Hanover High School

Educational Planning Guide 2020 - 2021

Revised 2/20/2020

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GENERAL INFORMATION

NOTES TO STUDENTS AND PARENTS

This Educational Planning Guide is designed to assist you in planning for a successful high school experience. The selection of your courses is an important responsibility that will prepare you to meet your educational goals. Courses offered are determined by student selection and enrollment. The administration retains the right of final approval for courses offered to our students.

Please give careful consideration to the courses you select for the upcoming school year. Read this Educational Planning Guide, review the high school graduation requirements, consider the courses that we offer, and compare this information with your current and post secondary academic goals and objectives. Work with your parents, guidance counselor, teachers, and administrators to select courses that best fit your career/educational goals. After subjects have been chosen, carefully consider the appropriate level of courses. Choose the level that best matches your personal learning style and career/educational objectives.

Introductory (Level 1) –Topics are introduced at an exploratory level. These courses often use an applied/hands-on approach to instruction.

Academic (Level 2) –These courses explore theoretical concepts as well as their applications.

Honors (Level 3) – These courses are designed for those students who meet the specific Honors criteria and who desire a highly rigorous course. These courses provide students with preparation for higher education at a technical school, four-year college or university.

Advanced Placement (Level 4) – designed to meet the specific College Board criteria as equivalent to college level credit courses.

Dual Enrollment – Pennsylvania's Dual Enrollment program allows school districts to partner with colleges and universities to offer high school juniors and seniors the chance to earn college credit while completing their high school requirements. Students have the opportunity to take college courses on campus at a reduced tuition rate. These courses are offered in cooperation with post-secondary institutions such as Harrisburg Area Community College, Penn State York, and York College. Please see the school counselor for more information.

SCHEDULE CHANGES

Since teaching assignments are based upon the selections made by students, changes to student schedules will only be made based on conflicts or administrative error.

Parents and students should also know that dropping courses is strongly discouraged and permitted only under the following conditions:

1. The student faces extenuating circumstances expressed by parents in writing.
2. The teacher and guidance counselor recommend the action.
3. The student maintains the minimum number of credits required.
4. The principal approves the change in writing.

Schedule changes may occur during the first three (3) weeks of each semester for semester-long courses and the first three (3) weeks of school for year-long courses. **After four weeks, no schedule changes will be made unless extenuating circumstances exist or upon the recommendation of the principal**. Courses dropped with approval of the principal will not appear on a student's transcript if the course is dropped before the end of the fourth week. Courses dropped after that time will be recorded on the student's permanent transcript with a grade of Withdraw Passing (WP) or Withdraw Failing (WF). "WF" will affect Honor Roll for that marking period. A "WP" or "WF" will not affect grade point average.

GRADUATION REQUIREMENTS

In order to graduate, a student must successfully complete a total minimum of 26 credits. Every student in grades 9-11 must be enrolled in no fewer than 7 credits per year. Students in grade twelve must be enrolled in at least 4 credits during the academic year. Students are permitted on campus only during scheduled class periods. Additionally, a fourth year student must enroll in all courses necessary to meet graduation requirements.

The principal has the authority to grant credit for courses taken at the college level or related educational experiences provided the student has been given prior approval to participate in such a program for credit. *(These courses and experiences must be provided at the parent's expense. The school is in no way liable for educational costs associated with college courses or other programs offered within or outside of the regular high school curriculum.)* Credit may be awarded to regularly enrolled students who successfully complete an evaluation that assesses mastery of a planned course.

Subject Area	**Credits**
English	4.0
Social Studies	3.0
Mathematics	3.0
Science	3.0
Health	1.0
Physical Education	2.0
*Electives	10.0
*Math, Science, Social Studies STEAM elective	(1)
*Music, Art, STEAM, FCD, Tech Ed elective (	(1)
Total Required	**26.0**

*One additional credit in Mathematics, Social Studies, or Science is required, and one credit in Music, Art, STEAM, FCD or Tech Ed is required as elective credits.

- Transcript review for graduation is afforded to those students having difficulty attaining the academic standards if the student has earned the required 26 credits with 13 credits successfully completed in the core areas.
- Beginning with the class of 2022, students must score proficient or advanced on the Literature, Biology and Algebra 1 Keystone Exams. The Pennsylvania Department of Education (PDE) is currently re-examining the current system of assessment and is developing the requirements for graduation as it relates to the Keystone exams. Hanover High school continues its commitment to providing students with quality instruction in all areas, and will keep students and families informed of legislation regarding the Keystone Exams.
- 6 credits are required to be a sophomore
- 12 credits are required to be a junior
- 19 credits are required to be a senior
- The fourth year of high school shall not be required for graduation if a student has completed all requirements for graduation.

RECOMMENDATIONS FOR THE COLLEGE BOUND

It is important to note that students planning to complete a four-year college program should enroll in a strong academic high school curriculum. This curriculum should include at least:

- English - 4 years (Honors English and AP English preferred by most colleges and required by many)
- Social Studies - 3 years (AP U.S. History and AP European History preferred for admission into competitive colleges)
- Science - 3 years, including at least 1 life science and 1 physical science. If majoring in a science, medical, or technical field, 4 science credits are recommended, especially one second year course such as: AP Chemistry, AP Physics, or AP Biology.
- Math – 3-4 years of academic math (Algebra I, Algebra II, Geometry, Pre-Calculus, Statistics, AP Statistics or AP Calculus)
- World Language – At least 2 years of the same language (AP French and AP Spanish preferred)

Please keep in mind that these are minimum requirements. Students seeking admission to highly selective colleges are encouraged to choose the most rigorous courses available.

ADVANCED PLACEMENT

One of the most helpful items for college admission for a student is successful achievement in high level courses. Advanced Placement or AP is a curriculum developed by The College Board to be taught in high schools at a college level. The teacher instructs on the highest level and follows the curriculum as designed by The College Board. Hanover High School currently offers 15 AP courses for our students.

Students enrolled in AP courses may, but are not required to, take the Advanced Placement exams. Some colleges award credit with scores of 4 or 5 on the exam, and a few may accept a score of 3. Some colleges advance the student to the next level of a subject. Check with the guidance counselor to obtain specific information about the colleges of choice.

ONLINE COURSES

Online course offerings are available through our cyber school and may be taken under certain circumstances. Contact the Guidance department to obtain specific information regarding cyber courses.

HYBRID/BLENDED COURSES

Hybrid courses contain web-based learning activities that complement face-to-face instruction, and "seat time" is reduced, allowing more flexibility in how students choose to use their learning time. The instructors of the hybrid courses determine which activities can be completed online, and which activities students must complete face-to-face in the classroom. For example, students who are caught up and have completed all online assignments, and have maintained a minimum course grade of 80%, may be assigned to the classroom for only 3 days of the 6 day cycle. The other 3 days can be used to work on projects, get extra help from a teacher in a different class, etc. Students are free to take advantage of all of the opportunities HHS has to offer

NCAA ELIGIBILITY

Students planning to play Division I or Division II intercollegiate sports after high school will be required to be certified by the NCAA. In order to be certified by the NCAA, students are required, while in high school, to earn 13 credits in core courses (academic math, science, social studies, English, world language, and computer courses.) Some of the requirements are for specific courses, and students must earn minimum grade point averages (GPAs) in these courses. Students must also earn minimum scores on the SAT or ACT. If you think you might be interested in playing sports in college, discuss this with your guidance counselor as soon as possible, preferably in your freshman year. Copies of these requirements can be obtained in the guidance office.

AWARDING CREDITS

Students in the high school earn credits toward graduation beginning in grade nine (9). Credits are earned through the successful completion of course requirements offered during the regular school year, or credits transferred from another school. Credits earned at the high school by Hanover Middle School students will be transcripted, but not calculated into the G.P.A. Credits may also be earned in an approved summer school, Cyber School, or through Independent Study. Credits earned in summer school are for credit recovery only, not course advancement.

Independent Study is used primarily for student enrichment, but may also be used to assist in credit deficiencies in unusual circumstances. Students will be awarded credit for the successful completion of an Independent Study course only under the following circumstances:

- The student, the student's parents, the student's counselor, and the teacher of the course approve the enrollment in the independent study course.

- Independent study will only be approved for those courses that are offered in the Educational Planning Guide. Independent study for these classes will only be considered if
    A. The course is not being offered due to low enrollment.
    B. The course cannot be scheduled due to a conflict with another required course.
- The independent study course is an approved course of instruction that is equivalent in credit value to regular classroom courses of similar content.
- The independent study courses will receive a grade of O (Outstanding), S (Satisfactory), or U (Unsatisfactory).
- The request to participate in a course is submitted in writing to the principal before the start of the school year. Requests for independent study courses will not be approved after the school year begins, except in extenuating circumstances.
- Independent study will not be used for students who have dropped a course earlier in the semester or school year with a "WF" grade.
- Written requests for independent study must include a copy of the curriculum and a scope and sequence of instruction. Approval will not be granted without these documents.

GRADING SYSTEM

The grading system in the high school is a rigorous system that includes percentages (%) for all academic classes except Physical Education, internships, and Keystone Preparation courses. These classes/requirements have alphabetical ratings. The grading system in the high school includes the following:

Numeric Value	Grading Scale	GPA	Quality of Work
90 to 100%	97-100	4.33	Superior quality
	93-96	4.00	
	90-92	3.67	
80 to 89%	87-89	3.33	Above average quality
	83-86	3.00	
	80-82	2.67	
70 to 79%	77-79	2.33	Average quality
	73-76	2.00	
	70-72	1.67	
65 to 69%	67-69	1.33	Below average
	65-66	1.00	
Below 65%	0-64	0.00	Failing

Alphabetical Value	Quality of Work
O	Outstanding quality
S	Satisfactory quality (minimum passing)
U	Unsatisfactory quality (no credit awarded)
WF	Withdraw Failing (no credit awarded)
WP	Withdraw Passing (credit up to the time of withdrawal awarded)
I	*Incomplete work

- Changes to a failing grade if all work is not completed after two weeks unless granted an extension by the principal.

COURSE WEIGHTING

Course weights are assigned to all courses that are graded on a percentage scale. Course weights have the purpose of denoting rigor on transcripts and calculating grade point averages (GPA). Course levels are noted in each course description found in this Educational Planning Guide.

The following weights apply to the class of 2021:

Level	Descriptor	Weight
Level 1	Introductory	1.0
Level 2	Academic	1.10
Level 3	Honors	1.20
Level 4	Advanced Placement (AP)	1.35

The following weights apply to the class of 2022 and beyond:

Level	Descriptor	Weight
Level 1	Introductory	1
Level 2	Academic	1.1
Level 3	Honors	1.2
Level 4	Advanced Placement (AP)	1.3

Sample Unweighted GPA

Course	Grade	4 pt scale	Multiply	Credit	Product
Honors English	90	3.67	x	1	3.67
AP US History	85	3.0	x	1	3.0
Honors Geom.	95	4.0	x	1	4.0
Academic Chem	90	3.67	x	1	3.67
Spanish II	80	2.67	x	1	2.67
Metals I	95	4.0	x	1	4.0
Health II	85	3.0	x	0.5	1.5
Psychology	88	3.33	x	0.5	1.66
				7	24.17

Unweighted GPA: 24.17÷ 7 = 3.45

Sample Weighted GPA

Course	Grade	4 pt scale		Credit		Weight	Product
Honors English	90	3.67	x	1	x	1.2	4.404
AP US History	85	3.0	x	1	x	1.3	3.9
Honors Geom.	95	4.0	x	1	x	1.2	4.8
Academic Chem	90	3.67	x	1	x	1.1	4.037
Spanish II	80	2.67	x	1	x	1.00	2.67
Metals I	95	4.0	x	1	x	1.00	4.0
Health II	85	3.0	x	0.5	x	1.00	1.5
Psychology	88	3.33	x	0.5	x	1.1	1.8315
				7			27.1425

Weighted GPA: 27.1425 ÷ 7 = 3.8775

CLASS RANK

In addition to maintaining records on student grade point averages, students are ranked according to their position in relationship to other members of their class. Calculations for class rank are as follows:

- The final average for each course (converted to 4 point scale) **X** credit earned **X** course level factor (weight).
- Each course point total (as calculated above) is added for a cumulative total, which is then divided by credits attempted.
- Courses receiving failing grades do not accumulate points, but do count as a credit attempted.
- Courses graded as Outstanding (O), Satisfactory (S), or Unsatisfactory (U) will not count toward rank or GPA.
- Credit recovery courses will not be used in the calculation of GPA & class rank.

HONOR ROLL

Academic recognition is given to students through our Honor Roll. Both Honor Rolls are published and posted in the high school each marking period.

First Honors

- Maintain a 90% average or higher
- No more than one grade below an 80%
- No grade less than 70%
- Adequate progress on cyber courses

Second Honors

- Maintain an 80% average or higher
- No more than two grades below an 80%
- No grades less than 70%
- Adequate progress on cyber courses

PLACEMENT FOR THE HONORS/ADVANCED PLACEMENT COURSES

Students are eligible for placement in Honors/Advanced Placement courses following a review of academic records. Considerations include academic achievement, and recommendations from a teacher, counselor, or administrator. Students desiring to take AP courses need to be highly motivated and should have experienced success in pre-requisite courses. Summer assignments are required for participation in Honors and AP courses.

SPECIAL CERTIFICATIONS AND CREDENTIALS

Hanover High School offers nine Career and College based programs that provide students the opportunity to earn one or more certifications/credentials while earning high school credit through hands-on learning experiences:

- National Occupational Competency Testing Institute (NOCTI) Certification
- National Institute for Metalworking Skills (NIMS) Certification;
- Harrisburg Area Community College (HACC) College:
    - Dual Enrollment; College in the High School; and Articulation Agreement
- Harrisburg University: Articulation Agreement
- Academy for Media Production (AMP): Articulation Agreement
- Hanover Area Micro-Credentialing

Construction Technology Program

- Student completing course progression can earn local Microcredential in Construction Technology

Welding Technology Program:

- Pennsylvania Department of Education – Career and Technical Educational Approved Program of Study (CIP Code: 48.0508)
- Two year program; 720-hours of welding instruction
- NOCTI Welding Certification
- OSHA 10 Training & Certification (12th grade)

Precision Machining Technology Program:

- Pennsylvania Department of Labor & Industry Approved
- Hanover Area Pre-Apprenticeship Program
- Two year program; Over 500 hours of machining instruction
- Nationally recognized NIMS Credentials
- OSHA 10 Training & Certification (12th grade)

Diversified Occupations: Job-Seeking/ Changing Skills:

- Pennsylvania Department of Education – Career and Technical Educational Approved Program of Study (CIP Code: 32.0105)
- One year program; Theory Course and 540-hours of workplace experience
- NOCTI 21st Century Skills for Workplace Success
- HACC-Gettysburg College in the High School: 3-credit Foundational Studies 101
- OSHA 10 Training & Certification

Mechatronics Program:

- HACC-Gettysburg Mechatronics Certification Program

- Successful students who enter HACC Mechatronics Program will have earned 8-college credits
- Interested Hanover High School students will earn first priority spots into HACC Mechatronics Program
- OSHA 10 Training & Certification (12th grade)

Computer Science/ Gaming Program:

- Curriculum established in consultation with Harrisburg University
- Student completing course progression can earn local Microcredential in Computer Science
- Students can earn credits toward a degree from Harrisburg University while still in high school

Music Technology Certification Program:

- Curriculum established in Consultation with Academy for Media Production (AMP)
- Student completing course progression can earn local Microcredential in Music Technology

Hanover Area Culinary Program – Micro-Credential:

- Curriculum established in consultation with local businesses in the field of culinary arts
- Student completing course progression can earn local Microcredential in Culinary Arts
- OSHA 10 Training & Certification

Early Childhood Education Certification Program

- Curriculum established in consultation with local businesses in the field
- One –two year program: 100 hours of workplace experience
- Student completing program can earn local Microcredential in Early Childhood Education
- OSHA 10 Training & Certification (12th grade)

Nondiscrimination Statement for the Welding and Diversified Occupations Programs: The Hanover Public School District is an equal opportunity institution and will not discriminate on the basis of race, color, national origin, sex, age or disability in admission to its programs, services, or activities, in access to them, in the treatment of individuals, or in any aspect of their operations, including its employment practices, as required by Title VI, Title IX, and Section 504. The lack of English skills shall not be a barrier to admission or participation in the districts activities and programs. The district offers a CTE program in Welding and Diversified Occupations. For information regarding civil rights or grievance procedure, contact Dr. Susan Seiple, Title IX Coordinator, sseiple@hanoverpublic.org or 717-637-9000.

HANOVER HIGH SCHOOL STEAM ACADEMY

Hanover High School is proud to offer a STEAM Academy, an innovative program for talented Hanover High School students with an interest in the fields of ***Science, Technology, Engineering, Art, and Mathematics.*** Student enrolled in STEAM Academy courses receive an individualized, Project-Based Learning experience supported by the intense use of state-of-the-art technology as a learning tool.

Students also focus on developing the critical 21st Century workplace skills known as the 4 C's:

Collaboration – Working together to reach a goal
Creativity – Trying new approaches to get things done
Communication – Sharing thoughts, ideas, questions and solutions
Critical Thinking – Looking at problems in a new way

Courses offered through the STEAM Academy are rigorous electives that require strong work habits and a commitment to learning. Students who enroll in the introductory level courses should be committed to completing the course progressions. Teacher recommendations will be required to enroll in any STEAM Academy courses.

The Hanover High School STEAM Academy offers courses in the following:

Entertainment Technology
AP Computer Science
Mechatronics/ Robotics
Biotechnology
Music Technology
Engineering and Design
Creators and Influencers
Drone Piloting

All courses offered in the STEAM Academy are taught using Project Based Learning. Project Based Learning is a teaching method in which students gain knowledge and skills by working for an extended period of time to investigate and respond to an engaging and complex question, problem, or challenge.

COURSE OFFERINGS

Course	Grade	Credits
ART		
Foundations of Art I	9, 10	1
Foundations of Art II	10, 11, 12	1
Art III	11, 12	1
AP Studio Art I (Drawing or 2D Design)	11, 12,	1
AP Studio Art II (Drawing or 2D Design)	11, 12	1
2D Design (Graphic Arts)	10, 11, 12	0.5
2D Design II (Graphic Arts)	10, 11, 12	0.5
Yearbook Design	10, 11, 12	1
3D Modeling I	9, 10, 11	0.5
3D Modeling II	9, 10, 11	0.5
Art of Camera Phone Photography	10, 11, 12	0.5
Creative Expressions in 3D	10, 11, 12	0.5
BUSINESS		
Accounting I	9, 10, 11, 12	1
Accounting II	10, 11, 12	1
CAREER AND COLLEGE PROGRAM COURSES		
Diversified Occupations Theory Course - NOCTI	12	1
Diversified Occupations - Practical	12	3 - 4
YCAL Pre-Apprenticeship Program– Practical	12	2 -3
Internship Program	11, 12	1-3
Tutoring, Counseling, Assisting	11, 12	1-2
FAMILY AND CONSUMER SCIENCE		
Culinary Arts I	9, 10, 11	1
Culinary Arts II	10, 11, 12	1
Café and Restaurant Management	11, 12	0.5
Hanover Shoe Farms Cafe	9, 10, 11, 12	0.5
Baking and Pastry Production	11, 12	0.5
Exploring Entrees	11, 12	0.5
Early Childhood Development and Education	11, 12	1
HEALTH AND PHYSICAL EDUCATION		
Health Education I	9	0.5
Health Education II	11	0.5
Cyber Health II		
Physical Education	9, 10, 11, 12	0.5

LANGUAGE ARTS		
Academic English I	9	1
Honors English I	9	1
Academic English lI	10	1
Honors English II	10	1
Academic English III	11	1
AP English Language and Composition	11	1
Academic English IV	12	1
AP English Literature and Composition	12	1
Academic Literacy	9	1
Modern Communications	10, 11, 12	0.5
Creative Writing (Includes Screenwriting)	10, 11, 12	0.5
Creative Writing II	10, 11, 12	0.5
English Language Development (ELD I, II, III/IV)	9, 10, 11, 12	1-2
MATHEMATICS		
Algebra I Block	9	2
Academic Algebra 1	9	1
Academic Algebra II	10, 11, 12	1
Honors Algebra II	10, 11	1
Academic Geometry	9, 10, 11, 12	1
Honors Geometry	9, 10, 11	1
Real World Math	11, 12	1
Academic Pre-Calculus	11, 12	1
Honors Pre-Calculus	11, 12	1
AP Calculus AB	12	1
Statistics	11, 12	1
AP Statistics	12	1
MUSIC		
Band	9, 10, 11, 12	0.5
Concert Choir	9, 10, 11, 12	0.5
Women's Chorus	9, 10, 11, 12	0.5
Music Theory	10, 11, 12	1
AP Music Theory	11, 12	1
Orchestra	9, 10, 11, 12	0.5
Beginning Strings Class	9, 10, 11, 12	0.5
Voice Class	9, 10, 11, 12	0.5
Guitar I	9, 10, 11, 12	0.5
Guitar II	9, 10, 11, 12	0.5
Music in the Theater	9, 10, 11, 12	0.5
Music Technology I, II, III	9, 10, 11, 12	0.5

SCIENCE		
Academic Biology	9, 10	1
AP Biology	10, 11, 12	1
Keystone Biology 2	10, 11	1
Biotechnology 	11, 12	1
Academic Chemistry	10, 11, 12	1
Honors Chemistry	10, 11, 12	1
AP Chemistry	10, 11, 12	1
Science Matters	10, 11, 12	1
Environmental Science	11, 12	1
Academic Physics	10, 11 12	1
Honors Physics	10, 11, 12	1
AP Physics	11, 12	1
Anatomy	11, 12	1
SOCIAL STUDIES		
Foundations of America	9	1
American History	10	1
World History	11, 12	1
AP European History	11, 12	1
AP US History	10, 11, 12	1
American Government	11, 12	0.5
Economics	11, 12	0.5
Humanities	11, 12	1
Psychology	11, 12	0.5
Sociology	11, 12	0.5
Reel History	11, 12	0.5
STEAM ACADEMY 		
Unity 3D Programming I, II, III	9, 10, 11, 12	0.5
Creative Writing (Screenwriting)	10, 11, 12	0.5 (Eng credit)
Game Design	9, 10, 11, 12	0.5
3D Modeling I	9, 10, 11, 12	0.5 (Art credit)
3D Modeling II	9, 10, 11, 12	0.5 (Art credit)
Virtual Reality	11, 12	0.5
STEAM Studio (Offered in 2020-2021)	10, 11, 12	0.5
AP Computer Science Principles	9, 10, 11, 12	1
Drone Piloting	11, 12	0.5
Creators and Influencers	10, 11, 12	0.5
ILC Spark Squad	9, 10, 11, 12	0.5 / 1
Filmmaking	9, 10, 11, 12	0.5 / 1

TECHNOLOGY EDUCATION		
Introduction to Design and Engineering	9, 10, 11, 12	0.5
Design and Engineering Project	9, 10, 11, 12	0.5
Metals I	9, 10, 11	1
Metals II	10, 11, 12	1
Metals III	11, 12	1
NOCTI WELDING	11, 12	3
NIMS Machining Pre-Apprenticeship	11, 12	2
Construction Technology I	9, 10, 11,	1
Construction Technology II, III	10, 11, 12	1
Mechatronics/Robotics I	10, 11, 12	0.5
Mechatronics/Robotics II	10, 11, 12	0.5
WORLD LANGUAGES		
French I	9, 10, 11	1
French II	10, 11, 12	1
French III	11, 12	1
AP French	12	1
Spanish I	9, 10, 11	1
Spanish II	9, 10, 11, 12	1
Spanish III	10, 11, 12	1
Spanish IV	11, 12	1
AP Spanish	11, 12	1

ART

Course: **Foundations of Art I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10
Prerequisites: None

Foundations of Art I is a general art class, introducing students to various techniques, processes, and media. Students will become familiar with classroom art procedures and basic art skills.
The primary technical focus will be on drawing, which is fundamental to all areas of art. Drawing can be learned. Students will increase their ability to draw realistically. Drawings in many different media will be produced. Subjects will include still life, portraits, figures, landscapes, and architecture. Students will also be given an introduction to color, perspective, printmaking and ceramics.

Art history will be interwoven into some lessons, so that a student may start to understand the relevance of time and culture to the art that it produced. By the end of the course, students will be familiar with the Elements of Art and how to use them in original works of art.

Course: **Foundations of Art II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Foundations of Art I

Students in Foundations of Art II should arrive very prepared to learn the Principles of Design and create original works of art. Even though this course has a strong studio production emphasis, students also study aesthetics, history, and criticism. Students will complete self-assessment worksheets after each major project. Through questionnaires, they will evaluate their work in areas such as: creativity, composition, effort and presentation.

Students will build the skills that they developed in Art I, but there will be more of an emphasis on creativity. Students will be exposed to a variety of two-dimensional drawing and painting media. Media may include value pencils, pen and ink, colored pencil, charcoal, marker, and scratchboard, watercolor painting, acrylic painting and pastels. Three-dimensional skills will also be developed through an extensive experience with clay.

Course: **Art III** **Full Year** **1 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Foundations of Art II

Students should arrive in Art III with a substantial background of technique, skill and theory. Students will be presented with projects that combine many of the Principles and Elements of Design. Having a strong knowledge of the Elements of Art, the focus will be learning the Principles of Design and applying them to well planned and balanced compositions.
Additional media such as professional pastels, paste papers, and collage will be offered. Students will

also investigate self-portraits, figure studies, and still lifes. During Foundations of Art II, students will be developing a personal look to their work. Students will also be taught how to professionally mat their own work. For those students desiring to continue with a career in art, this course is very important. Students with such interests will, with the assistance of the instructor, begin to develop a professional portfolio.

Course: **AP Studio Art 1 and II** **Full Year** **1 credit** **(Level 4)**
Grades: 11, 12

Prerequisites: Art I, Art II, Teacher Recommendation - See AP Placement, page 10

AP 2-D Design is a year-long course offered to students who are seriously interested in the practical experience of art and desire to work towards mastery of concepts, processes, and the execution of original ideas. AP 2- Design is based on building a portfolio of original art work that showcases high-quality art, a concentration or theme, and "breadth"/or range of experiences in art. AP 2-D Design does not require a written exam or test, but rather a submission of a portfolio toward the end of the course which will be scored by the College Board. Through the building of this portfolio, students will experience a variety of art mediums, concepts, processes designed to support them in finding their artistic "voice". The 2-D design portfolio is intended to address purposeful decision-making about using the elements and principles of art in an integrative way. In the 2-D design portfolio, the student will demonstrate their understanding of design principles as applied to a two-dimensional surface, whether physical or virtual. The principles of design (unity/variety, balance, emphasis, contrast, rhythm, repetition, proportion/scale, and figure/ground relationship) can be articulated through the visual elements (line, shape, color, value, texture, space). Any two-dimensional process or medium may be submitted, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, fashion design, illustration, painting, printmaking, etc. Video clips, DVDs, CDs and three-dimensional works may not be submitted. However, still images from videos or films are accepted.

AP Drawing is a year-long course offered to students who are seriously interested in the practical experience of art and desire to work towards mastery of concepts, processes and the execution of original ideas. AP Drawing is based on building a portfolio of original art work that showcases high-quality art, a concentration or theme, and "breadth"/or range of experiences in art. AP Drawing does not require a written exam or test, but rather a submission of a portfolio toward the end of the course which will be scored by the College Board. Through the building of this portfolio, students will experience a variety of art mediums, concepts, processes designed to support them in finding their artistic "voice". The Drawing portfolio is intended to address a wide range of approaches and media. Line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth and mark-making are drawing issues that can be addressed through a variety of means, which could include painting, printmaking, mixed media, etc. Abstract, observational and inventive works may be submitted. The range of marks used to make drawings, the arrangement of the marks and the materials used to make the marks are endless. Any work submitted in the Drawing portfolio that incorporates digital or photographic processes must address drawing issues such as those above, as well as mark-making.

Course: **2D Design I (Graphic Arts)** **Semester** **0.5 credit** **(Level 1)**
Grades: 10, 11, 12
Prerequisites: Foundations of Art I

Have you ever wondered what it would be like to work as a graphic designer? In this course you will learn the history of graphic design and begin to understand how art can be used as a form of visual communication. Color theory along with the Elements and Principles of Design will be a main focus as you create 2-Dimensional projects using both traditional art media and current computer technology. You will learn the basics of Adobe Photoshop, Illustrator & InDesign.

Course: **2D Design II (Graphic Arts)** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Foundations of Art I

Students who have successfully completed the Graphics Art & Design I class and wish to further develop skills on Adobe CC should sign up for this class. Adobe Suites is the software that the majority of design firms utilize. Having knowledge and skills in this software will be a plus to students who wish to pursue a degree in any of the associated fields.

Graphics I had a focus on Photoshop, Graphics II will continue where we left off and do more work with Illustrator. Photoshop works with altering images and Illustrator is the program used to create the images from a blank page. Illustrator is more challenging than Photoshop. As in Graphics I, students will be taught the skills and tool bar unique to Illustrator, and then use their skills to complete more complex projects.

Course: **Yearbook Design** **Year** **1 credit** **(Level 1)**
Grades: 10, 11, 12
Prerequisites: None

In this course you will gain skills in one or more of the following areas: page design, advanced publishing techniques, copy writing, editing and photography while producing a creative, innovative yearbook which records school memories and events. Participants gain useful, real world skills in time management, marketing, teamwork, and design principles.

Course: **3D Modeling I** **Semester** **0.5 Art credit** **(Level 2)**
Grades: 9, 10, 11
Prerequisites: Teacher recommendation

Learn the 3D modeling techniques used in movies, visual effects, video games, cartoons, commercials, and animation! Using 3DS Max, you will work in this highly skill-based art form to manipulate and sculpt pure imagination into substantial forms.

Course: **3D Modeling II**  **Semester 0.5 Art credit (Level 3)**
Grades: 9, 10, 11
Prerequisites: 3D Modeling I, Teacher recommendation

This course is a continuation of 3D modeling I. By the end of the course, you will have developed a portfolio of original projects that you can use when applying for an internship, higher education, or a job.

Course: **The Art of Camera Phone Photography** **Semester 0.5 credits (Level 1)**
Grades: 10, 11, 12
Prerequisites: None

Nearly all of us carry a very powerful camera in our pocket or purse. Wouldn't it be fun to learn to use 2/23/2018 22 your camera phone to its fullest potential? In this course you will learn the basic principles of photography, basic photo manipulation and editing, managing, storing and sharing your creative work. Using your camera phone, technology, apps, and your developing artistic sense, you will capture and edit hundreds of original images to add to your personal portfolio.

Course: **Creative Expression in 3D** **Semester 0.5 credits (Level 1)**
Grades: 10, 11, 12
Prerequisites: None

Do you like to work with your hands? Would you like to use your creativity to create works of art that are three-dimensional? This course will help you understand objects as well as the space around them. Using the Elements of Art and Principles of Design, you will create a variety of sculptural, functional, and "wearable" 3-D works using different materials and processes.

BUSINESS

Course: **Accounting I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

This course provides an opportunity for the student to learn the fundamentals of double entry accounting systems as used in most businesses. The orderly procedures of analyzing and recording information about transactions are discussed. This one-year course addresses the meaning and purpose of accounting, including the balance sheet, the income statement, books of original entry, adjusting and closing entries, controlling accounts, and general and subsidiary ledgers, as well as basic business practices and procedures.

Course: **Accounting II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Accounting I

The Accounting II course is intended to familiarize the student with basic accounting fundamentals that will be developed to the point of enabling the student to maintain sets of records for small business. The course also serves as an entry-level course that will supply knowledge of financial accounting for those students electing to work toward business careers in college. We will take a look at special journals and their use, will spend time making adjustments to accounting records, and will do some analysis of financial statements. We then discuss topics involving departmentalization, bad debts, depreciation, accruals, prepaid expenses, partnerships, corporations, and advanced financial statements.

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CARREER AND COLLEGE PROGRAM COURSES

SCHOOL – TO – WORK EXPERIENCES
One of the easiest and most effective ways to expose students to real world career opportunities is to allow students to follow, or shadow, workers in a variety of careers. There are several types of job shadowing/career exploration experiences coordinated and supported by the high school. There are job shadowing experiences (typically one day, non-credit), career exploration programs supported by the York County Alliance for Learning (YCAL) providing one-day immersion programs as well as monthly career mentoring in a wide variety of pathways (http://ycal.us/mentoring-program), and credit programs offered in the high school, detailed below. Student attendance and an interview process may be used as a measure for acceptance or denial into one or any of the programs. Students will be responsible for their own transportation and cost for programs when required.

Course: **Diversified Occupations Theory Course - NOCTI** **Full Year 1 credit (Level 1)**
Grades: 12
Prerequisites: None

The Diversified Occupations Theory Course – NOCTI combines school-based, classroom study in work orientation (job readiness, employability skills, career objective development, and consumer skills) with work-based, practical, on-the-job career preparation at an approved training site in government, business, or industry. The D.O. Theory Course – NOCTI is a requirement and critical component for students who are seeking work experience and training during senior year.

This program involves a planned partnership with specified connecting activities and responsibilities among the student-learner, parents, school, and employer. This program is a recognized technical preparation program by the Pennsylvania Department of Education. Students enrolled in Diversified Occupations are eligible to take the National Occupational Competency Testing Institute (NOCTI) 21st Century Skills Exam and earn a national certification.

Additionally, students enrolled in the D.O. Theory Course will have the option of taking a HACC College in the High School Course (Foundational Studies 100), and earning 3-college credits at a reduced cost per credit. Information will be provided to all students who enroll in this course.

Course: **Diversified Occupations - Practical** **Full Year** **3 - 4 credits (Level 1)**
Grades: 12
Prerequisites: Diversified Occupations Theory Course

All students gaining credit for work experience must be enrolled in the Diversified Occupations Theory Course. Students earning credit for work experience will be eligible for work-release, during the school

day. Students must have a 15 hour-a-week job at an approved location, completed all paperwork (Training Agreement and Training Plan) to verify the cooperative relationship between the school and the employer, and employers will obtain all mandatory state clearances. Students must also maintain satisfactory school attendance and passing grades in order to remain in the Diversified Occupations Program.

Course: **YCAL Pre-Apprenticeship Program – Practical** **Year** **2 - 3 credits** **(Level 1)**
Grades: 12
Prerequisites: 2-credits of Technology Education Courses/Teacher Recommendation

Upon successful completion of a minimum of 2-credits within the Technology Education Department, seniors will have the opportunity to participate in a hands-on learning experience with Kinsley Construction/Kinsley Education Center to prepare them for entering a full construction apprenticeship program after graduation. Students will be introduced to topics such as workplace safety, basic blueprint knowledge, and mathematics needed in construction. Students will be safety certified through OSHA training and complete an on-site practicum at Kinsley Education Center. The program consists of 130 contact hours: including online instruction and on-site experiences with Kinsley. There is no cost to the program, but students must provide their own transportation.

Course: **Internship Program** **Full Year** **1 - 3 credits** **(Level 2)**
Grades: 11, 12
Prerequisites: None

An internship is a career shadowing and work-based learning experience that is provided to students by an employer within the Hanover area to meet the career goals of interested students. Internships allow students to integrate academic learning with the "real world" activities within given career paths. The internship host and high school Transition Coordinator will evaluate students (monthly), and students will complete daily journals and an independent project each marking period. Students must provide their own transportation to and from the internship location. Students in this program may earn up to three credits.

Course: **Tutoring-Counseling-Assisting (TCA Program)** **Full Year** **1 - 2 credits** **(Level 1)**
Grades: 11, 12
Prerequisites: None

The TCA Program is a program for juniors and seniors who plan to pursue a degree in education or a related field. Students will work with teachers and their students at the elementary or middle schools within the Hanover Public School District. They serve as a teacher's aide by helping students with their schoolwork and assisting the cooperating teacher in clerical and other appropriate tasks. The TCA host teacher and the high school Transition Coordinator will evaluate students (monthly), and students will complete daily journals. Students must provide their own transportation to and from the TCA location. Students in this program may earn up to two credits.

FAMILY AND CONSUMER SCIENCE

Course: **Culinary Arts I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10, 11
Prerequisites: None

This course emphasizes four areas of learning: nutrition and healthy food choice; basic culinary technology; culinary cooking skills with all food groups; and management skills for time, resources, and problem solving. Learning will be encouraged through various methods such as lecture, cooperative group exploration, and performance skills. Emphasis will be placed on nutrition, fruits, vegetables, grains, dairy, eggs, quick breads, cakes, cookies and more.

Course: **Culinary Arts II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Culinary Arts I

This course continues the skills taught in Culinary Arts I but on a more advanced level. The primary focus will be career preparation for the culinary industry. Skills and concepts will include knife skills, food presentation, decorative cooking, herbs and spices, and ethnic cooking, as well as additional concepts needed for a culinary career.

Course: **Cafe and Restaurant Management** **Semester** **0.5 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Culinary Arts I and II

Application of culinary skills in the restaurant and food industry. Students will have an active role in the running and operation of the Hanover Shoe Farm cafe. This includes classroom component as well as cafe participation for credits. Safety and sanitation, food costing, basic industry positions, cooking for the cafe will be included but not limited to these topics.

Course: **Hanover Shoe Farms Cafe** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12
Prerequisites: Enrolled or completed Culinary Arts I

Students will apply safety and sanitation concepts as well as small business skills by working in the cafe and assist in running this student business. **This is not a scheduled course**. Students will serve in the Café in the ILC and may have additional assignments to complete.

Course: **Baking and Pastry Production** **Semester 0.5 credit (Level 3)**
Grades: 11, 12
Prerequisites: Culinary Arts I and II

This course will cover the science and production of dessert breads, pastries, and confections. Students will learn the design of a bakery to the inner workings of the different venues of bakery shops. Basic equipment and terminology will be covered. The art of plate design, color, form, textures, and flavor profiles will be practiced. Students will produce chocolate and baked desserts, pastry, and breads. This is an advanced level culinary course.

Course: **Exploring Entrees** **Semester 0.5 credit (Level 3)**
Grades: 11, 12
Prerequisites: Culinary Arts I and II
This course focuses on hot and cold food preparation techniques. Topics include sandwiches, dressings, sauces, soups and stews, and meats and poultry. Students will learn the design of an industrial kitchen to the inner workings of the different venues of food service. The art of plate design, color, form, textures, and flavor profiles will be practiced. Students will practice dressing various meats and poultry.

Course: **Early Childhood Development and Education Year 1 credit (Level 3)**
Grades: 11, 12
Prerequisites: None

Early Childhood Development and Education will be offered as a hybrid course. This format will allow for online learning, face-to-face classroom seminars, and hands-on learning experiences within local daycare and elementary schools within the district. Students will learn child development and apply this knowledge in the school setting. Students will create lesson plans and teach them in daycare and elementary schools

HEALTH AND PHYSICAL EDUCATION

Course: **920 Health Education I** **Semester** **0.5 credit** **(Level 1)**
Grades: Grades 9 (recommended), 10
Prerequisites: None

The class will cover various health topics from overall well-being, consumer health, stress management, and mental health. Other topics will include a few body systems, nutrition, violence education, peer relationships, and human sexuality. Additionally, crucial problems facing society such as alcohol and drug abuse, tobacco use, and sexually transmitted diseases will also be discussed.

Course: **921 Health Education II** **Semester** **0.5 credit** **(Level 1)**
Grades: Grades 11 (Recommended), 12
Prerequisites: Health I

Health Education II includes the study of standard first aid, CPR, and most body systems. The ultimate goal is to make health relevant to the point of personal involvement. During this course, students will also examine those skills required to successfully research an assigned topic(s). Other possible topics might include: medicines/supplementation, communicable/non-communicable diseases, and personal health assessment.

Course: **C921 Cyber Health II** **Semester** **0.5 credit** **(Level 1)**
Grades: Grades 11 (Recommended), 12
Prerequisites: Health I

This is a cyber course. Students must stay on pace with a passing grade in order to remain in the cyber course. Students who fall behind or are not passing will be asked to return to the classroom.

Course: **Physical Education (Limit one per year)** **Semester** **0.5 credit** **Level 1**
Grades: 9, 10, 11, 12 Separate course for grades 9-10 and 11-12 as schedule permits
Prerequisites: None

Physical education includes both male and female students in grades 9 through 12. Students will practice skills and play competitive games in a variety of sports. Activities include tennis, badminton, table tennis, football, soccer, softball, volleyball, basketball, hockey, disc golf and Ultimate Frisbee. Fitness activities such as Cross Fit, yoga, aerobics, and use of the weight room will also be included at times.

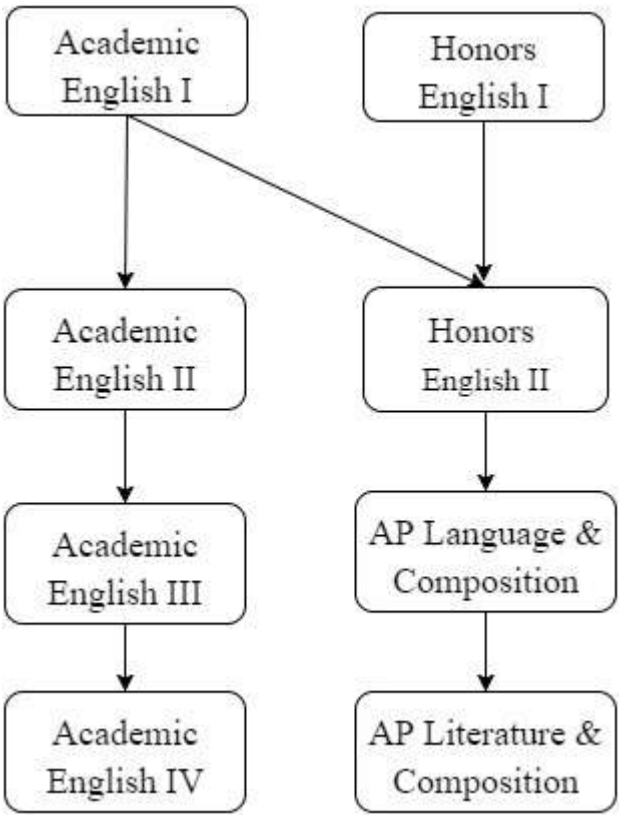
Course: **Independent Physical Education (Online)** **Semester** **0.5 credit** **Level 1**
Grades: 9, 10, 11, 12
Prerequisites: None

Cyber physical education includes both male and female students in grades 9 through 12. The students will be responsible for logging their food intake, exercise, and weight using the MyFitnessPal app.

- The student will be responsible for logging all of the food that they eat during each day of the school week using their MyFitnessPal account.
- The student will be required to participate in two hours of physical activity per week for all 18 weeks of the course (36 total hours).
- The student is required to make one blog entry per week. Each blog entry is a minimum of 8-10 sentences and should be fitness/exercise/nutrition related. Blog entries can be about their personal experience that week with their exercise and food intake. It can be about something they learned or even research they have done related to fitness/exercise/nutrition.
- The student is responsible for completing weight check-ins once every three weeks. They may weigh in as often as they want, but the minimum requirement is once every three weeks

LANGUAGE ARTS

Flow chart for Hanover High School's Language Arts pathways:



Students enrolled in English II will take the Literature Keystone Exam during the spring testing window. Students who do not score proficient or advanced will be provided with Keystone preparation materials in English III, and will retake the exam.

Course: **Academic English I** **Full Year** **1 credit** **(Level 2)**
Grades: 9
Prerequisites: None

The course is designed to develop proficiency in language arts. It includes grammar skills, writing, vocabulary, and literature. Grammar is taught as part of writing. Writing develops the paragraph into longer essays and creative writing and culminates in a short research paper. Some vocabulary study is based on the literature of the course. The literature is approached through the genres with a focus on short story, novel, and narrative non-fiction. Common core standards will also be addressed throughout the course.

Course: **Honors English I** **Full Year** **1 credit** **(Level 3)**
Grades: 9
Prerequisites: Successful completion of grade 8 English, See Honors Placement, page 10

The freshman honors course is a preparatory course for the Advanced Placement English Language and/or Advanced Placement English Literature Courses. This course is designed for high achieving students. It includes grammar skills, writing skills, and vocabulary and literature terms. This is a much faster and more in-depth course covering topics to include: short stories, poems, novels, essays, and higher level vocabulary. We will cover an equal amount of fiction and nonfiction to prepare students to be successful in Advanced Placement courses. Suggested students should have successfully completed English classes in 7th and 8th grades. Expectations of homework nightly to reinforce class discussions and literature work. Students taking this course must complete the summer assignment.

Course: **Academic English II** **Full Year** **1 credit** **(Level 2)**
Grades: 10
Prerequisites: English I

Students read literary and informative texts with a focus on the areas of key ideas and details, craft and structure, integration of knowledge and ideas, and vocabulary acquisition and use, as outlined in the Common Core State Standards. Writing is argumentative, informational/explanatory, and narrative. Communication skills are a focus, especially participation in a range of collaborative discussions. Students read independently along with reading and discussing whole-class texts. This course will culminate with the Pennsylvania Keystone Exam for Literature.

Course: **Honors English II** **Full Year** **1 credit** **(Level 3)**
Grades: 10
Prerequisites: Successful completion of English I - See Honors Placement. Page 10

This accelerated class is taken in lieu of Academic English II and offers numerous opportunities for literary analysis and creative expression. The honors course is a preparatory course for the Advanced Placement English Language and/or Advanced Placement English Literature Courses. Students read literary and informative texts with a focus on the areas of key ideas and details, craft and structure, integration of knowledge and ideas, and vocabulary acquisition and use, as outlined in the Common Core State Standards. Writing is argumentative, informational/explanatory, and narrative. Communication skills are a focus, especially participation in a range of collaborative discussions. Students read independently along with reading and discussing whole-class texts. It is essential to note that this course requires a two-novel summer reading and writing assignment. Students taking this course must complete the summer assignment. This course will culminate with the Pennsylvania Keystone Exam for Literature.

Course: **Academic English III** **Full Year** **1 credit** **(Level 2)**
Grades: 11
Prerequisites: English II

English III incorporates the Reader's/Writer's Workshop classroom model. The Workshop classroom focuses on choice reading and authentic writing and is driven by standards-based student assessment and differentiated instruction. Within the Workshop, students will spend time engaged in independent reading and writing by selecting their own extended texts (fiction and nonfiction) to read and respond to throughout the year with supplemental mentor texts provided by the teacher for whole-class practice. Students study real-world writing purposes through the review of mentor texts and mini-lessons built on craft. Real-world writing units include: narrative argumentative, informative and podcast genres. Students will revise, edit, share and track their writing progress over the year in a digital portfolio. In addition, students will study SAT preparatory vocabulary. Offering students choice in their literary experience emphasizes independence and autonomy--valuable traits for strong, productive readers, writers, thinkers, and citizens in our world.

Course: **AP Language and Composition** **Full Year** **1 credit** **(Level 4)**
Grades: 11
Prerequisites: Honors English II; See AP Placement, page 10

The Advanced Placement Language and Composition is designed to be a college-level course, presenting students with the academic challenges and the workload that goes along with a typical university-level English course. Students taking this course must complete the summer assignment. The AP English Language and Composition course aligns to introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.
The College Board, AP Advanced Placement Program Course Description

Course: **Academic English IV** **Full Year** **1 credit** **(Level 2)**
Grades: 12
Prerequisites: English III

This course is designed to prepare students for post-high school experiences in the workforce and college. The course has five modules as well as vocabulary acquisition. Career and Future Readiness module includes the creation of documents such as resumes, a reference list, and the cover letter. Students will also write either a college or work-related essay. Other readings and writing assignments are connected with the module themes of Intentions and Integrity, Making a Difference in the Lives of Others, Adventures and Advice, Creating a Legacy, and Pivotal Choices. Students will be required to complete independent reading assignments based on student choice that fit within the themes of the course.

Course: **AP English Literature and Composition** **Full Year** **1 credit** **(Level 4)**
Grades: 12
Prerequisites: AP Language and Composition See AP Placement, page 10

An AP English course in Literature and Composition should engage students in the careful reading and critical analysis of imaginative literature. Through the close reading of selected texts, students should deepen their understanding of the ways writers use language to provide both meaning and pleasure for their readers. As they read, students consider a work's structure, style, and themes as well as such smaller-scale elements as the use of figurative language, imagery, symbolism, and tone. This reading necessarily builds upon the reading done in previous English courses. This course includes the in-depth reading of texts drawn from multiple genres, periods, and cultures. Students also read works from several genres and periods, from the sixteenth to the twentieth century. They should read deliberately and thoroughly, taking time to understand a word's complexity, to absorb its richness of meaning, and to analyze how that meaning is embodied in literary form. In addition to considering a work's literary artistry, students should consider the social and historical values it reflects and embodies. Careful attention to both textual detail and historical context provides a foundation for interpretation, whatever critical perspectives are brought to bear on the literary works studied. Students taking this course must complete the summer assignment.

The College Board, AP Advanced Placement Program Course Description

Course: **Academic Literacy** **Year** **1 credit** **(Level 1)**
Grades: 9, 10
Prerequisites: Administrative assignment

Academic Literacy encourages students to utilize various techniques and strategies to become competent and confident readers and writers in all courses. Students will gain an understanding of the relationship between reading, writing, and academic success. Students will examine the characteristics of good writing and will learn strategies to become better readers and writers. Class activities will also include work on vocabulary and the fundamentals of grammar, punctuation, and sentence patterns. This course will also emphasize writing skills, specifically paragraph composition and career-related literacy skills.

Course: **Modern Communications** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: None

This course is focused solely on student interest and participation. Gain confidence and showcase your talents and passion as you participate in various communication opportunities. Together, we will explore how effective communicating looks, sounds, and feels in a modern context. Preparation for college and workplace interviews, post-secondary coursework, and digital communication will be the primary focus of this active, student-centered course.

Course: **Creative Writing (Screenwriting)** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12

Prerequisites: None
This workshop course will provide an opportunity for students to do original, imaginative writing based on the study of models from observation, experience, and literature. Students will work on descriptive, narrative, and persuasive prose, as well as dialogue and poetry. Student writing will be shared with the class, evaluated and critiqued by both the instructor and the class. Screenwriting will be a component of this course, where students will understand, critique, and write dramatic stories for modern media.

Course: **Creative Writing II** **Semester** **0.5 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Creative Writing I

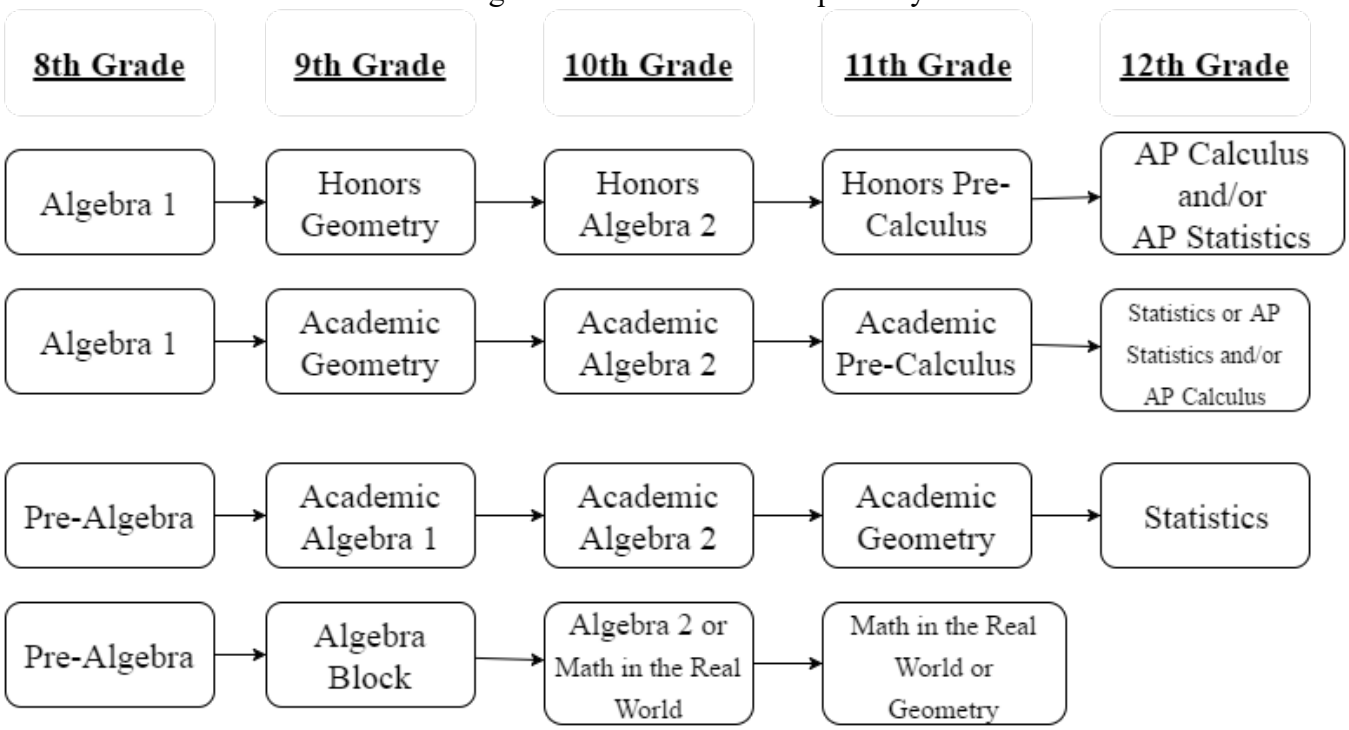
This workshop course will provide further opportunity for students to do original imaginative writing. Much of the writing will still be based on the study of models from observation, experience, and literature, but the students will have more of an opportunity to work on individual projects or consider a form in depth. Student writing will be shared with the class, evaluated and critiqued by both the instructor and the class.

Course: **English Language Development** **Year** **1-2 credits** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: Administrative Placement

This course addresses English language acquisition in speaking, listening, reading, and writing. The focus is on English: literature, composition, and vocabulary. Core English Language Arts standards are addressed. Language is integrated across the content areas of: History, Math, and Science.

MATHEMATICS

Flow chart for Hanover High School's mathematics pathways.



Any students who are enrolled in Algebra I will be required to take the Algebra Keystone Exam during the Spring testing window of Algebra 1. Any student who does not score proficient on the Algebra Keystone Exam will be required to participate in Keystone Preparation coursework. These students will retake the Keystone Exam upon completion of the preparation coursework. Students who do not score proficient after the second administration will complete a Keystone Project.

Course: **Algebra I Block** **Full Year** **2 credit** **(Level 1)**
Grades: 9
Prerequisites: (by Administrative Placement)

Any students who are enrolled in Algebra I will be required to take the Algebra Keystone Exam during the Spring testing window of Algebra 1 Block. Any student who does not score proficient on the Algebra Keystone Exam will be required to participate in Keystone Preparation coursework. These students will retake the Keystone Exam upon completion of the preparation coursework. Students who do not score proficient after the second administration will complete a Keystone Project.

Course: **Academic Algebra I** **Full Year** **1 credit** **(Level 2)**
Grades: 9
Prerequisites: None

Academic Algebra I is the higher-level study of mathematical structure including number systems and their properties. Academic Algebra I explores higher levels of thinking and moves at a faster pace than Algebra I. It is a course designed to provide students with a background in basic abstract reasoning, thus giving them the necessary knowledge to pursue other, more advanced, math courses. Problem solving skills will be refined and challenge problems will be explored.

Course: **Academic Algebra II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Successful completion of Algebra 1

Academic Algebra II is a continuation of the study of Academic Algebra I. It will cover a brief review of some Algebra I concepts, as well as an in-depth study of different types of equations, inequalities, graphs, and problem solving skills. Emphasis will be placed on higher-level critical thinking and problem solving skills. Students will be expected to explore challenge problems. Technology, such as graphing calculators, will also be incorporated into the lessons.

Course: **Honors Algebra II** **Full Year** **1 credit** **(Level 3)**
Grades: 10
Prerequisites: Successful completion of Algebra I - See Honors Placement, page 9

This course will cover the same topics as Academic Algebra II but at a faster pace and with additional depth. Time permitting, additional topics will be explored. The honors mathematics program is designed specifically to prepare students to take the AP Calculus course in 12^{th} grade.

Course: **Academic Geometry** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Successful completion of Algebra II

Geometry is a course that integrates knowledge from Algebra I and Algebra II into the visual, symbolic, and logical world of mathematics. Throughout this course, the skills of analysis and interpretation will be called upon. Classification and specific knowledge of geometric shape is required and spatial perception is needed to understand the relations of objects in space. Topics include lines, angles, triangles, polygons, circles, area, and volume. Students will explore a higher level of thinking skills as they investigate challenge problems. Critical thinking skills and problem solving skills will be refined throughout this course.

Course: **Honors Geometry** **Full Year** **1 credit** **(Level 3)**
Grades: 10, 11
Prerequisites: Successful completion of Honors Algebra II - See Honors Placement, page 9

This course will cover the same topics as Academic Geometry at a faster pace with additional depth. Time permitting, additional topics will be explored. The honors mathematics program is designed specifically to prepare students to take the AP Calculus course in 12th grade.

Course: **Real World Math** **Full Year** **1 credit** **(Level 1)**
Grades: 11, 12
Prerequisites: Algebra II

Mathematics in the Real World will provide for a hands-on applicable, useful, and experiential way of learning and using mathematics. The overall course will include material that focuses on arithmetic operations, problem solving, estimation, measurement, geometry, probability and statistics, algebraic principles, and the applications of mathematics. The emphasis will be on the ability to understand and apply functional mathematics to solve problems in the world of work.

Course: **Academic Pre-Calculus** **Full Year** **1 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Successful completion of Academic Geometry

Pre-Calculus is a preparatory course for those students who will be attending college in the future and for those students who will be studying calculus. Pre-Calculus introduces and develops many of the topics found in introductory college mathematics courses. This course is designed to review previously learned concepts, extend those ideas to develop concepts of higher mathematics, and to integrate algebraic and geometric concepts. In anticipation that most students will eventually study calculus, graphing of functions is emphasized throughout the course.

The primary objectives are: to help students to truly understand the fundamental concepts of algebra, trigonometry, and analytic geometry, to foreshadow important ideas of calculus, and to show how algebra and trigonometry can be used to model (and solve) real-life problems. A principal feature of this course is the balance among the algebraic, numerical, graphical, and verbal methods of representing problems, or the rule of four. This approach reinforces the idea that to understand a problem fully, students need to understand it algebraically as well as graphically and numerically.

As students work through applications, many of which are based on real data from cited sources, they learn to analyze and model data, represent data graphically, interpret graphs, and fit data to curves. Systematic problem-solving is emphasized following a step-by-step process: understand the problem, develop a mathematical model, solve the model, and interpret the solution.

Students electing this course should have access to a graphing calculator. Students will be expected to use these calculators to visualize and solve problems. Students will be expected to recognize that a graph is reasonable, identify all the important characteristics of a graph, interpret those characteristics, and confirm those using analytic techniques.

Course: **Honors Pre-Calculus** Full Year 1 credit (Level 3)
Grades: 11, 12
Prerequisites: Successful completion of Honors Geometry
See Honors Placement, page 9

This accelerated program will cover the same topics as Academic Pre-Calculus but at a faster pace and with additional depth. The honors mathematics program is designed specifically to prepare students for the AP Calculus course.

Course: **AP Calculus AB** **Full Year** **1 credit** **(Level 4)**
Grades: 12
Prerequisites: Honors Pre-Calculus - See AP Placement, page 9

This course consists of a full high school academic year of work that is comparable to calculus courses in colleges and universities. It is expected that students who take this course will seek college credit, college placement, or both from institutions of higher learning.

This course is primarily concerned with developing the students' understanding of the concepts of calculus and providing experience with its methods and applications. The course emphasizes a multi-representational approach to calculus, with concepts, results, and problems being expressed graphically, numerically, analytically, and verbally. Broad concepts and widely applicable methods are emphasized. Technology will be used to reinforce the relationships among the multiple representations of functions, confirm written work, implement experimentation, and assist in interpreting results.

This course is specifically designed for those students planning to pursue higher education in mathematics, science, computer science, or business. Students enrolled in AP Calculus will have the opportunity to take the Advanced Placement (AP) Calculus Examination administered in mid-May. Upon successful completion of the AP Examination, students are eligible to earn college credits and/or advanced placement for the course.

The College Board, AP Advanced Placement Program Course Description

Course: **AP Calculus BC** **Full Year** **1 credit** **(Level 4)**
Grades: 12
Prerequisites: Honors Pre-Calculus - See AP Placement, page 9; Teacher recommendation

This is an on-line course offered through Kahn Academy. Teacher recommendation required. Students will need to be self-directed and independent thinkers while receiving support on an as-need basis from an assigned mathematics teacher.

Course: **Statistics** **Full Year** **1 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Algebra II and Geometry

Statistics is designed for college bound students since most college programs include statistics as a requirement. This course will cover sampling methods, analyzing and displaying data, inferential statistics, and probability. The use of the TI-83 Plus and statistical software will be an important component to the course.

Course: **AP Statistics** **Full Year** **1 credit** **Level 4**
Grades: 12
Prerequisites: Academic Geometry, Algebra II - See AP Placement, page 9

This is designed to be a college level course for students whose plans include college after graduation. Many academic programs at the college level include statistics as a requirement. Students should consider their educational goals and interests when determining whether this course is appropriate for them. Upon successful completion of the AP Examination, students are eligible to earn college credits and/or advanced placement for the course. The course consists of the following four broad topics:

The topics for AP Statistics are divided into four major themes: exploratory analysis (20–30 percent of the exam), planning and conducting a study (10–15 percent of the exam), probability (20–30 percent of the exam), and statistical inference (30–40 percent of the exam).

I. Exploratory analysis of data makes use of graphical and numerical techniques to study patterns and departures from patterns. In examining distributions of data, students should be able to detect important characteristics such as shape, location, variability and unusual values. From careful observations of patterns in data, students can generate conjectures about relationships among variables. The notion of how one variable may be associated with another permeates almost all of statistics, from simple comparisons of proportions through linear regression. The difference between association and causation must accompany this conceptual development throughout.

II. Data must be collected according to a well-developed plan if valid information is to be obtained. If data are to be collected to provide an answer to a question of interest, a careful plan must be developed. Both the type of analysis that is appropriate and the nature of conclusions that can be drawn from that analysis depend in a critical way on how the data was collected. Collecting data in a reasonable way, through either sampling or experimentation, is an essential step in the data analysis process.

III. Probability is the tool used for anticipating what the distribution of data should look like under a given model. Random phenomena are not haphazard; they display an order that emerges only in the long run and is described by a distribution. The mathematical description of variation is central to statistics. The probability required for statistical inference is not primarily axiomatic or combinatorial but is oriented toward using probability distributions to describe data.

IV. Statistical inference guides the selection of appropriate models. Models and data interact in statistical work; models are used to draw conclusions from data, while the data are allowed to criticize

and even falsify the model through inferential and diagnostic methods. Inference from data can be thought of as the process of selecting a reasonable model, including a statement in probability language, of how confident one can be about the selection.
** The College Board, AP Advanced Placement Program Course Description*

Course: **Band** **Full Year** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: Teacher Approval

The emphasis on musicianship and interpretation that started in the lower grades is continued in grades 9-12 according to the student's ability. The band creates many opportunities for high quality performances, including 2-3 concerts per year, pep rallies, and several school performances. The band *may* also schedule an enjoyable one-day or multi-day trip each year. Interested students may also participate in the marching band, jazz band, small ensembles, and PMEA District Band Festivals.

NOTE: Students who wish to participate in the marching band *AND* a fall sport may do so, but should confer with the band director so a workable practice schedule may be formed that is fair to both the band and the sports team. Students interested in participating in the band front should *NOT* sign up for the band class.

Course: **Concert Choir** **Full Year** **0.5 Credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: Teacher Approval

Concert Choir is a performance-based elective open to both men and women that meets 3 days per cycle. Students will have the opportunity to study and perform various styles of choral music. Focus will be placed on singing technique, music literacy, and performance.

Concert Choir will perform two concerts per year and may have community performances. Students are expected to actively participate in class each day and must be present at each performance. Students may audition for Madrigals, Treble Makers, and PMEA Choral Festivals. Grading is based on daily participation, preparation, and attendance at performances.
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Course: **Women's Chorus** **Full Year** **0.5 Credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: Teacher Approval

Women's Chorus is a performance-based elective that meets 3 days per cycle. It is open to any female student with a desire to sing. Students will have the opportunity to study and perform various styles of choral music. Focus will be placed on singing technique, music literacy, and performance.

Women's Chorus will perform two concerts per year and may have community performances. Students are expected to actively participate in class each day and must be present at each performance. Students

may audition for Madrigals, Treble Makers, and PMEA Choral Festivals. Grading is based on daily participation, preparation, and attendance at performances.

Course: **Music Theory** **Full Year** **1 credit** **(Level 2)**
Grades: Grades 9-12
Prerequisites: Must be a vocal student or play an instrument

Music Theory gives students the opportunity to recognize, understand and describe the basic materials and processes of music that are heard and presented in a score. Students will develop aural skills through listening exercises, performance skills, notation skills, compositional skills and analytical skills. The following elements will be covered; scale patterns, rhythmic devices, tonality and basic part writing. There will be melodic and harmonic dictation, chord analysis and the development of theory elements to music history.

Course: **AP Music Theory** **Full Year** **1 credit** **(Level 4)**
Grades: 10, 11, 12
Prerequisites: See AP Placement, page 9
The ultimate goal of an AP Music Theory course is to develop a student's ability to recognize, understand, and describe the basic materials and processes of music that are heard or presented in a score. The achievement of this goal may be best promoted by integrated approaches to the student's development of: aural skills, listening exercises, sight-singing skills, performance exercises, written skills through written exercises, compositional skills, creative exercises, analytical skills and analytical exercises.

Content
The course should seek first to instill mastery of the rudiments and terminology of music, including hearing and notating:

- •pitches
- •intervals
- •scales and keys
- •chords
- •meter
- •rhythm

It is advisable to address these basic concepts through listening to a wide variety of music, including not only music from standard Western tonal repertoire, but also twentieth-century art music, jazz, popular music, and the music of non-Western cultures. Although beginning college courses focus primarily on the system of major–minor tonality, they often incorporate at least a brief introduction to modal, pentatonic, whole-tone, and other scales; moreover, there is increasing emphasis throughout colleges on equipping students to deal with music of their own time and of various world cultures.
** The College Board, AP Advanced Placement Program Course Description*

Course: **Orchestra** **Full Year** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: Membership in the Middle School/High School Orchestra or audition

High School Orchestra, a performance-oriented course, builds on string fundamentals and techniques previously learned, with an emphasis placed on the development of advanced musicianship skills. This course will grant students the opportunity to study a varied repertoire of music. Due to the performance nature of this course, students will be required to participate in all rehearsals, activities, and concerts scheduled by the school. **Orchestra will only be open to students who play a string instrument.** Interested students may also participate in small ensembles, string quartets, and PMEA District Orchestra Festivals at the director's discretion

Course: **Beginning Strings** **Full Year** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

This course is for any student that has an interest in learning how to play a string instrument. During this course you would select an instrument to learn, and go through the basics of how to play it.

Course: **Voice Class** **Semester** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: One year of Choir or teacher approval

The voice class is an elective designed to give the student an opportunity to study the art of singing more intensely. Emphasis is placed on proper singing technique, vocal health, diction, performance anxiety, repertoire selection and performance. Grades will be determined through class participation, in-class and homework assignments, and performance. Teacher observation, daily participation and solo performance are all important factors in determining much of the students' grades.

Course: **Guitar I** **Semester** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None
This class is open to any high school student. It is designed for those with beginning to intermediate guitar skills. No prior guitar experience is necessary. Students already having upper intermediate to advanced guitar skills will not benefit from this class. Students will participate in both group and individualized instruction, with weekly playing evaluations given by the instructor. This class will learn guitar chords in a few basic keys, basic strum patterns and picking patterns, reading guitar tablature, and basic guitar music theory and history. Students are expected to practice on their own daily and to have materials prepared for each class. Students will be graded on class participation, performance evaluations, and occasional written exams.

Course: **Guitar II** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12
Prerequisites: Successful completion of Guitar I, or Teacher Recommendation/Audition

This class is open to any high school student with prior guitar experience. It is designed for those with intermediate guitar skills looking to improve to an upper-intermediate or advanced level. Students will participate in both group and individualized instruction, with regular playing evaluations given by the instructor. This class will learn advanced guitar chords, barre chords, basic and advanced strumming and finger picking patterns, music reading in both standard notation and guitar tablature, and basic music theory and history. At minimum, students should be fluid in the use of basic chords and chord transitions, basic strumming patterns, and have been introduced to standard notation and/or tablature notation for guitar. Students will be expected to practice on their own daily and to have materials prepared for each class. Students will be graded on class participation, performance, evaluations, and occasional written exams.

Course: **Music in the Theater** **Semester** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

Music Theater is not merely for entertainment, but tackles problems of the day and is a valuable tool to teach children and adults. This elective is performance-oriented. Some musicals to be studied are "Fiddler on the Roof," "West Side Story," "Rent," "Les Miserable," and more. Students will focus on the music and story line of different shows. Students will be expected to act out scenes. The class will create and perform appropriate material to travel to the district elementary schools.

Course: **Music Technology & Sound Recording I** **Semester** **0.5 credit** **(Level 2)**
Grades: 10-12
Prerequisites: 1 year in a music ensemble or Teacher recommendation
This course will introduce the principles of audio and sound recording. Students will explore concepts used in music sequencing, notation and recording. This course will also teach basic music theory, editing techniques and mixing techniques. Students will use mixing, equalization, effects and a final mix of tracks to create a finished product.

Course: **Music Technology & Sound Recording II** **Semester** **0.5 credit** **(Level 2)**
Grades: 10-12
Prerequisites: Successful Completion of Music Tech 1

This course will build upon the foundation of Level I. Students will use Pro Tools, a digital audio workstation. Studio recording, live recording, editing, mastering and video recording will be utilized. Students will also create music using MIDI

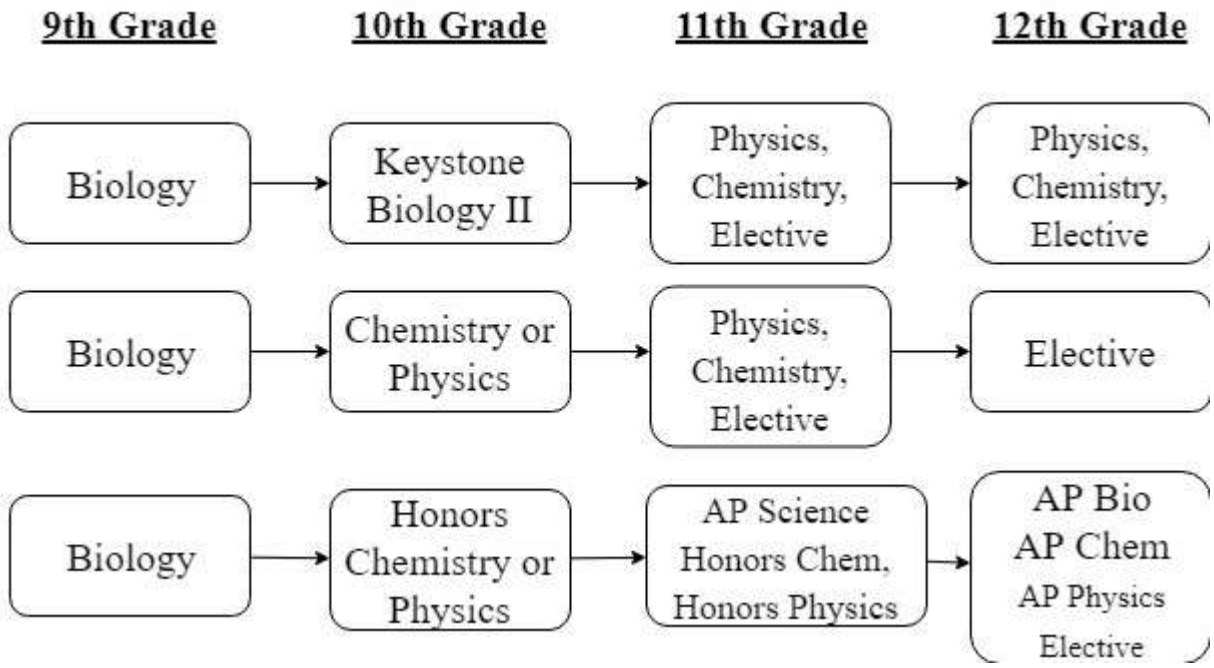
Course: **Music Technology & Sound Recording III** **Semester** **0.5 credit** **(Level 2)**

Grades: 10-12

Prerequisites: Successful Completion of Music Tech I and II

Music Technology and Sound Recording Level III will continue working with the industry standard, Pro Tools. Students will create their own music and record other students in the studio. Successful students will be eligible to receive a micro-credential after completion of this course. Hanover High School has partnered with local businesses to create a task list of competencies that address all of the standards necessary for a student to show proficiency in this high occupational field.

Flow chart for Hanover High School's science pathways.



Students enrolled in Biology will take the Biology Keystone Exam during the spring testing window. Students who do not score proficient or advanced in the Biology Keystone exam will be enrolled in a Keystone Biology II course and will be administered the assessment for a second attempt. These students will retake the Keystone Exam upon completion of the preparation coursework. Students who do not score proficient after the second administration will complete a Keystone Project.

Course: **Academic Biology** **Full Year** **1 credit** **(Level 2)**
Grades: 9, 10
Prerequisites: None

This course takes an applied and theoretical approach to topics in biology. It is an in-depth course studying living things and the processes that occur within and between organisms. This course is designed to increase students' understanding, awareness, and interest in the living things around them. Students will use lab experiments, online computer tools, class lectures, and group exercises to accomplish their investigations into the living things around them. This course will give students an exposure into the various disciplines within biology such as chemistry, the cell, genetics, ecology, and evolution. This course culminates in a Keystone Exam.

Course: **AP Biology** **Full Year** **1 credit** **(Level 4)**
Grades: 11, 12
Prerequisites: Successful completion of Academic Biology, Honors Chemistry - See AP Placement, Page 10

Given the speed with which scientific discoveries and research continuously expand scientific knowledge, many educators are faced with the challenge of balancing breadth of content coverage with depth of understanding. The revised AP® Biology course addresses this challenge by shifting from a traditional "content coverage" model of instruction to one that focuses on enduring, conceptual understandings and the content that supports them. This approach will enable students to spend less time on factual recall and more time on inquiry-based learning of essential concepts, and will help them develop the reasoning skills necessary to engage in the science practices used throughout their study of AP Biology. Students will study the core scientific principles, theories, and processes governing living organisms, biological systems, and natural phenomena. Understand key science practices you can use to develop explanations and predictions of natural phenomena, which you will test and refine through laboratory investigations. Develop advanced reasoning and inquiry skills as you design experiments, collect and analyze data using mathematics and other methods, and interpret that data to draw conclusions. Topics will include evolution, energy and growth, cells, genetics, and ecology. Upon successful completion of the AP Examination, students are eligible to earn college credits and/or advanced placement for the course.
** The College Board, AP Advanced Placement Program Course Description*

Course: **Keystone Biology** Full year 1 credit (Level 1)
Grades: 10, 11 (by Administrative Placement)
Prerequisites:

Keystone Biology II is designed for those students who have not scored Proficient on the Keystone Biology Assessment. Students will review biology topics to prepare for the Keystone retake. Proficiency must be shown on all biology topics in order to receive a passing grade. Students who have not scored Proficient after the second attempt will begin working on the Keystone Project Based Assessment.

Course: **Biotechnology** **Semester** **1 credit** **(level 3)**
Grades: 11, 12 – Full year alternate with anatomy
Prerequisites: Successful completion of biology, chemistry, Teacher recommendation

This course is designed to provide you with a broad overview of the science of biotechnology as well as basic laboratory skills needed by the Biotechnology industry. Biotechnology is best explained by how it is being used in the industry: forensic investigations through DNA fingerprinting, recombinant DNA technology to make insulin, transgenic organisms, GMO's (Genetically Modified Organisms), and gene therapy to treat genetic diseases. Biotechnology is the field of science that uses products of living organisms to make new products. If you are interested in the newest growing field in science, than this is your course.

Course: **Academic Chemistry** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Biology

Academic Chemistry is designed to give students practical background in chemistry concepts. This course will teach students that chemistry is part of our everyday world and will teach students to be smart consumers, responsible citizens and educated voters. This course is **not** appropriate for students pursuing a major in any technical, scientific, or medical field in college. This course does **not** fulfill the prerequisite for enrollment in AP Biology.

Course: **Honors Chemistry** **Full Year** **1 credit** **(Level 3)**
Grades: 10, 11, 12
Prerequisites: Algebra I, Biology - See Honors Placement, page 9

Honors Chemistry is designed to give students adequate theoretical background in chemistry so that they can successfully pursue chemistry courses at the college or AP level. Students who may be considering a major in the fields of science, math or any technical field should take this course. Students should have successfully completed Algebra in order to take this course, since there is a strong emphasis on mathematical applications with chemistry concepts. Laboratory work will emphasize scientific attitudes and enables students to gain confidence in handling scientific equipment and writing and following scientific procedures.

Course: **AP Chemistry** **Full Year** **1 credit** **(Level 4)**
Grades: 11, 12
Prerequisites: Successful completion of Honors Chemistry, Algebra II - See AP Placement, page 9

This course consists of academic work that is comparable to chemistry courses in college and universities. It is expected that students who take this course will seek college credit, college placement, or both from institutes of higher learning.

The curriculum assumes the student has mastered the material in Honors Chemistry. The student will be able to build upon those skills and expand the skills to new concepts. Major emphasis will be placed on problem solving where multiple concepts are covered within a single problem. Students should expect homework every night to cover the quantity of material required by the AP curriculum. All fundamental areas of chemistry must be covered by May.

A sincere commitment to academic rigor is a must for students taking this course. Time outside the scheduled class period may be required to complete some lab activities. A lab notebook will be required. Most universities will not give students credit without documentation of the student's laboratory work, regardless of the student's AP exam grade. Emphasis will be placed on learning proper lab techniques, collecting and analyzing data and applying problem solving techniques in the laboratory.
** The College Board, AP Advanced Placement Program Course Description*

Course: **Science Matters** **Full Year** **1 credit** **(Level 1)**
Grades: 11, 12
Prerequisites: None

Students will gain the knowledge they need to understand public issues related to science. It is a mix of facts, vocabulary, concepts, history, and philosophy. It is not the specialized stuff of the experts, but the more general,, less precise knowledge used in political discourse. If you can understand the news of the day as it relates to science, if you can treat news about science in the same way you treat everything else, then you will be scientifically literate.

Course: **Environmental Science** **Full Year** **1 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Biology

Environmental science will be offered as a hybrid course. This format combines the best of both online and face to face learning. The class will have off-campus days allowing students to complete the online components at a time that works best for them. Students will need to be current in their work and maintain a satisfactory GPA in the course to take advantage of off-campus days.

Environmental scientists search for viable solutions to environmental problems, solutions that are based as much as possible on solid scientific knowledge. The main focus of this course will be to understand how the biosphere changes naturally and how human activities are altering it. Specifically we will look at ecological relationships, risks associated with population growth in a developing world, our uses of renewable and nonrenewable resources, and how our individual actions affect the big picture. Environmental issues will be a major part of the discussion.

The hybrid format of this class will allow us to explore the scientific principles during off-campus days, while the classroom experience will allow more time for classroom discussions and projects. Students taking this course should be willing to work in small groups, and apply what they are learning to projects they help develop.

Course: **Academic Physics** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Biology, Algebra II (concurrently)

Physics is designed to give students an opportunity to see how the study of matter and energy and their relationships apply to everyday situations with minimal mathematical computation. Students who do not plan to attend college or students who are attending college but do not plan to major in any technical field should take this course. This course will take a look at motion, forces, energy, gravity, thermodynamics, sound and light in a practical, everyday manner through direct instruction, laboratory experiments, and hands-on projects.

Course: **Honors Physics** **Full Year** **1 credit** **(Level 3)**
Grades: 10, 11, 12
Prerequisites: Biology, Geometry (concurrently)- See Honors Placement, page 9

Honors Physics is designed to give students a background of the principles, laws, and concepts of classical physics. The scientific method is stressed in problem solving and laboratory exercises as well as hands-on projects, which compliment classroom discussions of theory. This course will prepare students to pursue Physics courses in college. Students who may be considering a major in any field of science, math, or any technical field should take this course since there is a strong emphasis on mathematical applications of physics concepts. Areas of study include motion, forces, energy, waves, sound, light, and electricity.

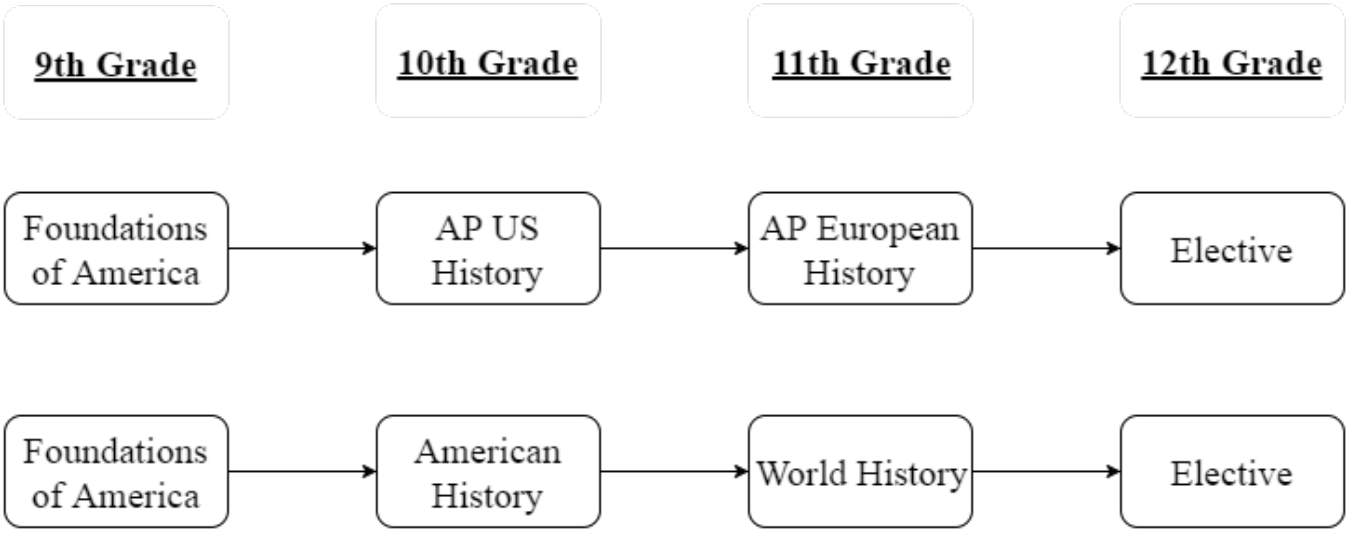
Course: **AP Physics** **Full Year** **1 credit** **(Level 4)**
Grades: 11, 12
Prerequisites: Geometry - See AP Placement, page 9

AP Physics includes topics in both classical and modern physics. Knowledge of algebra and basic trigonometry is required for the course. The basic ideas of calculus are introduced in connection with physical concepts such as acceleration and work. Understanding of the basic principles involved and the ability to apply these principles in the solution of problems are the major goals of the course. This course utilizes guided inquiry and student-centered learning to foster the development of critical thinking skills. This course provides instruction in each of the five content areas: Newtonian mechanics, fluid mechanics and thermal physics, electricity and magnetism, waves and optics, and atomic and atomic and nuclear physics.
** The College Board, AP Advanced Placement Program Course Description*

Course: **Anatomy** **Year** **1 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Biology

This course will explore the parts of the human body and how it works. There will be a major dissection of an animal that will be comparable to a human being. We also will use Internet resources to learn more about the human body. Some students will also have the opportunity to shadow and spend time in a health related field. This is a great course for those interested in any health related field**.**

SOCIAL STUDIES



Course: **Foundations of America** **Full Year** **1 credit** **(Level 2)**
Grades: 9
Prerequisites: None

This course will provide students with a solid foundation for the United States' creation and governmental and economic systems. Points of emphasis will be placed on Exploration, Colonization, and foundation of American Government, the U.S. Constitution, The Three Branches of Government, the Bill of Rights, Civil Rights, and Civil Liberties, and the Election Process. The students will also examine the U.S. Economics system and its development through Jeffersonian and Hamiltonian points of view in comparison to other systems found throughout the world.

Course: **American History** **Full Year** **1 credit** **(Level 2)**
Grades: 10
Prerequisites: Foundations of America

This required course will focus on American history beginning in the 1850s. It is presented as a survey course from the eve of the Civil War to the present. There will be a concentration on foreign wars, major domestic issues, and changing way of American life. Writing assignments will be required throughout the course and knowledge of geography will be emphasized.

Course: **World History** **Full Year** **1 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: None

This course covers the period of time from the Renaissance and Reformation to the present, including both Western and Eastern civilizations. The central purpose of the course is to provide students with an understanding of the past as a guide to help them understand their own times. Attention is given to the growth of ideas, religions, education, and the arts as well as aspects of social, intellectual, political, and economic developments. Geography is emphasized when talking of different regions. History is an evolutionary process. In order to appreciate that process, the course will examine how and why change occurs. Writing assignments are given throughout the course.

Course: **AP European History** **Full Year** **1 credit** **(Level 4)**
Grades: 11, 12
Prerequisites: Successful completion of English - See AP Placement, page 9

This course consists of a full year of academic work that is comparable to European History courses in colleges and universities. It is for highly motivated students who wish to develop a higher level of understanding of European history since 1450. The course will introduce students to cultural, economic, political, and social developments that played a fundamental role in shaping the world in which they live. Throughout the course, students will be exposed to a basic narrative of events and movements and some of the principal themes in modern European history. Critical thinking, research, and advanced writing skills will be emphasized with a major focus on the student's ability to analyze historical evidence and to express historical understanding in writing.

Course: **AP U.S. History** **Full Year** **1 credit** **(Level 4)**
Grades: 10, 11, 12
Prerequisites: Successful completion of English - See AP Placement, page 9

The AP U.S. History course is designed to provide students with the analytic skills and factual knowledge necessary to deal critically with the problems and materials in U.S. history. The program prepares students for intermediate and advanced college courses by making demands upon them equivalent to those made by full-year introductory college courses. Students should learn to assess historical materials—their relevance to a given interpretive problem, reliability, and importance—and to weigh the evidence and interpretations presented in historical scholarship. An AP U.S. History course thus develops the skills necessary to arrive at conclusions on the basis of an informed judgment and to present reasons and evidence clearly and persuasively in essay format.

Course: **American Government** **Semester** **0.5 credit** **(Level 1)**
Grades: 11, 12
Prerequisites: None

This course is devoted to American Government, and it deals with the fundamentals of American government and political philosophy. Attention is focused on the structural development of the modern Federal and State systems; the electoral, legislative and judicial processes; the presidency; and the history of major constitutional questions as treated by the Supreme Court, with an emphasis on the Bill of Rights.

Course: **Economics** **Semester** **0.5 Credit** **(Level 1)**
Grades: 11, 12
Prerequisites: None

Economics is the study of how people and countries use their resources to produce, distribute and consume goods and services to satisfy their wants and needs. The student's understanding of economics will influence how he/she will earn a living and help him/her make sound economic decisions. This course focuses on basic economic issues and concepts such as supply and demand, competition, income and spending, and the world of investments. Internet simulations such as The Stock Market Game will be used to reinforce the practical application of the academic theory. Additionally, students will study economic institutions, the role of government, national economic goals, monetary policy, the federal budget and current economic issues. Writing assignments are made throughout with additional assignments including projects, simulations and role-playing, to name a few.

Course: **Humanities** **Full Year** **1 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Successful completion of English and Social Studies at 80% or above

This elective course encompasses the following disciplines: literature, history, art, philosophy, theatre, music, and culture. Students will be encouraged to contemplate, write, and discuss changes in human values and emotions through western civilization.

Course: **Psychology** **Semester** **0.5 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Successful completion of English and Social Studies courses

This elective course treats psychology not as an isolated "academic" body of knowledge but rather as a study of the mind in relationship to the actions, feelings, thoughts and other mental or behavioral processes of people as they relate within themselves and society. The course attempts to explain the basic ideas, theories and discoveries that make up the body of psychological knowledge.

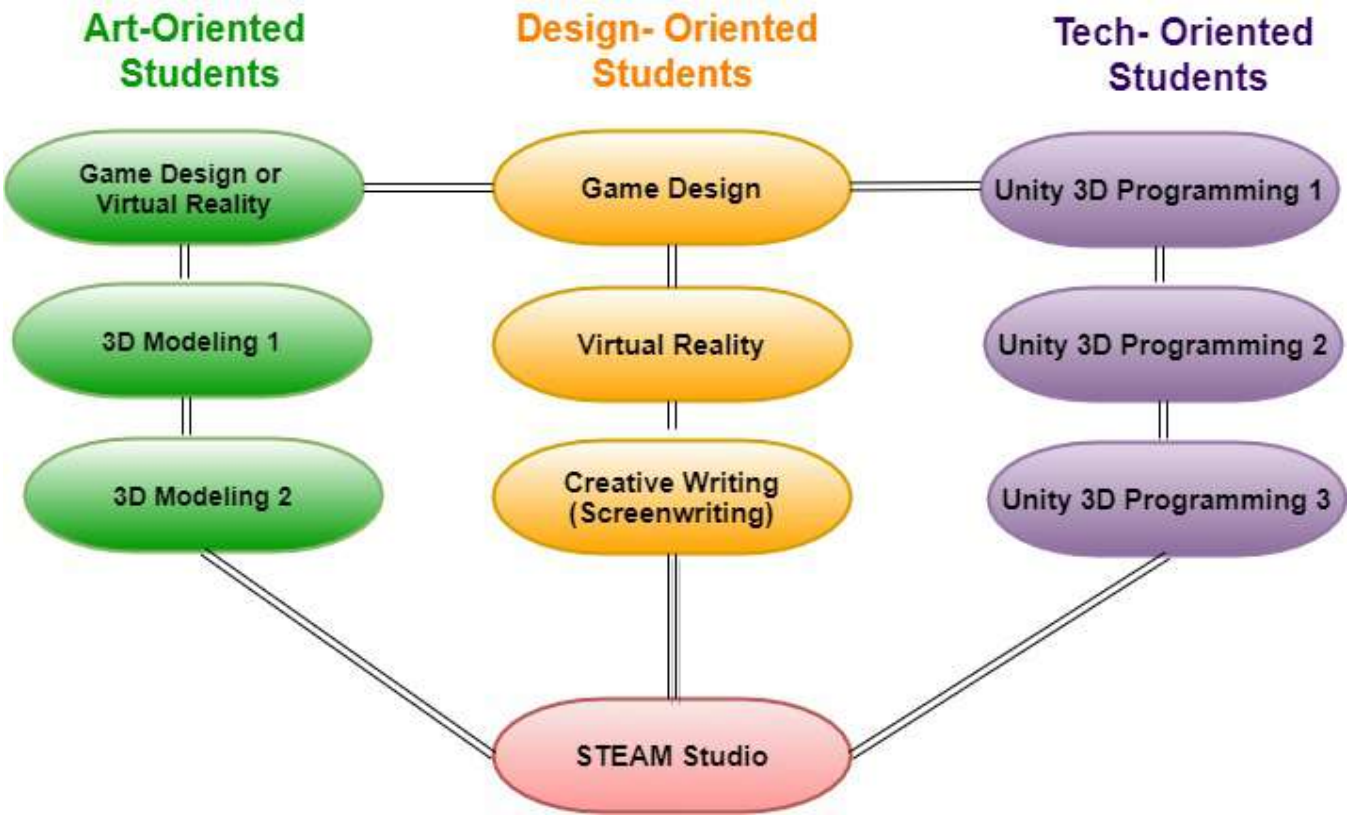
Course: **Sociology** **Semester** **0.5 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Successful completion of English and Social Studies courses

This is an elective course that deals in relationships with other human beings. These include relationships with friends, family, the people in school, clubs, businesses, government, and the social environment as a whole. The objective of the course is to develop a new sociological perspective, which will enrich the relationships between students and their social environment.

Course: **Reel History** **Semester** **0.5 credit** **(Level 1)**
Grades: 11, 12
Prerequisites: None

Hollywood films are an interpretation of their society. This course will examine Hollywood films as historical evidence. We will view movies on various topics and complete a project or movie review comparing the film to traditional sources such as books or articles. Through this course you should develop an understanding of American culture and society, develop the ability to analyze movies and other cultural artifacts, and gain an understanding of the historical development of film making in the US.

Entertainment Technology



The Entertainment Technology curriculum provides high students the opportunity, though hands-on, project-based learning to develop portfolios and skills needed to establish careers in a digital world. Students are prepared to pursue careers not only in the Gaming Industry, but a wide variety of fields that combine creativity with Science, Technology, Engineering, Art, and Mathematics. Courses include hybrid learning, project based activities, class discussions, and authentic assessments.

Game Design
3D Modeling I & II
Virtual Reality
Unity 3D Programming I, II, III
Screenwriting
STEAM Studio

Course: **Unity 3D Programming I** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12
Prerequisites: Teacher recommendation

Learn the basic concepts of Unity 3D and the C# programming language.

Course: **Unity 3D Programming II** **Semester** **0.5 credit** **(Level 3)**
Grades: 9, 10, 11, 12
Prerequisites: Programming I, Teacher recommendation

This course is a continuation of Programming I. You will explore complex 2D programming concepts, learn how to build increased difficulty into games, and explore advanced data structures. You will finish complete stand-alone executable games that can be played with friends and added to your digital portfolio**.** The design process will be used to create games.

Course: **Unity 3D Programming III** **Semester** **0.5 credit** **(Level 3)**
Grades: 10, 11, 12
Prerequisites: Programming II, Teacher recommendation

Are you ready to take your programming skills into the next dimension? Learn how to create dynamic Unity™ 3D games using the same industry-standard developing engine as professionals. You will create two fully executable games that can be played on many platforms and added to your digital portfolio.

Course: **Creative Writing (Screenwriting)** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12

Prerequisites: None
This workshop course will provide an opportunity for students to do original, imaginative writing based on the study of models from observation, experience, and literature. Students will work on descriptive, narrative, and persuasive prose, as well as dialogue and poetry. Student writing will be shared with the class, evaluated and critiqued by both the instructor and the class. Screenwriting will be a component of this course, where students will understand, critique, and write dramatic stories for modern media.

Course: **Game Design** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12

Prerequisites: Teacher Recommendation

"Gaming" doesn't only mean video games. Gamers also play board games, card games, simulations, and participate in interactive stories. This course breaks down the design process step by step. You will learn the fundamentals through hands-on modding, prototyping, and iteration of a variety of games. Your final project will include building, playtesting, and revising your own original game that can be played with friends and added to your game portfolio.

Course: **3D Modeling I** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12

Prerequisites: Teacher recommendation

Learn the 3D modeling techniques used in movies, visual effects, video games, cartoons, commercials, and animation! Using 3DS Max, you will work in this highly skill-based art form to manipulate and sculpt pure imagination into substantial forms.

Course: **3D Modeling II** **Semester** **0.5 credit** **(Level 3)**
Grades: 9, 10, 11, 12

Prerequisites: 3D Modeling I, Teacher recommendation

This course is a continuation of 3D modeling I. By the end of the course, you will have developed a portfolio of original projects that you can use when applying for an internship, higher education, or a job.

Course: **Virtual Reality Applications** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12

Prerequisites: Teacher recommendation

Virtual Reality Applications is a fun and exciting entry-level graphics course that introduces students to the unreal world of Virtual Reality (VR). The necessary hardware and software components of interactive 3D systems as well as human factors are discussed. The material is reinforced by practical assignments and projects. Skills learned can be applied to a variety of careers including: film production; television; music videos; video game design and development; virtual reality; medical and military simulation; scientific visualization and more. Hands-on experience using video game and VR content authoring tools.

Course: **STEAM Studio (Offered in 2021-2022)** **Year** **1 credit** **(Level 3)**
Grades: 10, 11, 12

Prerequisites: Successful completion of 3 or more STEAM courses; Teacher recommendation

STEAM studio is a course where students of varying talents come together to put their new skills to use for an outside client! Students will work with businesses, non-profits, schools, and other community organizations to gain experience with “real world” clients. Students will collaborate and develop projects such as create apps, art, games, websites, and more. This course is taught using Project Based Learning and is recommended for students who want to continue in the study of Robotics, Entertainment Technology, and Engineering and Design

Course: **AP Computer Science Principles** **Year** **1 credit** **(Level 4)**
Grades: 9, 10, 11, 12

Prerequisites: None

AP Computer Science Principles offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

Course: **Drone Piloting** **Semester** **0.5 credit** **(Level 3)**
Grades: 10, 11, 12 (Must be 16 when taking FAA Exam at the end of course)

Prerequisites: 3.0 GPA, FAA Requirements - meet or exceed, Mechanical and Reading Aptitude beneficial

Students will learn how to construct a drone, fly a drone, basic repairs of a drone, as well as deconstruction of a drone. Learn the rules of the sky as we study the Federal Aviation Administration (FAA) requirements to become a drone pilot. This class will culminate in students taking the FAA Remote Pilot Certification exam to get their Drone Pilot License. This is a mandatory requirement of the course. The FAA Requirements for this license include: you must be 16 years old, be able to read, speak, write, and understand English and be in physical and mental condition to safely fly a drone. The school nurse and P.E. teachers will certify vision requirements and physical fitness. A Remote Pilot Certification will open doors to careers such as photography, videography, surveying, real estate, construction, engineering and much more.

Course: **Creators and Influencers I** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12

Prerequisites: None

Students will create a brand that not only promotes the Hanover Public School District but also the Hanover community with a focus on student's personal interests. This course will capitalize on the experiences students bring from other courses and on their own personal interests and motivations. Students will incorporate videography, lighting, photography, audio recording, social media, graphic design, SEO techniques, analytics, copyright laws, teamwork skills, interviewing skills, communication skills, and marketing skills. Participants will work in a team-based setting to create, publish, and grow all aspects of the course brand. Success will be measured in brand growth. Upon completion of the course, students will have first hand experience in using the tools needed to create and manage a brand and have developed an online portfolio of their work that can be shared with future employers. This is an invaluable skill that will make the student very desirable to any future employer, regardless of the size or type of business. Students will be involved in all aspects of "creating the brand." Prospective students must be willing to work as a team, be in front of and behind the camera, and learn a lot of new things.

Course: **Creators and Influencers II** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: None

This course is for students that have completed Creators and Influencers I and wish to continue the journey.

Course: **ILC Spark Squad** **Sem/Yr** **0.5/1 credits** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

The Student *Technology Innovation and Integration* course is open to students in grades 9 through 12. It is a year long, hands on study of technology integration in an educational context. Students are required to assess problem sets throughout the day and define the best approach to addressing or solving the problem. In addition to solving problems for students and teachers, students will be required to complete and maintain several running projects that address problems or solutions in educational technology integration. This course does not meet as a regular class. Students will be assigned to this course based on their availability (Study Halls).

Course: **Filmmaking** **Sem/Yr** **1 credits** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

Do you have an interest in telling stories, being a YouTube content creator, or being the next Steven Spielberg? Students in this Filmmaking course will be introduced to the basic fundamentals of cinematography. The ability to create short films will allow you to enter the world of visual media which is so prevalent in society today. We will explore topics such as YouTube content creation, cameras, camera accessories, movement, lighting, collaboration, and all aspects of visual storytelling. This course does not meet as a regular class. Students will be assigned to this course based on their availability (Study Halls).

Course: **ILC Spark Squad** **Sem/Yr** **0.5/1 credits** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

The Student *Technology Innovation and Integration* course is open to students in grades 9 through 12. It is a year long, hands on study of technology integration in an educational context. Students are required to assess problem sets throughout the day and define the best approach to addressing or solving the problem. In addition to solving problems for students and teachers, students will be required to complete and maintain several running projects that address problems or solutions in educational technology integration. This course does not meet as a regular class. Students will be assigned to this course based on their availability (Study Halls).

Course: **Filmmaking** **Sem/Yr** **1 credits** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

Do you have an interest in telling stories, being a YouTube content creator, or being the next Steven Spielberg? Students in this Filmmaking course will be introduced to the basic fundamentals of cinematography. The ability to create short films will allow you to enter the world of visual media which is so prevalent in society today. We will explore topics such as YouTube content creation, cameras, camera accessories, movement, lighting, collaboration, and all aspects of visual storytelling. This course does not meet as a regular class. Students will be assigned to this course based on their availability (Study Halls).

TECHNOLOGY EDUCATION

Course: **Introduction to Design and Engineering** **Semester** **0.5 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: Successful completion of Algebra I, Teacher recommendation

Activities will be competitive hands-on design and building activities. Usage of the Internet for project research and exploration will be used with a strong emphasis on creativity and problem solving using a problem solving model to guide learning. Utilization of CADD (Computer Aided Drawing & Design) will be used throughout the course including advanced exposure to 3-D Modeling using Inventor software. Design, construction and assembly of proto-type models will be generated using 3D printers and/or CNC routers and including many shop processes for creating projects.

Course: **Design and Engineering Project** **Semester** **0.5 credit** **(Level 2)**
Grades: 9, 10, 11, 12
Prerequisites: Successful completion of Introduction to Design and Engineering, Teacher recommendation

This course is structured as a project based learning experience with a strong emphasis on creativity and problem solving using a problem solving model to guide learning. Activities will be competitive hands-on design and building activities. Students who wish to continue in Design and Engineering beyond this course are encouraged to enroll in STEAM Studio.

Course: **Metal I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10
Prerequisites: None

This course is open to any student with no previous high school metal working experience. Students enrolled in the course will work in areas of machine shop, welding, and sheet metal. During the course, students will be involved in producing their own required projects, developing skills in blueprint reading, precise measurements including tolerances, machine and hand tool usage, practicing safe techniques, working cooperatively, and developing employable skills. Costs for the individual projects are covered by the students.

Course: **Metal II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Metal I

Metals II is a year long course offering further development of basic skills introduced in level I. Students will broaden their experiences in the four areas of metal including sheet metal, machining, foundry, and welding during the year. Students will be required to manufacture a project/product incorporating all the areas covered. Upon completion of all required assignments, students may choose a specific area of concentration in order to prepare for future career opportunities. Concepts to be covered include but are not limited to, sheet metal pattern development, machining tapers, face, shoulder and slot milling, horizontal, vertical, and overhead welding positions, molding and pouring patterns.

Course: **Metal III** **Full Year** **1 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Metal I and Metal II

This course is a continuation of Metals I and II. Students will be concentrating in the areas of each individual student's strengths and interests. Students will be intensifying their educational experience in machining, sheet metal fabrication, welding and fabrication, or foundry casting and mold development. Approximately 75% of the year will be concentrated in one of the four areas. However, each of the four disciplines are interdependent upon each other and will be incorporated into their area of concentration throughout the year.

Course: **NOCTI Welding** **Full Year** **3 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Metal I and Metal II

NOCTI Welding is a PDE approved program for students desiring to enter the field of welding and fabrication. Students are scheduled three periods per day to obtain the 360 hours per year needed to incorporate all aspects of this industry. This program covers safety, blueprint reading, Oxy acetylene cutting, Plasma and carbon cutting, physical properties of metals, weld fit up and quality, Shielded metal 3/10/2017 62 arc welding, Gas metal arc welding, and gas tungsten arc welding. This comprehensive course prepares the student for both a written and performance exam in April/May of their senior year to obtain a certificate recognized by all industries

Course: **NIMS Machining, Pre-Apprenticeship** **Full Year** **3 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Metal I and Metal II

National Institute of Metalworking Skills (NIMS) has developed a pre-approved apprenticeship program specific to machining skills needed in the metal working industry. The Right Skills Now curriculum covers measurement, materials, safety, job planning, benchwork, and layout during the first year. The second year, CNC milling, CNC lathe turning, and an internship program is accomplished. Students will be scheduled two periods per day their first year and three periods per day the second year. This comprehensive course prepares the student for both a written and performance exam in April/May of their senior year to obtain a certificate recognized by all industries. This course has been sponsored with the cooperation of the Hanover Chamber of Commerce, RH Sheppard, Elsnor Engineering, and KLK Welding.

Course: **Construction Technology I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10, **11**
Prerequisites: None

This year-long elective course will provide students with opportunities to participate in the construction of several different introductory projects using machining techniques. Additionally, students will receive instruction in estimating building costs, electrical wiring and plumbing applications, reading blueprints, determining materials to be used, using tools and machines of construction, practicing safe techniques, working cooperatively, and developing employable skills. Successful students have the opportunity to work towards a Construction Technology Credential.

Course: **Construction Technology II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Construction Technology I

This year long elective course is available to students in grades 10-12 who have received a 75% or better grade in the Construction Technology I course. This course emphasizes shop safety, basic and advanced machine operations, furniture construction techniques and applied construction techniques on a whole collaborative class project. In addition, each student is required to construct a piece of furniture of his/her own choosing. Students will work more independently than in the Construction Technology I course. Successful students have the opportunity to work towards a Construction Technology Credential.

Course: **Construction Technology III** **Full Year** **1 credit** **(Level 2)**
Grades: 11, 12
Prerequisites: Construction Technology II – with an 85 or better

This course will allow the students to express themselves in the area of woodworking. This course is primarily a hands-on project oriented experience. A portion of this course will examine the nature and properties of wood. Some written work and research may be required. The project chosen for this class will reflect some type of specialized woodworking yet incorporate the many facets of the woodworking field. The course will also provide insights to the technological advances in the fields related to

woodworking. Successful students have the opportunity to work towards a Construction Technology Credential.

Course: **Mechatronics/Robotics 1** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Teacher Recommendation

Robotics is a lab-based course that uses a hands-on approach to introduce the basic concepts of robotics, focusing on the construction and programming of autonomous mobile robots. Students will obtain a practical understanding of electrical fundamentals, motor controls, and process control systems through theory and hands-on experience.

Mechatronics is a multidisciplinary field of science that includes a combination of mechanical engineering, electronics, computer engineering, telecommunications engineering. Systems engineering, and control engineering. These include wiring circuits, reading electrical and mechanical blueprints, troubleshooting and repairing electromechanical systems and using the tools/equipment of the industry, and understanding the safety standards for each operation. Understanding robotics is an important part of mechatronics. Students successfully completing this course have the potential ability to earn a microcredential as well as 8 credits toward the mechatronics program at HACC – Gettysburg.

Course: **Mechatronics/Robotics I1** **Semester** **0.5 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: Mechatronics/Robotics **1**

This course is a continuation of Mechatronics/Robotics I and will be taught using project based learning. This course will focus on collaborating in teams to create a robot.

Course: **French I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

French I is an introductory course that establishes the foundation for further studies. Students will attain basic proficiency in the four areas of communication (reading, writing, listening, speaking) and will develop an understanding of, and appreciation for, the French-Speaking world. Some topics include school, likes and dislikes, numbers, pastime activities, family, food and culture.

Course: **French II** **Full Year** **1 credit** **(Level 2)**
Grades: 10, 11, 12
Prerequisites: French I

French II continues to develop basic concepts in French language and culture including grammar, vocabulary, and pronunciation. Students will enhance and further develop skills in the four areas of communication (reading, writing, listening, speaking), including the use of past tense. Units to be presented include food, problems and advice, vacation, clothing, geography, and home.

Course: **French III** **Full Year** **1 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: French I, II

French III focuses on strengthening the skills acquired in French I and II. Students will begin to learn more advanced concepts to express thoughts, ideas and experiences about upcoming and memorable events. Some topics of study include health and wellness, childhood, entertainment, and traveling. French is spoken for the majority of instruction. Students are expected to demonstrate their ability to produce the language through extensive speaking and writing in the target language.

Course: **AP French Language and Culture** **Full Year** **1 credit** **(Level 4)**
Grades: 12
Prerequisites: Successful Completion of French III

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

course is taught almost exclusively in French. The AP French Language and Culture course engages students in an exploration of culture in both contemporary and historical contexts. The course develops students' awareness and appreciation of cultural products (e.g., tools, books, music, laws, conventions, institutions); practices (patterns of social interactions within a culture); and perspectives (values, attitudes, and assumptions).
** The College Board, AP Advanced Placement Program Course Description*

Course: **Spanish I** **Full Year** **1 credit** **(Level 1)**
Grades: 9, 10, 11, 12
Prerequisites: None

Students learn introductory vocabulary and grammar to speak and write about themselves and their lives in Spanish. Various engaging stories and authentic materials are used to increase Spanish comprehension and production. This approach encourages more natural language acquisition. Students will be expected to read, write, speak and listen in Spanish at various times throughout the class. Students will demonstrate mastery of the language through writings, presentations, projects and various other assessments. The majority of the work will be accessed and submitted through Firefly Blend.

Course: **Spanish II** **Full year** **1 credit** **(Level 2)**
Grades: 9, 10, 11, 12
Prerequisites: Spanish I

Students perfect their knowledge of speaking Spanish in the present tense before moving on to the various tenses of the past. More detailed geography and culture of selected countries is explored. Oral presentations occur on a regular basis and a carefully executed notebook (including all notes from Spanish I) must be maintained and presented for grading several times each marking period.

Course: **Spanish III** **Full Year** **1 credit** **(Level 3)**
Grades: 10, 11, 12
Prerequisites: Spanish II

This course is for students who are truly interested in perfecting their oral and written Spanish. Present and past tenses are reviewed before moving on to the various future tenses. Students continue to explore in detail the geography and customs of select Spanish-speaking countries. All essays and oral presentations will be conducted in Spanish. Spanish is spoken in instruction. Students continue to maintain an organized and thorough notebook, which contains all of their notes from Spanish I and II.

Course: **Spanish IV** **Full Year** **1 credit** **(Level 3)**
Grades: 11, 12
Prerequisites: Spanish III

This course is for students fully committed to using Spanish in their future education and career. Students will write their resumes in Spanish, take part in a Spanish interview, write about future goals in Spanish, and use Spanish to talk about themselves in a variety of advanced ways. Spanish vocabulary

will be tailored to the career goals of the students in this class. Grammar will delve into the subjunctive tense which allows students to talk about what they want or hope for. Contemporary art and music will be studied and analyzed in Spanish by students. Oral presentations in Spanish are a weekly occurrence. The notebooks will be perfected for use in college. Spanish is spoken in instruction.

Course: **AP Spanish Language and Culture** **Full Year** **1 credit** **(Level 4)**
Grades: 11, 12
Prerequisites: Successful completion of Spanish III

This course will prepare students for the AP Spanish Language and Culture exam. Taught entirely in Spanish, the course is a study of the sociology of the Spanish-speaking world. Students will read, write and speak in Spanish in an analytical fashion on a wide variety of topics. Formal compositions and oral presentations are a weekly occurrence. Summer coursework will be assigned to all students who sign up for this course.

High School Administration

Mrs. Rina Houck, Principal
Mr. Marc Abels, Assistant Principal

401 Moul Avenue
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Phone: (717) 637-9000 – Fax: (717) 630-4634

High School Guidance Office

Mrs. Theresa Henry (717) 637-9000 Ext. 5095 Counselor Grades 9, 11
Mrs. Kari Hively (717) 637-9000 Ext. 5006 – Counselor Grades 10 and 12

District Office Administration

Dr. John Scola, Superintendent
Dr. Susan Seiple, Assistant to the Superintendent
Mrs. Lois Gunnet, Director of Special Education
Mr. David Fry, Director of Technology

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