

Mayfield High School



Course Catalog

2017-2018

6116 Wilson Mills Road
Mayfield Village OH 44143

(440) 995-6900
www.mayfieldschools.org

Principal

Mr. Jeffrey Legan

Assistant Principal for Curriculum, Instruction & Staff Development

Mr. Jarrod Mulheman

Assistant Principal for Student Affairs (11-12)

Ms. Jane Perry

Assistant Principal for Student Affairs (9-10)

Mr. Brian Linn

Assistant Principal/Technical Education Director

Mr. Nathan W. Bishko

Dean of Students/Technical Education

Mr. Joseph Rico

Superintendent of Schools

Dr. Keith Kelly

Mayfield Board of Education

President – Ms. Sue Groszek

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Mr. James Teresi

TABLE OF CONTENTS

What It Takes to Earn a Mayfield High School Diploma

Curricular Requirements	2
Graduation Test Requirements	3
Diploma with Honors	4

General Information

Fine Arts Course Offerings	5
Technology Course Offerings	6
College Prep Curriculum	7
STEM2M Program	8
Tech Prep Curriculum	9
Credit Flexibility/MHS Independent Study	10
Dual Credit	11
Course Selection Rules and Regulations	14
NCAA Course Requirements	19

Course Descriptions

Applied Arts	21
Business Education	23
Family and Consumer Science	27
English	30
Fine Arts	39
Art	41
Music	45
Health/Physical Education	47
Mathematics	52
Science	59
Social Studies	70
Special Education	76
Special Programs	79
Technical Program	88
World Language	94
Special Programs	100
Technical Education (Excel TECC)	102

Career Information

Arts and Communication	118
Business and Management	120
Environmental and Agriculture	122
Health Services	124
Human Services	126
Industrial and Engineering Systems	128

Course Planner

	130
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WHAT IT TAKES TO EARN A MAYFIELD DIPLOMA

There are testing requirements and curriculum requirements connected with a Mayfield diploma; students must meet both requirements in order to earn a Mayfield diploma. The two sections below provide you with more information about these two diploma requirements.

I. Curricular Requirements

<u>Requirements</u>	<u>Credits</u>	<u>Comments</u>
English	4.0	9 Introduction to Literature Study and Composition, 10 World Literature and Composition, 11 American Literature and Composition, and 12 British Literature and Composition
Communications	0.5	Communications or News Writing for Electronic Media
Health	0.5	Health
Mathematics	4.0	Ohio requires that the mathematics credits must include one (1) credit of Algebra 2 or the equivalent of Algebra 2. At Mayfield a student would need to complete a Mathematics 3 course to meet this requirement.
Physical Education	0.5	One (1) semester taken during both grade 9 and grade 10; OR, one (1) semester taken during grade 9 or 10, AND two (2) full seasons of interscholastic sports, marching band or cheerleading.
Science	3.0	1.0 credit in Life Science 1.0 credit in Physical Science 1.0 credit advanced study in: chemistry, physics, or other physical science; advanced biology or other life science; astronomy, physical geology, or other earth or space science
Social Studies	3.0	U.S. History, World History, Government
Fine Arts	1.0	Students must complete at least two (2) semesters of fine arts taken from the list of fine arts course offerings included in the Course Catalog. Students following a career-technical pathway are exempt from the fine arts requirement.
Technology	0.5	The technology credit must be taken from the list of technology course offerings included in the Course Catalog.
Electives	4.0	Elective credits may include any combination of courses taken in excess of the credits listed above.
Total	21.0	

II. Graduation - Testing Requirements

Students who entered ninth grade for the first time in the 2014-2015 school year will follow graduation requirements for the **class of 2018**.

All students must complete the course requirements and assessment requirements in the seven approved courses. This means that all students will take all end-of-course tests for the seven courses and the college admissions test. If a student chooses to use a pathway that doesn't rely on end of test scores (college admissions test) or has accumulated necessary performance points, the student must still take the end-of-course tests to earn an Ohio High School Diploma. Students who score below proficient on a test may retake it after they receive remediation support on the material. All scores are documented in MHS Infinite Campus 'Assessments.'

It is the expectation that students take the state end-of-course test when they are taking the course. Students must meet their course requirements and one of the following options for the testing requirement:

1. **A total of 18 Graduation Points across all end-of-course tests;**
 - 4 points in Math, 4 points in English, 6 points across Social Studies and Science.
 - There is no subsequent need to score higher than 18 points.
 - Passing EOC is not needed to pass course.
 - Students can earn 1-5 points for each exam, based on their performance:
 - 5 Advanced
 - 4 Accelerated
 - 3 Proficient
 - 2 Basic
 - 1 Limited
2. A remediation-free score on the ACT (Writing 18, Reading 21, Math 22) or SAT (English 430, Reading 450, Math 520)
3. A composite score of 13 on the WorkKeys and an approved industry-recognized credential.

All students will take End of Course Tests (EOC)

9 th	10 th	12 th
Math 1 (90 minutes)	Math 2 (90 minutes)	American Government (90 minutes)
English 1 (105 minutes)	Biology (90 minutes)	
US History (90 minutes)	English 2 (105 minutes)	
Biology Honors (90 minutes)		

The end-of-course (EOC) tests will have students respond to items that are then computer scored. The EOCs will be administered 90% of the way through the school year. The EOC is online and interactive. Students will utilize constructed responses, equations, matching, dragging, multiple choice, multi select, grid and table items and simulation.

Special Circumstances: *Students taking Advanced Placement in Physical Science, American History or American Government may take assessments aligned with those courses in lieu of an end-of-course exam to avoid double testing.*

THE DIPLOMA WITH HONORS

The student who completes the high school academic curriculum shall meet at least seven of the following eight criteria:

1. earn four units of English;
2. earn at least four units of mathematics, which shall include Mathematics 1, Mathematics 2, Mathematics 3, and another higher level course;
3. earn at least four units of science, including one unit of physics and one unit of chemistry;
4. earn four units of social studies;
5. earn either three units of one foreign language or two units each of two foreign languages;
6. earn one unit of fine arts;
7. maintain an overall high school unweighted grade point average of at least 3.5 on a 4.0-point unweighted scale up to the last grading period of the senior year; or
8. obtain a composite score of 27 on the American College Test's ACT Assessment (excluding the optional writing test) or a combined score of 1210 on the College Board's SAT verbal and mathematics sections (excluding the required writing section).

The student who completes an intensive career in a technical education curriculum shall meet at least seven of the following eight criteria:

1. earn four units of English;
2. earn at least four units of mathematics, which shall include Mathematics 1, Mathematics 2, Mathematics 3, and another higher level course;
3. earn at least four units of science, including two units of advanced science*;
4. earn four units of social studies;
5. earn four units in a career-technical education program that leads to an industry-recognized credential, results in an apprenticeship, or is part of an articulated career pathway which can lead to post-secondary credit. If the student's program design does not provide for any of these outcomes, then the student must achieve the proficiency benchmark established for the applicable Ohio Career-Technical Competency Assessment or the equivalent;
6. achieve the proficiency benchmark established for the Ohio Career-Technical Competency Assessment or equivalent assessment aligned with State-approved and industry validated technical standards;
7. maintain an overall high school unweighted grade point average of at least 3.5 on a 4.0 point unweighted scale up to the last grading period of the senior year; or
8. obtain a composite score of 27 on the American College Testing Service's ACT Assessment (excluding the optional writing test) or a combined score of 1210 on the College Board's SAT verbal and mathematics sections (excluding the score obtained on the required writing section).
9. *Advanced science refers to courses in the Ohio Core that are inquiry-based with laboratory experiences and align with the 11/12th grade standards (or above) or with an AP science course, or with the new high school syllabi, or with an entry-level college course (clearly preparing students for a college freshman-level science class, such as anatomy, botany, or astronomy), or contain material above the current grade band level.

FINE ARTS COURSE OFFERINGS

Appropriate fine arts experiences for high school students preparing for college should include essential content in the following: creating or performing works of art, understanding the history of the arts, and/or responding to the aesthetic features of works of art. The Fine Art credit may be obtained through these courses:

Applied Arts Department

Advanced Media Production	<i>1.0 credit year course</i>
Digital Media Production 1	<i>0.5 credit semester course</i>
Digital Media Production 2	<i>0.5 credit semester course</i>
Fashion and Accessories Clothing and Design	<i>0.5 credit semester course</i>
Interior Design	<i>0.5 credit semester course</i>

English Department

Yearbook 1 and 2	<i>1.0 credit year course</i>
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Fine Arts Department

A.P. Art History	<i>1.0 credit year course</i>
AP Music Theory	<i>1.0 credit year course</i>
A.P. Studio Art	<i>1.0 credit year course</i>
Art Foundations	<i>0.5 credit semester course</i>
Art Foundations 2	<i>0.5 credit semester course</i>
Art 2	<i>1.0 credit year course</i>
Advanced Art 1	<i>1.0 credit year course</i>
Advanced Art 2 Honors	<i>1.0 credit year course</i>
Ceramics 1	<i>0.5 credit semester course</i>
Ceramics 2	<i>0.5 credit semester course</i>
Chorale	<i>1.0 credit year course</i>
Concert Choir	<i>1.0 credit year course</i>
Digital Art and Design 1	<i>0.5 credit semester course</i>
Digital Art and Design 2	<i>0.5 credit semester course</i>
Drawing/Painting	<i>0.5 credit semester course</i>
Jazz Band	<i>0.5 credit year course</i>
Marching and Concert Band	<i>1.0 credit year course</i>
Photography 1	<i>0.5 credit semester course</i>
Photography 2	<i>0.5 credit semester course</i>

Technical Education

Any Excel TECC course will satisfy this requirement.

TECHNOLOGY COURSE OFFERINGS

The technology credit may be obtained through these courses:

Applied Arts Department

Advanced Digital Media Production	<i>1.0 credit year course</i>
Advanced Digital Media Production 2	<i>1.0 credit year course</i>
Computer Programming with Visual BASIC	<i>0.5 credit semester course</i>
Computer Programming with Java	<i>0.5 credit semester course</i>
Digital Media Production 1	<i>0.5 credit semester course</i>
Digital Media Production 2	<i>0.5 credit semester course</i>
Information Technology	<i>0.5 credit semester course</i>
Tech Squad	<i>0.5 credit semester course</i>

English Department

News Writing for Digital Media	<i>0.5 credit semester course</i>
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Fine Arts Department

Digital Art and Design 1	<i>0.5 credit semester course</i>
Digital Art and Design 2	<i>0.5 credit semester course</i>
Photography 1	<i>0.5 credit semester course</i>

Mathematics Department

Computer Science Principles	<i>1.0 credit year course</i>
Computer Science A	<i>1.0 credit year course</i>

Science Department

Introduction to Engineering Design <i>(Meets technology requirement for the class of 2021 and beyond)</i>	<i>1.0 credit year course</i>
Principles of the Biomedical Sciences <i>(Meets technology requirement for the class of 2021 and beyond)</i>	<i>1.0 credit year course</i>

Technical Education

Business Academy 1	<i>3.0 credits year course at WES</i>
Business Academy 2	<i>3.0 credits year course at WES</i>
CADD Engineering 1	<i>3.0 credits year course at Lakeland</i>
CADD Engineering 2	<i>3.0 credits year course at Lakeland</i>
Information Technology and Programming 1	<i>3.0 credits year long at Mayfield</i>
Information Technology and Programming 2	<i>3.0 credits year long at Mayfield</i>
Interactive Media 1	<i>3.0 credits year long at Mayfield</i>
Interactive Media 2	<i>3.0 credits year long at Mayfield</i>
Digital Arts and Technology	<i>3.0 credits year long at Aurora</i>
Digital Arts and Technology 2	<i>3.0 credits year long at Aurora</i>

COLLEGE PREPARATORY CURRICULUM

The minimum core for college preparation is listed below. Students who intend to apply to a four-year college should expect to complete the curriculum at Mayfield High School.

1. English – 4 units
2. Mathematics – 4 units (Algebra content or above)
3. Social Studies – 3 units
4. Science – 4 units of Lab Science including Biology, Chemistry, and Physics
5. World Language – 2 or 3 units
6. Fine Arts – 1 unit

State and private colleges are required to establish admission policies in line with goals and purposes of the institution. By necessity, admission standards will vary from college to college. Some universities may require more extensive preparation in specific subject areas. **Check with the university of your choice** or your school counselor for the most up-to-date information.

The following coursework is strongly recommended by the Mayfield City Schools for all students who are preparing to attend college. Studies show that students who take a **rigorous college preparatory curriculum** are the most successful in college.

GRADE 9

9 Introduction to Literature and Comp.
U.S. History
Mathematics 1
9 Physical Science or Biology Honors
World Language *
Technology
Fine Art
Physical Education

GRADE 11

11 American Literature and Composition
Social Studies (Elective)
Mathematics 3
Chemistry, Physics or other advanced science
World Language *
Additional Electives

GRADE 10

10 World Literature and Composition
World History
Mathematics 2
Biology or Chemistry
World Language*
Communication Course
Health
Physical Education

GRADE 12

12 British Literature and Composition
American Government
Mathematics 4
Chemistry, Physics or other advanced science
Additional Electives

*A minimum of 2 or 3 years of the same language in grades 8 - 12.

STEM2M PROGRAM

The **STEM2M** Program at Mayfield High School combines Advanced Placement courses with Project Lead The Way courses in three fields – engineering, biomedical science, and computer science. Through these courses students will develop critical skills through an interdisciplinary approach which are relevant for any coursework or career.

Students who complete the requirements of their chosen pathway earn the AP + PLTW student recognition, a qualification that demonstrates to colleges and employers that the student is ready for advanced course work and interested in careers in this discipline.

To earn the recognition, the student must satisfactorily complete:

- three courses in the pathway;
 - o one AP course
 - o one PLTW course
 - o a third course, either AP or PLTW
- earn a qualifying score of 3 or higher on the AP Exam(s) and a score of Proficient or higher on the PLTW End of Course (EoC) assessment(s).

AP + PLTW Pathway Menu of Courses

Level	Engineering	Biomedical Science	Computer Science
AP Courses	AP Biology AP Calculus AB AP Calculus BC AP Chemistry AP Environmental Science AP Physics 1 AP Physics 2 AP Statistics	AP Biology AP Chemistry	AP Computer Science Principles AP Computer Science A
PLTW Courses	Introduction to Engineering Design Principles of Engineering	Principles of Biomedical Science Human Body Systems	<i>TBD Offered in 2018</i>

TECH PREP CURRICULUM

As the world shrinks in an increasingly global environment, there is a growing need for students to emerge from high school prepared to enter colleges, universities, and careers in order to successfully compete in a 21st century community.

Excel TECC Tech Prep programs prepare students for high demand, high skill technical careers in our competitive global economy. Excel TECC follows rigorous education pathways developed, aligned and implemented with college curriculum that emphasize education. Students in Excel TECC programs are met with a fresh approach to education. They are immersed in programs where field professionals present contextual problems they are expected to approach and solve. Students in Excel TECC programs are expected to be business savvy, fiscally responsible, fast thinking and critical evaluators. The faculty demands the best of Excel TECC students in order to develop the competencies and skills necessary to enter two-year or four-year colleges, technical school, or a career. Students in Excel TECC emerge ready to meet 21st century demands.

Students in Excel TECC have the opportunity to pursue college credits through articulation agreements with Cuyahoga Community College, Lakeland Community College, Art Institute of Pittsburgh, Culinary Institute of America, Johnson and Wales, Northwood University, University of Northwestern Ohio, Vatterott College, Universal Tech Institute, and the Art Institute of San Francisco. These articulation agreements lead to credits at the college level.

Graduates of Excel TECC are offered the opportunity to pursue a two- or four-year college degree with articulated credits coupled with the skill set to enter a career in the field of their training. Students participating in Career Technical Education programs in the Excel TECC Consortium have greater potential to be successful in the path of their choosing whether college or career.

CREDIT FLEXIBILITY

Credit Flexibility is designed to broaden the scope of curricular options available to students, increase the depth of study available for a particular subject, and tailor the learning time or conditions needed to complete a high school diploma. Students may earn credits through:

- the completion of courses;
- testing out or otherwise demonstrating mastery of the course content;
- pursuit of one or more “educational options” (e.g. distance learning, educational travel, independent study, internship, after-school program, community service or engagement project, and research).

A student who chooses educational options must inform the school and pre-identify the learning outcomes. The school and student will mutually agree upon the criteria for earning credit.

A student interested in credit flexibility should contact the assigned counselor for more specific information. Participation in the credit flexibility program requires a completed application, administrative approval, and an agreed-upon educational options contract.

INDEPENDENT STUDY

During independent study, a student is guided by a teacher in the course content but does attend classes on a regular basis with other students. In essence, the student works independently. While students follow the district-adopted curriculum and meet the district graduation requirements, independent study offers flexibility to meet individual student needs, interests & styles of learning.

Because students in independent study work closely with their MHS teachers, in one-on-one meetings or small group instruction, independent study can be a highly personalized form of instruction. Independent study also offers a high degree of flexibility and individualization, so it can serve a wide range of students including:

Highly motivated students who wish to accelerate.

- Students who face scheduling difficulties
- Students who need an individualized approach to fill in gaps in their learning or recover credits.
- Students who want an individualized approach that allows them to delve more deeply into areas of special interest.

Independent study requires basic academic skills and a level of commitment, motivation, organizational skills, and self-direction not unlike the level required by college students.

The education students receive from a certified teacher using independent study should be equal in quality and quantity to that offered in the classroom. Such a study must be a logical and worthwhile extension and fall within the academic criteria for inclusion in one of the high school departments. Please note that this is not always an option. The student will receive a Pass/No Pass/U on the transcript. Please see your school counselor if you are interested and have further questions.

DUAL CREDIT

Improving the educational attainment of Ohio citizens is key to ensuring the state's long-term success. Therefore, the state has committed significant resources across the education continuum to develop and implement strategies to address this critical issue. College Credit Plus replaces the Post-Secondary Enrollment Options program as of the 2015-2016 school year. The specified courses offered at the Mayfield High School by a certified instructor will be the same as those offered on the campus of Lakeland Community College.

The program is open to students in grades 7-12 who are able to meet specific qualifications determined by the state, which include receiving a remediation free overall score on a college readiness exam, such as the ACT, SAT or Compass.

To participate, students must be enrolled in both college and high school. The student will earn transcribed college and high school credit *upon successful completion of the course*. These credits are acknowledged at public Ohio colleges and universities. Students are responsible for providing intent to the counseling office by April 1st of the prior school year and for taking and earning accumulative passing points for the necessary end of course exams at the high school, which act as a graduation requirement.

Three or more semester credits will constitute as one Carnegie unit of high school credit. A student may not take more than 30 college credit hours per year or 120 college credit hours throughout the four years of high school.

Students will earn letter grades from the CCP course. Grades will be weighted on a honors/AP scale dependent upon equivalency of course offerings. It will be reflected within the high school transcript and calculated into the grade point average.

The student will have an Institution of Higher Learning Advisor and will meet at least once prior to the institution's effective no-fault course drop out date. An informational meeting for parents and students will be offered at the high school and specifics can be found on the school website.

In regards to decision making, it is important to take into account learning style, pace, rigor, weighting and future college applications. Therefore, it is necessary to seek advice from your high school guidance counselor.

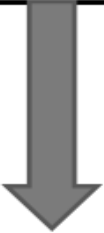
**MHS GRADUATION REQUIREMENTS
COLLEGE CREDIT PLUS EQUIVALENCY COURSES**

Mayfield High School Courses Required for Graduation	Lakeland Course Equivalent
4 English	
<ul style="list-style-type: none"> • 9 Intro. Lit/Comp • 10 World Lit/Comp • 11 American Lit/Comp • 12 Brit. Lit/Comp 	ENGL 1110/ ENGL 1120 (3) ENGL 2250/2260 (3) ENGL 2280/2290 (3)
4 Mathematics	
<ul style="list-style-type: none"> • Math 1 	MATH 0850 (3)
<ul style="list-style-type: none"> • Math 2 	MATH 0950 (3)
<ul style="list-style-type: none"> • Math 3 (Algebra II Requirement) 	MATH 1650 (4)
<ul style="list-style-type: none"> • Math 4 	MATH 1700 (3)
<ul style="list-style-type: none"> • Financial Algebra CP 	MATH 1040 (3) MATH 1050 (3)
<ul style="list-style-type: none"> • AP Calculus AB 	MATH 2500 (5)
<ul style="list-style-type: none"> • AP Calculus BC 	MATH 2600 (5)
<ul style="list-style-type: none"> • AP Statistics 	MATH 1550 (4)
3 Social Studies	
<ul style="list-style-type: none"> • U.S. History 	HIST 2150/ 2250 (3)
<ul style="list-style-type: none"> • Government • Economics 	POLS 1300 (3) ECON (3)
<ul style="list-style-type: none"> • World History 	HIST 1450 (3) HIST 1550 (3)
3 Science	
<ul style="list-style-type: none"> • Biology 	BIOL 1140 (3) BIOL 1010 (3) BIOL 1020 (3) BIOL 1030 (3) BIOL 1510 (4) BIOL 1520 (4)
<ul style="list-style-type: none"> • Physical Science 	PSCI 1300 (3) PSCI 1400 (3) PHYS 1500 (4) PHYS 1550 (3) PHYS 1610 (5) PHYS 1620 (5) CHEM 1050 (3) CHEM 1100 (4) CHEM 1500 (5) CHEM 1600 (5)
<ul style="list-style-type: none"> • Any Science Elective 	Any Science Elective
Elective Requirements	
.5 Communications (Speech)	COMM 1000/2000 (3 Each)
1 Fine Art	Any Art
.5 Health	PEHR 1500 (1) with PEHR 1250 (2)
.5 Physical Education	PEHR 1101-1607 (3)
.5 Technology	ITIS 1005 (3) ITCS 1105 (3)
4 Electives	Any Course

15 CREDIT HOUR & 30 CREDIT HOUR PATHWAYS FOR COLLEGE CREDIT PLUS

15 credit Pathway – Lakeland Community College - Dollar amount per credit hour and textbooks provided by the school district (contingent upon passing grade, or repayment required.)

30 Credit Pathway – Lakeland Community College - Dollar amount per credit hour and textbooks provided by the school district (contingent upon passing grade, or repayment required.)

Course	Location	Semester Hours	Equivalent	Pathway
ENG 1110 & ENGL 1120	MHS	6	Core English	15 Credit Hour Pathway
POLS 1300 or ECON 1150	LCC	3	X	
HUMX 1100 or SOCY 1150	LCC	3	X or Sociology	
PSYC 1500 or COMM 1000	LCC	3	AP Psychology or Communication	
<i>Math 1650 & MATH 1700</i>	LCC	4 & 3	<i>Math 4</i>	30 Credit Hour Pathway Pick One Math Sequence Block and
<i>Math 1550 & MATH 1650</i>	LCC	4 each	<i>AP Stats & Math 4</i>	
<i>GEOG 1100 & GEOG 1200</i>	LCC	4 each	X	 Pick one Science Sequence Block 30 Credit Hour Pathway
PHYS 1500	LCC	3	Astronomy	
BIOL 1140	LCC	4	X	
BIOL 1010 & BIOL 1020 & BIOL1030	LCC	3 each	Biology, Biology & Energy and the Environment	
CHEM 1100	LCC	4	Chemistry	
BIOL 1510 & BIOL 1520	LCC	4 each	AP Biology	Science Majors
CHEM 1500 & CHEM 1600	LCC	5 each	Chemistry	
PHYS 1610 & PHYS 1620	LCC	5 each	Physics & AP Physics	

COURSE SELECTION RULES AND REGULATIONS

1. **Minimum schedule load** – A minimum schedule of **5.75 credits per year for freshmen and sophomores is required and 6.0 credits per year for juniors and seniors**. A student in grades 10-12 must be carrying a minimum of 6 credits to be eligible to select one course on a pass/no pass basis. No courses required for graduation may be taken pass/no pass. Honors and Advanced Placement classes may not be selected for pass/no pass. **Please refer to the student handbook for other details of the pass/no pass program.**
2. **Promotion** – The following minimum credit accumulation is in effect for a student to be promoted to the next grade level:

Sophomore Homeroom	5.00 credits accumulated
Junior Homeroom	10.50 credits accumulated
Senior Homeroom	15.50 credits accumulated

If at the end of the first semester a student passes enough subjects and is enrolled in sufficient courses to graduate, the student will be classified as a senior and become a candidate for graduation.

3. **Transcripts** – It is the student's responsibility to check his/her transcript to make sure all requirements for graduation are being fulfilled. Credit evaluations are completed through the Counseling Department during the scheduling appointments. Students are encouraged to regularly access the Academic Planner in Infinite Campus to monitor his/her progress towards graduation.
4. **Schedule Changes/Dropping a Course** – Students are strongly encouraged to explore all course offerings before requesting specific courses. Courses offered and the teaching staff assigned to those courses are based upon the number of students who request to take them. Schedule changes can seriously impact class sizes and course offerings. Therefore, schedule changes in preparation for the coming year should be made by the close of the current school year.

Students will have 5 days starting on the 3rd day of class to add or drop a course without a withdraw or withdraw/fail marked on the transcript, contingent upon the permissible reasons. (Semester 2 changes must take place within the first three days of the 3rd marking period.) Students looking to drop a course to replace with a lower level course, may only do so after 2 weeks of class. It will not be reflected on the student's transcript.

Schedule change requests will be considered for the following reasons:

- insufficient credit
- incorrect placement
- courses needed for graduation
- additional elective options where enrollment permits and does not require movement of other courses. (excluding AP)

Schedule changes will not be made for the following reasons:

- moving a class from one period to another
- getting an eighth period study hall
- moving a lunch period to another period or teacher preference.

Students earning a letter grade of A, B, or C (70-100) at the end of the first semester may NOT drop a year-long course without receiving a WF (withdraw/fail) unless there are mitigating circumstances, such as a different course is needed for graduation, and that course cannot be scheduled at any other time.

Students earning a D or F (0-69), and whose grades are trending down, must schedule a meeting with the teacher and the appropriate counselor (or administrator). If it is determined that it is in the best interest to drop the course, the course will be dropped from the student's schedule only after all the proper paperwork has been reviewed through the counseling office.

5. **Pass/No Pass Option** – In an effort to encourage students in grades 10-12 to schedule courses that are difficult for them and not affect the student's point average, we offer each student an opportunity to take two courses on a pass/no pass basis. The courses selected will not be included in grade point average calculations unless a student receives an unsatisfactory or a no pass. The grade will show on the report card and transcript as pass (P), unsatisfactory (U), or no pass (NP).

The regulations for pass/no pass are as follows:

1. Only one credit per year can be selected pass/no pass. Two credits may be selected over a three-year period.
2. Honors and AP classes may not be selected for pass/no pass
3. Any course selected may not exceed one credit
4. To take any course pass/no pass, a student must be carrying a minimum of six (6) credits.
5. You must decide to take a class pass/no pass by September 15th whether you are selecting a first semester or a full – year course.
6. Students may not decide to take the second semester of a full-year class pass/no pass if they received a grade for the first semester.
7. Students taking second semester classes will have the first seven days of the second semester to request pass/no pass.
8. Seniors who plan to participate in Senior Search cannot take a second semester class pass/no pass unless they have above a 4.0 cumulative GPA.
9. The decision to take a class pass/no pass is final, and no course selected on a pass/no pass basis may be changed to a grade later. All attendance rules will be in effect. Daily attendance is required in pass/no pass classes as in any other classes. Students are expected to do their best and to participate totally in all class activities.

Evaluation for pass/no pass students is conducted in the same manner as it is for other students in the class. At the conclusion of the grading period, a grade ranging from an “A” to a “C” is converted to “Pass” (P), a “C-” or a “D” is converted to “Unsatisfactory” (U) but passing; and an “F” is converted to “No Pass” (NP).

6. **Grading Scale**

Grade	Percent	
A	93	100
A-	90	92
B+	87	89
B	83	86
B-	80	82
C+	77	79
C	73	76
C-	70	72
D+	67	69
D	63	66
D-	60	62
F	00	59

7. **Grading System** - Grade point values are as follows:

Letter Grade	Regular	Honors	Advanced Placement
A	4.0	4.5	5.0
A-	3.7	4.2	4.7
B+	3.3	3.8	4.3
B	3.0	3.5	4.0
B-	2.7	3.2	3.7
C+	2.3	2.8	3.3
C	2.0	2.5	3.0
C-	1.7	2.2	2.7
D+	1.3	1.3	1.3
D	1.0	1.00	1.0
D-	0.7	0.7	0.7
F	0.0	0.0	0.0

8. **Semester examinations** – Semester examinations shall be given in all courses giving 0.5 unit of credit for a semester’s work. Seniors who have an “A” (90%) for both grading periods second semester are excused from the second semester exam. No other students are excused from semester examinations. Anyone not reporting for a scheduled final examination (December and May), without prior permission, will receive an F for the course. Any exception will be made at the discretion of an administrator.
9. **Semester Grades** - Semester grades are determined by using the student’s numerical average. The sum of the first grading period average (multiplied by 2), the second grading period average (multiplied by 2) and the semester exam grade is divided by five. This numerical average is used as the student’s semester grade. In unusual circumstances when a student has earned a very low percentage grade for one grading period, the teacher, school counselor, and appropriate administrator will design an alternative method for determining the semester grade. Semester grades in courses that do not give a final exam are determined by using the student’s numerical average. The sum of the first grading period average and the second grading period average is divided by two. This numerical average is used as the student’s semester grade.
10. **Advanced Placement Courses** – **All students enrolled in Advanced Placement courses are required to take the Advanced Placement exam in May. The Advanced Placement exam costs approximately \$93.00 and will be an assessed student fee.** Students taking the AP Exam will be excused from taking a final exam during the second semester in that subject. The fourth grading period grade will be used as the final exam grade. A score of a 2 on the AP Biology, AP US History and/or AP Government test can count in place of the content’s end of year exam.

If a student refuses to take the Advanced Placement Exam, then the “AP” designation will be removed from the title of the course, the weighting will be removed from the calculation of the Grade Point Average, and the student will need to take the final exam for the course.

AP Courses are designed to make the program available to those that will profit from the challenging work offered.

Please take into account the following when considering an AP Course:

- Workload - in class and homework - Will exceed that assigned in other courses at the same level/same department.
- Independent work - May be greater than other courses.
- Complexity and Difficulty – Material is more complex than general education curricula.
- Critical Thinking – Greater amount of synthesis and evaluation.

11. **Report cards** – The district utilizes an electronic student management system, which provides students and parents the pupil’s achievement and attendance record.
12. **Principal’s List and Honor Roll** – A student who has a 3.75 GPA or better for a grading period earns a place on the Principal’s List. A student who has a 3.00 - 3.7499 GPA for a quarter makes the Honor Roll. Students receiving a failing grade in any subject will not be eligible for the Honor Roll or Principal’s List. Students with special needs whose services (e.g. speech, learning center, etc.) prevent them from taking 5.75 credits may appeal to the building principal for a review of their case. If the facts warrant, those students will be exempted from the 5.75 credit requirement.

13. ***Fees** – A fee is assessed in most courses in which workbooks and practice sets are required. Supplementary readings or consumable supplies are necessary. Fees for any courses listed are the previous year's fees and serve only as an estimated cost for the upcoming school year. Several supplemental charges may be assessed above and beyond the course fees listed. Some items are purposely not included in course fees. For example, goggles for science class can be used year after year if properly maintained; an older sibling may have already purchased paperbacks; students may want to use different qualities of materials in industrial arts projects; etc. Updated fees for all courses are kept on file in the curriculum office. ****If school fees are not up to date on payment, school dances and graduation will be impacted.****
14. **School Day** – The school day consists of 8 periods. One period must be set aside for lunch; therefore, students will have seven periods to work with in planning course selections.
15. **Physical Education Waiver** – Students must take at least 1 semester (.25 credit) of Physical Education within grades 9 or 10. Students may then waive the other half (.25 credit) of the PE graduation requirement by completing two full seasons of athletics, cheerleading or marching band. No credit or grade will be earned for the Physical Education waiver. **Participation in athletics, marching band, or cheerleading prior to the 2014-2015 school year does not apply. The two seasons of athletics, marching band, or cheerleading must be completed prior to second semester of the student's senior year. If the student has not completed the two seasons prior to the second semester of his/her senior year, the student must enroll in Physical Education to complete his/her physical education requirement.**
16. **Athletic and extracurricular eligibility** – The report card is the school's report to the students and parents, giving the pupil's achievement and attendance record. To be eligible, a student in athletics and extracurricular activities must have earned passing grades in a minimum of five, one-credit courses, or the equivalent, in the preceding grading period; have no failing grade in any subject during the previous grading period; and earn a minimum grade point average of 1.5 for the nine weeks prior to the desired extracurricular activity. **It is the student's responsibility to be aware of eligibility rules.**

NOTE: Extracurricular is defined as any activity that is not a scheduled and graded part of the school day. Please see the student handbook for more details concerning eligibility

17. **NCAA Course Requirements:**

A student who plans to attend a Division I or II college, or a college with Division I or II athletics, and who plans to participate in athletics at that school must complete a **core curriculum** of courses in order to be eligible for athletic participation. The core curriculum consists of courses in the following areas:

Division I (16 core courses required)	Division II (16 core courses required)
<ul style="list-style-type: none"> • 4 years of English • 3 years of mathematics (Algebra 1 or higher) • 2 years of natural/physical science (1 year of a lab science class) • 1 year additional English, mathematics or natural/physical science • 2 years of social science • 4 years of additional courses from any area above, world language or nondoctrinal religion/philosophy 	<ul style="list-style-type: none"> • 3 years of English • 2 years of mathematics (Algebra 1 or higher) • 2 years of natural/physical science (1 year of a lab science class) • 3 years additional English, mathematics or natural/physical science • 2 years of social science • 4 years of additional courses from any area above, world language or nondoctrinal religion/philosophy

A student who plans to attend a Division I or II college, or a college with Division I or II athletics, and who plans to participate in athletics at that school and plans to **enroll in CCP courses** must recognize that the courses are NCAA-approved as long as the class meets the following criteria:

- * is at the 100 level or above
- * is worth at least 3 semester hours to equal 1 Carnegie unit
- * is a course within one of the core areas
- * appears on the student's high school transcript

Test Scores: Division I has a sliding scale of test scores and grade-point averages. See your counselor for details. Division II has a minimum SAT score of 820 or ACT sum score of 68 (total English, mathematics, reading, and science scores). Note: All SAT and ACT scores must be reported directly to the NCAA Initial-Eligibility Clearinghouse by the testing agency. Test scores that appear on transcripts will not be used. When registering for the SAT or ACT, use the Clearinghouse code of “9999” to make sure the score is reported directly to the Clearinghouse.

Grade-Point Average: **Only core courses** are used in the calculation of the grade-point average. Make sure you look at the high school’s list of NCAA-approved core courses on the Clearinghouse Web site. See your counselor for your grade-point average and to check if a particular high school course is NCAA approved. To register at the NCAA Website, visit <http://www.eligibilitycenter.org>

All students must be determined to be eligible by the NCAA Clearinghouse. This requires an official transcript. There is no other way to determine eligibility. See your counselor about the Clearinghouse.

COURSE DESCRIPTIONS

This section of the course catalog provides descriptions of all courses offered at Mayfield High School and Excel TECC. Please use this section as a resource as you plan your schedule. MHS offers an extensive list of courses in all content areas. Course offerings for each year are based on student course requests. If a course does not receive enough requests, it will not be offered for the following school year. The master schedule will be created based upon student course requests in the spring.

The planning tool on the last two pages of this catalog serves as a planning guide for scheduling over the course of your high school career. Additionally, the Multi-Year Academic Planning (MYAP) tool is a valuable resource for tracking your progress towards graduation. The MYAP tool is available through the Infinite Campus Portal by clicking on “Academic Progress”.

For the most current version of the course catalog, please visit:

http://www.mayfieldschools.org/mayfieldhighschool_home.aspx

For more information about Excel TECC, please visit:

http://www.mayfieldschools.org/exceltecc_home.aspx

To track your progress towards graduation, please use the MYAP tool in the Infinite Campus Portal:

<https://mayfieldschools.infinitecampus.org/campus/portal/mayfield.jsp?>

All education opportunities are offered without regard to race, color, national origin, gender, or disability.

Mayfield City Schools encourages all residents to participate in our programs and services. If you require an accommodation to take part in a district program, please contact the Americans with Disabilities Act Coordinator: Denise Cirino, 440-995-7241.

APPLIED ARTS

The Applied Arts Department offers courses in two areas:

Business and Computer Education & Family and Consumer Science.

The courses offered are listed below by program area.

Business Education Courses

9th Grade

Computer Programming
with Visual BASIC*

Computer Programming
with Java*

Digital Media Production 1*

Digital Media Production 2*

Information Technology*

10th Grade

Accounting

Advanced Digital Media
Production

Computer Programming
with Visual BASIC*

Computer Programming
with Java*

Digital Media Production 1*

Digital Media Production 2*

Entrepreneurship and E-
Commerce*

Information Technology*

Tech Squad*

11th Grade and 12th Grade

Accounting

Advanced Digital Media
Production

Advanced Digital Media
Production 2

Computer Programming
with Visual BASIC*

Computer Programming
with Java*

Digital Media Production 1*

Digital Media Production 2*

Entrepreneurship and E-
Commerce*

Information Technology*

Intro. to Criminal Justice*

Money Management*

Tech Squad*

*Semester Course

Family and Consumer Science Courses

<u>9th Grade</u>	<u>10th Grade</u>	<u>11th Grade</u>	<u>12th Grade</u>
Cooking and Creating*	Child Development 1*	Child Development 1*	Chefery 1*
Life Skills*	Child Development 2*	Child Development 2*	Chefery 2*
	Cooking and Creating*	Clothing and Design*	Child Development 1*
	Clothing and Design*	Fashion and Accessories*	Child Development 2*
	Fashion and Accessories*	Food and Nutrition*	Clothing and Design*
	Food and Nutrition*	International Flavor*	Fashion and Accessories*
	Interior Design*	Interior Design*	Interior Design*
	International Flavor*		
	Interior Design*		
	Life Skills*		

*semester course

Business Education Courses

Accounting

Grades 10-12
Course Number 612
Full Year Course - 1 credit
Prerequisite: None
Estimated Fee: \$25.00
Recommended For: College Bound
Career: B,F,P

This course presents the basic principles of accounting and introduces the students to the materials and terminology commonly used. Two manual accounting systems are studied progressing from the general journal and ledger to a system using special journals and ledgers. Students will utilize the accounting cycle for a small services business organized as a sole proprietorship. Bank services, payroll records, taxes, partnerships and corporations are among the topics studied.

Accuracy, neatness, completeness and independence are emphasized. This class is highly recommended for students planning to major in business in college.

Advanced Digital Media Production

Grades 10-12
Course Number 620
Full Year Course - 1 credit
Prerequisite: Digital Media Production 2 & recommendation
Estimated Fee: \$30.00
Recommended For: College Bound/Technical Education
Career: A,B,E,F,H,P

The students who sign up for this year-long class must have successfully completed Digital Media Production 1 and 2. Students will spend the year creating media that can be posted to the Mayfield Web site, seen on Channel 22, or sent out for the cyber world to see. This course will allow students to use the fundamental skills they have developed and dazzle people with their creative style.

Advanced Digital Media Production 2

Grades 10-12
Course Number 621
Full Year Course - 1 credit
Prerequisite: Advanced Digital Media Production & recommendation
Estimated Fee: \$30.00
Recommended For: College Bound/Technical Education
Career: A,B,E,F,H,P

The students who sign up for this year-long class must have successfully completed Advanced Digital Media Production. This year long course builds on the foundation of knowledge from the previous three Digital Media courses, by offering students the opportunities to direct and produce the weekly video show that they created segments for in Adv. DMP I and create and produce their own independent film. As part of the video show, students will demonstrate their understanding of all the different aspects of production (director, sound, lighting, camera operation, and producing) throughout the course. As part of the independent film, students will have a chance to explore topics that interest them individually or as a group and push the limits of their film making skills and creativity. Students will also advance their skill and understanding during this course through professional readings, class discussions, and in depth critiquing of student made and professional videos.

Computer Programming with Visual BASIC

Grades 9-12
Course Number 635
Semester Course - 0.5 credit
Prerequisite: Mathematics 1
Estimated Fee: \$15.00
Recommended For: College Bound/Technical
Education
Career: A,B,E,F,H,P

This course provides the student with an opportunity to utilize the micro-computer in the solution of both mathematical and non-mathematical problems. The student is introduced to the computer language called Visual BASIC and is taught how to program in this object-oriented language in order to communicate with a micro-computer. The prerequisite, Mathematics 1, may be taken concurrently.

Computer Programming with Java

Grades 9-12
Course 636
Semester Course - 0.5 credit
Prerequisite: Computer Programming with Visual
BASIC
Estimated Fee: \$15.00
Recommended For: College Bound/Technical
Education
Career: A,B,E,F,H,P

In Computer Programming with Java students learn the Java programming language. This is a hands-on course in which students write computer programs in one of the most popular programming languages in the world.

Digital Media Production 1

Grades 9-12
Course Number 618
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$15.00
Recommended For: College Bound/Technical
Education
Career: A,B,E,F,H,P

YouTube was one of the most visited Web sites in 2010, but Vimeo made *Time Magazine's* list of top ten sites. Creating video is an essential 21st century skill, and Digital Media Production 1 is the class where students will learn what it takes to make creative and professional-looking videos. Students will use video cameras to learn basic camera shots, audio and green screen techniques.

Digital Media Production 2

Grades 9-12
Course Number 619
Semester Course - 0.5 credit
Prerequisite: Digital Media Production 1
Estimated Fee: \$25.00
Recommended For: College Bound/Technical
Education
Career: A,B,E,F,H,P

The students who sign up for this course must have successfully completed Digital Media Production 1. The Digital Media Production 1 course gave students just a small glimpse into the world of video making. In this course, students will have the opportunity to use their media skills and creativity to create professional quality media.

Entrepreneurship and E-Commerce

Grades 10-12
Course Number 616
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$15.00
Recommended For: College Bound/Technical Education
Career: A,B,F,P

This course is offered to give students the information and decision-making skills necessary to plan, start, and market a small business and make it grow. The course will incorporate an interactive, real-world business that combines entrepreneurship, marketing, advertising, E-commerce, and security. This course will study changes in the economy and how businesses are responding, changing, and evolving.

Information Technology

Grades 9-12
Course Number 632
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$15.00
Recommended For: College Bound/Technical Education
Career: CORE

Information Technology 1 students will be introduced to Microsoft Office Professional 2016. This course is designed to teach students how to use Word, Excel, Access, PowerPoint, Movie Maker, Publisher, and Google Classroom. Learn how to design, create, present, communicate and publish with this latest software.

Introduction to Criminal Justice

Grades 11-12
Course Number 614
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$21.00
Recommended For: College Bound/Technical Education
Career: A,B,F,P

This course will offer students the chance to participate in the current life situations which pertain to civil and criminal law.

The focus is on basic law principles and actual court cases related to civil and criminal offenses, homeland security, law enforcement structure, sentencing, and the appeals process. This course is designed to appeal to students interested in pursuing a career in protective services, forensic sciences, and the law field.

Money Management

Grades 11-12

Course Number 608

Semester Course - 0.5 credit

Prerequisite: None

Estimated Fee: \$15.00

Recommended For: College Bound/Technical Education

Career: A,B,F,P

Students need basic survival skills in personal finance before they leave high school. This course will offer such an opportunity for students to know about money before they learn by trial and error.

This class will be practical in its approach to various topics such as basic banking, interest charges on loans and credit cards, buying or leasing an automobile, insurance, and investments. Guest speakers will be brought in to give students an opportunity to learn from the experts. This course provides resources to change the financial future of students and set them on a path to win with money, allowing them to change the way they look at money forever. They will be empowered, equipped and entertained while building confidence in their own financial decision-making.

Tech Squad

Grades 10-12

Course Number 633

Semester Course - 0.5 credit

Prerequisite: Counselor Recommendation

Estimated Fee: None

Recommended For: College Bound/Technical Education

Career: A,B,E,F,H,P

This technology literacy course provides a fundamental knowledge of technological literacy and its role in today's society. Students will be able to apply their knowledge and research while developing leadership and communication skills by assisting the Mayfield Information Technology Department to support classroom teachers and students through project management and collaboration. Students will create projects to further their understanding and skills in the area of information technology to better support teachers and students with technology in the classroom.

This course will fulfill the technology graduation requirement. Students must interview with a counselor and an administrator in order to register for this course.

Family and Consumer Science Courses

Cooking and Creating

Grade 9-10

Course Number 666

Semester Course - 0.5 credit

Prerequisite: None

Estimated Fee: \$45.00

Recommended For: College Bound/Technical
Education

Career: A,B,F,H,P

This semester course offers students the opportunity to expand their experience in the areas of cooking and sewing. Students will examine a variety of textiles and learn to use the sewing machine. Construction of a project using the sewing machine will conclude the sewing experience. A small additional cost for sewing supplies and projects does apply. Students will have the opportunity to prepare foods using a variety of kitchen equipment. The semester will end with the preparation of an entire meal.

Life Skills

Grades 9-10

Course Number 664

Semester Course - 0.5 credit

Prerequisite: None

Estimated Fee: \$15.00

Recommended For: College Bound/Technical
Education Majors

Career: A,B,E,F,H,P

This course is designed to help students explore all aspects of life: personal development, decisions affecting their future, lifestyle options and consequences, relationships with family and friends, marriage, parenting, balancing family and work, dealing with family crisis and managing family living. Students will learn to deal with the realities of life throughout the entire life cycle. The students will benefit from a class that teaches everything from interpersonal skills to practical money

management strategies. This course is designed to help students meet the challenges of daily life with confidence.

Child Development 1

Grades 10-12

Course Number 662

Semester Course - 0.5 credit

Prerequisite: None

Estimated Fee: None

Recommended For: College Bound/Technical
Education Majors

Career: A,B,F,H,P

This one-semester course focuses on practical problems related to parenting roles and responsibilities, taking responsibility for personal growth within the parenting role, preparing for parenthood, building positive parent-child relationships, using guidance and discipline to promote self-discipline, self-esteem, and socially responsible behavior in children and adolescents, accessing sources of parenting information, support, and assistance and planning ways that families and society can share in nurturing children and adolescents. You will be required to care for a computerized baby for a full weekend.

Child Development 2

Grades 10-12
Course Number 663
Semester Course - 0.5 credit
Prerequisite: Child Development 1
Estimated Fee: None
Recommended For: College Bound/Technical
Education Majors
Career: A,B,F,H,P

This course is a continuation of the topics covered in Child Development 1. This course covers the emotional, social, moral, physical, and intellectual development of children ages 3-12. This class consists of surveys, projects, and observation as well as basic classroom work. This would be a great course for anyone who plans to have a career working with children.

Fashion and Accessories

Grade 10-12
Course Number 650
Semester Course - 0.5 credit
Prerequisite: Cooking and Creating or
recommendation
Estimated Fee: \$30.00
Recommended For: College Bound/Technical
Education
Career: A,B

This comprehensive study of clothing and accessories will interest those who are fascinated with trends of the past and projections of the future in the fashion industry. This course is designed for students who have the desire to create. New hand and machine sewing skills will be introduced and used to help develop the students' creativity in fashion and accessories. Projects include: a recycling project, duct tape garment, a piecework wall hanging a weekly accessory challenge, and a sweatshirt.

Clothing and Design

Grades 10-12
Course Number 649
Semester Course - 0.5 credit
Prerequisite: Fashion and Accessories
Estimated Fee: \$25.00
Recommended For: College Bound/Technical
Education
Career: A,B,E

This more extensive study of clothing construction will complement those students who excelled in their Fashion and Accessories projects. Intermediate construction skills will be further developed and refined to help create and complete two higher-level construction projects. A more concentrated look at figure analysis, pattern selection and basic principles of pattern altering will help the student create individualized projects.

Food and Nutrition

Grades 10-11
Course Number 660
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$60.00
Recommended For: College Bound/Technical
Education
Career: A,F,H,P

This semester course is a cooking class with an emphasis on preparing healthier meals and better food choices. Lab experiments are supplemented by demonstrations, lectures, readings, speakers, and audiovisuals.

Interior Design

Grades 10-12
Course Number 651
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$30.00
Recommended For: College Bound/Technical
Education
Career: A,B,E

Introduction to the foundation principle and skills of housing and interiors. This course addresses both interior and exterior design and introduces students to the phases of the design process. Concepts include historical, cultural, governmental and technological factors that influence housing. An aptitude for design is recommended.

International Flavor

Grades 10-11
Course Number 652
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$50.00
Recommended For: College Bound/Technical
Education
Career: A,B,F,H,P

A desire to explore many cultures is a necessary ingredient for this cooking course. The people, culture, lifestyles and cuisine of foreign countries will be studied. The course consists of lab work, demonstrations, written related materials and research of other countries. A strong desire to try new and different foods is recommended.

Chefery 1

Grade 12
Course Number 656
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$55.00
Recommended For: College Bound/Technical
Education
Career: A,B,F,H,P

Chefery 1 is a food preparation course with an emphasis on technique and theory. Class time is used for actual preparation of food. The course is designed to touch on many areas of food preparation to help young men and women prepare meals in an independent living situation. We will discuss how our food and diet has changed over time as well as explore the latest food issues that affect Americans. This course must be taken before Chefery 2.

Chefery 2

Grade 12
Course Number 657
Semester Course - 0.5 credit
Prerequisite: Chefery 1 and recommendation
Estimated Fee: \$55.00
Recommended For: College Bound/Technical
Education
Career: A,B,F,H,P

Chefery 2 is an advanced laboratory course that builds on previous learning. The course consists of lab work, demonstrations, experiments with ingredients and written related materials. Creativity, experimentation and trying new foods and recipes will be part of this course. Some of the units of study include: chocolates and candy making, cakes and cake decorating, grains and super grains.

ENGLISH

English at Mayfield High School

Mayfield High School requires all students to complete four years of English and one semester of a communications course. Advanced Placement, Honors and CC+ courses will provide the most challenge and are intended for highly motivated students who have a deep interest in advancing their literary analysis and composition skills. Electives offered may be taken for credit but do not apply toward the four year English requirement needed for graduation.

To encourage all students to write effectively and frequently, the English Department is committed to teaching writing as a process of drafting and revising. Upon graduation, students can be assured that they have received intensive instruction and practice to further their writing skills through a variety of written assignments.

To help students become critical thinkers they are exposed to a variety of classics and modern literature. Students are taught how to interact with the text and how to discern inferential meaning in the various genres read

Required English Courses (One course required each year)

9th Grade

9 Introduction to Literature and Composition

9 Introduction to Literature and Composition Honors

10th Grade

10 World Literature and Composition

10 World Literature and Composition Honors

11th Grade

11 American Literature and Composition

AP English Language and Composition

ENGL 1110 English Composition I*

12th Grade

12 British Literature and Composition

AP English Literature and Composition

AP English Language and Composition

ENGL 1110 English Composition I*

*semester course

Required Communications Course
(One course required in 10th, 11th or 12th grade)

10th Grade

Communications*

News Writing for
Digital Media***11th Grade**

Communications*

News Writing for
Digital Media***12th Grade**

Communications*

News Writing for
Digital Media*

*semester course

Elective Courses

9th Grade

Advantage English 1

10th Grade

Advantage English 2

Yearbook 1

11th Grade

Creative Writing 1or 2

Yearbook 1 or 2

Film Analysis*

12th Grade

Creative Writing 1,2,3

Yearbook 1 or 2

Film Analysis*

*semester course

Required English Courses

9 Introduction to Literature Study and Composition

Grade 9
 Course Number 131
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: None
 Recommended For: College Bound/Technical Education
 Career: CORE

Introduction to Literature Study and Composition is the study of various nonfiction and literary genres. The course is designed to foster an appreciation for the readings as well as to study the fundamentals of composition. Students also will study literary devices, vocabulary, grammar and oral communication. While there are no fees for the course, students will be required to obtain copies of the four major literary works that will be studied during the school year.

9 Introduction to Literature Study and Composition Honors

Grade 9
 Course Number 139
 Full Year Course - 1 credit
 Prerequisite: Recommendation
 Estimated Fee: None
 Recommended For: College Bound
 Career: CORE

Introduction to Literature Study and Composition Honors covers areas of composition, grammar, oral communication, and literature, as does all ninth grade English. The honors class, however, is both accelerated and enriched with regard to content, thus covering more material with more depth. In addition, students are expected to demonstrate in their writing a greater degree of sophistication in content and style.

Moreover, students are expected to work independently and be motivated intrinsically.

10 World Literature and Composition

Grade 10
 Course Number 141
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: None
 Recommended For: College Bound/Technical Education
 Career: CORE

World Literature and Composition is a survey of world literature, including but not limited to short stories, non-fiction, novels, and drama. Grammar and usage study is included in this course with the goal of improving writing and editing skills. Composition centers on the development of the four basic forms of writing (narrative, descriptive, expository, and persuasive) with an emphasis on developing clearly organized and well-developed multi-paragraph compositions.

10 World Literature and Composition Honors

Grade 10
 Course Number 149
 Full Year Course - 1 credit
 Prerequisite: Recommendation
 Estimated Fee: None
 Recommended For: College Bound

World Literature and Composition Honors expands the basic areas of literature and composition covered in the regular World Literature and Composition curriculum and proceeds at a more rapid pace. Greater independence is expected of the students in their analysis of literature. In addition, students are expected to demonstrate a greater degree of sophistication in content and style in their writing. Types of compositions

include informational, literary analysis, argumentative, and narrative. Grammar is approached as a means of improving composition.

11 American Literature and Composition

Grade 11
 Course Number 151
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: None
 Recommended For: College Bound/Technical Education
 Career: CORE

American Literature and Composition is a study of American literature. This course spans a wide range of material beginning in the 1600s and concluding with contemporary authors. Students study prominent authors of each literary period with emphasis on significant contributions and historical context of works.

The writing program focuses on research, literary analysis, argumentative, narrative, and informational forms.

AP English Language and Composition

Grade 11-12
 Course Number 159
 Full Year Course - 1 credit
 Prerequisite: Recommendation
 Estimated Fee: AP test registration
 Recommended For: College Bound
 Career: CORE

With recommendations from and the approval of the College Board, the Advanced Placement English Language and Composition course work models a college composition class.

The curriculum concentrates on argumentation: how to analyze the rhetoric employed by writers and speakers, how to construct successful arguments which

synthesize accredited sources, and how to compose successful arguments that draw on personal knowledge and experiences. Promoting an awareness of current events and history, particularly American history, the coursework places a greater emphasis on non-fiction than fiction and analyzes fiction for arguments made by the author. Students enrolled in this course are required to take the A.P. exam in May.

12 British Literature and Composition

Grade 12
 Course Number 161
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: None
 Recommended For: College Bound
 Career: CORE

British Literature and Composition is a survey of British literature. Emphasis is placed upon the significant literary works and styles of each era. The lives of writers and the historical backgrounds of literary periods are also studied, as well as the history of the English language. Much time is given to the improvement of student composition through expository and persuasive writing, as well as analytical essays. The students' vocabulary is enriched through applied literary study, emphasizing understanding of word meanings rather than rote memorization of definitions.

In addition, language study is targeted through the review of grammar, usage, and mechanics and their application to the writing process. This is a college preparatory course. The course work given and teacher expectations are commensurate with the pre-college level.

AP English Literature and Composition

Grade 12

Course Number 169

Full Year Course - 1 credit

Prerequisite: Recommendation

Estimated Fee: A.P. Test Registration

Recommended For: College Bound

Career: CORE

With recommendations from and the approval of the College Board, the Advanced Placement English Literature and Composition course work models a college composition class.

The curriculum involves both the study and practice of writing and the study of literature. Composition study will encompass the modes of discourse, rhetorical strategies and argumentation, critical analysis of literature, and exposition. The study of literature will include a mix of world, English, and American literature. Students enrolling in this course are expected to take the AP exam in May.

ENGL 1110 English Composition

Grades 10-12

Course Number CCP193

Semester Course – 3 college credits 1 semester credit

Prerequisite:

Estimated Fee: TBD

Recommended For: College Bound/Technical Education

Career: CORE

This course focuses on the writing process and on the composition of expository writing assignments, including personal, informational, and critical essays. Students will read and analyze expository and imaginative texts (fiction, nonfiction, poetry, or drama). Because of duplication in course content, students who have taken ENGL 1110 English Composition I (B) should not take this course. (3 contact hours)

Required English Courses for Excel TECC

11 American Literature and Composition

Grade 11
Course Number 155 or 156
Full Year Course - 1 credit
Prerequisite: Recommendation
Estimated Fee: None
Recommended For: Technical Education
Career: CORE

This course is an eleventh grade English course for students enrolled in career technical programs.

This course is a study of American literature which spans a wide-range of material from early American in the 1600s to the contemporary authors. Students study prominent authors and poets of each literary period with emphasis on significant contributions. Historical and biographical backgrounds are also examined. Additional reading selections include nonfiction material pertinent to the technical field. Refinement of research, writing, and communication skills is pursued.

12 British Literature and Composition

Grade 12
Course Number 165, 166, or 168
Full Year Course - 1 credit
Prerequisite: Recommendation
Estimated Fee: None
Recommended For: Technical Education
Career: CORE

This course is a twelfth grade English course for students enrolled in career technical programs.

The course is a survey of British literature. Emphasis is placed upon the significant literary works and styles of each era. The lives of writers and the historical backgrounds of literary periods are also studied, as well as the history of the English language. Additional reading selections include non-fiction material pertinent to the technical field. Much time is given to the improvement of student composition through expository and persuasive writing, as well as analytical essays and technical writing associated with the technical program. The students' vocabulary is enriched through the study of literary works and technical selections with an emphasis on understanding word meaning rather than rote memorization. In addition, language study is targeted through the review of grammar, usage, and mechanics and their application to the writing process.

Required Communication Courses

(One course required in 10th, 11th, or 12th grade)

Communications

Grades 10-12
Course Number 181
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: None
Recommended For: College Bound/Technical Education
Career: CORE

Communications is a course that introduces students to various facets of communication skills. This course will include public speaking, media literacy, and copywriting intended for publication. Public address and research skills will be used along with technology and software-based applications for presentation purposes. Students in this course will be expected to use the writing process to produce speech outlines and drafts, and to develop technical writing. Students gain confidence and poise through class presentations. Students will also focus on the interview process. Computer-based research skills are honed and the writing process is included.

News Writing for Digital Media

Grades 10-12
Course Number 183
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: None
Recommended For: College Bound/Technical Education
Career: CORE

This course simulates a professional news writing experience. Students will learn about writing for a specific purpose and be involved in real-world production situations, requiring them to display leadership, time management, and collaboration. The course will explore the writing process and the impact of text features on written communication. Students will learn how to produce an electronic publication that includes pictures, links, articles, and event coverage related to current national and local news, school activities, media reviews, and current topics. Enrollment in this course will require students to work on teams and to meet production deadlines. Students must commit time outside of the school day to complete projects and assignments. This course satisfies the communication graduation requirement and is open to students in grades 10 through 12.

Elective Course Offerings

Advantage English 1

Grade 9
 Course Number 134
 Full Year Course – No Credit
 Prerequisite – Recommendation
 Estimated Fee – None
 Recommended For: Supplemental Support

The Advantage English 1 course provides support for identified students who need more development in literacy skills and are not receiving other intervention services. The class is aligned with the English Language Arts State Standards for 9th grade with an emphasis on individual skill development in reading comprehension and written communication. This class is a half-period taken opposite lunch.

Advantage English 2

Grade 10
 Course Number 144
 Full Year Course – No Credit
 Prerequisite – Recommendation
 Estimated Fee – None
 Recommended For: Supplemental Support

The Advantage English 2 course provides support for identified students who need more development in literacy skills and are not receiving other intervention services. The class is aligned with the English Language Arts State Standards for 10th grade with an emphasis on individual skill development in reading comprehension and written communication. This class is a half-period taken opposite lunch.

Creative Writing 1, 2, and 3

Grades 10-12
 Course Number 184, 185 or 186
 Full Year Course - 1 credit
 Prerequisite: English teacher recommendation
 Estimated Fee: None
 Recommended For: College Bound
 Career: A, B, E, P

Creative Writing is an elective English course open to students in grades 10-12 who take pleasure in experimenting with the written word. The course is designed to give creative students an outlet for imaginative expression of ideas and thoughts. Students gain experience in creating short stories, poems, and essays as well as partake of other class-related creative experiences. The goal of each student in class should be to meet all of the required assignments of the class and submit as much original work as possible for entry/publication in student writing contests and the student publication *Voices Magazine*. Evaluations are based upon collections within individual portfolios, workshop leadership, and intrinsic motivation. All students in Creative Writing are expected to serve on the staff of *Voices*, our school literacy/arts magazine. Students taking the course for the second or third time shall design written projects evincing growth in prose/poetry as well as maturity of style.

Film Analysis

Grades 11-12
Course Number 196
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: None
Recommended For: College Bound/Technical Education
Career: A, B, E, P

The film analysis course covers a variety of cinematic concepts from photography and *mise en scene*, to ideology and theory. These concepts will be supported through examples from all over the world and from various time periods in the history of film.

Students must have good analytical skills and be accomplished at critical writing. The course work requires numerous critical written reviews of elements covered in the class.

Reading and Writing Fundamentals

Grades 9-10
Course Number 789
Semester Course - 0.5 credit-1 credit
Prerequisite: Program Admission
Estimated Fee: None

This course is designed to provide remediation to identified students who are simultaneously enrolled in English 9 (English 10). Students will receive instruction in decoding skills, vocabulary development, and comprehension strategies that is aligned with the English 9 (English 10) curriculum. In addition the course will provide a strong foundation for written communication. Students will learn to plan, organize and compose multi-paragraph

essays with sufficient supporting details. Revision strategies will be taught as part of the writing process. Instruction in written communication will also be aligned with the English 9 (English 10) curriculum.

Yearbook 1 and 2

Grades 10-12
Course Numbers 194 or 198
Full Year Course - 1 credit
Prerequisite: Recommendation by an English teacher
Estimated Fee: None
Recommended For: College Bound
Career: A, B, E, P

Yearbook provides an opportunity for students to produce an annual publication while recording the school's history in photographs and writing. Students will experience all aspects of producing a yearbook with particular focus on yearbook journalism, layout and design, and photographic composition.

During the course of the school year, students will execute the following: develop a theme, organize and carry out a business campaign, shoot pictures, design page layouts, write copy, captions and headlines, and meet all deadlines. Yearbook students are required to sell advertising during the first quarter in order to stay in the class. Students also cover extracurricular activities during both semesters, including photographing extracurricular activities and sporting events. In addition, in order to prepare for deadlines, on occasion it will be necessary for students to stay after school.

FINE ARTS

Fine Arts at Mayfield High School

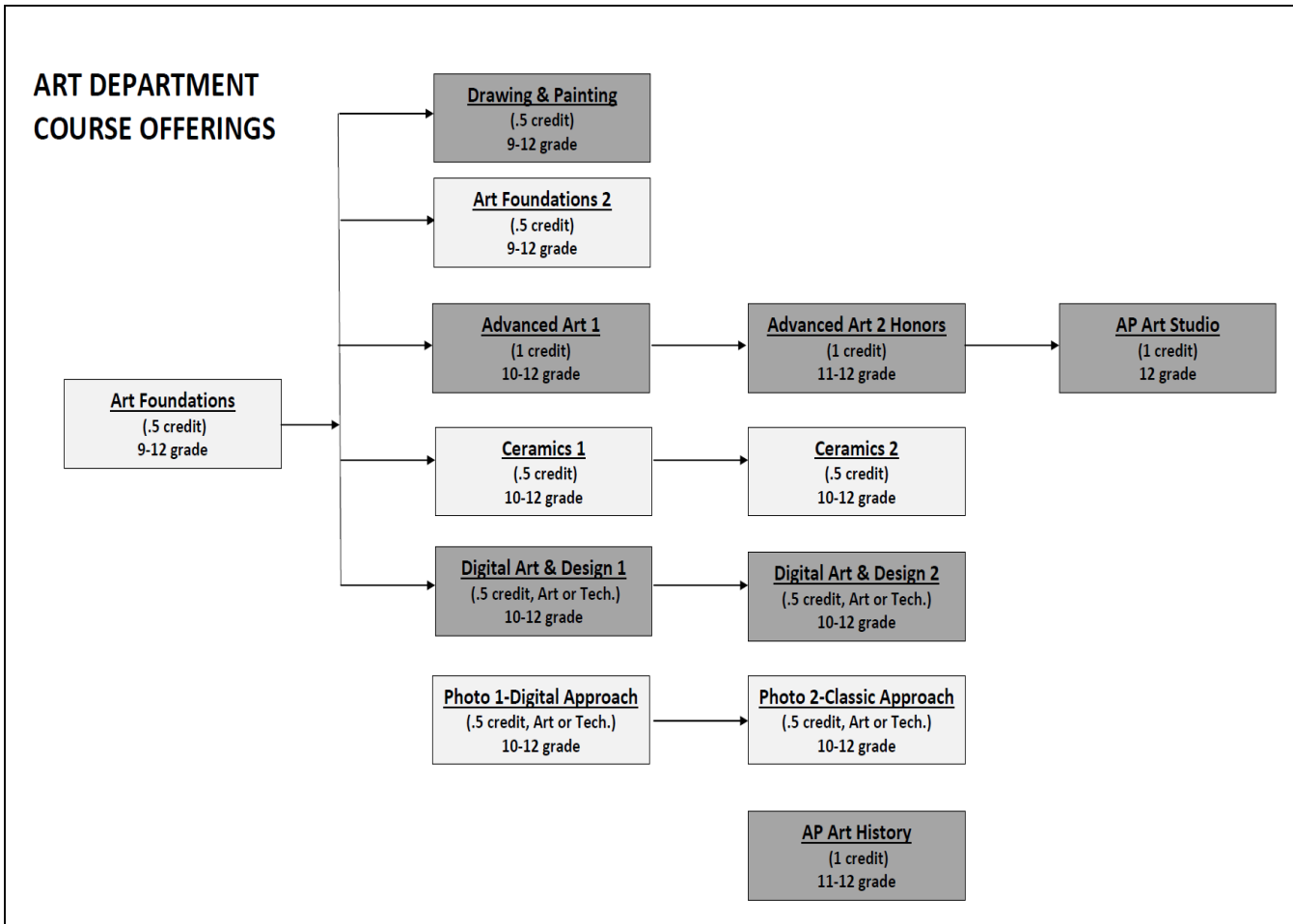
The Fine Art Department offers course in both Art and Music. The list of available courses for each area is shown below followed by the course descriptions for the courses.

Art at Mayfield High School

The art program is designed for personal enrichment and/or to develop artist skills and/or cohesive art portfolio for college entry. The art courses are planned to provide students with in-depth experience in a variety of art media. Basic skills, art appreciation, and art history will be integrated within each course. The teachers in the art department will offer professional career guidance and direction with the aid of college visits, visiting artists, and portfolio preparation. The classes are all electives and may be used to fulfill college entrance Fine Arts requirements.

Music at Mayfield High School

The curriculum is designed to provide a wide range of musical activities and performance opportunities for students to enrich their lives and contribute to their total education. All classes may be used to fulfill the fine arts credit that is required for acceptance into many colleges and universities.



Music Courses

9th, 10th, 11th, and 12th Grade

Chorale

Jazz Band

Marching and Concert Band

Concert Choir

AP Music Theory

Art Courses

Art Foundations

Grades 9-12
 Course Number 706
 Semester Course - 0.5 credit
 Prerequisite: None
 Estimated Fee: \$35.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E,P

Art Foundations is a prerequisite to all the art courses at Mayfield High School. This course is designed as an introduction for all students to gain a general knowledge about the art studio and the elements and principles of art. Emphasis is placed on exposure to a variety of art materials and techniques in two-dimensional design while developing observational skills.

Art Foundations 2

Grades 9-12
 Course Number 708
 Semester Course - 0.5 credit
 Prerequisite: Art Foundations
 Estimated Fee: \$35.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E,P

Art Foundations 2 is a semester course for students that have an appreciation and enjoyment of art but cannot fit a yearlong course into their schedules. This course provides the opportunity to utilize the basic skills learned in Art Foundations with more advanced projects. Students will work with different media and techniques including tempera, watercolors, colored pencils, charcoal, printmaking, sculpture and mixed media. Emphasis is placed on composition, design and creative solutions to the problems presented. Art History is incorporated as it applies to specific projects.

Drawing and Painting

Grades 9-12
 Course Number 707
 Semester Course - 0.5 credit
 Prerequisite: Art Foundations
 Estimated Fee: \$35.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E

Drawing and Painting is for students who may be interested in an Art career. It is recommended that students take Drawing and Painting for the Advanced Art series, but it is not required. Students will explore a variety of media in the area of drawing and painting. Along with drawing, this course will also introduce students to opaque and transparent painting techniques. Students will paint with tempera and watercolors. Emphasis is placed on technique, creative problem solving, and critical observation.

Advanced Art 1

Grades 10-12
 Course Number 718
 Full Year Course - 1 credit
 Prerequisite: Art Foundations and Teacher Recommendation
 Estimated Fee: \$50.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E,P

Advanced Art 1 is designed for students who may be interested in pursuing a career in art. Since the students are recommended for Advanced Art, there is a higher level of expectation. Ideas and techniques learned in Art Foundations are expanded upon with an emphasis on creativity. Students are required to complete weekly drawings outside of class. Some projects in Advanced Art 1 are: contour line, drawing, self and creative portraits, and paintings and drawings from observations.

Emphasis is on learning to use a variety of media including: charcoal, colored pencil, pastels, oil pastels, conte crayon and pencils. Art history, criticism and aesthetics are incorporated into the program to encourage students to critique, evaluate, and appreciate art.

**Although it is not imperative, students are encouraged to take Advanced Art 1 as sophomores to complete the advanced art series by the end of their senior year.*

Advanced Art 2 Honors

Grades 11-12

Course Number 719

Full Year Course - 1 credit

Prerequisite: Advanced Art 1 and Teacher Recommendation

Estimated Fee: \$55.00

Recommended For: College Bound/Technical Education

Career: A,B,E,P

Advanced Art 2 Honors is designed for students who have an understanding of artistic media and techniques. Emphasis is placed on creativity and critical analysis as a series of problems are presented requiring thoughtful and innovative solutions. New media techniques are introduced. Emphasis is placed on advanced use of color theory, composition and design. Art history, criticism and aesthetics are incorporated into the program to encourage students to critique, evaluate and appreciate art. Students are required to complete weekly drawings outside of class. *Advanced Art 2 is an honors class with weighted grades; therefore, the demands and requirements are greater than in previous art courses.*

AP Studio Art: Drawing

Grades 12

Course Number 727

Full Year Course - 1 credit

Prerequisite: Advanced Art 2 and teacher recommendation

Estimated Fee: \$55.00 and A.P. Test Registration

Recommended For: College Bound/Technical Education

Career: A,B,E,P

This course models a college drawing class and is for highly motivated students who are interested in the production of art. Students will develop their artistic voice by creating unique artworks demonstrating a high degree of technical skill. The culmination of this course is the submission of an AP portfolio comprised of work focused on quality of execution, breadth of mediums and subject matter and concentration on a theme of the student's choosing.

AP Art History

Grades 11-12

Course Number 709

Full Year Course - 1 credit

Prerequisite: None

Estimated Fee: \$15.00 and A.P. Test Registration

Recommended For: College Bound/Technical Education

Career: A,B,E,P

With recommendations from and the approval of the College Board, the Advanced Placement Art History course work models a college art history class and this course will provide students with an opportunity to study, research and understand painting, architecture, sculpture and other forms of art in various historical and cultural contexts. Past and present major forms of art will be critically analyzed emphasizing many issues such as politics, patronage, religion, gender and function. Students enrolled in this course are required to take the A.P. exam in May

Ceramics 1

Grades 10-12
 Course Number 713
 Semester Course - 0.5 credit
 Prerequisite: Art Foundations
 Estimated Fee: \$65.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E

This course focuses on the fundamentals of hand building and glazing techniques. Students will learn pinch, coil and slab construction, glazing, and kiln loading procedures. Ceramics 1 will focus on three-dimensional design, the elements of art, aesthetic awareness and historical background as it relates to ceramics. Two research projects are required for successful completion of the course.

Ceramics 2

Grades 10-12
 Course Number 714
 Semester Course - 0.5 credit
 Prerequisite: Ceramics 1
 Estimated Fee: \$65.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E

Ceramics 2 is for students who have completed Ceramics 1 and wish to further develop their talents and interests in the study of ceramics. Hand-building, sculpture and work on the potter's wheel will be reintroduced, with emphasis on form and quality. The students will use clay and glazes to fulfill course-required projects and personal interests. Students will be required to research and present a variety of topics in ceramics.

Photography 1

Grades 10-12
 Course Number 696
 Semester Course - 0.5 credit
 Prerequisite: None
 Estimated Fee: \$35.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E,F,H,P

Students enrolling in Photo 1 are encouraged to take Art Foundations prior to taking this course. Starting with the history of photography, students will read and learn about the invention of the camera. Students will use a digital camera and Photoshop tools to edit and enhance photos based on compositional elements. Students will experience a variety of studio projects and research assignments. *Students may use this credit as either a technology or fine arts credit.*

Photography 2

Grades 10-12
 Course Number 697
 Semester Course - 0.5 credit
 Prerequisite: Photography 1
 Estimated Fee: \$55.00
 Recommended For: College Bound/Technical Education
 Career: A,B,E,F,H,P

This course is for students who wish to further develop their skills and interests in photography. Compositional elements and use of Photoshop will be extended. Creativity and quality will be emphasized through a variety of studio projects. Students will be required to research and present current topics in photography. *Students may use this credit as either a technology or fine arts credit.*

Digital Design 1

Grades 10-12

Course Number 715

Semester Course - 0.5 credit

Prerequisite: Art Foundations

Estimated Fee: \$30.00

Recommended For: College Bound/Technical
Education

Career: A,B,E

This course introduces students to graphic design and the computer as a tool to produce both fine and graphic art products. Students will create illustrations and designs using the elements and principles of art. Students will experience industry standard software (Photoshop) and hardware such as digital cameras and drawing tablets to create their own work. *Students may use this credit as either their Technology credit or Fine Arts credit.*

Digital Design 2

Grades 10-12

Course Number 716

Semester Course - 0.5 credit

Prerequisite: Digital Design 1

Estimated Fee: \$30.00

Recommended For: College Bound/Technical
Education

Career: A,B,E

Digital Design 2 is for students who wish to further develop their interest, knowledge and skills in the world of graphic design and technology.

Interaction with various software, emphasis on developing the artistic eye, and expanding individual portfolios with high quality products are some of the curriculum objectives. Students will experience designing for a variety of clients modeling career awareness.

Music Courses

AP Music Theory

Grades 10-12
Course Number 581
Full Year Course - 1 credit
Prerequisite: None
Estimated Fee: AP Test Registration
Recommended For: College Bound/Technical Education
Career: A

With recommendations from and the approval of the College Board, the Advanced Placement Music Theory course work models a college music class.

In an AP Music Theory course, students are required to read, notate, write, sing, and listen to music. Students will learn basic musical language and grammar including note reading, musical notation, harmonic analysis, and part writing which will lead to a thorough understanding of music composition and music theory. Students will also recognize the development of music from a historical and cultural perspective and extend musical awareness beyond music currently familiar to the student. Students enrolled in this course are required to take the A.P. exam in May

Chorale

Grades 9-12
Course Number 597
Full Year Course - 1 credit
Prerequisite: Audition
Estimated Fee: None
Recommended For: College Bound/Technical Education
Career: A

Chorale is an advanced singing group consisting of students with prior choral experience. Entrance into this ensemble is by audition or at director discretion. All performances and rehearsals are mandatory. This choir works on more advanced musical concepts through sight-reading and the rehearsal and performance of sophisticated musical literature. The Chorale is made up of members who strive to convey a meaningful musical aesthetic through themselves for their audiences. This is done through a focus on the interpretation of texts and the conveying of this meaning through exceptional diction, dynamics, and phrasing. The choir performs evening concerts in school and the metropolitan area, which may include competitions and festivals. These evening commitments are a required part of the course.

By meeting additional requirements, juniors and seniors will be able to obtain honors credit for this course. The various options for earning the honors credit will be presented to students in the spring of the preceding school year.

Concert Choir

Grades 9-12
 Course Number 592
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: None
 Recommended For: College Bound/Technical
 Education
 Career: A

The Concert Choir is a mixed ensemble consisting of students who enjoy singing. Admission is voluntary on an elective basis, and passage fulfills the required Arts credit for graduation. Participation in the Concert Choir expands basic knowledge of music through the performance and appreciation of choral music. The ensemble lays the foundation for exceptional musical performance though focuses on diction, tone production, and vowel formation, as well as improving or introducing students to reading music notation through sight-reading. The Concert Choir performs in no fewer than two evening concerts per school year. Attendance at all evening performances is mandatory for successful course completion.

Jazz Band

Grades 9-12
 Course Number 553 or 554
 Full Year Course – 0.5 credit
 Prerequisite: Concurrent enrollment in
 Marching/Concert Band and Recommendation
 Estimated Fee: None
 Recommended For: College Bound/Technical
 Education
 Career: A

This is a comprehensive course covering jazz performance, history, and theory. Entrance into this ensemble is by audition only, and all performances and rehearsals are mandatory. Members must be enrolled in

Marching/Concert Band to be eligible. This course is a half period taken opposite lunch. Attendance at all evening performances is mandatory for successful course completion.

Marching and Concert Band

Grades 9-12
 Course Number 564
 Full Year Course - 1 credit
 Prerequisite: Audition
 Estimated Fee: \$25.00
 Recommended For: College Bound/Technical
 Education
 Career: A

The Band is a select wind ensemble of students in grades 9-12 who have demonstrated mastery skills at the high school level. During the fall season, this band comprises the marching band. After the conclusion of the marching band program, the band continues as a concert performance band. This band performs at various concerts, festivals, and parades. The students are required to attend all events.

The fee assessed is for band camp, which is a course requirement. Students are also responsible for purchase of equipment and clothing for summer parades, marching band, and concert band.

By meeting additional requirements, juniors and seniors will be able to obtain honors credit for this course. The various options for earning the honors credit will be presented to students in the spring of the preceding school year.

HEALTH AND PHYSICAL EDUCATION

Health and Physical Education Courses

9th Grade

Physical Education*

10th Grade

Physical Education*

Aerobics 10*

Plyometrics and
Conditioning 10*

Health

**PEHR 1500 Health and
Wellness AND PEHR
1250 First Aid
(must be taken together)**

Fundamentals of Coaching*

11th-12th Grade

Physical Education*

Aerobics 11-12*

Plyometrics and
Conditioning 11-12*

Sports Medicine*

Sport/Recreation and
Fitness*

**PEHR 1500 Health and
Wellness AND PEHR
1250 First Aid
(must be taken together)**

Fundamentals of
Coaching*

*semester course

Health and Physical Education Courses

Physical Education

Grades 9-10
Course Number 739
Semester Course - 0.25 credit
Prerequisite: None
Estimated Fee: \$11.00
Recommended For: College Bound/Technical Education
Career: CORE

The 9-10 Physical Education program consists of a comprehensive coeducational curriculum with major emphasis on team and group-related activities. Individual sports and lifetime recreational activities are offered at various times throughout the year to provide a well-rounded course of study. Students will have swimming. Individual physical fitness will be stressed as an integral part of each unit of instruction. A climate is established to provide a safe setting for positive interaction among students.

This course may be used to meet half of the physical education graduation requirement or may be taken twice to fulfill the physical education graduation requirement.

9th grade students must take at least 1 semester of PE within four years. Students may then waive their other half of the PE graduation requirement by completing two full seasons of athletics, cheerleading or marching band. No credit or grade will be earned for the Physical Education waiver. Participation in athletics, marching band, or cheerleading prior to the 2014-2015 school year does not apply.

Health

Grade 10
Course Number 734
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$14.75
Recommended For: College Bound/Technical Education
Career: CORE

In the health classes, students explore the various health problems and fads of the past, present, and future. Emphasis is placed on understanding facts and concepts as well as knowing the many local health agencies and their services in the community. The following topics are studied in depth: (1) use, abuse, and misuse of tobacco, alcohol, and drugs; (2) basic first aid and first aid principles; (3) mental health; (4) aging, death and dying; (5) stress; (6) sexually transmitted disease; (7) birth defects; (8) cancer and heart disease; and (9) CPR.

PEHR 1500 Health and Wellness*

Grades 7-12
Course Number CCP 752
Semester Course – 1 college credits .33 semester credit
(with First Aid – 3 college credits 1 semester credit)
Prerequisite:
Estimated Fee: TBD
Recommended For: College Bound/Technical Education
Career: CORE

This course introduces students to topical health information emphasizing the six dimensions of health: physical, emotional, environmental, intellectual, social, and spiritual. It also includes the health and skill related components of fitness, stress

management, disease prevention, and prevention of alcohol, tobacco, and drug abuse. The course emphasizes making positive lifestyle choices for optimal health and wellness. (1 contact hour)

Course must be taken with PEHR 1250 First Aid*

PEHR 1250 First Aid*

Grades 7-12

Course Number CCP754

Semester Course – 2 college credits .66 semester credit
(with Health and Wellness – 3 college credits 1 semester credit)

Prerequisite:

Estimated Fee: TBD

Recommended For: College Bound/Technical
Education

Career: CORE

This course introduces students to accident or sudden illness recognition and the analysis and correct application of first aid procedures when immediate or temporary care is needed. Laboratory experience includes practice on both mannequins and classmates. Successful completion of lab experience and standardized exam will enable students to achieve American Red Cross certification in Adult CPR and Responding to Emergencies. (2 contact hours) Course must be taken with PEHR 1500 Health and Wellness*

Aerobics 10

Grade 10

Course Number 743

Semester Course - 0.25 credit

Prerequisite: Teacher Recommendation

Estimated Fee: \$10.00

Recommended For: Fitness Minded

Career: A,B,H,P

This course provides a total body aerobic fitness and strength-training program for high school age females. The course impacts cardiovascular endurance, muscle strength and endurance, flexibility and body composition of the amount of fat one has compared to lean tissue. This exercise program includes dance aerobics, step, power

walking, Pilates, big fitness ball routines, stretch cord routines, medicine ball routines, water aerobics, and a fitness circuit with ladders and jump ropes. *This course may be used to meet half of the physical education graduation requirement*

Plyometrics and Conditioning (P.A.C.) 10

Grade 10

Course Number 745

Semester Course - 0.25 credit

Prerequisite: Must be participating in a varsity sport
and Teacher Recommendation

Estimated Fee: \$25.00

Recommended For: Fitness Minded

Career: A,B,E,H,P

P.A.C. 10 is a semester course offered to varsity athletes seriously interested in strength training and plyometrics. This course can be used as a substitute to the physical education requirement or as an elective class. The course will offer an intense workout for males and females who are extremely dedicated to becoming faster and stronger to improve their athletic performance. The course will offer programs for off-season and in-season conditioning. Students will strength train three times per week. Each student will be pre-tested, have a mid-term test and a post-term test at the conclusion of the program. This course would be excellent for those athletes who are involved in more than a varsity sport. *This course may be used to meet half of the physical education graduation requirement.*

Fundamentals of Coaching

Grades 10-12

Course Number 740

Semester Course - 0.5 credit

Prerequisite: 9-10 PE

Estimated Fee: Optional Coaching Certificate

(\$65.00) and CPR Certificate (\$45.00)

Recommended For: College Bound/Technical Education

Career: A,B,E,H,P

The impact of coaching has exploded, touching every aspect of today's society. Through this course, the student will develop guidelines and principles helpful in organizing a successful athletic program. The course will emphasize an awareness of the demands of the coaching profession and explore issues and ethical considerations significant to coaching.

Students will take practice tests for coaching and CPR through the National Federation of High School Coaches and the American Red Cross.

Aerobics 11-12

Grades 11-12

Course Number 744

Semester Course - 0.5 credit

Prerequisite: Completion of Physical Education

Graduation Requirement and Teacher Recommendation

Estimated Fee: \$10.00

Recommended For: Fitness Minded

Career: A,B,H,P

This elective course provides a total body aerobic fitness and strength-training program for high school age females. The course impacts cardiovascular endurance, muscle strength and endurance, flexibility and body composition of the amount of fat one has compared to lean tissue. This exercise program includes dance aerobics, step, power walking, Pilates, big fitness ball routines, stretch cord routines, medicine ball routines, and a fitness circuit with ladders and jump

ropes. *This course may NOT be used to meet the physical education graduation requirement.*

Plyometrics and Conditioning (P.A.C.) 11-12

Grades 11-12

Course Number 746

Semester Course - 0.5 credit

Prerequisite: Completion of the Physical Education

Graduation Requirement, must be participating in a varsity sport, and Teacher Recommendation

Estimated Fee: \$25.00

Recommended For: Fitness Minded

Career: A,B,E,H,P

The P.A.C. 11-12 is an elective semester course offered to varsity athletes seriously interested in strength training and plyometrics. This course can be used as an elective class. The course will offer an intense workout for males and females who are extremely dedicated to becoming faster and stronger to improve their athletic performance. The course will offer programs for off-season and in-season conditioning. Students will strength train three times per week. Each student will be pre-tested, have a mid-term test and a post-term test at the conclusion of the program. This course would be excellent for those athletes who are involved in more than a varsity sport. *This course may NOT be used to meet the physical education graduation requirement.*

Sports Medicine

Grades 11-12

Course Number 736

Semester Course - 0.5 credit

Prerequisite: 2.5 grade point average

Estimated fee: \$11.00

Recommended For: College Bound/Technical Education

Career: H,P

This course is designed for students interested in fields such as athletic training, physical therapy medicine, fitness, physiology of exercise, kinesiology, nutrition, and other sports medicine related fields. The students will be responsible for class work and practical hands-on application in the following areas: prevention, treatment, and rehabilitation of sports injuries; taping and wrapping of injuries; first aid/CPR; emergency procedures; and sports medicine careers. This course will offer practical experiences with local sports medicine specialists. The Sports Medicine course is designed to be taken in conjunction with a Sports Medicine Practicum (expanded practical experience), which will require an average of one hour per week outside of the school day.

Sport/Recreation and Fitness

Grades 11-12

Course Number 742

Semester Course - 0.5 credit

Prerequisite: Completion of the Physical Education Graduation Requirement

Estimated Fee: None

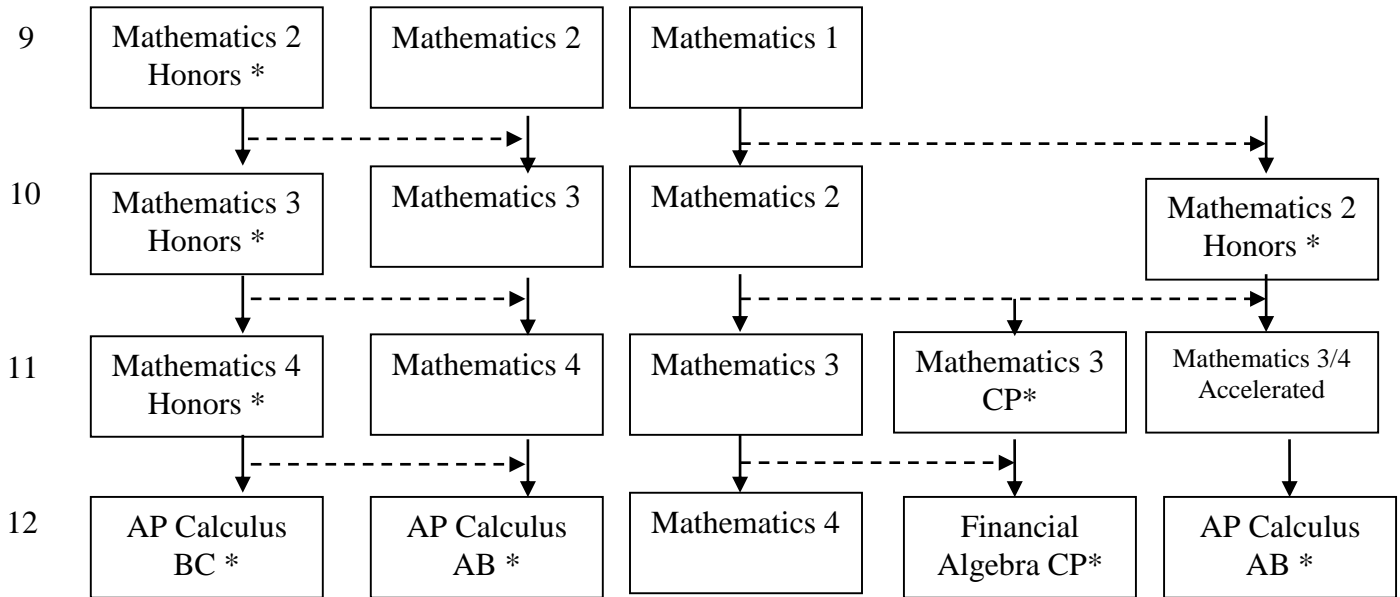
Recommended For: Fitness Minded

Career: A,B,E,H,P

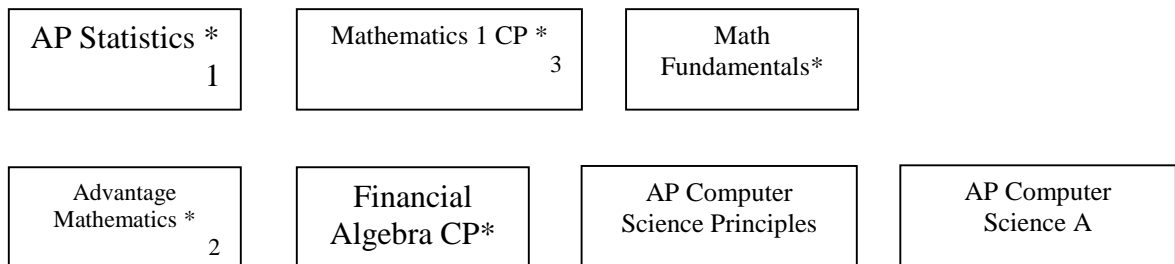
This class is for 11th and 12th graders who want to continue taking physical education as an elective. The semester would include sports and recreation activities interwoven with fitness routines which have proven to be the most popular among the older students. Each sport and recreation activity would have more time dedicated to it with more skill and strategy work included. The ultimate reward would be skilled game play that is more fun and competitive. *This course may NOT be used to meet the physical education graduation requirement.*

MATHEMATICS

Mathematics Courses



Other Mathematics Courses



* Course available only with recommendation of current mathematics teacher.

1. A.P. Statistics is available to students who have completed Mathematics 3.
2. Advantage Mathematics can be taken in grades 9 or 10 by students who are recommended by their mathematics teacher. This class is a 25-minute class taken instead of study hall opposite lunch as a support to help strengthen basic skills.
3. Math 1 CP is a two-period course for students who need extra support to strengthen basic skills in addition to learning all topics covered in Mathematics 1.

Mathematics Courses

Mathematics 1

Grade 9
 Course Number 331
 Full Year Course - 1 credit
 Prerequisite: 8 Mathematics
 Estimated Fee: None
 Recommended For: College Bound or Technical
 Education
 Career: CORE

The purpose of Mathematics 1 is to formalize and extend the mathematics that students learned in middle school. The critical areas deepen and extend understanding of linear relationships, in part by contrasting them with exponential phenomena, and in part by applying linear models to data that exhibit a linear trend. Mathematics 1 also uses properties and theorems involving congruent figures to deepen and extend understanding of geometric knowledge from prior grades. A graphing calculator is required for this course.

Mathematics 2 Honors

Grade 9
 Course Number 339
 Full Year Course - 1 credit
 Prerequisite: Mathematics 8 Accelerated and
 Recommendation
 Estimated Fee: None
 Recommended For: College Bound
 Career: CORE

This course is the second course in the honors program sequence. All topics covered in the Mathematics 2 course are included, but covered in greater depth and with increased rigor. A graphing calculator is required for this course.

Mathematics 1 CP

Grade 9
 Course Number 332
 Full Year Course - 2 credits
 Prerequisite: Recommendation
 Estimated Fee: None
 Recommended For: College Bound or Technical
 Education with Supplemental Support
 Career: CORE

Mathematics 1 CP covers all of the same objectives as Mathematics 1. It is designed for students that struggled in previous math courses and need additional support. This course meets for 2 periods every day to accomplish this goal. Students earn 1 mathematics credit and 1 elective credit upon completion of this course. A graphing calculator is required for this course.

Advantage Mathematics 1

Grade 9
 Course Number 334
 Full Year Course: No Credit
 Co-requisite: Mathematics 1 and Recommendation
 Estimated Fee: None
 Recommended For: Supplemental Support
 Career: CORE

This course is used as a support for students who need extra help with the skills needed to succeed in Mathematics 1. The class is structured so that students will have more in-depth practice and more one-on-one time. This is a half-period class and taken opposite lunch.

Math Fundamentals

Grade 9
Course Number 876
Full Year Course: 1 elective credit
Prerequisite: Recommendation
Estimated Fee: None
Recommended For: Supplemental Support
Career: CORE

This course is for 9th grade students that need one more year of development before entering Math 1. This course will strengthen the understanding of major concepts and topics from previous math courses and preview major content from future courses. Topics and content covered include number sense, formulating and reasoning about expressions and equations, analyzing two- and three-dimensional space and figure using distance, angle, similarity and congruence, linear functions and an introduction to exponential functions.

Mathematics 2

Grade 10
Course Number 341
Full Year Course - 1 credit
Prerequisite: Mathematics 1 or
Mathematics 8 Accelerated
Estimated Fee: None
Recommended For: College Bound or Technical
Education
Career: CORE

The focus of Mathematics 2 is on quadratic expressions, equations, and functions; comparing their characteristics and behavior to those of linear and exponential relationships from Mathematics 1. The need for extending the set of rational numbers arises and real and complex numbers are introduced so that all quadratic equations can be solved. The link between probability and data is explored through conditional probability and counting methods. The study of similarity leads to an understanding

of right triangle trigonometry. A graphing calculator is required for this course.

Mathematics 3 Honors

Grade 10
Course Number 349
Full Year Course - 1 credit
Prerequisite: Mathematics 2 Honors and
Recommendation
Estimated Fee: None
Recommended For: College Bound
Career: CORE

This course is the third course in the honors mathematics sequence. All topics covered in the Mathematics 3 course are included, but covered in greater depth and increased rigor. An introduction to statistical inference is also included. A graphing calculator is required for this course.

Advantage Mathematics 2

Grade 10
Course Number 344
Full Year course: No Credit
Co-requisite: Mathematics 2 and Recommendation
Estimated Fee: None
Recommended For: Supplemental Support
Career: CORE

This course is used as a support for students who need extra help with the skills needed to succeed in Mathematics 2. The class is aligned with the concepts that are taught in Mathematics 2. In addition, this class is structured so that students will have more in-depth practice and more one-on-one time. This is a half-period class and taken opposite lunch.

Mathematics 3

Grade 11
 Course Number 351
 Full Year Course - 1 credit
 Prerequisite: Mathematics 2
 Estimated Fee: None
 Recommended For: College Bound or Technical Education
 Career: CORE

It is in Mathematics 3 that students pull together and apply the accumulation of learning that they have from their previous courses. They apply methods from probability and statistics to draw inferences and conclusions from data. Students expand their repertoire of functions to include polynomial, rational, and radical functions. They expand their study of right triangle trigonometry to include the unit circle. Finally, students bring together all of their experience with functions and geometry to create models and solve contextual problems. A graphing calculator is required for this course.

Mathematics 4 Honors

Grade 11
 Course Number 359
 Full Year Course - 1 credit
 Prerequisite: Mathematics 3 Honors and Recommendation
 Estimated Fee: None
 Recommended For: College Bound
 Career: B,E,F,H

Mathematics 4 Honors is the fourth course in the honors program sequence. All topics covered in the Mathematics 4 course are included in this course plus additional work in parametric equations, polar equations, number theory and derivatives and integrals as a preparation for the AP Calculus BC course. A graphing calculator is required for this course.

Mathematics 3 CP

Grade 11
 Course Number 352
 Full Year Course - 1 credit
 Prerequisite: Mathematics 2 and Recommendation
 Estimated Fee: None
 Recommended For: College Bound or Technical Education
 Career: B,E,F,H

This course covers the same content as Math 3 but is designed for students that struggled in Math 2 and need additional support. A graphing calculator is required for this course.

Mathematics 3/4 Accelerated

Grade 11
 Course Number 353
 Full Year Course - 1 credit; *Honors weight*
 Prerequisite: Mathematics 2 or Mathematics 2 Honors and Teacher Recommendation
 Estimated Fee: None
 Recommended For: College Bound
 Career: CORE

This course will cover the same content as Math 3 and also the major concepts from Math 4. The content is covered at an accelerated pace in order to make sure that all content is covered in one school year. This course is intended to give incoming juniors that took Math 2 or Math 2 Honors as a sophomore the essential background needed to be able to enroll AP Calculus AB as a Senior. Only juniors may enroll in this course and teacher permission is required. A graphing calculator is required for this course.

Mathematics 4

Grade 12
 Course Number 361
 Full Year Course - 1 credit
 Prerequisite: Mathematics 3
 Estimated Fee: None
 Recommended For: College Bound or Technical Education
 Career: B,E,F,H

Mathematics 4 builds off of the concepts of Mathematics 3 but extends the study of rates of change, functions, trigonometry and sequences and series. This course includes an introduction to matrices and calculus. A graphing calculator is required for this course.

Financial Algebra CP

Grade 12
 Course Number 362
 Full Year Course - 1 credit
 Prerequisite: Mathematics 2 and Teacher Recommendation
 Estimated Fee: None
 Recommended For: Technical Education or College Bound
 Career: A,B,F,P

This course explores linear, quadratic, and exponential equations, as well as probability, geometry and other math topics through the realities of the stock market, banking and credit, employment, taxes, retirement, and budgeting. The course may be taken as a senior level college preparatory class to fulfill the fourth year graduation requirement or as an additional mathematics course during a student's senior year. A graphing calculator is required for this course.

AP Calculus AB

Grade 12
 Course Number 364
 Full Year Course - 1 credit
 Prerequisite: Mathematics 4
 Estimated Fee: A.P. Test Registration
 Recommended For: College Bound
 Career: B,E,F,H
AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Calculus AB course work models a college course in Mathematics.

AP Calculus AB is a course designed to accommodate those students who have completed Mathematics 4 before their senior year and have a desire to continue their mathematics education. The course offers an intuitive approach to limit theory along with differential and integral calculus. With much of the emphasis placed on problem solving and applications (business, engineering, etc.), the students will be prepared to take the Calculus AP exam (AB Form) in May. A graphing calculator is required for this course. Students enrolled in this course are required to take the A.P. exam in May.

AP Calculus BC

Grade 12
 Course Number 369
 Full Year Course - 1 credit
 Prerequisite: Mathematics 4 Honors and Recommendation
 Estimated Fee: A.P. Test Registration
 Recommended For: College Bound Education
 Career: B,E,F,H
AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Calculus BC course work models a college course in Calculus.

The student will be prepared to take the Advanced Placement Calculus exam (AB or BC) in May. This course follows guidelines set by the Advanced Placement Program of the College Entrance Examination Board. Both differential and integral calculus are studied with a major emphasis on problem solving and analytical applications. Other topics covered include sequences and series, differential equations, and polar coordinates. A graphing calculator is required for this course. Students enrolled in this course are required to take the A.P. exam in May.

AP Statistics

Grade 11-12
 Course Number 370
 Full Year Course - 1 credit
 Prerequisite: Recommendation
 Estimated Fee: A.P. Test Registration
 Recommended For: College Bound
 Career: B,E,F,H,P
AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Statistics course work models a college course in Statistics.

The purpose of this course is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. Students are exposed to four broad conceptual themes:

Exploring Data: Observing patterns and departures from patterns

Planning Study: Deciding what and how to measure

Anticipating Patterns: Producing models using probability theory and simulation

Statistical Inference: Confirming models.

A graphic calculator is required for this course. Students enrolled in this course are required to take the A.P. exam in May.

AP Computer Science Principles

Grade 10-12
 Course Number: 380
 Full Year Course – 1 credit
 Prerequisite: Math 1
 Estimated Fee: AP Test Registration
 Recommended for: College Bound/Technical
 Career: A, B, E, F, H
AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Computer Science Principles course work models a first semester introductory college computing course.

The purpose of this course is to focus on the concepts and computational thinking practices central to the discipline of computer science. The course is organized around the investigation of seven big ideas, all of which are fundamental principles essential to thrive in future college courses and a variety of computing and STEM careers. Emphasizing these key big ideas helps students build a solid understanding and facility with computing and computational thinking. The course focuses on using technology and programming as a means to solve computational problems and create exciting and personally relevant artifacts. Projects and problems include app development, visualization of data, cybersecurity, and simulation.

This course will fulfill the technology graduation requirement.

Students enrolled in this course are required to take the AP Computer Science Principles test in May

AP Computer Science A

Grade 11-12

Course Number 381

Full Year Course - 1 credit

Prerequisite: AP Computer Science Principles

Estimated Fee: A.P. Test Registration

Recommended For: College Bound

Career: B,E,F,H,P

AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Computer Science A course work models a first semester introductory college computing course.

The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem solving and design using the Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

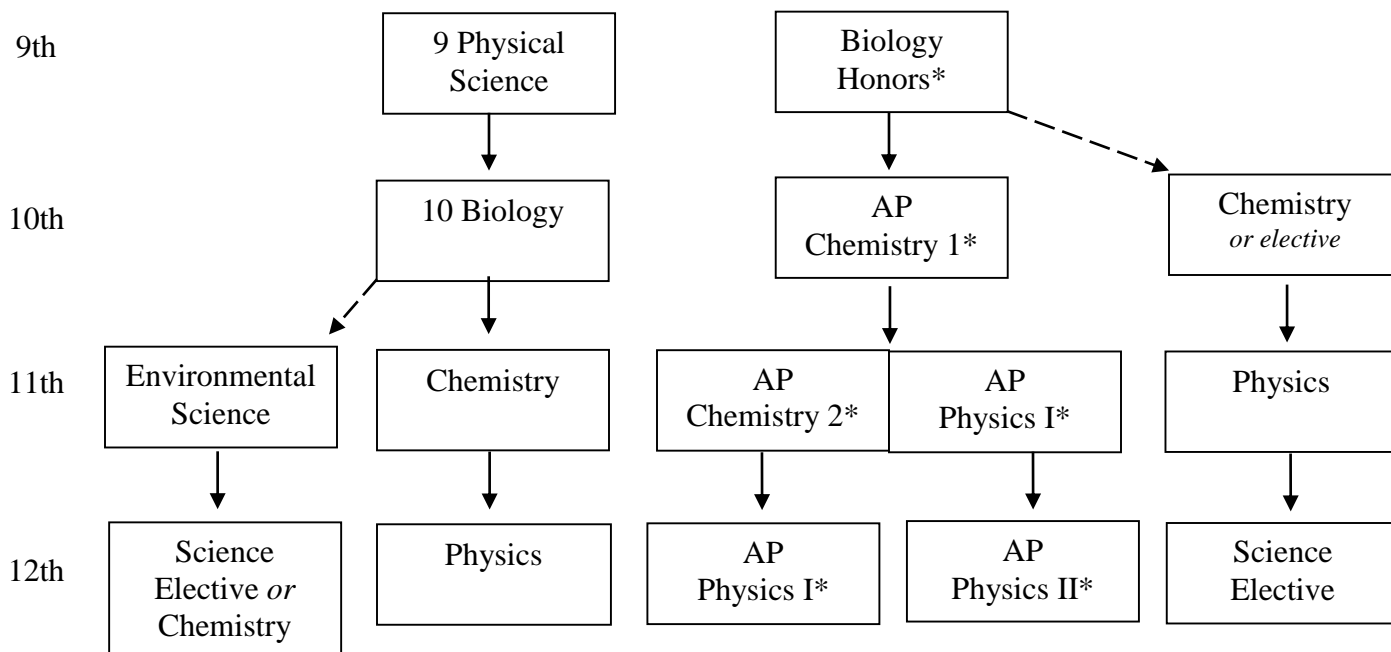
This course will fulfill the technology graduation requirement.

Students enrolled in this course are required to take the AP Computer Science A test in May

SCIENCE

The science curriculum is designed to meet the needs of every student. Students must earn three credits in science. One credit must be in a physical science and a second credit must be in a biological science. The third credit can be in any advanced study for high school graduation, although the college-bound CORE recommends the sequence of chemistry and physics for college preparation. Science electives are identified on the next page.

Main Sequence of Science Courses



*Course available only with recommendation of current science teacher.

Science Elective Courses

Science Credit Electives

- *AP Biology
- *AP Environmental Science
- *Environmental Science
- *Human Anatomy and Physiology
- Explorations In Engineering (11/12)

*Biology is a prerequisite for these courses

STEM2M Electives

- ^Introduction to Engineering Design (9,10,11 or 12)
- +Principles of Engineering
- ^Principles of Biomedical Science (9,10,11 or 12)
- +Human Body Systems

^earns tech credit

+ STEM course listed above is a prerequisite
STEM elective credits are not science credits.

Main Sequence of Science Courses

9 Physical Science

Grade 9
 Course Number 431
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: \$17.00
 Recommended For: College Bound/Technical Education
 Career: CORE

The course provides a foundation in basic chemistry and physics by which scientific knowledge is acquired. Students acquire useful lab skills, math applications and reasoning skills that help students to better develop their ability to communicate. The course begins with a look at accuracy, precision and uncertainty. The course then delves into the basic chemistry topics including the explorations in matter, atoms in the Periodic Table, chemical reactions, solutions, acids and bases, as well as nuclear change. Physics fundamentals include the overview of motion, forces, work, energy, heat, temperature, waves, sound, light, electricity and magnetism. The course meets all of the physical science requirements for the Ohio Graduation Test.

Biology Honors

Grades 9 or 10
 Course Number 439
 Full Year Course - 1 credit
 Prerequisite: Teacher recommendation
 Estimated Fee: \$25.00
 Recommended For: College Bound
 (May be taken concurrently with AP Chemistry [Year 1])
 Career: CORE

Biology Honors, the study of life, is also a survey course emphasizing the seven themes of Biology: cellular structure and function, reproduction, metabolism, homeostasis, heredity, evolution and interdependence.

Students will be expected to work at the level of application and analysis of information. Independent projects will be done during which time the student will be expected to explore information beyond the textbook.

10 Biology

Grade 10
 Course Number 441
 Full Year Course - 1 credit
 Prerequisite: 9 Physical Science
 Estimated Fee: \$25.00
 Recommended For: College Bound/Technical Education
 Career: CORE

10 Biology is a broad-based survey of the study of life. The course emphasizes the seven themes in Biology: cellular structure and function, reproduction, metabolism, homeostasis, heredity, evolution and interdependence. Inquiry learning, laboratory and field experiences, as well as the use of technology are utilized to teach Biology concepts. This course satisfies the high school requirement for a life science.

Chemistry

Grades 11-12
 Course Number 451
 Full Year Course - 1 credit
 Prerequisite: 9 Physical Science, 10 Biology, Taking/Completed Mathematics 2
 Estimated Fee: \$20.00
 Recommended For: College Bound
 Career: CORE

Chemistry deals with all of the substances that make up our environment and the changes that take place in these substances. Students are introduced to chemistry as a science and discuss matter and its changes. Once these basic concepts are understood, a

more detailed study is begun with topics such as atomic structure, classification of elements, the periodic table, chemical bonding, and chemical formulas. The interaction of substances is further expanded to include chemical equations and mass relationships in chemical reactions. Course study also includes the phases of matter, including topics of the gas laws, molecular composition of gases, and a study of liquids, solids and water. Note: A non-programmable, scientific calculator is necessary for the many mathematical calculations that are required.

AP Chemistry [Year 1]

Grades 10-11

Course Number 447

Full Year Course - 1 credit

Prerequisite: Grade of A or B in 9 Physical Science or Honors Biology, and Teacher Recommendation

Estimated Fee: \$20.00

Recommended For: College Bound

Career: A,B,E,F,H,P

With recommendations from and the approval of the College Board, the Advanced Placement Chemistry course work models a first semester first year college course in Chemistry.

This is the first of a two-year sequence for Advanced Placement Chemistry. It helps prepare the student for the Advanced Placement exam to be taken upon completion of the AP Chemistry [Year 2] class during his/her junior or senior year. The course is designed to approximate the first semester of a first-year college chemistry course. Topics to be covered include: introduction to matter and measurements; atoms, molecules, and ions; chemical stoichiometry, formulas, and equations; aqueous reactions and solution stoichiometry; thermo chemistry; electronic structure of atoms; the periodic table; chemical bonding; molecular geometry;

gases; intermolecular forces, liquids, solids; and properties of solutions. Appropriate lab experiments are incorporated into the course. Students should have a strong commitment to completing the two-year sequence.

AP Chemistry [Year 2]

Grades 11-12

Course Number 459

Full Year Course - 1 credit

Prerequisite: AP Chemistry [Year 1] and Teacher Recommendation

Estimated Fee: \$20.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Chemistry course work models a second semester first year college course in Chemistry.

Topics to be covered include: chemical equilibrium; chemical kinetics; chemical thermodynamics; electrochemistry; oxidation-reduction reactions; nuclear chemistry; and methods of qualitative and quantitative analysis. Appropriate lab work is incorporated into the course. Students enrolled in this course are required to take the A.P. exam in May.

Physics

Grade 11-12

Course Number 461

Full Year Course - 1 credit

Prerequisite: 9 Physical Science, 10 Biology, and a grade of C or better in Mathematics 3.

Estimated Fee: \$10.00

Recommended For: College Bound

Career: CORE

The regular course in Physics is basically a survey course. Many aspects of physics are explored. The course begins with a review of trigonometry and the metric system. The

student will move on to the topic of mechanics, which includes the study of forces and motion. Other topics to be studied include kinetic theory, waves, sound, light, and electricity. Note: A scientific calculator is necessary for the many mathematical calculations that are required.

AP Physics I

Grade 11-12

Course Number 469

Full Year Course - 1 credit

Prerequisite: Teacher Recommendation and Mathematics 3 or above

Estimated Fee: \$10.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Physics I course work models a first semester college course in algebra-based mechanics.

The course provides a systematic introduction to the main principles of mechanics. The course covers Newtonian mechanics (including rotational dynamics and angular momentum); work, energy, and power; and mechanical waves and sound. It will also introduce electric circuits. An understanding of the basic principles involved and the ability to apply these principles to a variety of problems, especially in the laboratory environment, are the major goals of the course. To this end a significant portion of the course (approximately 35-40%) will be devoted to laboratory work with a focus on inquiry based labs. Knowledge of algebra and trigonometry is required although the basic ideas of calculus may be introduced in connection with some physical concepts. Students enrolled in this course are required to take the A.P. exam in May.

AP Physics II

Grade 12

Course Number 470

Full Year Course - 1 credit

Prerequisite: AP Physics I

Estimated Fee: \$10.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Physics II course work models a second semester college course in algebra-based physics.

The course uses Newtonian mechanics, work, energy, and power to expand on the topics of fluid mechanics; thermodynamics; electricity and magnetism; electrical circuits; optics as well as atomic and nuclear physics. An understanding of the basic principles involved and the ability to apply these principles to a variety of problems, especially in the laboratory environment, are the major goals of the course. To this end a significant portion of the course (approximately 35-40%) will be devoted to laboratory work with a focus on inquiry based labs. Knowledge of algebra and trigonometry is required although the basic ideas of calculus may be introduced in connection with some physical concepts. Students enrolled in this course are required to take the A.P. exam in May

Elective Science Courses

AP Biology

Grades 10-12

Course Number 468

Full Year Course - 1 credit

Prerequisite: Grade of B or better in Biology and concurrent with Chemistry.

Estimated Fee: \$25.00 and A.P. Test Registration

Recommended For: College Bound Students majoring in the sciences

Career: A,B,E,F,H,P

AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Biology course work models a first year college course in Biology.

As a general survey course, topics covered included the cell, biochemistry, molecular biology, classification, evolution and ecology. Laboratory experiments reinforce and approximate college lab curriculum. Students enrolled in this course are required to take the A.P. exam in May.

AP Environmental Science

Grades 10-12

Course Number 467

Full Year Course - 1 credit

Prerequisite: Completed Biology with a grade B or above, and successful completion of 9 Physical Science or concurrent with Chemistry

Estimated Fee: \$15.00 and A.P. Test Registration

Recommended For: College Bound

Career: E,F,H,P

AP+PLTW Pathway Course

With recommendations from and the approval of the College Board, the Advanced Placement Environmental Science course work models a one semester, non-science major college course.

The course explores the scientific principles involved in environmental issues. The

course is issue based, making it more appealing to those students who do not plan a major in science at the college level. The course does delve into the scientific reasons behind environmental problems making it of interest to those students planning a career in the sciences. Emphasis is placed on data manipulation, science report writing, and debating issues based on scientific fact rather than myth. The students are expected to produce college-level work during the class. Students enrolled in this course are required to take the A.P. exam in May.

Environmental Science

Grades 11-12

Course Number 452

Full Year Course - 1 credit

Prerequisite: 9 Physical Science, 10 Biology

Estimated Fee: \$15.00

Recommended For: College Bound/Technical Education

Career: A,B,E,F,H,P

Environmental Science provides students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. Students can explore actual case studies and conduct hands-on activities to identify and analyze environmental problems both natural and man-made, to evaluate the relative risks associated with these problems, and examine alternative solutions for resolving and/or preventing them. The course includes interactions between humans and the Earth; ecosystems, environmental factors, biological evolution, populations, diversity; matter and energy, relationships; human interactions with science and technology, understanding technology; research, science and society; application of science processes, and techniques and research.

Explorations in Engineering

Grades 11-12

Course Number 444

Full Year Course – 1 advanced science credit

Prerequisite: 9 Physical Science, 10 Biology, and Mathematics 2

Estimated Fee: \$24.00

Recommended For: College Bound/Technical Education

Career: B,E,F

This course will intensely explore a variety of engineering topics using a project-based approach. The extensive theory and analysis will include the mathematical and physical properties that explain the nature of the design. In addition, the course will emphasize that engineering design fills a customer need and has constraints. Project constraints will include limitations in design requirements, manufacturability, cost analysis, and more.

This course is intended to be taken concurrently with another science course.

Human Anatomy and Physiology

Grades 11-12

Course Number 453

Full Year Course - 1 credit

Prerequisite: C or better in Biology Lab

Estimated Fee: \$35.00

Recommended For: College Bound/Medical Field

Career: B,E,F,H,P

The human body is truly incredible. To deepen student understanding of the human body Anatomy and Physiology is a year-long course that investigates the human body's structure and its functions. The course will examine the structure and function of major body systems including the skeletal, muscular, nervous, endocrine, circulatory, lymphatic, integumentary, digestive, respiratory, urinary and reproductive

systems. Disease, medical technology, and current research will be highlighted throughout the year. Dissections are an integral part of the course.

Introduction to Engineering Design

Grades 9-12

Course Number 438

Full Year Course - 1 technology credit

Prerequisite: Concurrent enrollment or completion of Mathematics 1

Estimated Fee: \$24.00

Recommended For: B, E, F

AP+PLTW Pathway Course

This is the introductory course in our engineering program. The major focus of the course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will use 3D solid modeling design software to help them design solutions to solve proposed problems, to learn how to document their work, and to communicate their solutions.

This course will fulfill the technology graduation requirement.

Human Body Systems

Grades 9-12

Course Number 445

Full Year Course – 1 elective credit

Prerequisite: Principles of the Biomedical Sciences

Estimated Fee: \$24.00

Recommended For: B, E, F, H, P

AP+PLTW Pathway Course

This is the second course in our biomedical program. Students examine the processes, structures, and interactions of the human body systems to learn how they work together to maintain homeostasis (internal

balance) and good health.

Using real-world cases, students take the role of biomedical professionals and work together to solve medical mysteries. Hands-on projects include designing experiments, investigating the structures and functions of body systems, and using data acquisition software to monitor body functions such as muscle movement, reflex and voluntary actions, and respiratory operation.

Important concepts covered in the course are communication, transport of substances, locomotion, metabolic processes, defense, and protection.

Principles of the Biomedical Sciences

Grades 9-12
 Course Number 435
 Full Year Course – 1 technology credit
 Prerequisite: None
 Estimated Fee: \$24.00
 Recommended For: B, E, F, H, P
AP+PLTW Pathway Course

This is the introductory course to our biomedical program. Students will investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases.

They will determine the factors that led to the death of a fictional person as they sequentially piece together evidence found in her medical history and her autopsy report. Students will investigate lifestyle choices and medical treatments that might have prolonged the person's life and demonstrate how the development of disease is related to changes in the human body systems.

The activities and projects introduce students to human physiology, basic biology, medicine, and research processes and allow students to design experiments to solve problems.

This course will fulfill the technology graduation requirement.

Principles of Engineering

Grades 9-12
 Course Number 448
 Full Year Course – 1 elective credit
 Prerequisite: Introduction to Engineering Design,
 Concurrent enrollment or completion of
 Mathematics 2
 Estimated Fee: \$24.00
 Recommended For: B, E, F
AP+PLTW Pathway Course

This is the second course in our engineering program. This course helps students understand the field of engineering and engineering technology. Students will explore various technology systems and manufacturing processes that will help students learn how engineers and technicians use math, science and technology in an engineering problem solving process to benefit people.

The course also includes concerns about social and political consequences of technological change.

Excel TECC Required Science Courses

Anatomy/Chemistry for Excel TECC Programs

Grade 11

Course Number 495

Full Year Course - 1 credit

Prerequisite: Only for students enrolled in Cosmetology

Estimated Fee: \$45.00

Recommended For: Cosmetology Students

Career: E,F,H,P

Subjects covered are Bacteriology, Sanitation and Sterilization, Histology of Hair, Skin, and Nails, Chemistry, Anatomy, Color Theory, Electricity and Light Therapy. Students study bacteriology applications and communicable diseases, acceptable sanitation and sterilization procedures, the structure of hair, skin, and nails, chemical principles applicable to cosmetology practices, body systems related to massage techniques, as well as the remaining body systems, color theory as it relates to hair color, basic electrical concepts for implements and equipment, and the relationship of light rays and the spectrum to facial and scalp treatments. The focus of Bacteriology is to define, describe and classify bacteria and related diseases with a minimum 75% accuracy to meet requirements of the State Board of Cosmetology. Sanitation and Sterilization focuses on describing effective, practical and acceptable methods for the prevention of bacteria and disease through proper sanitation and sterilization techniques with a minimum 100% accuracy to meet State Board of Cosmetology requirements. The focus of Histology of Hair, Skin and Nails is identification, description, and definition of hair, skin and nail requirements for the State Board of Cosmetology. Chemistry focuses on basic chemistry terms, formulas, and concepts that relate to the chemistry of

substances used on hair, skin, and nails with a minimum 75% accuracy to meet State Board of Cosmetology requirements. The focus of Anatomy is the identification using both technical and common names of all bones, muscles, nerves and blood vessels of the face, neck, shoulder, upper chest, hand, arm and upper back with a minimum of 75% accuracy to meet the requirements of the State Board of Cosmetology. Color theory focuses on color identification, balance, use of the color wheel, and terminology with a minimum 75% accuracy to meet the State Board of Cosmetology requirements. The focus of Electricity is to list and tell the purposes and effects of various electrical equipment and the currents produced by each with a minimum of 75% accuracy to meet the requirements of the State Board of Cosmetology. Light Therapy focuses on the relations of basic concepts of light to light therapy equipment for facial and scalp treatments with a minimum of 75% accuracy to meet the State Board of Cosmetology requirements.

Human Anatomy/Physiology for Excel TECC Programs

Grades 11-12

Course 493

Full Year Course - 1 credit

Prerequisite: Concurrent with Medical
Technology/Physiology –only for students in the
Med Tech Program

Estimated Fee: \$35.00

Recommended For: Medical Technology Students

Career: B,E,F,H,P

This course is designed to meet the college prep science requirements and also to reinforce and enhance Medical Terminology classes. The course will examine the structure and function of major body systems including the skeletal, muscular, nervous, endocrine, circulatory, lymphatic, integumentary, digestive, respiratory, urinary and reproductive systems. Disease, medical technology, and current research will be highlighted throughout the year. Dissections are an integral part of the course.

SOCIAL STUDIES

Social Studies at Mayfield High School

Students are required to take Social Studies courses during their 9th, 10th, and 12th grade years. There is a wide variety of elective courses available for students to take in their 10th, 11th, and 12th grade years.

Required Social Studies Courses

<u>9th Grade</u>	<u>10th Grade</u>	<u>11th Grade</u>	<u>12th Grade</u>
U.S. History in the 20 th Century	World History		American Government
U.S. History in the 20 th Century Honors	AP World History		AP. United States Government and Politics

Elective Social Studies Courses

<u>9th Grade</u>	<u>10th Grade</u>	<u>11th Grade</u>	<u>12th Grade</u>
	Current World Issues*	American History Through Film*	American History Through Film*
	Sociology 1*	AP Economics	AP Economics
	Sociology 2*	AP European History	AP European History
	AP Economics	AP U.S. History	AP U.S. History
		AP Psychology	AP Psychology
		Current World Issues*	Current World Issues*
		Psychology*	Psychology*
semester course		Sociology 1	Sociology 1*
		Sociology 2*	Sociology 2*

Required Social Studies Courses

United States History in the 20th Century

Grade 9
Course Number 231
Full Year Course - 1 credit
Prerequisite: None
Estimated Fee: \$20.00
Recommended For: College Bound/Technical Education
Career: CORE

United States History is a selective in-depth study of the United States' social, cultural, intellectual, political, and economic development which will lead the student to a better understanding of his/her society. A combination of a chronological and topical approach is used to analyze the following aspects of American culture with the major focus on post-Civil War America: (1) democracy and the Constitution of the United States, (2) politics and political change, (3) urban-industrial America, (4) the labor movement in the U.S., (5) minority groups in a pluralistic society, (6) foreign relations, and (7) facing the future. Emphasis on the skills and knowledge needed to pass the end of course exam will be a major focus of the course.

United States History in the 20th Century Honors

Grade 9
Course Number 239
Full Year Course - 1 credit
Prerequisite: Recommendation
Estimated Fee: \$20.00
Recommended For: College Bound
Career: CORE

U.S. History in the 20th Century Honors is a more rigorous and in-depth study of the material covered in the regular U.S. History class. Emphasis will be placed on

improvement in essay composition, analysis and interpretation of original source materials, as well as assessing the relevance, reliability, and importance of other types of historical evidence. This course is recommended for all students planning to enroll in future Social Studies Advanced Placement offerings. Emphasis on the skills and knowledge needed to pass the end of course exam will also be a major focus of the course.

World History

Grade 10
Course Number 241
Full Year Course - 1 credit
Prerequisite: None
Estimated Fee: \$11.00
Recommended For: College Bound/Technical Education
Career: CORE

This course examines world events from 1600 to the present. It explores the impact of the democratic and industrial revolutions, the forces that led to world domination by European powers, the wars that changed empires, the ideas that led to independence movements and the effects of global interdependence. Focus is placed on Western civilization with an emphasis on cultural, philosophical, artistic, economic, social and political growth. The last nine weeks detail the world since 1945, the role of the U.S., the end of the USSR, and the North-South economic confrontations. The concepts of historical thinking introduced in earlier grades continue to build with students locating and analyzing primary and secondary sources from multiple perspectives to draw conclusions.

AP World History

Grade 10

Course Number 249

Full Year Course - 1 credit

Prerequisite: Recommendation

Estimated Fee: \$18.50 and A.P. Test Registration

Recommended For: College Bound

Career: CORE

With recommendations from and the approval of the College Board, the Advanced Placement World History course work models a semester college course in World History.

It is a course that fulfills the World History credit requirement required by the State of Ohio for graduation. The purpose of the AP World History course is to develop greater understanding of the evolution of global processes and contacts in different types of human societies. This understanding is advanced through a combination of factual knowledge and analytical skills. The course highlights the nature of changes in global frameworks and their causes and consequences, as well as comparisons among major societies. It emphasizes relevant factual knowledge, leading interpretive issues, and skills in analyzing types of historical evidence. Specific themes provide further organization to the course, along with consistent attention to contacts among societies that form the core of world history as a field of study. Students enrolled in this course are required to take the A.P. exam in May.

This course is recommended for students planning on taking AP United States History, AP European History, and AP United States Government and Politics.

American Government

Grades 12

Course Number 261

Full Year Course - 1 credit

Prerequisite: None

Estimated Fee: \$20.00

Recommended For: College Bound/Technical Education

Career: CORE

American Government is a comprehensive course required of all seniors. The course utilizes the foundations established by previous social studies courses and builds from these a more thorough understanding of current affairs and problems of our society and the world. The first semester is devoted to an examination of political theory, political parties, elective machinery, the political structure, and how it works. It also looks at the individual rights and civil rights of Americans long with the court system. Emphasis is placed on current political issues, elections, and problems facing America. Skills and knowledge to pass the end of course exam will also be a focus.

The second semester studies the economic system of the United States, basic economic concepts, and personal financial literacy.

AP United States Government and Politics

Grade 12

Course Number 269

Full Year Course - 1 credit

Prerequisite: Recommendation, AP U.S. History
recommended

Estimated Fee: \$22.00 and A.P. Test Registration

Recommended For: College Bound

Career: CORE

With recommendations from and the approval of the College Board, the Advanced Placement Government and Politics course work models a semester college course in Economics.

The Advanced Placement American Government course is designed to give students a critical perspective on politics and government in the United States. This course involves both the study of general concepts used to interpret American politics and the analysis of specific case studies. It also requires familiarity with various institutions, groups, beliefs, and ideas that make up the American political reality. In addition, this course is designed to help advanced students take the advanced placement college exam in May to help obtain college credit.

Students enrolled in this course are required to take the A.P. exam in May.

Elective Social Studies Courses

American History through Film

Grade 11-12
Course Number 276
Semester Course - 0.5 credit
Prerequisite: United States History and World History
Estimated Fee: None
Recommended For: College Bound/Technical Education
Career: A,P

Students will examine Hollywood feature films and historical dramas as historical evidence. Students will view movies on various American history topics and compare film evidence to information from more traditional sources, such as news articles, texts, primary sources, and critical commentaries.

The intent is to give students more practical critical analysis experience. Film will be used to motivate students to study important American history themes and topics with more depth and detail than in core history courses.

AP Economics

Grades 10-12
Course Number 289
Full Year Course - 1 credit
Prerequisite: Recommendation
Estimated Fee: \$22.00 and A.P. Test Registrations
Recommended For: College Bound
Career: A,B,E

With recommendations from and the approval of the College Board, the Advanced Placement Economics course work models a semester college course in Economics.

AP Macroeconomics and AP Microeconomics are elective courses designed to give students a thorough understanding of the principles of economics that apply to an economic system as a whole and at the individual firm level. The course places emphasis on the study of product and factor markets, while analyzing the government's role in preventing market failure. Focus is also placed on calculation of national income and price along with a concentration on developing a familiarity with economic performance measures, economic growth, and international economics. The course will also include units of study on the role of money and banking, fiscal, and monetary policies, as well as supply and demand in a market economy. Students will take two AP Tests in May, Microeconomics and Macroeconomics, which can be accepted as college credits. Students enrolled in this course are required to take the A.P. exam in May.

AP European History

Grades 11-12

Course Number 279

Full Year Course - 1 credit

Prerequisite: Recommendation

Estimated Fee: \$22.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,P

With recommendations from and the approval of the College Board, the Advanced Placement European History course work models a semester college course in European History.

As the name implies, this course centers on European history and concentrates on the time period from 1450 to the present.

Emphasis is placed on different interpretations of European history and development of skills in working with statistical data, charts, graphs, maps, documents, and pictorial evidence of historical events. Students will improve skills in essay composition assessment of historical materials—their relevance, reliability and importance—as well as develop an awareness of the interrelationship between social, economic, political and international events in European history. Students enrolled in this course are required to take the A.P. exam in May.

AP Psychology

Grades 11-12

Course Number 278

Full Year Course – 1 credit

Prerequisite: Recommendation

Estimated Fee: \$22.00 and AP Test Registration

Recommended For: College Bound

Career: A, B, H, P

With recommendations from and the approval of the College Board, the Advanced Placement Psychology course work models a first semester college course in Psychology.

This course follows guidelines set by the The AP Psychology course is designed to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Topics include the biological basis of behavior, sensation and perception, altered states of consciousness, learning and memory, testing and intelligence, motivation and emotions, developmental psychology, personality theories, abnormal behavior and social psychology.

AP United States History

Grades 11-12

Course Number 259

Full Year Course - 1 credit

Prerequisite: Recommendation

Estimated Fee: \$22.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,P

With recommendations from and the approval of the College Board, the Advanced Placement United States History course work models a first semester college course in US History.

The Advanced Placement United States History course prepares students for the Advanced Placement examination offered in May. This course is designed to acquaint the students with an in-depth account of United States History from colonial time through the administration of Richard Nixon. Emphasis is placed on different interpretations of American history and development of skills in working with statistical data, charts, graphs, maps, documents, and pictorial evidence of historical events. Students will improve skills in essay composition, assessment of historical materials—their relevance, reliability, and importance—as well as develop an awareness of the interrelationship between social, economic, political, and international events in American history. Students enrolled in this course are required to take the A.P. exam in May.

Current World Issues

Grades 10-12

Course Number 274

Semester Course - 0.5 credit

Prerequisite: None

Estimated Fee: None

Recommended For: College Bound/Technical Education

Career: B,E,H,P

The purpose of Current World Issues is to provide a framework for students to study and understand the ongoing political problems the world community is experiencing today. It is an attempt to show the study of international relations as an introduction to the art and science of the survival of mankind. Current World Issues will expose the students to the global condition of the world in the later twentieth century. It will first attempt to get a “handle” on how world diplomacy developed before World War II and the radical changes that have taken place in world diplomacy in the post-World War II era. Secondly, all the regional areas will be studied with a look at present problems and the role the super power plays in them. Finally, the course will look to the future and possible solutions.

Psychology

Grades 11-12
Course Number 277
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: None
Recommended For: College Bound/Technical
Education
Career: A,B,H,P

In psychology, emphasis is placed on personality and the factors involved in the development of personality. This course allows the student to develop his/her own personality and human behavior in several ways. First, the student discovers how and why humans respond to their environment by exploring perception, memory and thought, the central nervous system, drives, and emotions. Next, students pursue a unit of study in learning. Basic conditioning concepts are dealt with, as well as factors that affect learning, such as motivation, feedback, and transfer.

Sociology 1

Grades 10-12
Course Number 271
Semester Course - 0.5 credit
Prerequisite: Recommendation
Estimated Fee: None
Recommended For: College Bound/Technical
Education
Career: A,B,H,P

Sociology 1 is intended to offer students an academic and scientific approach to the study of human interaction. Emphasis is placed on fundamental sociological concepts and principles. Numerous student activities are included in the program so that learning is enhanced through actual involvement. The course provides students with an understanding of the organization of cultures and societies. In addition, special attention is paid to the problem of social stability in society and the role of the individual as a member of social institutions.

Sociology 2

Grades: 10-12 Course Number 272
Semester Course - 0.5 credit
Prerequisite: Sociology 1
Estimated Fee: None
Recommended For: College Bound/Technical
Education
Career: A,B,H,P

This course is intended to offer students an academic, scientific, and experimental approach to the study of social issues. Numerous student activities are included in the program that explores equal rights, poverty, ecology, population, and aging

SPECIAL EDUCATION

Special Education at Mayfield High School

The Special Education department serves students in four different programs:

- Cognitively Disabled Students
- Hearing Impaired Students
- Learning Disabilities Students
- Multi-Handicapped Students

These programs serve disabled students in grades 9 through 12. Eligibility for the program is determined by the standards set by the Ohio Division of Special Education. Individual needs and learning styles dictate each student's program. Students are provided viable alternatives within an integrated high school setting in either general education classes and/or intervention/resource classes taught by special education teachers. Students in these classes are taught the subjects required for graduation in a small group setting.

Special Education Courses

<u>Cognitively Disabled</u>	<u>Hearing Impaired</u>	
English SCC	Career Focus*	Social Skills Communication 1*
Mathematics SCC	Consumer Mathematics Intervention	Social Skills Communication 2*
Science SCC	English Resource	Social Studies Resource
Social Studies SCC	Health Resource*	Study Skills*
	Information Technology Intervention*	Reading and Writing Fundamentals
	Learning Center	
	Mathematics Intervention	
	Mathematics Resource	
	Science Resource	
	<u>Hearing Impaired</u> <u>(Continued)</u>	

*semester course

<u>Learning Disabilities</u>	<u>Multi-Handicapped</u>	<u>Adapted Courses</u>
Fundamentals of Reading and Writing	English SCM	Adapted Art **
English Intervention 11-12	Health SCM*	Adapted Home Economics**
Math Fundamentals	Independent Living Skills SCM*	Adapted Information Technology*
Learning Center	Mathematics SCM	Adapted Music**
Social Skills Communication 1*	Pre-Vocational SCM	Adapted Physical Education*
Social Skills Communication 2	Science SCM	Adapted Photography *
	Social Studies SCM	

*semester course
**quarter course

Courses for Cognitively Disabled Students

English SCC

Grades 9-12
Course Number 841
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

English SCC is based on an individual's ability level and all activities are geared toward polishing the skills already known while adding to his/her body of knowledge. Students work on handwriting, grammar, spelling, listening, reading, and comprehension of materials read independently and those read by the teacher. All skills are aimed toward functional application, as well as reading for information and enjoyment.

Mathematics SCC

Grades 9-12
Course Number 845
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

Emphasis is placed on practical application of skills to the world of work and consumerism. Basic computation, counting of money and making change, measurement and time are continually developed as per each student's capabilities.

Science SCC

Grades 9-12
Course Number 844
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: \$15.00

Students will be introduced to and/or will build on areas concerning land, animals, plants, water life, and environment, which includes conservation and recycling, basic mechanical awareness and the earth.

Social Studies SCC

Grades 9-12
Course Number 843
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

Social Studies is the practical application of being a responsible member of a family, community, and country. Activities include learning about current events, history, geography, and a general knowledge of how local, state, and the United States governments operate.

Courses for Hearing Impaired Students

Career Focus

Grades 9-12
Course Number 787
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

Students are introduced to a variety of careers and the skills needed for these careers. Career games, OCIS (Ohio Career Information Systems), employability skills, transition behaviors, job applications, interviewing techniques and social skills on the job are some activities and areas that may be addressed in this course. Each student will have the opportunity to participate in a job shadowing experience.

Consumer Mathematics Intervention

Grades 11-12
Course Number 875
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

The primary goal of the consumer mathematics course is to prepare students to live and function independently in society. Taught by a special education teacher, instruction may include such areas as banking, financing, budgeting, taxes, insurances and wages. Practical application, as well as theory, will be addressed.

English Resource

Grades 9-12
Course Number 772
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

This course is designed to teach and reinforce oral and written language with objectives and goals covering all aspects of language: semantic (vocabulary), syntactic (grammatical), and pragmatic (functional use) skills. An appreciation of literature will be encouraged through a variety of resources. Both the Reading and Writing Common Core Ohio *Extended* Standards are addressed within the curriculum of this class.

Health Resource

Grades 9-12
Course Number 786
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

This course is designed to promote health awareness, and to enable students to make healthy lifestyle choices. The health program includes the physical, mental and social development which may include the topics of stress, nutrition, sexuality, body systems, alcohol, tobacco and drug abuse, AIDS and other sexuality transmitted disease, first aid, accidents and aging.

Information Technology Intervention

Grades 9-12
Course Number 631
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

Information Technology Intervention is designed to teach special education students the skills necessary to use the computer. Utilizing the Windows operating system, students may create documents incorporating Microsoft Word, Access, Excel, PowerPoint, Publisher and Internet programs. To meet the unique needs of special education students, this course incorporates necessary adjustments for students with disabilities in a cross-categorical manner by providing the least restrictive environment.

Learning Center

Grades 9-12
Course Number 896
Full Year Course – No credit
Prerequisite: Program Admission
Estimated Fee: None

Learning Center provides an opportunity for students to receive supportive services in academic classes. The goal is to help students experience success at the high school and benefit more fully from the classroom experience. The acquisition of study skills and acceptance of responsibility for learning are emphasized. Remedial instruction and strategies to compensate for deficit skill areas are taught through the use of content and/or supplemental materials. Supportive services include individual and small group instruction, and assistance in preparing for and taking tests. The Learning Center teachers maintain communication with classroom teachers and keep students informed of their progress. Students work to achieve individual IEP goals

Mathematics Resource

Grades 9-12
Course Number 780
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

Emphasis for this course is placed on basic mathematical skills. Students develop reasoning and application skills while reinforcing computation skills.

Mathematics Intervention

Grades 9-12
Course Number 876
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

This course gives students the foundation which will allow them to be successful with an algebra curriculum. Its content includes number sense fractions, decimals, percentages, integers, patterns, proportional reasoning, and percents. Mathematics Intervention works to prepare the students to move to the Mathematics 1 course. Topics covered include patterns, proportional reasoning, direct variation, linear equations, functions and inequalities. A scientific calculator is required for this course.

Science Resource

Grades 9-12
Course Number 782
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

Science classes are adapted to the language levels of the students. Content and skills are based on Mayfield's basic science curriculum which includes the areas of biology, physical science and chemistry. Class work incorporates hands-on practical activities. Language development, based on the concepts and activities of science is an important component.

Social Skills Communication 1

Grades 9-10
Course Number 775
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

Students will be introduced to a variety of social skills through role-play, peer observation, group discussion, and exposure to social skills-based literature. This will be an interactive class where students will demonstrate the skills that are taught.

Social Skills Communication 2

Grades 9-11
Course Number 776
Semester Course - 0.5 credit
Prerequisite: Program Admission & Social Skills 1
Estimated Fee: None

This course will be a continuation of Social Skills 1. The goal is for the student to

become more confident in their ability to communicate and be able to self-advocate.

Social Studies Resource

Grades 9-12
Course Number 774
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

Social Studies is designed to expose students to world, national, and local events, both past and present. Each student is encouraged to become a responsible and productive citizen with a basic understanding of his/her community and world. Course content is focused on one of the following areas: American and world history, geography, citizenship and government.

Study Skills

Grade 9-10
Course Number 895
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

This course is designed for students who exhibit a lack of study/test preparation skills. The activities taught in this class would help students become successful in their academic coursework as well as prepare the student for state testing. This course will help students become independent learners. This course is primarily for ninth grade students.

Courses for Learning Disabled Students

English Intervention 11-12

Grades 11-12

Course Number 871

Full Year Course - 1 credit

Prerequisite: Program Admission

Estimated Fee: \$8.95

English Intervention 11-12 is a combination of study and appreciation of American and British literature. The focus in instruction is on the development of skills in reading comprehension, composition, the editing process, and speaking and listening. Students will be strengthening writing as needed by planning, revising, editing, re-writing or trying a new writing approach to meet audience needs and purpose for writing in research, literary analysis, persuasive, narrative, and expository forms. A review of grammar usage and mechanics will also be incorporated through their application to the writing process. Instruction will also emphasize close reading strategies that allow students to practice decoding text from multiple sources. Students will also develop speaking and listening skills through their engagement with literary pieces and current events. Admission to this class is by teacher recommendation.

Learning Center

Grades 9-12

Course Number 896

Full Year Course – No credit

Prerequisite: Program Admission

Estimated Fee: None

Learning Center provides an opportunity for students to receive supportive services in academic classes. The goal is to help students experience success at the high school and benefit more fully from the classroom experience. The acquisition of study skills and acceptance of responsibility

for learning are emphasized. Remedial instruction and strategies to compensate for deficit skill areas are taught through the use of content and/or supplemental materials. Supportive services include individual and small group instruction, and assistance in

preparing for and taking tests. The Learning Center teachers maintain communication with classroom teachers and keep students informed of their progress. Students work to achieve individual IEP goals.

Social Skills

Communication 1

Grades 9-10

Course Number 775

Semester Course - 0.5 credit

Prerequisite: Program Admission

Estimated Fee: None

Students will be introduced to a variety of social skills through role-play, peer observation, group discussion, and exposure to social skills-based literature. This will be an interactive class where students will demonstrate the skills that are taught.

Social Skills

Communication 2

Grades 9 - 11

Course Number 776

Semester Course - 0.5 credit

Prerequisite: Program Admission

Estimated Fee: None

This course will be a continuation of Social Skills 1. The goal is for the student to become more confident in their ability to communicate and be able to self-advocate.

Study Skills

Grade 9 - 10
Course Number 895
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

This course is designed for students who exhibit a lack of study/test preparation skills. The activities taught in this class would help students become successful in their academic coursework as well as prepare students for state testing. This course will help students become independent learners. This course is primarily for ninth grade students.

Math Fundamentals

Grade 9
Course Number 876
Full Year Course: 1 credit (elective credit)
Co-requisite: Mathematics 1 and Recommendation
Estimated Fee: None
Recommended For: Supplemental Support
Career: CORE

This course is for 9th grade students that need one more year of development before entering Math 1. This course will both strengthen understanding of major concept and topics from previous math courses and preview major content from future courses. Topics and content covered include number sense, formulating and reasoning about expressions and equations, analyzing two- and three-dimensional space and figure using distance, angle, similarity and congruence, linear functions and an introduction to exponential functions.

Reading and Writing Fundamentals

Grades 9-10
Course Number 789
Semester Course - 0.5 credit-1 credit
Prerequisite: Program Admission
Estimated Fee: None

This course is designed to provide remediation to identified students who are simultaneously enrolled in English 9 (English 10). Students will receive instruction in decoding skills, vocabulary development, and comprehension strategies that is aligned with the English 9 (English 10) curriculum. In addition, the course will provide a strong foundation for written communication. Students will learn to plan, organize and compose multi-paragraph essays with sufficient supporting details. Revision strategies will be taught as part of the writing process. Instruction in written communication will also be aligned with the English 9 (English 10) curriculum.

Courses for Multi-Handicapped Students

English SCM

Grades 9-12
Course Number 811
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

English is individualized by ability level, and all activities are geared toward practical application to the world of work. Following directions, listening, a functional vocabulary, relating information, and being able to express needs/wants are the primary focuses.

Health SCM

Grades 9-12
Course Number 818
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

Emphasis is placed on understanding facts about the human body; health measures and prevention of diseases; nutrition; personal hygiene, abuse and misuse of tobacco, alcohol and drugs; basic first aid and safety practices in the home, school, work and community.

Independent Living Skills SCM

Grades 9-12
Course Number 816
Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: None

Students develop skills needed to function as independently as possible through practical experiences gained in the kitchen, the community, and the school.

Mathematics SCM

Grades 9-12
Course Number 815
Full Year Course - 1 credit
Prerequisite: Program Admission
Estimated Fee: None

Mathematics is based on an individual's ability level. All activities are directed toward handling of money; use of coupons; the concepts of counting, sorting, and matching; and one-to-one correspondence.

Science and Social Studies SCM

Grades 9-12
Course Number 817 & 817
Full Year Course - 1 credit each (2 credits)
Prerequisite: Program Admission
Estimated Fee: None

An integrated curriculum designed specifically for students with special learning needs using the foundation of academic content standards with lessons that are modified to make sure that all students have a way to participate and learn. There is a three-year cycle of new units and each month a new topic is introduced built around a science or social studies theme along with a transition focus. Additionally, there is a strong emphasis on life skills embedded in each lesson so that learning is new as students progress through the years even if they are in the same classroom setting each year.

Social Studies SCM – 813

Government
US History
World History
Geography
Economics

Transition Planning

Science SCM – 817

Earth and Space Science

Physical Science

Life Science

Scientific Inquiry

Health

Pre-Vocational SCM

Grades 9-12

Course Number 819

Full Year Course - 1 credit

Prerequisite: Program Admission

Estimated Fee: None

Students are introduced to, and continue to build on, a variety of jobs, which require following directions, cooperating with a supervisor and co-workers, and setting up and putting away needed materials while increasing speed, accuracy, and endurance.

Adapted Courses

Adapted Art

Grades 9-12
Course Number 705
Quarter Course - 0.25 credit
Prerequisite: None
Estimated Fee: \$20.00
Recommended For: Special Education
Career: A,B,C

Adapted Art is a course designed for special education students. Art projects are based on the elements of art: line, shape, color, value, texture and space. Students learn a variety of art techniques using different media. Manipulation of various materials, improvement of motor skills and eye hand coordination, and proper use of materials are stressed for physical and cognitive development.

Adapted Home Economics

Grades 9-12
Course Number 648
Quarter Course - 0.25 credit
Prerequisite: Program Admission
Estimated Fee: \$40.00

This basic cooking class focuses on recipe reading, socializing at the table, table manners, measurement, tools, equipment, and safety in the kitchen. The students will have an opportunity to use the microwave oven and stove, as well as many small appliances.

Adapted Information Technology

Grades 9-12
Course Number 628
Quarter or Semester Course - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: none

The Adapted Information Technology class is designed to provide the students with basic skills in using the computer. The projects used in the class are designed to meet the individual needs and abilities of the students.

Adapted Photography

Grades 9-12
Course Number 698
Quarter Course or Semester - 0.5 credit
Prerequisite: Program Admission
Estimated Fee: none

Learn the basics of digital photography. How to care for your camera and equipment, how to care for and maintain the equipment. How to take pictures, load them on to a computer and what to do with them once they are on the computer. We will also learn what the symbols on your camera mean and when to use them.

Explore manual settings for more artistic control, by learning how to set your own film speed, aperture and shutter speed. We will also learn when to use a flash and explore taking shots, landscape and portraits.

This class will enable you to practice and apply what you learn using your own camera.

Adapted Music

Grades 9-12
Course Number 574
Quarter Course or Semester - 0.25 credit
Prerequisite: Program Admission
Estimated Fee: none

The Adapted Music class is designed to focus on individual abilities by providing a sense of security and success in music making, whether it be “hands-on” playing of instruments, body movement, or singing.

Adapted Physical Education

Grades 9-12
Course Number 748
Semester Course - 0.25 credit
Prerequisite: None
Estimated Fee: \$2.50
Recommended For: Special Education
Career: CORE

The Adapted Physical Education program is designed to accommodate students by using the least restrictive environment. The behavior objectives are written to be challenging yet attainable by each individual student. The activities and sports are those found in the regular curriculum: leisure-time activities, team sports, individual activities, and a host of fitness activities. Because of the nature of the students, the team sports are quite modified and often reduced to one-on-one or two-on-two experiences.

TECHNOLOGY

Technology Courses

9th Grade

Computer Programming with Visual BASIC*

Computer Programming with Java*

Digital Media Production 1*

Digital Media Production 2*

Information Technology *

Introduction to Engineering Design
(Meets technology requirement for the class of 2021 and beyond)

Principles of the Biomedical Sciences
(Meets technology requirement for the class of 2021 and beyond)

*semester course

10th , 11th , and 12th Grades

Advanced Digital Media Production

Advanced Digital Media Production 2

AP Computer Science Principles

AP Computer Science A

Computer Programming with Visual BASIC*

Computer Programming with Java*

Digital Art and Design 1*

Digital Art and Design 2*

Digital Media Production 1*

Digital Media Production 2*

Information Technology *

Introduction to Engineering Design
(Meets technology requirement for the class of 2021 and beyond)

Principles of the Biomedical Sciences
(Meets technology requirement for the class of 2021 and beyond)

News Writing for Digital Media*

Photography 1*

Tech Squad

Technology Courses

Courses to meet the technology graduation requirement are offered by a variety of different departments. Their course descriptions are duplicates of the descriptions published earlier in this book. They are repeated here for your convenience.

AP Computer Science Principles

Grade 10 – 12

Course Number: 380

Full Year Course – 1 credit

Prerequisite: Math 1

Estimated Fee: TBD

Recommended for: College Bound/Technical Education

Career: A, B, E, F, H

With recommendations from and the approval of the College Board, the Advanced Placement Computer Science Principles course work models a first semester introductory college computing course.

The purpose of this course is to focus on the concepts and computational thinking practices central to the discipline of computer science. The course is organized around the investigation of seven big ideas, all of which are fundamental principles essential to thrive in future college courses and a variety of computing and STEM careers. Emphasizing these key big ideas helps students build a solid understanding and facility with computing and computational thinking. The course focuses on using technology and programming as a means to solve computational problems and create exciting and personally relevant artifacts. Projects and problems include app development, visualization of data, cybersecurity, and simulation.

Students enrolled in this course are required to take the AP Computer Science Principles test in May

AP Computer Science A

Grade 11-12

Course Number 381

Full Year Course - 1 credit

Prerequisite: AP Computer Science Principles

Estimated Fee: A.P. Test Registration

Recommended For: College Bound

Career: B,E,F,H,P

With recommendations from and the approval of the College Board, the Advanced Placement Computer Science A course work models a first semester introductory college computing course.

The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes object-oriented and imperative problem solving and design using the Java language. These techniques represent proven approaches for developing solutions that can scale up from small, simple problems to large, complex problems. The AP Computer Science A course curriculum is compatible with many CS1 courses in colleges and universities.

Students enrolled in this course are required to take the AP Computer Science Principles test in May

Advanced Digital Media Production

Grades 10-12
Course Number 620
Full Year Course - 1 credit
Prerequisite: Digital Media Production 2 & recommendation
Estimated Fee: \$30.00
Recommended For: College Bound/Technical Education
Career: A,B,E,F,H,P

The students who sign up for this year-long class must have successfully completed Digital Media Production 1 and 2. Students will spend the year creating media that can be posted to the Mayfield Web site, seen on Channel 22, or sent out for the cyber world to see. This course will allow students to use the fundamental skills they have developed and dazzle people with their creative style.

Advanced Digital Media Production 2

Grades 10-12
Course Number 621
Full Year Course - 1 credit
Prerequisite: Advanced Digital Media Production & recommendation
Estimated Fee: \$30.00
Recommended For: College Bound/Technical Education
Career: A,B,E,F,H,P

The students who sign up for this year-long class must have successfully completed Advanced Digital Media Production. This year long course builds on the foundation of knowledge from the previous three Digital Media courses, by offering students the opportunities to direct and produce the weekly video show that they created segments for in Adv. DMP I and create and produce their own independent film. As part of the video show, students will demonstrate their understanding of all the different aspects of production (director,

sound, lighting, camera operation, and producing) throughout the course. As part of the independent film, students will have a chance to explore topics that interest them individually or as a group and push the limits of their film making skills and creativity. Students will also advance their skill and understanding during this course through professional readings, class discussions, and in depth critiquing of student made and professional videos.

Computer Programming with Visual BASIC

Course Number 635
Semester Course - 0.5 credit
Prerequisite: Mathematics 1
Estimated Fee: \$10.00
Recommended For: College Bound/Technical Education
Career: A,B,E,F,H,P

This course provides the student with an opportunity to utilize the micro-computer in the solution of both mathematical and non-mathematical problems. The student is introduced to the computer language called Visual BASIC and is taught how to program in this object-oriented language in order to communicate with a micro-computer. The prerequisite, Mathematics 1, may be taken concurrently.

Computer Programming with Java

Grades 9-12
 Course 636
 Semester Course - 0.5 credit
 Estimated Fee: \$10.00
 Prerequisite: Computer Programming with Visual
 BASIC
 Recommended For: College Bound/Technical
 Education
 Career: A,B,E,F,H,P

In Computer Programming with Java students learn the Java programming language. This is a hands-on course in which students write computer programs in one of the most popular programming languages in the world.

Digital Design 1

Grades 10-12
 Course Number 715
 Semester Course - 0.5 credit
 Prerequisite: Art Foundations
 Estimated Fee: \$30.00
 Recommended For: College Bound/Technical
 Education
 Career: A,B,E

This course introduces students to graphic design and the computer as a tool to produce both fine and applied art products. Students will create illustrations and designs using the elements and principles of art. Students will experience industry standard software (Photoshop) and hardware such as digital cameras and drawing tablets to create their own work. *Students may use this credit as either their Technology credit or Fine Arts credit.*

Digital Design 2

Grades 10-12
 Course Number 716
 Semester Course - 0.5 credit
 Prerequisite: Digital Design 1
 Estimated Fee: \$30.00
 Recommended For: College Bound/Technical
 Education
 Career: A,B,E

Digital Design 2 is for students who wish to further develop their interest, knowledge and skills in the world of graphic design and technology.

Interaction with various software, emphasis on developing the artistic eye, and expanding individual portfolios with high quality products are some of the curriculum objectives. Students will experience designing for a variety of clients modeling career awareness.

Digital Media Production 1

Grades 9-12
 Course Number 618
 Semester Course - 0.5 credit
 Prerequisite: None
 Estimated Fee: \$15.00
 Recommended For: College Bound/Technical
 Education
 Career: A,B,E,F,H,P

YouTube was one of the most visited Web sites in 2010, but Vimeo made *Time Magazine's* list of top ten sites. Creating video is an essential 21st century skill, and Digital Media Production 1 is the class where students will learn what it takes to make creative and professional-looking videos. Students will use video cameras to learn basic camera shots, audio and green screen techniques.

Digital Media Production 2

Grades 9-12
Course Number 619
Semester Course - 0.5 credit
Prerequisite: Digital Media Production 1
Estimated Fee: \$25.00
Recommended For: College Bound/Technical Education
Career: A,B,E,F,H,P

The students who sign up for this course must have successfully completed Digital Media Production 1. The Digital Media Production 1 course gave students just a small glimpse into the world of video making. In this course, students will have the opportunity to use their media skills and creativity to create professional quality media.

Information Technology

Grades 9-12
Course Number 632
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: \$15.00
Recommended For: College Bound/Technical Education
Career: CORE

Information Technology 1 students will be introduced to Microsoft Office Professional 2016. This course is designed to teach students how to use Word, Excel, Access, PowerPoint, Movie Maker, Publisher, and Google Classroom. Learn how to design, create, present, communicate and publish with this latest software.

Introduction to Engineering Design

Grade 9 or 10
Course Number 438
Full Year Course - 1 credit
Prerequisite: Concurrent enrollment or completion of Mathematics 1
Estimated Fee: TBD
Recommended For: B, E, F

This is the introductory course in our engineering program. The major focus of the course is to expose students to the design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. Students will use 3D solid modeling design software to help them design solutions to solve proposed problems, to learn how to document their work, and to communicate their solutions.

News Writing for Digital Media

Grades 10-12
Course Number 183
Semester Course - 0.5 credit
Prerequisite: None
Estimated Fee: None
Recommended For: College Bound/Technical Education
Career: CORE

This course simulates a professional news writing experience. Students will learn about writing for a specific purpose and be involved in real-world production situations, requiring them to display leadership, time management, and collaboration. The course will explore the writing process and the impact of text features on written communication. Students will learn how to produce an electronic publication that includes pictures, links, articles, and event coverage related to current national and local news, school activities, media reviews, and

current topics. Enrollment in this course will require students to work on teams and to meet production deadlines. Students must commit time outside of the school day to complete projects and assignments. This course satisfies the communication (formerly speech) graduation requirement and is open to students in grades 10 through 12.

Photography 1

Grades 10-12

Course Number 696

Semester Course - 0.5 credit

Prerequisite: None

Estimated Fee: \$35.00

Recommended For: College Bound/Technical Education

Career: A,B,E,F,H,P

Students enrolling in Photo 1 are encouraged to take Art Foundations prior to taking this course. Starting with the history of photography, students will read and learn about the invention of the camera. Students will use a digital camera and Photoshop tools to edit and enhance photos based on compositional elements. Students will experience a variety of studio projects and research assignments. *Students may use this credit as either a technology or fine arts credit.*

Principles of the Biomedical Sciences

Grade 9 or 10

Course Number 435

Full Year Course - 1 credit

Prerequisite: None

Estimated Fee: TBD

Recommended For: B, E, F, H, P

This is the introductory course to our biomedical program. Students will investigate concepts of biology and medicine as they explore health conditions including heart disease, diabetes, sickle-cell disease, hypercholesterolemia, and infectious diseases.

They will determine the factors that led to the death of a fictional person as they sequentially piece together evidence found in her medical history and her autopsy report. Students will investigate lifestyle choices and medical treatments that might have prolonged the person's life and demonstrate how the development of disease is related to changes in the human body systems.

The activities and projects introduce students to human physiology, basic biology, medicine, and research processes and allow students to design experiments to solve problems.

WORLD LANGUAGE

Foreign Language study at Mayfield High School

Knowing more than one language is a great asset in our “global village.” French, German, Italian, and Spanish courses are designed to meet the needs of college preparatory students and are offered at levels one through five. Students who have strong composition and spelling skills usually do well in a foreign language. Although a foreign language is not required for graduation, many colleges recommend that students take a minimum of two or three years of the same foreign language for college admissions.

World Language Courses

French Courses

French 1

French 2

French 3/Honors

French 4 Honors

AP French
Language &
Culture

German Courses

AP German
Language &
Culture

Italian Courses

Italian 1

Italian 2

Italian 3/Honors

Italian 4 Honors

AP Italian
Language &
Culture

Spanish Courses

Spanish 1

Spanish 2

Spanish 3/Honors

Spanish 4 Honors

AP Spanish
Language
& Culture

World Language Courses

French 1

Grades 9-12
 Course Number 513
 Full Year Course - 1 credit
 Prerequisite: None
 Estimated Fee: \$9.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

French 1 begins the study to understand and speak French as well as to read and write the target language. Basic grammatical structures are taught. Activities include the drilling of French sound, the learning of vocabulary, verb tenses, and grammatical structures leading to free conversation, oral, and written drills, and an introduction to French civilization and culture. Successful study of foreign languages can lead to varied career opportunities, especially in business fields. It is suggested that a student taking a world language should be doing satisfactory work in English classes.

French 2

Grades 9-12
 Course Number 514
 Full Year Course - 1 credit
 Prerequisite: French 1 or 8 French
 Estimated Fee: \$27.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

French 2 builds on and continues the development of the four basic skills introduced in French 1: listening, speaking, reading, and writing. The student learns new vocabulary words, new tenses, and other basic grammatical structures. This knowledge is applied in written and oral work such as essays, skits, short speeches, and daily classroom conversation. Each unit discusses a phase of French culture.

French 3

Grades 10-12
 Course Number 515
 Full Year Course - 1 credit
 Prerequisite: French 2
 Estimated Fee: \$9.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

French 3 continues to emphasize all four phases of language study. By the end of the year, the students will have completed the study of most of the major points of grammar of the language. There is still great emphasis on building vocabulary. More emphasis is placed on writing as well as on speaking (planned and extemporaneous) on a wide number of subjects pertaining to the lives of the students. The class reads its first complete book. (*Honors curriculum will be available. Please see your counselor and/or your World Language teacher for details.*)

French 4 Honors

Grades 11-12
 Course Number 519
 Full Year Course - 1 credit
 Prerequisite: French 3 and Recommendation
 Estimated Fee: \$60.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

This course is designed to give the students an introduction to French history and literature, to review grammar, to enable them to read with understanding, and to express themselves. In their text, the students study French history. They then study literature in relation to the period of history in which the works were written. There is a successive review of structure, especially of verbs. The students are encouraged to discuss the material studied as well as any other matters which interest

them in order to facilitate their use of the language.

AP French Language and Culture

Grade 12

Course Number 520

Full Year Course - 1 credit

Prerequisite: French 4 Honors and Recommendation

Estimated Fee: \$47.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

With recommendations from and the approval of the College Board, the Advanced Placement French Language and Culture course work models a college world language class.

This course is designed to prepare students for the Advanced Placement Language Test. There is a review of grammar using the last half of the grammar text started in French 4 Honors. Short stories are read. Weekly extemporaneous oral presentations and several resumes of articles from current magazines are required during each grading period. The students give a longer oral report to the class, read French language books for book reports and do structured as well as creative writing. Listening comprehension is developed through constant work with audio recordings made by French speakers. Students enrolled in this course are required to take the A.P. exam in May

AP German Language and Culture

Grade 12

Course Number 550

Full Year Course - 1 credit

Prerequisite: German 4 Honors and Recommendation

Estimate Fee: None - A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

With recommendations from and the approval of the College Board, the Advanced Placement German Language and Culture course work models a college world language class.

This course provides intensive study in preparation for the Advanced Placement Test. The class is focused on the six AP themes: Global Challenges, Beauty and Aesthetics, Science and Technology, Contemporary Life, Personal and Public Identities, and Families and Communities. Students work on increasing vocabulary, and improving speaking, listening and writing skills using authentic resources. Students enrolled in this course are required to take the A.P. exam in May

Italian 1

Grades 9-12

Course Number 533

Full Year Course - 1 credit

Prerequisite: None

Estimated Fee: 11.00

Recommended For: College Bound

Career: A,B,E,F,H,P

Italian 1 is an introductory course designed to provide students with a basis for learning the spoken and written language. Practice in listening, speaking, reading, and writing are given and students are provided opportunities to express themselves in everyday situations. Students develop speaking skills by constant repetition of core materials. Each lesson is built around a cultural theme and all oral and written exercises center upon this theme. Reading

skills are developed from short dialogues and modifications of the core material. Numerous situational dialogues are written to increase writing skills and provide for originality. Basic grammatical structures are taught and reinforced with exercises. Successful study of foreign language can lead to varied career opportunities, especially in business fields. It is suggested that students taking foreign language should be doing satisfactory work in English classes.

Italian 2

Grades 9-12
 Course Number 534
 Full Year Course - 1 credit
 Prerequisite: Italian 1 or 8 Italian
 Estimated Fee: 11.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

Italian 2 continues to develop the listening, speaking, reading, and writing skills present in Italian 1. Through oral exercises students are provided opportunities for self-expression in concrete situations. Students are encouraged to use the language in a new context with each new lesson. They are able to handle an active vocabulary of approximately 2,000 words, as well as to recognize many more in speech or writing. The students are introduced to contemporary non-touristic life and culture through themes, readings, and cultural notes.

Italian 3

Grades 10-12
 Course Number 535
 Full Year Course - 1 credit
 Prerequisite: Italian 2
 Estimated Fee: \$11.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

Italian 3 offers the students an opportunity to form more complex expressions by the further study of grammar. It broadens the students' understanding of the language by the reading of true-to-life articles. Students learn about the culture and political geography of Italy and are presented with much new vocabulary. Most discussions are done in the language to increase language usage. The students write original compositions. (*Honors curriculum will be available. Please see your counselor and/or your World Language teacher for details.*)

Italian 4 Honors

Grades 11-12
 Course Number 539
 Full Year Course - 1 credit
 Prerequisite: Italian 3 and Recommendation
 Estimated Fee: \$46.00
 Recommended For: College Bound
 Career: A,B,E,F,H,P

Italian 4 broadens the students' understanding of the Italian language and culture by presenting graded reading materials. Readings acquaint students with aspects of Italian life and culture. In order to understand modern phrases and idioms, the works of current Italian authors are studied. All discussions are in the language, as is all written work.

AP Italian Language and Culture

Grade 12

Course Number 540

Full Year Course - 1 credit

Prerequisite: Italian 4 Honors and Recommendation

Estimated Fee: \$46.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

This course is designed to provide intensive study in preparation for college placement tests. During the year, students will complete units of history, literature and review of major points of the grammar learned in the preceding courses. Students enrolled in this course are required to take the A.P. exam in May.

Spanish 1

Grades 9-12

Course Number 523

Full Year Course - 1 credit

Prerequisite: None

Estimated Fee: \$17.00

Recommended For: College Bound

Career: A,B,E,F,H,P

Spanish 1 is a study of the basic structures of Spanish which contribute to the development of listening, speaking, reading, and writing abilities. Basic material is presented and designed to develop the student's ability to understand the spoken word. Speaking skills are developed by imitating the teacher and through patterned and free response drills in the text. Reading skills are developed through dialogues and narratives. Specific reading lessons concentrate on grammar points and introduce new vocabulary. Successful study of foreign language can lead to varied career opportunities, especially in business fields. It is suggested that students taking foreign language should be doing satisfactorily in English classes.

Spanish 2

Grades 9-12

Course Number 524

Full Year Course - 1 credit

Prerequisite: Spanish 1 or 8 Spanish

Estimated Fee: \$17.00

Recommended For: College Bound

Career: A,B,E,F,H,P

In the second year, emphasis is placed on increasing competence in the four basic language skills: listening, speaking, reading, and writing. Each unit teaches vocabulary, grammar, and cultural material on the Spanish-speaking countries. Second-year students should have successfully fulfilled first-year requirements.

Spanish 3

Course Number 525

Full Year Course - 1 credit

Prerequisite: Spanish 2

Estimated Fee: \$44.00

Recommended For: College Bound

Career: A,B,E,F,H,P

Spanish 3 is designed to review and expand grammatical elements and to develop conversation and self-expression through written and oral exercises. Students continue to study culture and civilization with special emphasis on the history and geography of Spain. Additional opportunities for reading comprehension, self-expression, and cultural appreciation are provided through readings, discussion, and oral and written assignments. (*Honors curriculum will be available. Please see your counselor and/or your World Language teacher for details.*)

Spanish 4 Honors

Grades 11-12

Course Number 529

Full Year Course - 1 credit

Prerequisite: Spanish 3 and Recommendation

Estimated Fee: \$9.00

Recommended For: College Bound

Career: A,B,E,F,H,P

At this level, students have already learned the basics of Spanish grammar. Therefore, it is necessary only to review major problematic areas. The four skills – reading, writing, speaking, and listening – are now practiced through extended literary readings, discussions, essays, oral presentations, and listening activity exercises. Conversation and composition are emphasized. All classroom discussion is in the target language.

AP Spanish Language and Culture

Grade 12

Course Number 530

Full Year Course - 1 credit

Prerequisite: Spanish 4 Honors and Recommendation

Estimated Fee: \$43.00 and A.P. Test Registration

Recommended For: College Bound

Career: A,B,E,F,H,P

AP Spanish Language and Culture provides intensive study in preparation for the Advanced Placement Examination. The class is focused on grammar, fluency, through speaking, listening, reading and writing. Cultural themes are studied and discussed throughout the course.

Students enrolled in this course are required to take the A.P. exam in May.

SPECIAL PROGRAMS

Senior Search

Grade 12

Course Number G031

4th quarter course – 0.0 credit

Prerequisite: Must have enough credits to meet graduation requirement, at least a 70% or higher in all classes by the end of the third quarter, carry a 2.0 GPA for first semester, no more than 10 absences for the school year (without medical excuse), no more than seven unexcused tardies per quarter, and no out of school suspensions.

Estimated Fee: None

Recommended For: College Bound/Technical Education

Career: A,B,E,F,H,P

The senior search program is designed to provide seniors with the opportunity to intern on meaningful projects of their own selection and design. The program operates during the final four weeks of the senior year, starting after progress reports are issued, and ending on Honors Day. Students will drop all classes and work on the project a minimum of six hours per day. Students enrolled in AP courses will begin the project after their respective exams.

Project Design

Acceptable projects generally fall into three categories:

1. An empirical study relevant to career technical objectives, which involves an evaluation of the student's work experience.
2. An internship, which entails shadowing, training, and the completion of various tasks or projects directly related to career objectives.
3. An involvement in a community problem, which encompasses defining the problem and its importance to the community's

well-being. This involvement needs to include a case study of the problem, a service project with a goal of remediation of the problem, and an evaluation of the value of the project with implications for further study.

Special details about the senior search program will be provided to interested seniors after the start of second semester.

A student cannot be paid during the work experience, nor can he/she participate in the Senior Search program with a business or organization in which a relative is an owner, manager or employee.

Wildcat Focus

Grade 9

Course Number 994 or 995

Full Year Course – 0.0 credit

Prerequisite: none

Recommended For: College Bound/Technical Education

Estimated Fee: \$15.00

Career: Core

Wildcat Focus is a comprehensive program which provides the freshmen students with a supportive, friendly, environment, provided under the guidance of upperclassmen peers that eases the transition from middle school to high school. Special emphasis is placed on aiding students with the social and academic components of adjusting to high school life. The program is required and is a full year class. Freshmen students take this class during half of their lunch period and will have opportunities with their mentors to explore what Mayfield has to offer and take advantage of the opportunity to get acclimated to the environment of Mayfield High School.

Wildcat Focus Mentor

Grades 11-12

Course Number G041

Full Year Course – 1.0 credit

Prerequisite: Application and acceptance into the mentor program

Recommended For: College Bound

Estimated Fee: None

Career: A,B,P

Wildcat Focus is designed to cover a myriad of topics that a ninth grade student needs to know for social and academic success at Mayfield High School. Lessons include stressing the importance of school spirit, using the libraries, learning effective note taking and study skills, getting along with others, and much more. A key component of the Wildcat Focus program is mentorship. Built into Wildcat Focus is the opportunity for new ninth grade students to learn from and model the behavior of respected upper-class students.

A group of student leaders and a teacher will be assigned to every group of new ninth grade students. Developing a close guiding relationship with the new ninth grade students is the ultimate goal of a mentor.

A Wildcat Focus mentor will serve as a model for the entire school body. The responsibilities of mentors will be to:

- Assist faculty advisors
- Meet with approximately five new ninth grade students on a daily basis during the Wildcat Focus period
- Tutor struggling ninth grade students in areas of concern
- Teach mini-lessons that are part of the curriculum
- Lead small group discussions
- Update students and review information about school events, procedures and rules
- Meet on Wednesday mornings with the Wildcat Focus coordinators or counselors
- Attend two mentoring training sessions during the summer
- Help at the Ninth Grade Orientation in August
- Attend Wildcat Focus sponsored activities.

TECHNICAL EDUCATION

Excel TECC Programs

Allied Health	Medical Technologies
Auto Collision	Performing Arts Academy
Auto Technology	Production Welding
Business Academy	Studio Art & Design
CADD Engineering Technology	Teacher Education and Children's Health (T.E.A.C.H.)
Construction Trades	Travel, Tourism & Hotel Management
Cosmetology	Welding
Culinary Arts	<u>Environmental Education Programs</u>
Digital Arts & Technology	Cleveland Botanical Garden
Exercise Science & Sports Rehabilitation	Floriculture and Gardening Operations
Fire/EMS Training Academy	Landscape and Turf Operations
Health Informatics	<u>Intervention Programs</u>
Information Technology & Programming	Agriculture Career Exploration
Interactive Media	Career Based Intervention
Licensed Practical Nursing	Job Training
Marketing Communications (Seniors Only)	
Medical Assisting	

College credits may be available upon successful completion of the program.

Technical Education Courses

Allied Health I & II

(Northern Career Institute-Eastlake Campus)

Allied Health I

Consists of Mental Health and Medical Terminology

Allied Health II

Consists of Principles of Allied Health and Patient Centered Care

Prerequisite: Interview conducted by the instructor.

By the program start date student must have completed coursework required for junior status at their home school.

Clinical Requirements: During the senior year, students attend clinical sites and will need to provide their own transportation to and from the sites.

Students must pass a BCI background check, negative drug screen and submit evidence of other health screening requirements, which are required by the clinical sites. Students must also successfully pass CPR (training provided during the course) prior to attending clinicals.

Recommended For: College Bound/Technical Education

3 credits each year

9 credits Lakeland Community College

10 credits through University of Akron

Certifications Available: State Tested Nursing Assistant (STNA) & CPR

This program is designed to provide the basic health-care skills necessary for an entry-level position in health care. Upon successful completion of the program and passage of certification exams, students can begin a career as a State Tested Nursing Assistant (STNA). Students will learn to assist patients with daily living and fundamental tasks, assist in a health care setting, and prepare sterile environments.

Auto Collision I & II

(Northern Career Institute-Willoughby Campus)

Auto Collision I

Collision Nonstructural Inspection and Repair
Sem 1

Collision Painting and Refinishing sem 2

Auto Collision II

Collision Structural Inspection and Repair
Sem 1

Collision Electrical and Mechanical
Sem 2

Prerequisite: Interview by the Instructor. By program start date students must have completed coursework required for junior status at their home school

including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: College Bound/Technical Education

3 credits each year

5 credits through Cuyahoga Community College

20 credits through University of Akron

The Auto Collision program is designed to teach students the complete cycle of repairing automobiles and other vehicles damaged from normal “wear and tear” or from accidents and collisions. The knowledge and skills covered include shop safety, use of hand and power tools, rust repair, sheet metal repair, body panel replacement, fiberglass repair, unibody and frame repair, custom fabrication painting, MIG welding, detailing and customer service. ASE and NATEF are available for qualified students.

Auto Collision I consists of Collision Nonstructural Inspection and Repair and Collision Painting and Refinishing.

Auto Collision II consists of Collision Structural Inspection and Repair and Collision Electrical and Mechanical.

Job opportunities for those completing this program include: body repair shops, auto dealerships, wholesale or retail parts and paint sales, frame shops, front end shops, custom shops, auto recycler, shop foreperson and major claims insurance adjuster. The Ohio Technical College offers advance placement in Auto Collision repair and refinishing Technologies. In addition to classroom training, senior-level students who meet the established requirements may be permitted to work at an Auto Collision related job during the second semester of their senior year.

Auto Technology I & II

(Northern Career Institute-Willoughby Campus)

Auto Technology I

Ground Transportation Maintenance

Automotive, Braking, Suspension and Steering Systems

Auto Technology II

Ground Transportation Electrical/Electronics

Automotive Engine Performance

Prerequisite: Interview by the Instructor. By program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: College Bound/Technical Education
3 credits each year
5 credits through Cuyahoga Community College
8 credits through University of Akron
8 CT2 credits

The Auto Technology program is a “hands on” learning environment, and experience is gained by performing many aspects of customer services. Students in the 1st year will be taught to use a computerized 4-wheel alignment machine and computerized wheel balancer and gain experience with tire pressure monitoring systems. Students will also have the opportunity to receive the SP2 safety certificate and The Valvoline Motor Oil Basics Certificate. Students will remove and replace various steering and suspension components, brakes and exhaust systems and will use MIG welding and Oxy fuel torches.

Second year students will use a variety of advanced computerized scan tools from Snap-On and Bosch to diagnose and repair drive train, emission, electrical issues such as Anti-Lock Brake systems and check engine lights. Students will be introduced to drive train, transmission, and engine repair. In addition, they will also be introduced to the maintenance and repair of sports and recreational vehicles such as ATV's and motorcycles

Business Academy I & II

(Northern Career Institute-Willoughby Campus)

College Tech Prep

Business Academy I

Business Foundations, Management Principles

Business Academy II

Marketing Principles, Strategic Entrepreneurship
Prerequisite: Interview by Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two credits each earned in English and Mathematics.
Recommended For: College Bound/Technical Education

3 credits each year.

7 credits through Cuyahoga Community College
9 credits through Lakeland Community College
6 credits through University of Akron

The Business Academy is a dynamic, comprehensive program which will introduce students to the exciting professional world of Business. Students will explore several diverse career areas including Entrepreneurship, Marketing, eCommerce, Management, Personal Finance, Project

Management, International Business, Business Law, Finance, Operations and Management.
The objectives of the Business Academy are to prepare students for transition to college, technical school or employment and to connect, collaborate and compete in a global economy. An emphasis on communication, critical thinking, strong work ethic, goal setting, productivity, leadership and teamwork will provide students with a solid foundation for success. Students will have the opportunity to participate in DECA, a Career Technical Student Organization. Students will be encouraged to participate in an Internship experience during their senior year.

Course content will include creating a viable Business Plan, Personal Financial Literacy, Marketing, Ethics, Finance, Social Responsibility, developing Business Relationships, Leadership, Customer Relations, and Professional Development. The latest technology will be fully integrated to facilitate and foster collaboration and Teamwork in a professional environment.

CADD Engineering Technology I & II

(Computer-Aided Design/Drafting)
(Mayfield Innovation Center)

College Tech Prep

CADD I

Engineering Design sem 1

Architecture Design/Site and Foundation Plans sem 2

CADD II

Architectural Design/Structural & mechanical/Electrical/Plumbing sem 1

Manufacturing Operations sem 2

Prerequisite: Interview by Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: Students interested in any engineering or Architectural field/College Bound students

3 credits each year

6 credits through Cuyahoga Community College
16 credits through Lakeland Community College
3 CT2 Credits

Students who have an interest in how things are made and work, an interest in design and product invention, and seeing their ideas come to life are ideal candidates for the CADD Engineering Technology course. Students who complete the program have the

opportunity to earn up to sixteen semester hours of college credit.

CADD I, the first year of a two-year program located at Mayfield Innovation Center meets daily for lab and lecture activities. The program gives high school juniors interested in Science, Technology, Engineering, & Mathematics (STEM) careers a head start on mastering core concepts and techniques critical to success in these areas. CADD I students learn about various aspects of the engineering and manufacturing design processes and their application to various software programs. Specific software program selections may vary, but will include AutoCAD, Solidworks and Revit applications, as well as applications to support Fabrication Lab equipment. Students may also have the opportunity to intern with outside businesses.

CADD II, a continuation of the CADD I program, builds on previously learned concepts and principles. Competencies focus on Architectural design, including site/foundation planning, plan development and electrical, mechanical and structural concepts. Specific software program selections may vary, but will include the Autodesk Revit application. Students may also have the opportunity to intern with outside businesses. CADD II students will complete a real-world capstone project to complete their senior year.

Construction Trades I & II

(Mayfield High School)

Construction Trades I

Construction Technology sem 1
Carpentry and Masonry Technical Skills sem 2

Construction Trades II

Structural Coverings & Finishes sem 1
Structural Systems

Prerequisite: Interview by Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics. Recommendations: Good attendance and discipline records.

Recommended For: Technical Education
3 credits each year
6 credits through Cuyahoga Community College
9 credits through Lakeland Community College
3 CT2 Credits

The Construction Trades program will prepare students to enter the workforce or to continue education at the post-secondary level. Students will learn basic skills in construction management, safety and in the following trade areas: house framing,

masonry, gutters, siding, roofing, plumbing, electrical, painting, carpentry, deck building, dry wall, floor coverings, wall-papering and simple home repairs by building homes in the classroom. Students will also experience onsite work learning, how to estimate jobs along with reading blueprints. Students will get the chance to get real life job experience by providing home improvements in the community. In the second year of Construction Trades students will have the opportunity to maintain a construction related job during the day. Students would work a minimum of 15 hours per week, and must provide their own transportation. Students will be required to take an end of course test.

Cosmetology I & II

(Mayfield High School or Northern Career Institute-Willoughby Campus NIC-W)

COS I

5 credits – Mayfield HS including Science and English

3 credits – NCI-W

COS II

5 credits – Mayfield HS including English and 150-hour internship

3 credits – NCI-W including 120-hour internship

Prerequisite: Interview by Instructor. By program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommendations: Good disciplinary and attendance record– 90% attendance record is required to take State test.

Recommended For: Technical Education/College
Bound or strong interest in massotherapy, fashion design.

Students must be able to provide their own transportation to and from the Internship

3 credits through Lakeland Community College
3 credit through Cuyahoga Community College
30 through University of Akron

The lab training consists of learning manipulative skills such as hair cutting, hair styling, hair tinting, permanent waving, blower styling, hot iron styling, manicuring, and facials. Early in the program, students practice on mannequins. As they progress in skills and hours of instruction, they may practice on customers. Students take Anatomy/Chemistry and English at Mayfield HS to provide the information required to understand the concepts from such a wide range of fields. These include the theory of anatomy; physiology; histology of the skin, scalp, hair, and

nails; cosmetic chemistry; bacteriology; sterilization and sanitation safety; salesmanship; salon management and communication skills. In addition, students study disorders of the skin, scalp, hair and nails.

The Cosmetology II course is designed to assist the student in developing specific skills and scientific knowledge to become a cosmetologist. The major part of the cosmetologist's education is devoted to developing and mastering essential specific manipulative skills.

The students operate a professional customer clinic. Business management provides the student with the principles needed to plan and operate a salon as a successful business. In order to be eligible to take the State exam, students must pass junior and senior English, junior chemistry, and both years of lab and theory, and participate in 150/120 hours (Mayfield/NIC-W) of Internship after school under the supervision of a managing cosmetology licensee. The internship is one managing cosmetology licensee per student placement. Additional optional certification programs including hair extensions and airbrush makeup are available.

Upon successfully passing the State Board of Cosmetology exam, the student will be licensed to work in a salon. Students can also earn 20-30 hours towards an Associate Technical Study degree.

Culinary I & II

(Beachwood High School)

Culinary I

4 credits

Prerequisite: Interview by instructor. By program start date, student must have completed coursework required for junior status at their home school.

Students meet daily for 3 ¾ hours

Culinary II

5 Credits (Includes 3 Paid Internship)

Students meet daily for 1 ½ hours also 12.5 hours per week of paid internship outside of school day

4 credits through Cuyahoga Community College

6 CT2 credits

Culinary Arts I will offer on-site training in our public restaurant to high school juniors showing interest and aptitude for the food service industry. The first year of the two-year sequence consists of a supervised in-school restaurant experience and related instruction. Using the nationally recognized ProStart and ServSafe curriculums, students will develop basic skills in food preparation, service and sanitation.

Culinary Arts II offers a coordinated employment experience and curriculum involving restaurant management, culinary theory and culinary math. The ProStart curriculum is endorsed by the National Restaurant Association Education Foundation and provides each student earning a Certificate of Achievement with articulated college credit. The paid internship component allows the students to work in the food industry after school and weekends a minimum of 12.5 hours per week to receive credit and earnings. Students must provide their own transportation.

Digital Arts and Technology I & II

(Aurora High School)

College Tech Prep

Prerequisite: Interview by the Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended GPA: 2.5 or better

Recommended For: College Bound/Technical Education

3 credits each year

6 credits through Cuyahoga Community College

Be sure to read course description before committing to this program.

The Digital Arts & Technology program is geared towards the students who are interested in digital photography, videography, and audio engineering, cinematography, graphic design and digital media. Students will receive training on how to market the aforementioned skills and advance their careers or post-secondary education. Basic photography and camera skills are taught using our array of DSLR cameras, studio lighting, strobes, and software such as Adobe Lightroom and Photoshop. The videography/cinematography component of the program involves music videos, short films, documentaries, presentations and special effects. Students utilize high-end DSLR and cinema cameras and software to professionally edit video. A third tier of Digital Arts & Technology is audio engineering. We use industry standard audio recording and mixing software and Avid Pro Tools. Students will learn the basics of audio by means of recording techniques, microphone placement, and mixing. First year students meet every day in the morning where all aspects are taught to a basic

level. Students will be encouraged to gravitate towards their desired area of specialization. Throughout the two years, students will learn 21st century skills in digital arts, professional networking, and technology. Students will create their own online portfolios that they will take with them into the job market. Most importantly, everything is taught from a business standpoint so these skills can be utilized in the business world.

Senior year for three days a week, students are provided with the opportunity to obtain and maintain an internship throughout the entire school year. Students are able to work for, and alongside professionals in the related field. This internship opportunity will provide unparalleled real life experience, help develop respect and understanding for the field and provide a foundation for professional network.

Exercise Science & Sports Rehabilitation

(Brush High School)

College Tech Prep

Health Science and Technology

Exercise and Athletic Training, Medical Terminology Athletic Injuries and Preventions

Prerequisite: Interview by Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommendations: Good attendance and disciplinary record

3 credits each year

6 CT2 college credits

This health science program will help you learn the basics of preventing, diagnosing and treating injuries related to sports and/or science exercise. Exercise Science & Sports Rehabilitation also offers real work experience through shadowing and clinical hours in an approved healthcare facility. Students must obtain the American Heart Association Certification on their own before beginning clinical training.

Students wishing to attend college will have a good foundation for a declared major in any health related field. Students may be required to join Health Occupations Students of America (HOSA) student organization and may compete in local, regional & national activities. Students may earn a CPR certification.

Fire/EMS Training Academy I & II

Juniors (Tri- C East Campus)

Seniors (Tri-C West Campus)

College Tech Prep

Fire/EMS I

Foundations of Fire Fighting and Emergency Medical Services sem 1

Emergency Medical Technician sem 2

Fire/EMS II

EMT 1 sem 1 Fire I/Fire2 sem 2

Pre-requisite: Interview by the instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics. **To enter the EMT/Fire Academy all students are required to have a physical on file by the start of their junior year.**

Recommendations: Good discipline record, good study habits

Recommended For: College Bound/Technical Education

3 credits each year

6 credits through Cuyahoga Community College

13 credits through University of Akron

22 credits CT2

Be sure to read course description before committing to this program.

The Fire/EMS Training Academy is partnered with Cuyahoga Community College and is a two-year commitment. Students have the potential (provided you meet all requirements of the program) to take the State of Ohio Emergency Medical Technician and Professional Firefighter Exam. Upon completion, students will be immediately employable after graduation.

The first year students learn the foundations of the Firefighting and EMS field, featuring a wide variety of practical learning

experiences and related academic classes. Students will be exposed to and become proficient in foundational skills necessary in the Fire and EMS career, including:

- Communications
- Leadership and teamwork
- Problem solving skills
- Safety and wellness
- Ethical and legal responsibilities
- Employability Skills
- CPR/First Aid Training

The second year, students will spend the first semester at Tri C Eastern Campus enrolled in a college level EMT class and the second semester is spent at Tri C Western Campus attending the Fire Academy. It should be stressed that the EMT and Firefighting programs are at a college level and require substantial study time outside of class time to be successful. Students must achieve and maintain an 80% grade average and meet the attendance requirements in order to be eligible to sit for the State examination.

Health Informatics I & II

(Northern Career Institute-Eastlake Campus)

Health Informatics I

Consists of Data and Use and Transforming Data into Information

Health Informatics II

Consists of Transforming Information into Knowledge and Problems and Solutions

Prerequisite: Interview conducted by the instructor. By the program start date student must have completed coursework required for junior status at their home school.

Recommended For: College Bound/Technical Education

3 credits each year

8 credits through Lakeland Community College

Health Informatics is a fast-growing career in the healthcare pathway. Ideally it is the fusion of healthcare, information technology, and business administration and guides their integration into different aspects of the healthcare sector at both the individual and population levels. It incorporates collecting, analyzing, and using data to make informed decisions regarding the healthcare system as well as to improve the efficiency of it. Students work through healthcare-based scenarios in this project-based learning environment to complete projects that will improve how information and technology in the healthcare system is discovered, delivered, and utilized. Some career pathways from Health Informatics may include: health information specialist, medical billing and coding specialist, and data analyst with additional schooling.

Information Technology and Programming I & II

(Mayfield High School)

College Tech Prep

Prerequisite: Interview by Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommendations: Good attendance and disciplinary record

Recommended for: College Bound Students

Pursuing High Tech Careers

3 credits each year

10 credits through Lakeland Community College

13 credits through Cuyahoga Community College

3 credits through University of Akron

9 CT2 credits

ITP I - Programming Logic & Design

(Visual Basic.NET & JAVA

Programming), Principles of

Web Design (HTML, CSS, JavaScript,

XML), PC Operating Systems.

ITP II - Core Courses--Networking Essentials,

Information Systems/SQL Database Senior Pathway

Options: A+ PC Hardware & Software Maintenance

and Repair, Unity Games Programming (C#.Net

Programming), Mobile Applications Development

(Android & iOS w/Java and Objective-C), Adobe

Authoring and Web Design, Computer Programming

(C#.Net or Java options)

Professionalism Skills - Junior and Senior Year;

utilizing a three sided approach addressing Personal

Skills (Integrity, Work Ethic, Professionalism,

Responsibility, Adaptability/Flexibility, and Self-

Motivation).

Workplace Skills - Communications, Decision

Making, Teamwork, Multicultural Sensitivity and

Awareness, Planning, Organizing, Management,

Leadership.

Professional Experiences and Competitions include

Skills USA: Professionalism, leadership and

teamwork skills; regional, state and national

competitions in IT Skills events as well as leadership

events.

PEPP: Progressive Educational Partnership Program,

including IT Explorer Program, and Senior Capstone

Internship opportunities.

TMW Coding Competition: Professional mentorship

experience and competition with other area programs.

Baldwin-Wallace University Programming Contest

Senior projects opportunities with area organizations

and businesses.

Since 2001 over 95% of ITP graduates have enrolled in post-secondary education including two and four-year colleges and universities as well as technical programs and elite military training programs.

Interactive Media I & II

(Mayfield High School)

College Tech Prep

IM I

Programming sem 1., Web Design sem 2

IM II

Information Technology sem 1, Networking

Satisfies Mayfield Technology requirement

Prerequisite: Interview by instructor, with portfolio samples of hand drawn or digitally created artwork.

By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommendations: Good attendance record.

Recommended For: College Bound/Technical Education

3 credits each year

6 credits through Cuyahoga Community College

13 credits through Lakeland Community College

12 CT2 credits

Interactive Media (IM) careers are highly recommended for students interested in art combined with digital technology such as digital art and design, digital photography, graphic design, animation, web authoring, special effects video, 3D design, and emerging interactive multimedia technologies. Computers are the standard tool for many jobs in the art industry today. Students communicate effectively and professionally with adult clientele and have done award winning projects for clients that include the Lake County Metroparks and the Hungarian Society of Cleveland. Classroom facilities match the professional graphic arts work environment, including Adobe Creative Cloud Suite professional level computer graphics software, digital drawing tablets, scanners, digital photo and video cameras, lighting and sound equipment, and computers with dual display monitors.

Licensed Practical Nursing I & II

(Northern Career Institute-Eastlake Campus)

College Tech Prep

Licensed Practical Nursing I

Consists of Patient Centered Care and Nutrition and Wellness

Licensed Practical Nursing II

Consists of Patient Centered Care and Diagnostics, Lifespan Development and Medical Intervention and Medical Terminology

Prerequisite: Passage of a pre-entrance exam with a proficient score. Proficient scores generally indicate a moderate level of overall academic preparedness necessary to support learning of nursing-related content. Minimum cumulative GPA of 3.0 through first semester of sophomore year

Clinical Requirements: During the senior year, students attend clinical sites and will need to provide their own transportation to and from the sites.

Students must pass a BCI background check, negative drug screen and submit evidence of other health screening requirements, which are required by the clinical sites. Students must also successfully pass CPR (training provided during the course) prior to attending clinical.

3 credits each year

30 credits through University of Akron

30 CT2 credits

Certifications Available: Licensed Practical Nurse (LPN), State Tested Nursing Assistant (STNA) & CPR

This unique program is approved by the Ohio Board of Nursing, C.O.E, and the Ohio Department of Career and Technical Education. It is 1 of only 4 high school nursing programs in the state of Ohio. It progresses from the simple to complex in theory, skills and clinical practice. Some of the courses include: fundamentals of nursing which includes a skill lab component, body and structure, nutrition, professional relationships, pharmacology and medical/surgical nursing. Clinical experience is correlated with theory and is provided at local hospitals, rehab facilities, assisted living facilities and nursing homes.

Upon successful completion of the nursing course, the graduate takes the Ohio Board of Nursing examination which provides licensure for the graduate. Once licensed, the graduate nurse is able to provide comprehensive total nursing care to people of all ages.

Marketing Communications

(Beachwood High School)

College Tech Prep

Grade 12 only

Business Foundations sem 1

Marketing Principles sem 1

Marketing Applications sem 2

Integrated Marketing Communications sem 2

Marketing Tech Work sem 1 and sem 2

Prerequisite: This program is designed for students entering their senior year. Prerequisites include an interview by instructor and by program start date student must have completed coursework required for senior status at their home school.

Recommendations: Followed a college preparatory course of study, good attendance and discipline records.

Recommended For: College Bound/Technical Education

3 credits

12 credits through Lakeland Community College

12 credits through University of Akron

Marketing is a college-preparatory course intended for students desiring to study business, marketing or a related field in college. Students operate the class as a company and gain hands on experience in marketing, sales, and entrepreneurship. Students will explore business topics through class instruction, marketing research, engagement in small group debates, development of interpersonal communication and leadership skills, persuasive presentations and discussion involving classroom, work and real world experiences. All students are employed in diverse fields of choice and are evaluated at their work sites. Students participate in Junior Achievement and/or DECA. These National Student Organizations help students to develop marketing skills outside of the classroom.

Medical Assisting I & II

(Northern Career Institute-Eastlake Campus)

College Tech Prep

Med Assist I

Medical Terminology and Patient Centered Care and Diagnostics

Med Assist II

Lifespan Development and Medical Intervention and Medical & Dental Office Technology

Proof of current vaccinations

Prerequisite: Interview by Instructor. By program start date student must have completed coursework

required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: College Bound/Technical Education

Certifications Available: Registered

Medical Assistant (RMA) & CPR

3 credits each year

13 credits through Lakeland Community College

30 credits through University of Akron

The Medical Assisting program is designed to prepare students to handle both the clinical duties and administrative responsibilities in a medical setting.

Students learn anatomy and physiology, medical office protocol, vital signs, and patient care. Medical terminology, medical ethics, office skills, and basic patient care are included. Classroom and clinical settings offer a variety of opportunities for learning.

Medical Technologies I & II

(Mayfield Innovation Center)

College Tech Prep

Med Tech I 5 credits with English and Science

Med Tech II 4 credits

Prerequisite: Interview by Instructor.

By program start date student must have completed coursework required for junior status at their home school. This includes seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Students must also have proof of current vaccinations, required blood titers, PPD, seasonal flu inoculation, criminal background check and be in good standing at home school with regards to academics, discipline, and attendance.

Recommended For: College Bound/Technical Education

4 credits through Cuyahoga Community College

13 credits through Lakeland Community College

9 college credits through University of Akron

3 CT2 credits

Medical Technologies is intended for those students who are serious about an educational future in the medical/dental sciences. The program prepares students with an interest in the medical professions to develop the knowledge, attitudes, practices and technical skills to obtain employment in medical, dental and diagnostic treatment facilities. Medical Technologies prepares the student to continue their

education in a post-secondary institution in the medical/dental or diagnostic sciences. The Medical Technologies student will participate in instructional, laboratory and clinical experiences designed to equip the student for direct patient care, diagnostic, therapeutic and treatment options. As seniors, students will participate in a clinical experience in world renowned health care facilities that will include an in-depth look at local medical/dental facilities. Students must be able to provide their own transportation to the clinical lab experience. Related subjects include: Lifespan Human Growth and Development, Principles of Allied Health, Patient Centered Care and Diagnostics, AHA Healthcare Provider C certification, OSHA completion, Infection Control and Risk Management, Human Relations, disease pathology/treatment, Basic Electrocardiogram Interpretation and Medical Terminology.

Performing Arts Academy I & II

(Chagrin Falls High School)

College Tech Prep

Prerequisite: Audition consisting of two contrasting monologues or one monologue and one song, no more than 90 second each. Monologue texts and a list of recommended song selections will be posted on the Academy Web-site. Students must be prepared to sing a cappella. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommendations: Good attendance and discipline record.

Recommended For: College Bound/Acting, Singing, Performing, Designing and Technical Theatre Education

3 credits each year

8 credits through Cuyahoga Community College

During the interview process a resume and a headshot or school photo, a letter of recommendation from a theatre, drama or music program student has attended and a character reference should be provided.

The Chagrin Falls Performing Arts Academy is a college preparatory program for high school juniors and seniors. Juniors are encouraged to attend in the morning but accommodations may be made for juniors to attend in the afternoon; seniors are required to be in the afternoon session. The Academy is an accredited, half-day high school program which takes place during school hours. The program will consist

of acting, theatre, voice, voice for the stage and tech theatre training and performance education. This will include daily acting classes, plus classes in voice, movement, musical theatre, technical theatre, stage combat, makeup, history, vocal training, and audition labs. The acting class will consist of sessions of improvisation, scene study, Shakespeare, Styles physical technique, acting for the camera and two years studying Stanislavski technique. The voice class will include vocal exercises, dialects and monologues.

There will be fully mounted productions and student plays along with special workshops led by guest artist from the professional theatre. The Academy produces eight productions a year. Students need only participate in one show a year. Students may audition for as many as fit their schedule. Students auditioning must clear their schedule to accommodate rehearsals and productions. Students must provide their own transportation to after school and evening events.

Production Welding

(Northern Career Institute-Willoughby Campus)

Production Welding I

Gas Metal Arc Welding sem 1

Shielded Metal Arc Welding sem 2

Production Welding II

Flux Cored Arc Welding sem 1

Gas Tungsten Arc Welding sem 2

Prerequisite: Interview by the Instructor. By program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: College Bound/Technical Education

3 credits each year

10 credits through Lakeland Community College

10 CT2 credits

In the Production Welding program, first year students will learn fundamental welding and safety skills needed to reach the goal of employment in the welding trades. Skills include ARC, MIG, TIG, Oxy-fuel welding and cutting and Plasma torch cutting. Shop safety and use of basic shop tools and equipment are learned and students use these skills to fabricate and repair projects in class. Second year students refine their skills and focus on areas of interest. Career opportunities for students who successfully complete the program include factory and production welder and

welder fitter. Production welding also gives students an opportunity to receive college credits through a partnership with Lakeland Community College.

Studio Art & Design I & II

(Orange High School)

College Tech Prep

Prerequisite: Studio art assessment, portfolio, reference letter and interview.

Prerequisite: Interview by the Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: College Bound/Technical Education

3 credits each year

6 credits through Cuyahoga Community College

The expectation in Studio Art & Design is to prepare self-motivated, creative students for careers in the visual arts by developing a comprehensive portfolio for college acceptance. The program aims to prepare students to be, **College & Career Ready**. All art students will be introduced to the multiple careers in the visual arts through the use of social media, guest speakers, class instruction and our own professional networking resource, "ARTatWORK".

Curriculum Expectations

- To embrace creative problem solving and visual communications while developing individual expressions within content, image and message.
- To develop a personal philosophy of art based on aesthetic theories, personal development and cultural influences.
- To design authentic learning related to multiple careers in art.

CAREER OPPORTUNITIES

Fine Art, Graphic Design, Illustration, Advertising, Product Design, Animation, Art Education, Art History, Architecture, Display Design, Painting, Interior Design, Photography, Art Direction, Freelance Artist and Urban Landscape Design.

Fine artists create art to satisfy their own personal vision and self-expression and may choose to exhibit their work in local, national and international shows. They may also submit proposals for publicly funded

art projects (i.e. murals), private and corporate commissions, corporate collections, gallery representation and museum collection purchases.

Applied artists put their artistic skills and commercial knowledge at the service of multiple clients including local, national and international businesses, commercial organizations, non-profit groups, corporations with in-house art departments, card/gift industry, fashion industry, industrial design/product industry, retail and wholesale companies/stores, and publishing firms.

Teacher Education and Children's Health I & II (T.E.A.C.H.)

(Fairmount Early Childhood Center at Beachwood)

College Tech Prep

Prerequisite: Interview by Instructor. By program start date student must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: Students who want to pursue a degree in education or related field

3 credits each year

3 credits through Cuyahoga Community College

7 credits through Lakeland Community College

9 credits through University of Akron

The T.E.A.C.H program prepares students to fill a vital role in the education and health of children. This program teaches content knowledge in child development, curriculum, common core, early learning content standards and educational theory as well as middle childhood development and children's health. High school students receive the opportunity to teach and care for children in many different learning environments. The first year stresses basic skills needed to work with children of all ages. Students travel with the instructor to different lab schools to develop the concepts and skills needed to work with children.

The second year of the T.E.A.C.H program further develops content knowledge and essential teaching skills and strategies necessary to become a professional or teacher ready to work with children of all ages. The students apply knowledge of child development and best practices while working in independent internships with children for the entire school year. Students who meet both attendance and academic requirements set by area colleges will be

awarded credits towards a two or four-year degree in Early Childhood Education, Elementary Education or another field related to Child Health and Development.

Travel, Tourism and Hotel Management I & II

(Northern Career Institute-Willoughby Campus)
College Tech Prep

TTHM I

Hospitality Fundamentals sem 1
Event and Food Planning sem 2

TTHM II

Front Office Management and Operations sem 1
Hospitality Management sem 2
Travel and Adventure Planning sem 2

Prerequisite: Interview by Instructor. By program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.
3 credits each year
5 credits through Lakeland Community College.

This class will prepare individuals for entry level employment and post-secondary education in pathways that relate to hotel management, restaurant and food/beverage services, lodging services, travel and tourism. Guest speakers from the industry and field experiences are included during regular class time. Seniors are permitted to work second semester in a travel/tourism related position during program hours with permission and completed paperwork. Certifications available include: Guest Service Gold (American Hotel and Lodging Educational Institute), Workplace Safety and Health (National Institute for Occupational Safety and Health), Person In Charge (Lake County Health Department), and Teenage Restaurant Worker Safety (Occupational Health and Safety Administration). Topics include customer service, lodging occupations, food safety & sanitation, housekeeping & laundry, hospitality marketing, entrepreneurship, travel services, front desk operations, event

planning, sports & entertainment jobs and sales.

Welding I & II

(Northern Career Institute-Willoughby Campus)

Welding I

Gas Metal Arc Welding sem 1
Shielded Metal Arc Welding sem 2

Welding II

Flux Cored Arc Welding sem 1
Gas Tungsten Arc sem 2

Prerequisite: Interview by the Instructor. By program start date students must have completed coursework required for junior status at their home school including seven (7) credits with a mandatory two (2) credits each earned in English and Mathematics.

Recommended For: College Bound/Technical Education

3 credits each year

10 credits through Lakeland Community College

20 credits through University of Akron

10 CT2 credits

This two-year program will train student in SMAW, GMAW, GTAW, FCA-GS, CAC, blueprint reading and shop safety. Students are taught the same skills that are taught at the Lincoln School of Welding. Related classroom instruction is also an important part of the Welding program. In related class, students learn the scientific theories and principles of welding as well as information on fabrication and welding different alloys. Blueprint reading and layout skills along with mathematics and other job skills are part of the related class. Community service projects are stressed. Opportunities for trained welders include millwright welder, fabrication welder, tack welder, pipe welder, welding inspector and welding equipment tender.

ENVIRONMENTAL EDUCATION **PROGRAMS**

Cleveland Botanical Garden, Floriculture and Gardening Operations, Landscape and Turf Operations

These programs are designed to educate the students in practices of commercial horticulture, including ornamental landscaping, greenhouse production, public gardening, and floral design.

Plants provide the basis for our ecosystems and our economies. The curriculum is designed to prepare students for a wide array of careers in horticulture by blending academics and the technical subject areas. All programs are considered Tech Prep in which students have the opportunity to earn up to 6 Semester College Credits through an articulation agreement with Ashland and Cuyahoga Community College. Students will be required to complete a co-op project. Students will have the opportunity to explore post-secondary training in the area of agriculture by visiting Cuyahoga Community College, and the Agricultural Technical Institute in Wooster. Students enrolling in the program also become members of FFA, and have the opportunity to join the Ohio Nurserymen and Landscapers Association, and PLANET. If a student wants to cultivate the gardener side of their career, then they can choose from any of the following areas:

Environmental Education Programs

Grades 10-12

College Tech Prep

EE I

EE II

Prerequisite: Interview by Instructor

Recommendations: Good attendance and discipline record

Recommended For: College Bound/Technical Education

3 credits each year

6 credits through Cuyahoga Community College

6 credits through University of Akron

Agriculture Career Exploration (A.C.E.)

(Environmental Education Center)

ACE I

ACE II

Prerequisite: Interview by Instructor and recommended by Counselor and/or Administrator.

Recommended For: Technical Education

Academic credits each year dependent upon individual student performance.

This program offers 10th-12th grade students an exploration of the various Agriculture occupations with emphasis on entry level job skills. This work-study program is designed for selected students to explore agriculture-related careers while getting firsthand experience in the world of work. Students successfully completing various job shadow sites throughout the school year will have the opportunity to gain paid employment. While learning job skills, students will also gain knowledge in the areas of: employability skills, positive work habits, communication and interpersonal skills, basic floral design, landscape techniques, plant propagation and care, and general horticulture skills. Students will have the opportunity to explore post-secondary training in the area of agriculture by visiting Cuyahoga Community College, and the Agricultural Technical Institute in Wooster. Students enrolling in the program become members of FFA, and have the opportunity to join the Ohio Nurserymen and Landscapers Association and PLANET.

Cleveland Botanical Garden

(Cleveland Botanical Garden)

Cleveland Botanical Garden Program is for students that desire a career in landscape maintenance and public gardening. The garden houses 10 landscaped acres of permanent, award-winning displays and themed gardens which the students use for their classroom. The students are engaged by hands-on horticultural experiences as they work alongside their teachers and the knowledgeable CBG staff members in areas of interest. This program is designed for those students who wish to develop their landscaping skills, work habits, and knowledge to ultimately become successful workers in the horticulture industry and productive members of society. Entry employment opportunities are available and continuation of higher education is encouraged after completion of the program.

Floriculture and Gardening Operations

(Gates Mills Environmental Education Center)

The Floriculture and Gardening Operations program is for students who wish to explore several areas in the green industry before entering post-secondary training or the work force. The program offers the basics in landscape and golf course maintenance, gardening, greenhouse, floral, garden center and nursery operations. The program includes hands-on training by growing, maintaining, selling and designing with trees, shrubs, perennials, annuals, vegetables, houseplants and cut flowers. Students are encouraged to participate in a paid internship program to enhance the learning experience in specialized areas of Horticulture. Opportunities are available for students to participate in community events, field trips, volunteer experiences, National Technical Honor Society, industry certifications, local and state competitions and FFA. Students will also have the opportunity to make connection with industry professionals.

Landscape and Turf Operations

(Gates Mills Environmental Education Center)

The Landscape Construction and Design program is an intensive Tech Prep program designed for students who are serious about employment in the landscape industry and/or to prepare themselves for further education in a college, university or trade school. The course uses a project based, problem based philosophy while providing students with hands on work and instruction both on the horticulture campus and at off site locations. Students will engage in topics such as landscape equipment operation, landscape design and estimating, plant identification and care, construction with stone, wood and precast pavers, and general maintenance of the landscape. Career opportunities include: landscape designer/architect, crew leader – landscape maintenance, park system work, landscape/hardscape construction, and gardener.

INTERVENTION PROGRAMS

Agriculture Career Exploration (A.C.E.) Career Based Intervention @ Gates Mills Career Based Intervention @Tri-C Job Training

All students have the ability to learn, to establish a career plan and carry out their career path to gain success in their lives. The intervention programs are designed to assist students who possess barriers to career and academic success to establish a career path by using work based learning experiences and gaining competencies to achieve a successful path to career options. The intervention instruction is designed to help students recover credits, get back on track academically and establish career goals. Based on student's age, potential career desires and academic credits they will be referred to the appropriate intervention program by the student's guidance counselor and/or principal.

Agriculture Career Exploration (A.C.E.) (Environmental Education Center)

Grades 10-12

ACE I

ACE II

Prerequisite: Interview by Instructor and recommended by Counselor and/or Administrator.

Recommended For: Technical Education

8 Credits each year dependent upon individual student performance. (2 Lab, 1 Related, 5 Virtual Learning.)

This program offers 10th - 12th grade students an exploration of the various Agriculture occupations with emphasis on entry level job skills. This work-study program is designed for selected students to explore agriculture-related careers while getting firsthand experience in the world of work. Students successfully completing various job shadow sites throughout the school year will have the opportunity to gain paid employment. While learning job skills, students will also gain knowledge in the areas of: employability skills, positive work habits, communication and interpersonal skills, basic floral design, landscape techniques, plant propagation and care, and general horticulture skills. Students will have the opportunity to explore post-secondary training in the area of agriculture by visiting Cuyahoga Community College, and the Agricultural Technical Institute in Wooster. Students enrolling in the program become members of FFA, and have the opportunity to join the Ohio Nurserymen and Landscapers Association and PLANET.

Career Based Intervention (Environmental Education Center)

Grades 9-10

9th graders earn up to 7 Credits dependent upon student performance (2 Lab, 1 Related, up to 4 Virtual

Learning), 10th graders earn up to 8 credits dependent upon student performance (2 Lab, 1 Related, up to 5 Virtual Learning)

Prerequisite: Interview by Instructor and recommended by Counselor and/or Administrator.

Recommended For: Technical Education

Career -Based Intervention (CBI) is a Career Technical Education Program designed for students in grades 9-10 who have barriers to achieving academic and career success. The program is designed to help students recover credits and improve academics.

Career Based Intervention

(Mayfield High School)

Grades 9 - 12

8 credits each year

5 additional courses comprised of both Traditional and Virtual Learning Courses. Students will have their school counselors forward their schedules to Excel TECC office. Students are responsible to meet their home school graduation requirements.

It is a mandatory requirement of this program that all juniors and seniors obtain outside employment within 3 weeks of the start of the program. If at any time the student is without employment they must attend CBI all day.

Prerequisite: Interview by Instructor and recommended by Counselor and/or Administrator. Students must be **15 years old** before the start of the school year, must attend class every day, and follow all the guidelines of the Mayfield City Schools while earning high school credit.

Recommendation: Counselor and/or Administrator

Recommended For: Technical Education

Career-Based Intervention (CBI) is a career technical education program designed for students in grades 9 -12 who are identified as disadvantaged (either academically or economically or both) and who have barriers to achieving academic and career success. The program is aimed specifically at helping students become motivated toward education exploring work experience. The CBI program is designed to help students recover credits, improve academic competencies, graduate from high school, develop employability skills, implement a career plan and participate in a career pathway in preparing for careers.

CBI is based on the key principles of higher student expectations, studying the common curriculum of the school, providing authentic learning opportunities, having supportive structures and establishing a sense of belonging. In this program, the student must also work outside the school day and earn money as well as credit for graduation. Each student also receives job related instruction in class. The ultimate objective of the CBI program is graduation from high school with marketable skills and a career path.

The main goal of CBI students in grades 9-12 is to be able to graduate and be able to learn employability skills to implement a career plan.

Job Training

Grades 10-12

Up to 3 credits per year

One or two-year enrollment options.

Prerequisite: Interview; at least 16 years of age; recommendation of counselor.

The Job Training program is an option for students who want an individualized program that enables them to gain relevant work experience and on-the-job training while completing their academic requirements for graduation. Working with the student, a progression toward competitive employment is determined. The majority of the training provided is through community-based placements with on-the-job mentoring and employer provided supports. Paid or unpaid placements are determined individually based on a student's prior experiences and job readiness. Job placements are developed with considerations for proximity to the student's residence, and transportation-related requirements. Students meet for small group instruction weekly at their home schools. To earn 3 credits per year, a student must be engaged fifteen hours per week in either paid or unpaid work experience.

The outcomes of the program are: job search skills, employability skills, and paid work experience. It is the responsibility of the student and family to arrange transportation to paid or unpaid work sites.

CAREER INFORMATION

ARTS and COMMUNICATION CAREER CLUSTER

Is This You?

- Do you have artistic ability?
- Can you work accurately with detailed information?
- Do you visually like to express your feelings and ideas?
- Can you work skillfully with your hands?
- Do you have the ability to work creatively with large groups of people?
- Are you creative and innovative?
- Do you like to observe your surroundings?
- Do you have clear written and verbal communication skills?
- Do you enjoy working with a variety of media?

If you answered YES to most of these questions, then you may be interested in the Arts and Communication Career Cluster described below.

The Arts and Communication cluster includes programs of study related to humanities and performing, visual, and media arts. It includes many jobs in a variety of work settings from corporations, theaters, radio or television stations, advertising or architecture firms, art studios, museums, sets, to your own business office or art studio.

Workers in this group create, act, direct, write, and produce visual or auditory materials for entertainment, business and educational purposes.

People in this cluster area may perform on stage or work behind the scenes for a production, show, or company training class or corporate event. They also may create original works of art, restore or edit them to further the artists' expression or interpretation of ideas.

In the Course Catalog, applicable courses are listed with a Career Code of "A."

**SAMPLE CAREER OPPORTUNITIES FOR ARTS AND
COMMUNICATION BY EDUCATIONAL LEVEL**

HIGH SCHOOL GRADUATE	TECHNICAL TRAINING OR 2-YEAR COLLEGE	4-YEAR COLLEGE AND BEYOND
Photographer Assistant	Darkroom Technician	Magazine Editor
Layout Artist	Journalist	Public Relations Writer
Disc Jockey	Book Cover Designer	Animator
Merchandise Display Operator	Illustrator	Art/Technology Teacher
Sign Maker	Layout/Paste-up Artist	Producer
Visual Artist	Interior Decorator	Artist
Furniture Refinisher	Multimedia Specialist	Film Maker
Furniture Manufacturer	Photographer	Graphics Designer
Wood Pattern and Model Maker	Recording Studio Assistant	Foreign Language Interpreter
Building Tradesperson	Sound Engineer	Ceramics Engineer
Welding Artist	Printer	Corporate Trainer
Kiln Operator	Copywriter	Museum Curator
Ceramic Molder	Desktop Publishing	Print Maker
Cabinet Maker	Packaging Designer	Interior Decorator/Designer
Theater Set Crew	Technical Illustrator	Construction Manager
	Museum Technician	Architect
	Industrial Engineering Technician	Journalist
	Mechanical Drafter	Industrial Designer
	Precision Woodworker	Landscape Designer
	Computer Assisted Drafter	Home Appliance Designer
	Computer Assisted Drawing Engineer	Automotive Designer
	Construction Machinery Operator	Graphic Artist
	Tool Designer	Advertising Executive
	Mechanical Engineering Technician	Theater Set Manager
	Silk Screen Artist	Radio/Television Producer
	Theater Set Designer	Columnist
	Screen/Television Script Writer	
	Technical Writer	
	Library Assistant/Technician	

BUSINESS and MANAGEMENT CAREER CLUSTER

Is This You?

- Is it important for you to have day-to-day contact with the public?
- Are you able to use logical thinking and personal judgment to perform a variety of tasks?
- Are you able to make decisions based on your own judgment and company policy?
- Are you able to follow instructions without close supervision?
- Do you like to sell your ideas to audiences?
- Do you like to work with data to support your ideas?
- Are you able to deal effectively with people?
- Are you able to change work activities frequently?
- Do you like to oversee projects from beginning to completion?

If you answered YES to most of these questions, then you may be interested in the Business and Management Career Cluster described below.

Business careers include a variety of jobs in areas related to administration and management as well as marketing, finance, accounting, and data processing.

Workers in this group use mathematical and analytical skills to design financial systems and interpret records, and communication skills to supervise and work with others, locally, nationally, and globally. Others set policies and priorities as well as participate in marketing and sales activities.

In the Course Catalog, applicable courses are listed with a Career Code of “B.”

**SAMPLE CAREER OPPORTUNITIES FOR BUSINESS
AND MANAGEMENT BY EDUCATIONAL LEVEL**

HIGH SCHOOL GRADUATE	TECHNICAL TRAINING OR 2-YEAR COLLEGE	4-YEAR COLLEGE AND BEYOND
Accounting Clerk	Administrative Assistant	Accountant/CPA
Auctioneer	Auditing Clerk	Advertising Manager
Bank Teller	Bookkeeper	Air Traffic Controller
Bill Collector	Chef/Caterer	Auditor
Cashier	Computer Networker	Bank Examiner
Courier	Computer Programmer	Business Investment Broker
Customer Service Representative	Cost Estimator	Business Manager
Dispatcher	Credit Analyst	Business Education Teacher
File Clerk	Food Service Manager	Buyer
Food Service Staff	Insurance Agent	City Manager
General Office Clerk	Loan Officer	Economist
Hotel Clerk	Medical Records Person	Entrepreneur
Postal Worker	Medical Secretary	Estate Planner
Receptionist	Retail Manager	Financial Analyst
Retail Salesperson	Travel Agent	Financial Planner
Telephone Operator	Underwriter	Hospital Administrator
Travel Guide		Labor Relations Director
Word Processor		Marketing Director
		Market Research Analyst
		Personnel Director
		Recreations Projects Director
		Securities Broker
		Stockbroker
		Urban Planner

ENVIRONMENTAL AND AGRICULTURAL SYSTEMS CAREER CLUSTER

Is This You?

- Do you enjoy learning how nature and different environments work?
- Do you like being outside?
- Do you like to learn about how foods and other products arrive at your table?
- Can you use math and science skills as they relate to the functions of the Earth?
- Do you have strong science skills such as chemistry, physics, and geology?
- Would you like to work with and manage the population and care of animals?
- Do you like to work with machinery to improve the appearance of lawns or recreation areas, or work on farms?
- Do you like to creatively solve problems?

If you answered YES to most of these questions, then you may be interested in the Environmental and Agricultural Systems Career Cluster described below.

The Environmental and Agricultural Systems Career Cluster involves programs of study related to the environment and agriculture. Careers include those in agriculture, earth sciences, environmental studies, fisheries management, forestry, horticulture, and wildlife management.

Workers within these career fields manage, develop, protect, and improve natural habitats for wildlife, study methods and practices to maintain and increase the nation's agricultural productivity, improve strategies of raising crops or animals, identify and analyze sources of pollution, collect and synthesize data from atmospheric monitoring, meteorological and mineralogical information, consult with farmers, food companies or corporations concerning environmental standards, study tornados, volcanoes, and other natural phenomenon and design environmentally friendly living space for humans and wildlife.

Those who work in this career area use many skills in science, mathematics, data collection, and problem solving. Strong communication and reasoning skills are also foundations for success.

In the Course Catalog, applicable courses are listed with a Career Code of "F."

SAMPLE CAREER OPPORTUNITIES FOR ENVIRONMENTAL AND AGRICULTURAL SYSTEMS BY EDUCATIONAL LEVEL

HIGH SCHOOL GRADUATE	TECHNICAL TRAINING OR 2-YEAR COLLEGE	4-YEAR COLLEGE AND BEYOND
Animal Trainer	Agricultural Commodity Grader	Agricultural Economist
Aquatic Life Laborer	Arborist	Agricultural Engineer
Deckhand	Assayer	Agronomist
Dog Groomer	Environmental Technician	Aquaculturalist
Farm Machine Operator	Farmer	Botanist
Golf Course Maintenance Worker	Fisher	Earth Scientist
Greenhouse Maintenance Worker	Floral Designer	Environmental Health Inspector
Horse Trainer	Florist	Extension Service Specialist
Irrigator	Food Science Technician	Farm Animal Veterinarian
Lawn Service Worker	Geological Data Technician	Food Specialist
Logger	Geological Sample Test Technician	Forester
Nursery Worker	Greenhouse Manager	Forest Urban Ecologist
Plant Breeder	Greens keeper	Geographer
Turf Sod Producer	Inspector	Geologist
Veterinary Attendant	Land Appraiser	Geophysicist
	Landscape Construction	Golf Course Superintendent
	Landscaper	Horticulturist
	Logging Operations	Land Development Consultant
	Meteorological Technician	Landscape Architect
	Park Naturalist	Logging Superintendent
	Park Ranger	Meteorologist
	Petroleum Technician	Oceanographer
	Stadium Grounds Crew	Range Manager
	Topographic Technician	Soil Conservationist
	Turf Manager	Urban Forester
	Wood Technologist	Volcanologist
		Water Conservationist
		Wildlife Manager

HEALTH SERVICES CAREER CLUSTER

Is This You?

- Can you respond quickly and clearly in emergencies?
- Can you work with details?
- Do you have fine motor skills?
- Do you have stamina to work long hours?
- Can you perform multiple tasks at one time?
- Are you organized with a good memory?
- Do you have strong biology, chemistry, and mathematics skills?
- Do you work well with people?
- Are you able to work physically close to people?
- Are you interested in nutrition, anatomy, and physiology?
- Do you have strong memorization and problem solving skills?

If you answered YES to most of these questions, then you may be interested in the Health Services Systems Career Cluster described below.

The Health Services career cluster includes programs of study related to the promotion of health as well as the treatment of injuries, condition, and disease. It includes many jobs in a variety of work settings from hospitals, private physician's offices, outpatient facilities, gyms and sports facilities, and patients' homes.

Workers in this group include those working in medicine, dentistry, nursing, therapy and rehabilitation, nutrition, fitness, and hygiene. People in this cluster may perform or assist with surgery, take and read X-rays, help rehabilitate a patient's physical injury or condition, counsel those suffering from physical or mental disease, conduct assessments for weight loss and nutrition, assist the elderly with daily tasks, respond to emergencies, and treat victims.

Compassion and empathy are important personal traits, as well as the ability to balance many tasks and responsibilities. Knowledge in biology, anatomy, chemistry, communication, and psychology are foundations for success in this career cluster area.

In the Course Catalog, applicable courses are listed with a Career Code of "H."

**SAMPLE CAREER OPPORTUNITIES FOR HEALTH SERVICES
BY EDUCATIONAL LEVEL**

HIGH SCHOOL GRADUATE	TECHNICAL TRAINING OR 2-YEAR COLLEGE	4-YEAR COLLEGE AND BEYOND
Dispensing Optician	Cardiology Technologist	Anesthetist
Electroneuodiagnostic Technologist	Dental Hygienist	Dentist
Home Health Aide	Echo cardiographer	Dermatologist
Licensed Practical Nurse	Emergency Medical Technician	Dietician
Medical/Dental Office Manager	Health Information Technician	Epidemiologist
Medical Records Technician	Histology Technician	Exercise Physiologist
Orderly	Nuclear Medicine Technologist	Geriatrician
	Paramedic	Immunologist
	Phlebotomist	Internist
	Physician Assistant	Medical/Clinical Laboratory Technologist
	Radiologic Technologist	Medical Researcher
	Stress Test Technician	Nurse-Midwife
	Surgical Technologist	Nutritionist
	Veterinary Assistant	Occupational Therapists
		Optometrist
		Pathologist
		Pediatrician
		Pharmacist
		Pharmacologist
		Psychiatrist
		Recreation Therapist
		Registered Nurse
		Surgeon
		Veterinarian

HUMAN SERVICES CAREER CLUSTER

Is This You?

- Do you want to work for the benefit of helping others?
- Can you work accurately with detailed information?
- Can you work independently?
- Are you compassionate?
- Can others count on you?
- Do you have excellent physical condition and stamina?
- Do you have knowledge of basic mathematics and biology?
- Do you have clear verbal skills?
- Are you interested in how the government, social, and legal systems work?
- Can you use judgment and reasoning to cope with emergencies such as illnesses, accidents, and interrupted service?
- Can you direct, manage, or supervise the activities of others?

If you answered YES to most of these questions, then you may be interested in the Health Services Systems Career Cluster described below.

Human service careers include a variety of jobs in law and legal services, community support areas such as fire and city services, education, and personal services such as cosmetology and home health aides.

Workers in this group may teach children, teens, or adults, save persons experiencing an emergency, work with expectant mothers or welfare recipients, represent clients in a court of law, work within the government system as a public official, take care of ill people in their homes, and provide personal services such as child care, food service, recreation, and counseling.

Knowledge in psychology, biology, and government, and strong communication skills and empathy are foundations that will lead to occupational success in this cluster area.

In the Course Catalog, applicable courses are listed with a Career Code of “P.”

**SAMPLE CAREER OPPORTUNITIES FOR
HUMAN SERVICES BY EDUCATIONAL LEVEL**

HIGH SCHOOL GRADUATE	TECHNICAL TRAINING OR 2-YEAR COLLEGE	4-YEAR COLLEGE AND BEYOND
Bus Driver	Addiction Counselor	Athletic Coach/Trainer
Certified Nurse's Aide	Agricultural Specialist/County Extension Agent	Audiologist
Drapery Installer	Barber	Child Psychologist
Educational Support Personnel	Correction Officer	Corporate Trainer
Exercise Instructor	Cosmetologist	Counselor (Mental Health/School)
Fire Inspector	Daycare Operator	Economist
Geriatric Aide	Dental Assistant	Federal Bureau of Investigation (FBI)
Home Health Aide	Exercise Trainer	Gerontologist
Interpreter	Firefighter	Government Official
Paper Hanger	Flight Attendant	Judge
Pet Controller	Funeral Director	Lawyer
Playground Supervisor	Intake Counselor	Librarian
Security Guard	Interpreter for the Deaf	Lobbyist
Teacher Aide	Manicurist	Minister/Priest/Rabbi
Waiter/Waitress	Paralegal Assistant	Psychologist
Waste Management Technician	Parent/Student Advocate	Parole Officer
Weight Reduction Specialist	Personal Physical Trainer	Parks and Recreation Guide
	Police Officer	Probation Officer
	Private Investigator	School Administrator
	Preschool/Nursery Teacher	School Psychologist
	Probations Officer	Social Worker
	Recreation Worker	Teacher
	Sheriff's Deputy	
	Social Service Technician	
	Youth Director	

INDUSTRIAL AND ENGINEERING SYSTEMS CAREER CLUSTER

Is This You?

- Do you like to know how things work?
- Can you dissect smaller pieces from the big picture?
- Do you like to design new objects or machines?
- Can you work with details?
- Do you like to create ways a machine could improve its function?
- Can you use mathematics and physics concepts to solve problems?
- Do you enjoy problem solving and creative thinking?
- Do you like to work with your hands?
- Do you like to use technology to create programs, solve problems, design objects or structures?

If you answered YES to most of these questions, then you may be interested in the Industrial and Engineering Career Cluster described below.

Industrial and Engineering Systems involves programs of study related to the technologies necessary to design, develop, install, or maintain physical systems.

Careers include those in engineering and related technologies, mechanics and repair, transportation, manufacturing technology, precision production, and construction.

Workers within this career area design new products or improve existing products or systems, create new models of automobiles and other forms of transportation, build and repair computers, write software programs, precision weld, construct buildings, homes and transit systems, use a computer to simulate and test how a machine, structure, or system operates, read and conform to design standards, and create solutions to functional, structural, mechanical, or technological problems.

Those who work in this career area use many skills in mathematics, physical science, problem solving, logic, and communication.

In the Course Catalog, applicable courses are listed with a Career Code of “E.”

**SAMPLE CAREER OPPORTUNITIESFOR INDUSTRIAL
AND ENGINEERING SYSTEMS BY EDUCATIONAL LEVEL**

HIGH SCHOOL GRADUATE	TECHNICAL TRAINING OR 2-YEAR COLLEGE	4-YEAR COLLEGE AND BEYOND
Assistant Drafter	Airplane Mechanic	Aerospace Engineer
Automotive Technician	Calibration and Instrumentation Technician	Airport Engineer
Carpenter	Electronic Equipment Repairer	Architect
Concrete Mason	Electronics Engineering Technician	Chemical Engineer
Construction Worker	Experimental Welder	Civil Engineer
Crane Operator	Fire-Protection Engineering Technician	Computer Programmer/Software Developer
Die Designer Apprentice	Heating, Air Conditioning and Refrigeration	Construction Site Supervisor
Electrician (Apprentice)	Hydraulic Repairer	Electrical Engineer
Glazier	Laser Technician	Energy Systems Designer
Ironworker	Machinist	Industrial Engineer
Lathe Operator	Millwright	Mapping Scientist
Precision Welder	Research Electrician	Mechanical Engineer
Roofer	Small Engine Mechanic	Metallurgist
Tool and Die Maker	Surveyor	Nuclear Engineer
Truck Driver	Technical Illustrator	Petroleum Engineer
	Tool Programmer	Quality Control Manager
		Stress Analyst
		Structural Engineer
		Surveyor Supervisor
		Systems Analyst
		Systems Engineer
		Welding Engineer

Course Planner

Ninth Grade

Department	Semester 1	Semester 2	Credit
English	<u>9 Intro. to Lit. & Comp.</u>	<u>9 Intro. to Lit. & Comp.</u>	<u>1.0</u>
Social Studies	<u>U.S. History</u>	<u>U.S. History</u>	<u>1.0</u>
Mathematics	<u>Mathematics</u>	<u>Mathematics</u>	<u>1.0</u>
Science	<u>Physical Sci/Bio Hon.</u>	<u>Physical Sci/Bio Hon</u>	<u>1.0</u>
World Lang. or Elective	_____	_____	<u>0.0</u>
Fine Arts / Elective	_____	_____	<u>0.0</u>
Phys Ed./Elective	<u>Physical Education(0.25)</u>	_____	<u>0.25</u>
Lunch/Study Hall	<u>Lunch/Wildcat Focus</u>	<u>Lunch/Wildcat Focus</u>	<u>0.0</u>
Total Credits			<u>6.0</u>

Tenth Grade

Department	Semester 1	Semester 2	Credit
English	<u>10 World Lit. & Comp.</u>	<u>10 World Lit. & Comp.</u>	<u>1.0</u>
Social Studies	<u>World History</u>	<u>World. History</u>	<u>1.0</u>
Mathematics	<u>Mathematics</u>	<u>Mathematics</u>	<u>1.0</u>
Science	<u>Biology/Chemistry</u>	<u>Biology/Chemistry</u>	<u>1.0</u>
World Lang. or Elective	_____	_____	<u>0.0</u>
Communications / Elective	<u>Communications (0.50)</u>	_____	<u>0.50</u>
Phys Ed./Health	<u>Physical Education</u>	<u>Health</u>	<u>0.75</u>
Lunch/Study Hall	<u>Lunch/Study Hall</u>	<u>Lunch/Study Hall</u>	<u>0.0</u>
Total Credits			<u>6.0</u>

Eleventh Grade

Department	Semester 1	Semester 2	Credit
English	<u>11 American Lit. & Comp.</u>	<u>11 Intro. to Lit. & Comp.</u>	<u>1.0</u>
Social Studies Elective	_____	_____	<u>.0</u>
Mathematics	<u>Mathematics</u>	<u>Mathematics</u>	<u>1.0</u>
Science (Chem. or Sci. Elect)	_____	_____	<u>.0</u>
World Lang. or Elective	_____	_____	<u>.0</u>
Elective	_____	_____	<u>.0</u>
Elective	_____	_____	<u>.0</u>
Lunch/Study Hall	<u>Lunch/Study Hall</u>	<u>Lunch/Study Hall</u>	<u>0.0</u>
Total Credits			<u>.0</u>

Twelfth Grade

Department	Semester 1	Semester 2	Credit
English	<u>12 British Lit. & Comp.</u>	<u>12 British Lit. & Comp.</u>	<u>1.0</u>
Social Studies	<u>Government</u>	<u>Government</u>	<u>1.0</u>
Mathematics	<u>Mathematics</u>	<u>Mathematics</u>	<u>1.0</u>
Science Elective	_____	_____	<u>.0</u>
World Lang. or Elective	_____	_____	<u>.0</u>
Elective	_____	_____	<u>.0</u>
Elective	_____	_____	<u>.0</u>
Lunch	<u>Lunch</u>	<u>Lunch</u>	<u>0.0</u>
Total Credits			<u>.0</u>