularly participating in physical activity, they will achieve and maintain a health enhancing level of physical fitness as well as exhibit responsible personal and social behavior that respects self and others in the physical activity setting. Most importantly students will learn the values of physical activity for health, enjoyment, challenge, self-expression and/or social interaction.

**Note:** Students must take & successfully complete PE for eight semesters and must have a total of 2 credits to graduate according to NYS Education Department. Therefore, PARTICIPATION IS MANDATORY. For medical reasons for non-participation, a physician's note is required, and an alternate assignment will be given and MUST be completed for credit.

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## HEALTH

Grade: 9-12

Every Other Day or Semester / Potential Credit: 0.5

Health Education class is the only subject that is specifically all about you! The health education class examines 11 content areas which pertain to teen health wellness and lifelong healthy living. These areas include healthy lifestyles, mental/emotional health, nutrition, physical activity, drugs/alcohol, disease/disorders, human sexuality, parenting/family life, consumer health and environmental health. Students will engage in open discussions, slide shows, videos, group and independent projects, as well as listen to some powerful guest speakers. This class allows students to take a close look at their own current state of health and take all the necessary steps to make healthy lifestyle changes to achieve optimal health. How will the choices you make today, impact your life tomorrow?

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## HEALTH & WELLNESS

Grade: 9-12

Elective

Every Other Day / Potential Credit: 0.5

This elective course is for students who would like the opportunity to learn about nutrition, wellness and fitness during the school day. As well to learn and participate in various strength and conditioning techniques. This course emphasizes the importance of life-long wellness habits. Students will be assigned tasks throughout each quarter that will give them exposure to fitness, nutrition, and wellness topics. Students will also design personalized fitness and nutrition plans based on the principles of fitness and complete these plans throughout the school year. Students will complete fitness and nutrition evaluations to identify areas of strength, success, or needed improvement. Students will be guided to design and follow a self-directed fitness and nutrition program. Their progress will be monitored and tracked throughout the course of the year. Students will also have opportunities to field trips to apply their knowledge in a real life setting out of the school building.

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## PERSONAL TRAINING

Grade: 9-12

Elective

Every Other Day / Potential Credit: 0.5

This elective course is for students who would like the opportunity during the school day to learn and participate in various strength and conditioning techniques. Students will develop knowledge and skills with free weights and universal stations while emphasizing safety and proper body positioning. Students will also learn anatomy and conditioning techniques.

Students will design personalized fitness plans based on the principles of fitness and complete these plans throughout the school year. Students will complete fitness evaluations to identify areas of strength, success, or needed improvement. After the first evaluation, students who wish to focus on a specific area such as strength, speed, power, endurance, agility, and/or flexibility needed to improve performance in a specific sport or activity will be guided to design and follow a self-directed program. Their progress will be monitored and tracked throughout the course of the year. Students will also have opportunities for field trips to apply their knowledge in a real life setting out of the school building.

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## AQUATIC/WATER SPORTS

Grade: 9-12

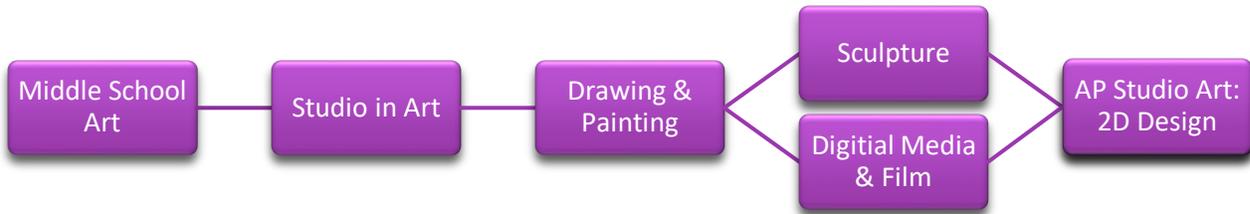
Elective

Every Other Day / Potential Credit: 0.5

This elective course is for students who would like the opportunity during the school day to do water activities. Students will be in the pool during class. This course will help students develop skills useful or necessary in an aquatic environment. Students will focus on swimming and competitive strokes, such as freestyle, breaststroke, butterfly, and so on. Students will also do team-oriented water sports, such as water polo and relay swimming. Students will also learn sailing and kayaking. Students may have opportunities for field trips to apply their knowledge in a real life setting outside of the school building.

# ELECTIVE COURSE DESCRIPTIONS

# ART



*Students on an Advanced Regents pathway can replace the three Language Other than English (LOTE) requirement with an approved sequence of five credits of art courses. See the Graduation Requirement page in the beginning of this catalog for more information.*

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## MIDDLE SCHOOL ART

Grade: 7-8

Every Other Day / 0.5 unit of study- MS Art

This introductory class emphasizes the basic art concepts and a variety of different media. Through this course, students will gain and build fundamental knowledge about the elements and principles of design, creativity, problem solving, and critical thinking. Two and three-dimensional concepts will be taught through a variety of materials. This knowledge will help prepare every middle school student for future art courses in high school and for their future lives in an increasingly innovative and visually oriented world.

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## STUDIO ART

Grade: 9-12

Full Year / Potential Credit: 1

Students are introduced to the fundamentals of artistic expression. This course includes experiences in drawing, painting, two-and three-dimensional design, and sculpture. This course emphasizes observation and interpretation of the visual environment, visual communication, imagination, and symbolism through an introduction to various visual arts media. The focus of this comprehensive course is the study of how artists convey ideas through application of a variety of media, and the study of historical and contemporary art and artists. Successful completion of this course satisfies the Art/Music graduation requirement.

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## DRAWING & PAINTING

Grade: 9-12

Full Year / Potential Credit: 1

This Drawing/Painting course focuses on the interrelationships that occur between drawing and painting using a variety of media and techniques, emphasizing observation and interpretation of the visual environment. This course typically includes applying various media, mark making, and compositional strategies, along with a study of art and artists from a worldwide perspective and instruction in the critique process.

***Prerequisite: Studio Art***

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## SCULPTURE

Grade: 10-12

Full Year / Potential Credit: 1

This course promotes expression of ideas through three-dimensional works. Students explore representational and abstract sculpture through subtractive (carving), additive (modeling), and assemblage techniques in one or more media. A study of historical and contemporary sculpture and sculptors from a worldwide perspective, and instruction and practice in the critique process are addressed.

*This course is offered every other year opposite Digital Media & Film.*

***Prerequisite: Studio Art***

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## DIGITAL MEDIA & FILM

Grade: 10-12

Full Year / Potential Credit: 1

This course introduces students to the creative and conceptual aspects of media arts production, including a range of techniques, genres and styles, mediums, and forms. Focus is on the development of ideas and application of form and structure through the application of a variety of media, and the study of historical and contemporary art and artists from a worldwide perspective. Students develop media literacy and an understanding of balancing freedom and responsibility as they analyze and create media artworks. Students will also explore a range of skills needed to explore contemporary social, cultural, and political issues and creatively solve problems through cinematic or video productions.

*This course is offered every other year opposite Sculpture.*

***Prerequisite: Studio Art***

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## AP STUDIO ART: 2D DESIGN

Grade: 12

Full Year / Potential Credit: 1

This AP Art and Design 2-D Design course is designed for students with a professional or academic interest in two-dimensional art. This course focuses on the development of a personal investigation in 2-D Design, enabling the students to demonstrate mastery of media, technique, problem solving, and depth of ideas. Such conceptual variety can be demonstrated through either the use of one or the use of several media. Students refine their skills and create artistic works to submit via a portfolio to the College Board for evaluation.

***Prerequisite:*** *Studio in Art, Drawing & Painting and one other art elective.*

# MUSIC

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## MS MUSIC

Grade: 7-8

Every Other Day / 0.5 unit of study- MS Music

The intent of the course is to provide a worthwhile musical experience for students, regardless of individual skill or talent level. Emphasis is placed on developing an affective and cognitive appreciation as a listener of all genres of music. This course provides instruction in music appreciation, theory, performance, and history. Students will experiment with the different facets of music as they gain musical background.

*\*This course is mandatory only for students who do not opt to take Band or Chorus in MS.*

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## MS BAND

Grade: 7-8

Every Other Day / MS Music Elective

Students will explore and perform varying styles of instrumental music, which will be highlighted in two performances a year. Students do not require any previous instrumental training to be a part of Band, and are offered instrumentation from brass, woodwind, and percussion instrument families while aligning with the current NYSED music standards.

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## MS CHORUS

Grade: 7-8

Every Other Day / MS Music Elective

Students participating in Junior High Chorus will learn and perform diverse choral music. Students will perform in both the winter and spring concerts. During rehearsals students will practice the fundamentals of vocal technique, music literacy, and the art of choral singing.

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## HS BAND

Grade: 9-12

Full Year\* / Potential Credit: 1

Students will learn to perform and appreciate varied selections from the finest available literature. The group will contribute to the musical life of the student and school. Students will participate in one sectional instrumental class each week. Band students will also be required to participate in community events and concerts. Successful completion of this course satisfies the Art/Music graduation requirement.

*\*NOTE: For students taking both Band and Chorus, Band is offered on B-Day's for ½ credit.*

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## HS CHORUS

Grade: 9-12

Full Year\* / Potential Credit: 1

This vocal ensemble is composed of students from grades 9-12. Membership will enable students to receive an enriched musical experience and continue to develop their vocal techniques. Chorus students will be required to participate in community events and concerts. Successful completion of this course satisfies the Art/Music graduation requirement.

*\*NOTE: For students taking both Band and Chorus, Chorus is offered on A-Day's for ½ credit.*

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## MUSIC THEORY

Grade: 10-12

Full Year / Potential Credit: 1

Music Theory will explore the building blocks of music including melody, rhythm, harmony, and form. The class will include composing, performing, and visiting musical forms popular throughout history from the Middle Ages and Renaissance through the 21st Century. Concurrent enrollment in Band or Chorus is required.

***Pre-requisite:*** At least one year of experience in MS or HS ensembles (band or chorus).

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## MUSICAL THEATRE & STAGECRAFT

Grade: 9-12

Elective

Semester / Potential Credit: 0.5

Musical Theatre is inherently a collaborative art and the emphasis of this class will be to introduce you to the multiple aspects of the stagecraft. In this course we will be discovering what it takes to put on a musical production both at the professional and amateur level. In addition to learning the history of American Musical Theater, you will learn about the art of sound and lighting design, set design, prop mastery, costume design, and direction.

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## HISTORY OF ROCK & ROLL

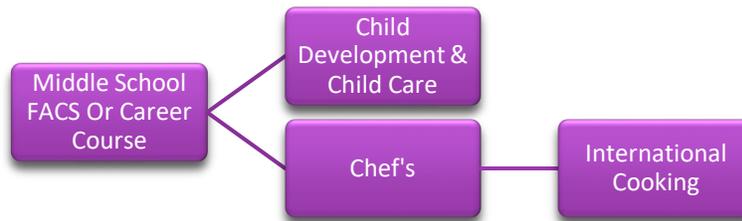
Grade: 9-12

Elective

Semester / Potential Credit: 0.5

The History of Rock and Roll will survey the history of rock music from its origins to the present day. Students will study all major genres including rap and country music, as well as the social, political, technological, and economic forces that shaped the music. Issues of race, gender and class will also be discussed as they relate to the various styles. The class includes detailed listening assignments and an introduction to musical vocabulary and concepts. No prior knowledge of music is required for this class.

# FAMILY & CONSUMER SCIENCES



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## MS FACS

Grade: 7-8

Semester / 0.5 unit of study- MS CTE

Family and Consumer Sciences (FACS) is a course designed into four process skill areas: communication, leadership, management, and thinking. The content topics include: career development, clothing management, financial management.

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## CHEF'S CLASS

Grade: 9-12

Full Year / Potential Credit: 1

Chef's is a full year course that provides an opportunity for students to develop basic food preparation skills. Classroom and lab work experiences emphasize nutrition and consumer skills as students examine preparation principles and techniques of a variety of foods. This course teaches students to develop life-long eating habits using My Plate guidelines. Basic skills learned in this class will be built upon in International Cooking and Baking.

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## INTERNATIONAL COOKING AND BAKING

Grade: 10-12

Full Year / Potential Credit: 1

This course consists of two sections, one each semester. During the first semester, the emphasis is on baking and pastry. Topics include breads, cakes, pies and restaurant style desserts. The second semester offers students the opportunity to recognize and prepare foods native to countries throughout the world and discuss how the food customs of these countries have been influenced by climate, geography, culture and religion. In addition, students realize the origin of popular foods that we enjoy here in the USA.

***Prerequisite:*** Chef's Class

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## CHILD DEVELOPMENT & CHILD CARE

Grade: 9-12

Full Year / Potential Credit: 1

Experiences in the Child Development course are designed to assist students in developing an understanding of the parenting process and of parenting skills. Competencies developed in this course will be useful to anyone who lives with, associates with, or works with children. Emphasis in this course is related to the parenthood decision, costs of having and raising a child, the promotion of child growth and development, guidance techniques for promoting positive behavior, prevention of child abuse and neglect, promoting health and safety of children, caring for the sick or injured child, and selection of child-care services.

# BUSINESS

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## MS DIGITAL LITERACY

Grade: 7

Semester or Every Other Day / 0.5 unit of study- MS CTE

This course will introduce the students to basic computer hardware and processing concepts using Windows based applications. The course will include lessons in Digital Citizenship, Google Chrome, e-mail communication and etiquette as well as an introduction to the Microsoft Office 365 suite. Students will learn how to effectively collaborate online as well as safely navigate social media. This course provides the resources for students to be successful digital learners and citizens as they move through high school and into college and the workforce.

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## MS COMPUTER SCIENCE

Grade: 8

Semester or Every Other Day / 0.5 unit of study- MS CTE

This course is an introductory computer science learning experience for 8th grade students. Mapped to CTSA standards, the course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user centered design, and data. This program will inspire students to research and pursue computer science careers as they build their own websites, apps, animations, games, and physical computing systems.

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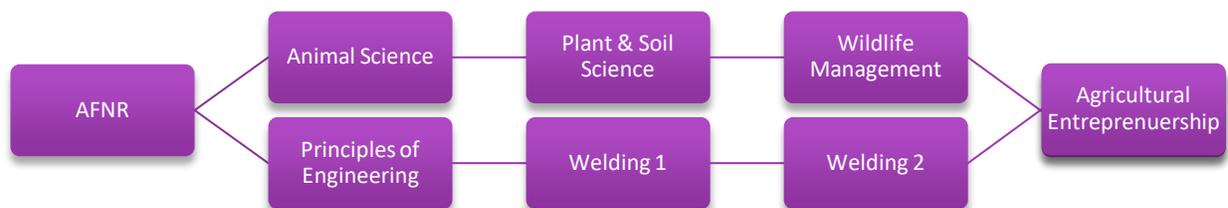
## CAREER & FINANCIAL MANAGEMENT (CFM)

Grade: 9-12

Semester or Every Other Day / Potential Credit: 0.5

This course will explore a variety of careers that are available as well as the process of deciding which path to take. It will include a section on Financial Management and Financial Planning including but not limited to; creating a budget, how to stick to it, and how the career they have chosen will meet their needs. The objective of this course is to develop the skills the student needs to more effectively compete in today's job market. By focusing on real-life skills needed to obtain a job, like; resume writing, creating a cover letter, filling out a job application and a real interview, the student will obtain all the tools needed to be successful in today's world. This course will include 20 weeks of computer applications. Concentration will be in proficiency in the Microsoft Office Suite.

# AGRICULTURE



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## AGRICULTURE, FOOD AND NATURAL RESOURCES (AFNR)

Grade: 9-12

Full Year / Potential Credit: 1

The agriculture, food and natural resources (AFNR) industry is a highly technical and ever-changing sector of the global economy upon which everyone is dependent. Students will explore each of the following AFNR career pathways: 1. Agribusiness Systems; 2. Animal Systems; 3. Biotechnology Systems; 4. Environmental Service Systems; 5. Food Products and Processing Systems; 6. Natural Resource Systems; 7. Plant Systems; 8. Power, Structural and Technical Systems. We will investigate agriculture here in Chautauqua and Cattaraugus County and compare these to other areas in New York State and around the world. Students will also discover what the FFA is all about in this foundation class.

*-This course is offered every other year.*

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## ANIMAL SCIENCE

Distance Learning

Grade: 9-12

Full Year / Potential Credit: 1\*

*(Distance Learning Course- PV Hosts)* This course involves a comprehensive study of the most common agricultural animal industries including: dairy, beef, sheep, goats, horses, swine, and poultry. Class study also involves the study of less common agricultural enterprises such as aquaculture species, rabbits, ostrich, honeybees, etc. Animal behavior, care, genetics, nutrition and reproduction are studied. The judging of each species will be covered in detail as well. Some exotic species and common pets such as fish, cats and dogs will be covered as well.

*\* Students may also use Animal Science as their third credit of science.*

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## PLANT & SOIL SCIENCE

Grade: 9-12

Full Year / Potential Credit: 1

Students will explore the horticulture and landscaping industry in this class. We'll also learn about crop cultivation, golf management, pruning, gardening, lawn care, composting and identification of flowers, fruits, shrubs, grasses, and vegetables. Students will have the opportunity to create their own landscape designs and provide seasonal maintenance on existing landscaped areas at the school. Students will look at how soils are formed, classified, improved, and harvested. This course is recommended for students interested in working with plants, both as ornamental and food enterprises.

*-This course is offered every other year.*

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## WILDLIFE MANAGEMENT

Grade: 10-12

Full Year / Potential Credit: 1

The history of wildlife indigenous to our area will be the main focus of this class. It is highly recommended for students interested in being outdoors, whether on a farm, hunting, fishing, hiking, camping or for those who are involved in the local Envirothon contest. Wildlife management from habitat analysis to reporting data to the NYS DEC will be covered along with predator trapping techniques. Things like planning and implementing a food plot successfully and the laws governing wildlife regulations will make more sense after completing this class. Ecological concerns such as pollution, deforestation and more will also be investigated.

*-This course is offered every other year.*

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## AGRICULTURAL MECHANICS (PREVIOUSLY WELDING I)

Grade: 9-12

Semester / Potential Credit: 1

Metal cutting systems which use both oxy-fuel and plasma-arc cutting, will be used to create unique projects in this class. Along with an introduction to welding and shop safety, students will develop basic skills needed for careers related to electricity, mechanical technology, small engines and welding. Looking for a class that is hands on and has the capacity to give you field related work skills that you can use throughout life? This is the class for you!

***Prerequisite:*** Design & Drawing

***WLD1200: SAFETY AND CUTTING (JCC):***

*Students in grades 11 or 12 who take this course could opt to take this class for college credit. Students would need to notify the counselor during their scheduling appointment that they want this credit. This course has the potential attainment of 3 college credits.*

College  
Level

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## WELDING II

Grade: 10-12

Full Year / Potential Credit: 1

Welding codes and symbols will be covered as you practice SMAW (stick welding) in various positions throughout the year. Fabricating projects from scratch and blueprints will put your SMAW skills into practice. Students will be taught how to use the GTAW (TIG) equipment and build functional weldments. Each class member is expected to build an extensive project before the completion of the year as part of their portfolio. Cast iron repair, stainless steel work and aluminum welding will also briefly be part of this class.

**Prerequisite:** *Welding I (aka Agricultural Mechanics)*

*WLD1350: INTRO TO SHIELDED METAL ARC WELDING (JCC):*

College  
Level

This course introduces the shielded metal arc (stick) welding process. Emphasis is placed on padding, fillet, and groove welds in various positions with SMAW electrodes. Upon completion, students should be able to perform SMAW fillet and groove welds on carbon plate with prescribed electrodes.

*Students in grades 11 or 12 who take this course could opt to take this class for college credit. Students would need to notify the counselor during their scheduling appointment that they want this credit. This course has the potential attainment of 3 college credits.*

*WLD1360: GAS METAL ARC WELDING (JCC)*

This course introduces gas metal arc (GMAW) welding and flux core arc welding processes (FCAW). Topics include equipment setup and fillet and groove welds with emphasis on application of GMAW and FCAW electrodes on carbon steel plate. Upon completion, students should be able to perform fillet welds on carbon steel in the flat, horizontal, and overhead positions.

*Students in grades 11 or 12 who take this course could opt to take this class for college credit. Students would need to notify the counselor during their scheduling appointment that they want this credit. This course has the potential attainment of 3 college credits.*

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## AGRICULTURAL ENTREPRENEURSHIP

Grade: 11-12

Full Year / Potential Credit: 1

Class projects will include marketing an agricultural product, sales techniques, partial and whole budgeting, break-even analysis, record keeping, business management, computer applications and public relations skills. Students who are interested in farming or who plan to have an agricultural career should consider this class. Learn what it takes to be successful and how to market your commodities. Public speaking and presentation skills will be developed in and out of the classroom as you learn about Robert's rules of order and Parliamentary Procedure. Are

you looking for skills to succeed after high school or what Agriculture has to offer? This is the class for you!

*-This course is offered every other year.*

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## PRINCIPLES OF ENGINEERING

Grade: 11-12

Full Year / Potential Credit: 1\*

This course will explore the engineering field, as well as other technical careers, through a case study approach. A case study is the scientific study of a problem in order to derive a solution. The case study should emphasize the solution and the solution may be presented in a variety of ways. At the end of the course you should have an idea as to whether a technical career is for you. Students should take one or more Technology Classes before they take this class.

*\*Students may also use Principles of Engineering as their third credit of math or science.*

### CAREER AND TECHNICAL EDUCATION PROGRAM- AGRICULTURAL SCIENCE

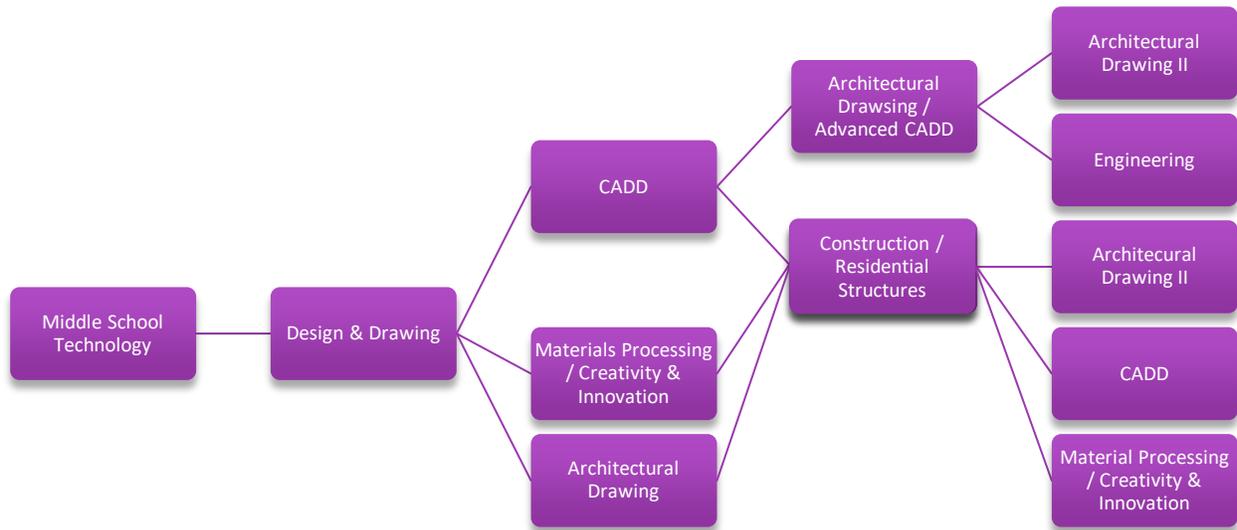
Students at Pine Valley have the opportunity to study and experience this specialized field in a hands-on instructional environment. Students will also benefit from work-based learning opportunities and supervised experiences.

This program requires the following 3 ½ credits:

- AFNR (1 credit)
- Animal Science (1 credit)
- Plant Science (1 credit)
- Career & Financial Management (½ credit)
- PLUS work-based learning hours

At the completion of the course sequence, students will take a culminating exam. Successful completion of the program and passing exam scores will result in a Technical Endorsement on a student's diploma.

# TECHNOLOGY & MANUFACTURING



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## MIDDLE SCHOOL TECHNOLOGY

Grade: 7-8

Semester / 0.5 unit of study- MS CTE

Students will make use of tools ranging from traditional woodworking to modern day computer applications. They will learn how to use all resources including tools to help solve problems. The problem-solving process and the seven resources of technology will be the main focal points of the class.

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## DESIGN AND DRAWING

Grade: 9-12

Full Year / Potential Credit: 1\*

This course begins our drawing sequence and is meant to introduce students to technical drawing, the universal language and problem-solving skills. The course begins with hand drawing techniques and concludes with Computer Aided Drafting. Students are highly encouraged to take this course either as a freshman or sophomore so that they will have time to complete the drawing sequence.

This course is Part One of a three-course sequence that can lead students to obtain 3 college Credits in **MCT1240: Engineering Drawing with Auto CAD**.

This course is also a prerequisite for Welding I, Agricultural Mechanics/Small Engine Repair and Computer Aided Drafting & Design (CADD).

*\*Design and Drawing can be used to satisfy the Art/Music graduation requirement.*

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## COMPUTER-AIDED DESIGN & DRAFTING (CADD)

Grade: 10-12

Full Year / Potential Credit: 1

This course makes use of AutoCAD as well as toughing on Inventor. CADD builds on the drawing experiences of Design & Drawing through the use of computer technology. Students will begin the class learning traditional wire frame techniques and then move on to 3D modeling.

This course is second in a three-course sequence that can lead students to obtain 3 college credits in **MCT1240: Engineering Drawing with Auto CAD**.

***Prerequisite:** Design & Drawing*

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## ADVANCED CADD / ARCHITECTURAL DRAWING

Grade: 10-12

Full Year / Potential Credit: 1\*

This course builds on the experiences from Design and Drawing and CADD. Three-dimensional modeling will be explored extensively in this course with Autodesk Inventor. Students will also enter the world of architectural drawing with the CADD software.

This course is third in a three-course sequence that can lead students to obtain 3 college credits in **MCT1240: Engineering Drawing with Auto CAD**; students must be juniors or seniors at the time enrollment in this class to qualify for college credit.

*\* Students will take Advanced CADD in the first semester of the year and will continue into Architectural Drawing for the second semester; these courses run consecutively with each course earning a potential ½ credit each.*

***Prerequisite:** Design & Drawing & CADD*

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## ARCHITECTURAL DRAWING II

Grade: 12

Full Year / Potential Credit: 1

This course is only for seniors that are taking the architectural drawing sequence. This course will utilize skills learned in the prerequisite courses. In this course, students will have to create a set of house plans. The students will have to create an electrical plan, plumbing plan, as well as all the floor plans. Students will have to review building codes as well as drawing practices.

***Prerequisite:** Design & Drawing, CADD, Advanced CADD; Prefer students to have Construction & Residential Structures also*

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## ROBOTICS / TRANSPORTATION

Grade: 10-12

Full Year / Potential Credit: 1\*

Science and technology relate to computer-controlled mechanical devices such as the automated tools commonly found on automobile assembly lines. In this class you will be required to utilize creative thinking skills in the design, construction, and programming of robots. The possibilities of the robotics in this class are endless. Lego and Vex robotics will be used to automate systems and design a robot. Students will gain a better understanding of the basic mechanical principles such as gears and pulleys and how they can be applied to transportation. Various projects will be assigned throughout the year which progressively build upon student's learning.

*\* Students will take Robotics in the first semester of the year and will continue into Transportation for the second semester; these courses run consecutively with each course earning a potential ½ credit each.*

*-This course is offered every other year.*

**Prerequisite:** Design & Drawing

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## ADVANCED ROBOTICS / MANUFACTURING

Grade: 11-12

Full Year / Potential Credit: 1\*

This class will build on all the concepts that were previously introduced in Robotics/Transportation. VEX robotic systems will be utilized in this class. Students will explore the automated concepts that VEX allows for. Various projects will be assigned throughout the school year which will progress in complexity. Manufacturing processes will be discussed as well as manufacturing theories. Students will create a small-scale mass production by the end of the year.

*\* Students will take Advanced Robotics in the first semester of the year and will continue into Manufacturing for the second semester; these courses run consecutively with each course earning a potential ½ credit each.*

*-This course is offered every other year.*

**Prerequisite:** Robotics/Transportation

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## CONSTRUCTION SYSTEMS / RESIDENTIAL STRUCTURES

Grade: 9-12

Full Year / Potential Credit: 1\*

This course focuses exclusively on residential construction. We will follow a timeline very similar to that of building a house. We start by talking about finance and home plans with the topics progressing in the same fashion in which the house would be built. The course focuses on specific skills such as wall framing, stair construction, and rafter layout.

*\* Students will take Construction Systems in the first semester of the year and will continue into Residential Structures for the second semester; these courses run consecutively with each course earning a potential ½ credit each.*

*-This course is offered every other year.*

**Prerequisite or Corequisite:** Design and Drawing

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## MATERIAL PROCESSING- WOODS / CREATIVITY AND INNOVATION IN WOOD

Grade: 9-12

Full Year / Potential Credit: 1\*

This course explores manipulation of raw materials into a finished product. Design principles are heavily incorporated into this course. Students will be introduced to hand tools, machine tools, computer numerically controlled (CNC) tools, fasteners, and finishing. In the second semester, students are charged with developing their own projects making use of principles learned in Material Processing. Students are encouraged to develop projects that relate to their everyday life or other courses.

*\* Students will take Materials Processing in the first semester of the year and will continue into Creativity & Innovation for the second semester; these courses run consecutively with each course earning a potential ½ credit each.*

*-This course is offered every other year.*

**Prerequisite or corequisite:** Design and Drawing

### FIVE-UNIT SEQUENCE IN TECHNOLOGY FOR AN ADVANCED REGENTS DIPLOMA

The following is a map of two potential pathways to use a five-unit sequence in Technology Education as a replacement to the Language Other than English (LOTE) requirement for the Advanced Regents Diploma for students at Pine Valley Central School. All students must start with Design & Drawing as their first course, next would be either CAD or Robotics, and the remainder of the courses can be taken in any order or concurrently, as available.

Unit (credit) Categories	PV Pathway Option #1	PV Pathway Option #2
Foundational Course <i>1 Unit</i>	Design & Drawing	Design & Drawing
Systems Course <i>½ Unit</i>	Construction	Construction
Career & Financial Management <i>½ Unit</i>	CFM	CFM
Electives <i>3 Units</i>	-CADD -Adv. CADD/Architectural Drawing -Engineering	-Robotics/Transportation -Adv. Robotics/Manufacturing -Engineering
Extra PV courses that fit into the pathway as electives, as needed	Architectural Drawing II Residential Structures Creativity & Innovation Materials Processing	

### CAREER AND TECHNICAL EDUCATION PROGRAM- COMPUTER-AIDED DESIGN

Students at Pine Valley have the opportunity to study and experience this specialized field in a hands-on instructional environment. Students will also benefit from work-based learning opportunities and supervised experiences.

This program requires the following 3 ½ credits:

- Design & Drawing (1 credit)
- CAD (1 credit)
- Advanced CAD (1 credit)
- Career & Financial Management (½ credit)
- PLUS work-based learning hours

At the completion of the course sequence, students will take a culminating exam. Successful completion of the program and passing exam scores will result in a Technical Endorsement on a student's diploma.

# DRIVER'S EDUCATION

## 5-Hour Pre-Licensing Course

The goals of the NY State's comprehensive statewide highway safety program are to prevent motor vehicle crashes, save lives and reduce the severity of injuries suffered in crashes. This pre-licensing course aims to address these goals and is committed to educating new drivers by providing them with information to help them drive safely. Students will learn the basic "rules of the road", safe driving principles, defensive driving techniques, and information about the effects of alcohol, drugs and drowsiness on driving. Students will learn safe driving skills and have the potential to improve their driving behavior by learning to share the road courteously and safely.

This course is optional, may not always be available, and requires a registration fee. Students will be notified in school when a course is available. This is **not** a credit-bearing course.

## Drivers Education Course

Driver and Traffic Safety education is intended to educate students on appropriate driving skills and habits as well as playing a responsible role in the highway transportation/safety system. This course includes classroom instruction as well as behind-the-wheel training and observation. Students who satisfactorily complete this course are eligible to receive the MV-285: Student Certificate of Completion.

This course is offered annually at PVHS during the summer. Registration is required and students will be notified in school prior to summer release when the course is open for registration. This is a credit-bearing course and will be recorded on student transcripts.

# CAREER & TECHNICAL EDUCATION

## What is CTE?

Career & Technical Education Programs are two-year programs offered to high school juniors and seniors by the Erie 2-Chautauqua-Cattaraugus BOCES in 11 different career areas. Pine Valley students enrolled in CTE programs spend part of the school day at the LoGuidice Center in Fredonia with students from other school districts studying and experiencing a specialized field of their choice in a hands-on instructional environment.

## How do students pursue this educational option?

Students are encouraged to start exploring the options available at BOCES starting in 9<sup>th</sup> grade. Students will work with their counselor and teachers to ensure they are on an academic path which prepares them for this educational opportunity. In 10<sup>th</sup> grade, students are allowed to visit the CTE programs at BOCES. After this visit, students will meet with their counselor to further discuss their goals and the educational path they wish to take. Students must be on an academically successful path and have their required credits in order to enroll in a CTE program.

## What program options are available?

For information about [CTE Programs at the LoGuidice Center](#), click the text. (If you are unable to access this link, brochures are available online at [www.e2ccb.org](http://www.e2ccb.org)).

- Automotive Body & Repair
- Automotive Technology
- Conservation/ Natural Resource Management
- Construction Technology
- Cosmetology
- Criminal Justice/ Crime Scene Investigation- Forensics
- Culinary Arts
- Health Careers
- Small Animal Science
- Sports Conditioning & Exercise Science
- Welding

Pine Valley offers the following programs in-house:

- Agricultural Science (see Agriculture section)
- Computer Aided Design (see Technology section)

# 2021-2022 MS COURSE REQUEST FORM

STUDENT NAME: \_\_\_\_\_

NEXT GRADE: \_\_\_\_\_

## CORE CURRICULUM

### ENGLISH

- English 7
- English 8

### SOCIAL STUDIES

- Social Studies 7
- Social Studies 8

### MATH

- Math 7
- Advanced Math 7
- Math 8
- Algebra I (R)

### SCIENCE

- Science 7
- Science 8
- Living Environment (R)

### LANGUAGE

- Spanish 7
- Spanish 8

### PHYSICAL EDUCATION

- Physical Education (every year)

### HEALTH

- Health (S)

## SPECIAL AREAS

### ART- ½ credit

- Art

### CAREER AND TECHNICAL

#### EDUCATION- 1 ¾ credits

- Technology
- Digital Literacy
- Computer Science
- Family & Consumer Sciences

### MUSIC- ½ credit

- MS Band
- MS Chorus
- MS Music

# 2021-2022 HS COURSE REQUEST FORM

STUDENT NAME: \_\_\_\_\_

NEXT GRADE: \_\_\_\_\_

## CORE CURRICULUM

### ENGLISH

- English 9
- English 10
- English 11 (R)
- English 12
- JCC English Composition 1510 & 1530
- JCC English Writing 1540 & AP Literature

### SOCIAL STUDIES

- Global Studies 9
- Global Studies 10 (R)
- US History 11 (R)
- AP US History (R)
- Government & Economics
- AP Government & Economics

### MATHEMATICS

- Algebra I- A
- Algebra I- B (R)
- Algebra I (R)
- Geometry (R)
- Algebra II (R)
- JCC College Algebra/Trig 1590 & JCC Pre-Calculus 1600
- JCC Calculus 1710 & 1720 (DL)
- General Applied Math
- Principles of Engineering

### SCIENCE

- Earth Science (R) & LAB
- Living Environment (R) & LAB
- Chemistry (R) & LAB
- Physics (R) & LAB
- JCC Principles of Biology I 1570 & LAB
- Forensic Science
- Everyday Science
- Principles of Engineering
- Anatomy & Physiology

### LANGUAGE

- Spanish I
- Spanish II
- Spanish III
- Spanish IV

### PHYSICAL EDUCATION

- Physical Education

### HEALTH

- Health

### ART & MUSIC

- Studio Art
- Design & Drawing
- Band
- Chorus

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### BOCES CAREER & TECH PROGRAMS

*(Junior & Senior Years only)*

- Automotive Technology
- Automotive Body & Repair
- Conservation
- Construction Technology
- Cosmetology
- Criminal Justice
- Culinary Arts
- Health Careers
- Small Animal Science
- Sports Conditioning & Exercise Science
- Welding

*ELECTIVES ON THE REVERSE SIDE*

## ELECTIVE OPTIONS

Course	Category	Credit	Other Information
Creative Writing	English	0.5	
Journalism	English	0.5	
Communications in the Modern World	English	0.5	
History of Sports	Social Studies	0.5	
History of War	Social Studies	0.5	
Human Rights	Social Studies	0.5	
JCC Problem Solving & Statistics	Math	0.5 each	Consecutive enrollment
Forensic Science	Science		
Every Day Science	Science		
Anatomy & Physiology	Science		
Spanish 4	Language		
Health & Wellness	Personal Health	0.5	
Personal Training	Personal Health	0.5	
Aquatic/Water Sports	Personal Health	0.5	
Drawing & Painting	Visual Art		
Digital Media & Film	Visual Art		
AP Studio Art: 2D Design	Visual Art		Seniors Only
Music Theory	Performing Art		
Musical Theatre & Stagecraft	Performing Art	0.5	
History of Rock & Roll	Music	0.5	
Chef's	FACS		
International Cooking & Baking	FACS		
Child Development & Child Care	FACS		
Career & Financial Management (CFM)	FACS / Business	0.5	
Animal Science I (DL)	Agriculture / Science		
Plant & Soil Science	Agriculture / Science		
Agricultural Mechanics (Welding I)	Agriculture		
Welding II	Agriculture		
Agricultural Entrepreneurship	Agriculture		
Principles of Engineering	Agriculture / Tech.		
Design & Drawing	Technology		
Computer-Aided Design & Drafting	Technology		
Robotics & Transportation	Technology		
Advanced Robotics & Manufacturing	Technology		
Material Processing & Creativity/Innovation in Woods	Architecture	0.5 each	Consecutive enrollment