



Manheim Township  
High School

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# **Educational Planning Guide**

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**2011-2012**

# MANHEIM TOWNSHIP SCHOOL DISTRICT

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## **MISSION STATEMENT**

The mission of the Manheim Township School District is to provide an environment where everyone will learn, grow and succeed.

## **VISION STATEMENT**

Manheim Township School District aspires to be a place where every individual finds the resources needed to learn, grow and succeed. We are dedicated to pursuing a vision of excellence, and we believe that vision requires a strong learning environment, a supportive community, and an awareness of our place in the larger world.

We are committed to:

A learning environment that is

- A place of safety and mutual respect.
- A place that stimulates curiosity and creativity.
- A place that sets high expectations and standards of achievement.
- A place that provides opportunities for critical thinking and problem solving.

A learning community that fosters

- A commitment to lifelong learning.
- A sense of personal integrity.
- An appreciation for the richness diversity can bring.
- An understanding of the breadth of a liberal arts education.
- Opportunities for extracurricular growth.
- The achievement of each individual's potential.

An understanding of our place in our world that requires

- Mutual respect and cooperation.
- Open communication.
- Understanding of cultural diversity
- A sense of global citizenship.

# Manheim Township High School

PO Box 5134 School Road  
Lancaster, PA 17606-5134

## **AN EDUCATIONAL PLANNING GUIDE FOR STUDENTS, PARENTS, AND FACULTY**

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## **PURPOSE OF THE EDUCATIONAL PLANNING GUIDE**

The purpose of the Educational Planning Guide is to provide students, parents and staff with an understanding of guidelines, policies and expectations regarding the courses offered by Manheim Township High School and the procedures related to scheduling of courses. The high school curriculum represented in this guide is prepared by the high school staff and is approved by the Manheim Township Board of School Directors.

## **DISCREPENCIES**

The development of Board policy and administrative guidelines is a continually on-going process due to changing laws and the desire to more effectively run the school system. In the case of a discrepancy between a Board policy or a revised administrative guideline and the published provisions within this guide, the policy/guideline most recently adopted or revised shall prevail.

## **CHANGES TO THE PLANNING GUIDE**

The Manheim Township School District reserves the rights to alter the requirements and offerings as printed when deemed to be the result of sound educational planning or when the results are based on changes in federal, state, or local regulations. Changes that are made will be conveyed to students via an addendum sheet to this guide, and/or relayed by school staff via information meetings and/or announcements.

## **IMPORTANCE OF THE COURSE SELECTION PROCESS**

Planning your educational program is a serious responsibility. The subjects that you choose to study in high school today will greatly influence your future life.

This guide is designed to assist in planning your secondary school program. It is intended to provide sufficient information so that students and parents may play a major role in this planning. In selecting your courses of study, give careful thought to future educational and career goals, past academic achievement, and your abilities, aptitudes and interests.

## **ACKNOWLEDGMENT**

This **Educational Planning Guide**, and the instructional program described herein, is the direct result of positive cooperation, professional expertise and genuine staff support. In addition, input has been sought from the student body and parent advisory groups.

The entire staff of Manheim Township High School has been instrumental in developing the instructional program. This is a direct indication of their professional dedication and commitment to their students.

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## GRADUATION REQUIREMENTS

The Manheim Township School District Program of Study operates under a curriculum plan where all students who meet the requirements for graduation receive identical diplomas. A total of 22 credits including specific designated courses and successful completion of a Graduation Project are required to meet graduation requirements. [For the Class of 2015 see the Keystone Exams section for additional requirements.]

### Minimum Graduation Requirements

#### **1<sup>st</sup> Requirement: Course Work (22 Total Credits)**

English	4 credits	Family & Consumer Management	½ credit
Social Studies	4 credits	Health	½ credit
Science	3 credits	Physical Education	2 credits
Mathematics	3 credits	Other Subjects	4 credits
		*Arts and Humanities	1 credit

*\*Arts and Humanities credits may consist of Art, Music, Family and Consumer Science, World Language, Technology Education and Reading courses as well as English and Social Studies credits earned beyond those required for graduation.*

#### **2<sup>nd</sup> Requirement: Graduation Project**

#### **3<sup>rd</sup> Requirement: Completion of Keystone Exams (Class of 2015 only)**

Transcripts of students transferring into the district will be evaluated on an individual basis.

### Graduation Project

The Pennsylvania Department of Education requires that all students complete a “culminating project” as part of graduation requirements. The purpose of the project is to assure that students are able to demonstrate ability to research, analyze, synthesize, evaluate and communicate understanding and knowledge. The present curriculum presents numerous opportunities for students to meet the standards described in the rationale of the graduation project. In addition to opportunities within the curriculum, students will be able to design an independent project that is related to a service activity, hobby, area of interest, or area of independent research. Students are encouraged to complete the project during the sophomore or junior year. The graduation project may **not** be completed before ninth grade. **Each department offers multiple opportunities for students to complete this project.**

### Keystone Exams

The Keystone Exams are end-of-course assessments designed to assess proficiency in the subject areas of Algebra I, Algebra II, Geometry, Literature, English Composition, Biology, Chemistry, U.S. History, World History, and Civics and Government. The Keystone Exams are one component of Pennsylvania’s new system of high school graduation requirements. Keystone Exams will help school districts guide students toward meeting state standards—standards aligned with expectations for success in college and the workplace.

For the graduating classes of 2015 and 2016, students must demonstrate successful completion of secondary-level course work in Algebra I, Biology, Literature, and English Composition, in which the Keystone Exam serves as the final course exam.

Additional information on the Keystone exams will be provided as it is made available by the PA Department of Education.

## **CONCURRENT ENROLLMENT, EARLY GRADUATION, & EARLY COLLEGE GUIDELINES**

**Manheim Township School District Board Policy #217 (Graduation Requirements) provides students with opportunities to attend college on a part-time basis as a junior or senior, attend college full-time for their senior year, or graduate early from high school.**

### **To Access These Programs:**

In addition to being academically eligible, the student would be required to:

- Meet the entrance requirements of the college or university
- Pay all costs associated with college enrollment including registration, tuition, dues, fees, textbooks and transportation.

### **Early College - Concurrent Enrollment (Part-time):**

Students can attend college part-time during their junior and senior years while also attending the high school. Students interested in this option generally attend the high school in the AM or PM to complete remaining credits needed for graduation and then attend classes at a local institution during the remainder of their school day. There is currently a plan before the School Board to accept college course work to fulfill graduation requirements. Until approval is received, college courses may be used to supplement, but not supplant high school requirements. Although students choosing this option are not eligible for federal financial aid, many of the colleges with which the school is seeking agreements offer credits at a substantially reduced rate of half or less per credit hour. See Mr. Bates in Guidance for participating colleges and universities.

### **Early College (Full-time):**

Students can attend college full-time in lieu of their senior year. Students interested in this option must successfully complete 24 credits (typically 8 classes) during their freshman year. Upon completion of the 24 credits, the student is eligible to receive a Manheim Township Diploma. During the freshman year, students are not considered high school graduates and are therefore ineligible for federal financial aid. Students may enroll in any four-year college or university for the Full-time Early College Program.

### **Early Graduation (Graduation in 3 Years):**

Students who complete 22 credits (including the required credits in each of the content areas) by the conclusion of their third year are eligible to graduate. See the Graduation Requirement Section of this guide. Students who wish to graduate in three years must plan carefully and closely consult with their counselor to ensure all required course work is completed successfully and that appropriate deadlines are met for college applications. With this option, students are considered high school graduates and are eligible to apply for and potentially receive federal financial aid for college.

### **Participating Colleges & Universities:**

Students may enroll in any four-year college or university for the Full-time Early College Program. Check with Guidance for the list of colleges participating in the Concurrent Enrollment Program.

**Updated information on these programs will be posted on the guidance website as it becomes available.**

## NCAA ELIGIBILITY CENTER

Student-athletes who are considering participating in collegiate athletics should explore the NCAA (National Collegiate Athletic Association) requirements for eligibility. A high school diploma alone is not sufficient to permit a student to participate in college athletics. The NCAA has a set of minimum standards that students must meet to be eligible. Detailed information can be found at [www.eligibilitycenter.org](http://www.eligibilitycenter.org).

The following basic information is taken from [NCAA Freshman-Eligibility Standards Quick Reference Sheet](#) :

To be eligible to participate, students must meet minimum GPA and minimum SAT/ACT standards while completing a minimum number of core courses at the College Preparatory Level. The courses are as follows:

### 16 Core Courses:

- 4 years of English.
- 3 years of mathematics (Algebra I or higher).
- 2 years of natural/physical science (1 year of lab if offered by high school).
- 1 year of additional English, mathematics or natural/physical science.
- 2 years of social science.
- 4 years of additional courses (from any area above, foreign language or non doctrinal religion/philosophy).

*Note:* Students in the graduating class of 2012 who attend a Division II institution in 2012-13 will be eligible by completing 14 core courses. Review the reference sheet or website for more information.

**Any student who is considering participating in collegiate athletics should only elect College Preparatory or Honors level courses. Any core course (English, mathematics, science, or social studies) that is not a College Prep or Honors level course will not be accepted by the NCAA.** If you have any questions regarding NCAA eligibility contact your guidance counselor.



## GRADING SYSTEM

### Course Grades: Marking Period, Semester, and Course

Students earn numerical grades. In each course, the students earn a grade ranging from 0 to 100%. Letter grades are not officially utilized as part of the Manheim Township Grading System. Students' **marking period grades** are based upon the grading system utilized by individual teachers. These systems are at the teacher discretion and are announced at the beginning of the course.

Students' **semester grades** are a weighted average of their marking period grades and their midterm/final exam grade. The grade can be calculated using the following formula:

- For courses with a midterm or final exam:
  - o  $0.4 \times \text{Marking Period 1} + 0.4 \times \text{Marking Period 2} + 0.2 \times \text{Midterm/Final Exam}$
- For courses without a midterm or final exam:
  - o  $0.5 \times \text{Marking Period 1} + 0.5 \times \text{Marking Period 2}$

Students' **course grades** for year-long courses are the average of the 1<sup>st</sup> semester and 2<sup>nd</sup> semester grades. For semester-long courses, the course grade is equal to the semester grade.

IMPORTANT NOTE: For the semester and year-long calculations, only values rounded to the nearest whole number are used in the calculation and reported. Decimal parts are not utilized or reported.

### Grade Point Average (GPA)

On each quarterly report card, a weighted numerical grade point average is calculated and reported for the grades of that marking period. Additionally, at the end of each school year, a cumulative GPA is calculated and reported. As part of the GPA calculations, the rigor of the course (called weighting) and the number of credits awarded is factored in.

The GPA is calculated as follows:

- For each course, take the *grade times weight times number of credits*.
- Add up the calculations and divide by the number of credits attempted.

IMPORTANT NOTE: Different schools, both high school and college, use many different systems for reporting GPA's including but not limited to weighted vs. un-weighted, 4.0 scales, 5.0 scales, ... Counselors can be of assistance in calculating alternative GPA's if the specific system is known. On college transcripts, the high school will report a weighted and unweighted Numeric Grade Average, as well as a weighted and unweighted 4.0 scale conversion.

### Final/Midterm Exams

As part of their course grades, students take midterm and final examinations in English, social studies, science, mathematics, world language, and health courses. These examinations count as one-fifth of the semester grades and are reported on the student report card.

NOTE: Seniors who have averaged a 93% or higher in a class at the conclusion of the fourth marking period are excluded from having to take the final exam.

### Honor Roll

There is a First Honor Roll and a regular Honor Roll. To be eligible for the First Honor Roll a student must have a marking period weighted NGA of 93% with no grade lower than an 80% in any subject. The regular Honor Roll is comprised of students with a marking period NGA of 83% with no grade lower than a 70% in any subject. A student must be attempting four credits (or the equivalent of five courses) to be eligible for either Honor Roll.

## **Grade Level Status: Freshman, Sophomore, Junior, and Senior**

The classification of **sophomore** is given after a student has completed 4.5 credits of work. The classification for a **junior** is given after a student has completed 11 credits of work, and the classification of **senior** is given upon the completion of 16 credits of work. The students' grade levels generally changes at the conclusion of school year, but students can be promoted at mid-year if through passing semester courses their number of credits reaches the next classification. Credits are not awarded for coursework completed prior to the end of grade 8. To determine the credit value of a course, refer to the course description section printed in this guide.

## **Dropping a Course**

Students who drop a course [See Schedule Changes], prior to the end of the 1<sup>st</sup> marking period (1<sup>st</sup> Semester and Year-long courses), or prior to the end of the 3<sup>rd</sup> marking period (2<sup>nd</sup> semester courses) will have the course removed from their record. Courses dropped after that time will remain as part of the record and reflect a WP (Withdrew Passing) or WF (Withdrew Failing) based on their classroom performance to that time.

## **Importance of Attendance and Classroom Behavior**

While student attendance and classroom behavior will not be directly factored into a student's grade, good attendance and behavior is an important factor in successfully mastering a course. When absent, it is the student's responsibility to see the instructor and make arrangements for completing the work missed in a timely fashion. Failure to do so may result in a failing grade for any work missed.

## **Mid-Year Course Level Changes**

Students changing course levels (i.e. Honors to College Prep, ...) [See Schedule Changes] will have their grades from the earlier course transfer along to their new course placement.

## **Repeating a Course**

Students may repeat a course for grade improvement or to earn credit. Students doing so will retain both the "new" course grade and the original course grade as part of their permanent record. All attempted credits are documented and calculated in the NGA; however, only one credit will count towards meeting graduation requirements.

## **Senior Pass/Not Pass Option**

Seniors who have successfully completed the required courses through grade 11 will be able to take one course with a Pass(P)/Not Pass(NP) evaluation. Classroom teachers, guidance counselors and principals must approve a student's written request. The course cannot be needed as a graduation requirement. All contracts (available in the Guidance Office) must be completed by the last day of the first marking period for first semester and full-year courses and the last day of the third marking period for second semester courses. The same deadlines apply for rescinding a request.

## HOW TO DETERMINE WHAT COURSES TO SELECT

1. **Carefully study the entire planning guide** in order to take full advantage of the variety and flexibility of offerings. Refer to your grade level's suggested guidelines for grade-specific guidance on requirements and recommended courses.
2. Identify the courses you wish to take in your core areas (English, mathematics, science, social studies, and world languages) and determine if you meet the prerequisites. Your current teacher can give you advice regarding what course(s) you may want to elect.
3. Identify other courses you may need to take in the upcoming year to satisfy specific graduation requirements (Family and Consumer Science, Health) and choose your physical education course.
4. **9<sup>th</sup>, 10<sup>th</sup>, and 11<sup>th</sup> grade students must schedule the time equivalent of six major subjects (credits) per year [12<sup>th</sup> grade students must schedule five].** You may elect to take as many as seven credits (or eight if you include virtual course selections). After choosing your core courses and other required courses, identify elective courses that interest you to complete your schedule. **You must also identify alternate choices. Having a “back-up” alternate selection for every elective course will help ensure that you have a complete schedule if courses become full or your primary choices conflict with one another.**
5. **Ask questions.** Your fellow students (particularly those older than you), your parents, your teachers and your counselor are all great sources of information.

## HOW TO SCHEDULE YOUR COURSE SELECTIONS

Once you have identified the courses you wish to take, you'll need to enter your selections via the community portal. If you do not have a community portal account, you'll need to obtain one prior to being able to schedule. [Students who do not obtain a community portal account will be able to make their course selections after the online selection ends.]

Detailed information on how to select your courses is provided in the High School portion of the district web site ([www.mtwp.net](http://www.mtwp.net)) under Course Selection.

## COURSE OFFERINGS & ALTERNATE SELECTIONS

The listing of a specific course in this planning guide does not guarantee that it will be taught each school year. Administration determines whether or not a course will be offered based upon the total course enrollment, the type of course involved, and available staffing. Even if a course is offered, students are not guaranteed enrollment. Students may have conflicts in their schedule or the capacity of a course may be reached. Consequently it is very important that students select alternate choices to maximize the chance that they will have a complete schedule.

## VIRTUAL HIGH SCHOOL COURSES

The High School offers a number of courses in a virtual format. The courses offer the students the advantage of 24/7 access to course lessons, activities and assignments, increased time to read lessons and work on assignments, self-pacing within units/modules, individualized assistance and feedback from instructors, increased self-discipline, improved organizational skills, improved time management, and greater independence. Selecting these courses will also allow a student to exceed the typical seven credits that can be earned during a school year.

Virtual courses are currently offered in Health, Family and Consumer Management, and in the Social Studies Department. Students wishing to select a virtual course should select the course whose course id ends in “vt”.

## SCHEDULE CHANGES

Students must carry at least six credits each school year. Any changes to student schedules must maintain a minimum of six credits. [Exception: Seniors must carry at least five credits.]

### ***Changes Before School Begins:***

1. Students will complete their initial course selections via the community portal. After course selection is closed on the portal, all changes will need to be requested through the guidance office.
2. Students may request changes to their course selections up until the ***end of the school year***.
3. Students will have access to their actual course schedules in mid-August. Students wishing to make changes to their schedule at this time may be able to do so by coming to the guidance office during the drop-add period occurring approximately two weeks prior to the start of the school year.

Requests to change schedules in an effort to have certain teachers or to have classes during certain periods of the day will not be honored. Exceptions to this rule will only be made under circumstances where a student previously had the teacher and was unsuccessful in the class (a 70% or below), or the student is scheduled to have the same teacher for a third year.

### ***Changes Once School Begins:***

4. Students may drop or add any course through the first week of the school year (or the 1<sup>st</sup> week of the 2<sup>nd</sup> semester for 2<sup>nd</sup> semester courses). Students adding a course once it has already begun are responsible for making up any activities missed prior to enrollment. Students are not permitted to add a course after the first week of the term.
5. Students may drop a course up until report cards are issued for the 1<sup>st</sup> marking period (or end of the 3<sup>rd</sup> marking period for 2<sup>nd</sup> semester courses). Students wishing to drop a course after this time will have the course remain on their permanent record with a grade of WP (Withdraw Passing) or WF (Withdraw Failing) based upon their performance to that point.
6. Students may request a level change (Level 1/ College Prep/Honors) through guidance with administrative approval. The change will then be made if mutually agreed upon by the teacher, parents, and students. If there is not an agreement, a principal will make the final decision.

## SUGGESTED FRESHMAN GUIDELINES

### 1. A freshman schedule must include between six and seven credits.

#### **Core Courses (4 credits):**

English (full year – 1 credit)  
Social Studies (full year – 1 credit)  
Science (full year – 1 credit)  
Mathematics (2 semester courses – 1 total credit)

#### **Elective Courses (1 ½ - 2 ½ credits):**

World Language (full year – 1 credit)  
and/or  
Family & Consumer Science Electives,  
Technology Electives, Business Electives, Art  
Electives, Music Electives

#### **Additional Required Course (1/2 credit):**

Physical Education (semester – ½ credit)

### 2. English, Mathematics, Science, and Social Studies:

Your eighth grade teachers will be recommending your selection in these core areas based upon your performance at the middle school. If you have questions about their recommendation or would like to elect a different course you should talk with your teacher and guidance counselor.

### 3. World Languages:

Taking Chinese 1, French 1, 2, Spanish 1, 2 or German 1, 2 is recommended for college preparatory students. Students with an aptitude for world languages should plan four or five years of one world language rather than two years of two world languages. Students are **not** required to take a world language to meet graduation requirements.

### 4. Electives and Alternates:

Wherever possible, the pursuit of electives is encouraged. You should also identify alternate elective choices in case your first choices are not available. Carefully read through the entire planning guide to identify courses that may interest you.

### 5. International Baccalaureate:

Students intending to apply to the International Baccalaureate (IB) program during their junior year should be electing honors courses and year two of their world language. See the International Baccalaureate section of this guide for more information.

### 6. Career and Technology Center (CTC):

The CTC programs are options for junior and senior students. The CTC provides students with practical training in a variety of careers that allow students to move into the workforce upon graduation. Additionally, most programs at the CTC include collegiate level course work that is transferred to colleges and universities if the student prefers that route over entering the workforce. Additional information about the CTC is available in this planning guide, on the course selection website, and at [www.lcctc.org](http://www.lcctc.org). Students planning to attend the CTC should consult with their counselor to ensure that they have chosen all the appropriate courses.

### 6. 4-Year Plan:

Consider writing out all the courses you think you'd like to take for the next four years. Many courses are only offered in alternate years and many programs have prerequisites that you will need to complete before taking other courses. By putting together a four year plan it becomes more likely that you will be able to take all the courses you would like to. This is also critical if you are considering attending the CTC or participating in the IB program during your Junior Year.

## SUGGESTED SOPHOMORE GUIDELINES

### 1. A sophomore schedule must include between six and seven credits.

#### **Core Courses (4 credits):**

English (full year – 1 credit)  
 Social Studies (full year – 1 credit)  
 Science (full year – 1 credit)  
 Mathematics (2 semesters – 1 total credit)

#### **Additional Required Courses (1 total credit):**

Physical Education (semester – ½ credit)  
 Family & Consumer Sci. (sem – ½ credit)

#### **Elective Courses (1 - 2 credits):**

World Language (full year – 1 credit)  
 and/or  
 Family & Consumer Science Electives,  
 Technology Electives, Business Electives, Art  
 Electives, Music Electives

### 2. English, Mathematics, Science, and Social Studies:

You should consult with your current teacher to determine the appropriate selection in these areas. Some courses have prerequisite requirements you must meet during your freshman year.

### 3. World Languages:

Continued study of a world language is recommended for college preparatory students. Students with an aptitude for world languages should plan four or five years of one world language rather than two years of two world languages. Students are **not** required to take a world language to meet graduation requirements. Sophomore students are permitted to elect the 1<sup>st</sup> year of a world language.

### 4. Electives and Alternates:

Wherever possible, the pursuit of electives is encouraged. You should also identify alternate elective choices in case your first choices are not available. Carefully read through the entire planning guide to identify courses that may interest you.

### 5. International Baccalaureate:

Students intending to apply to the International Baccalaureate (IB) program during their junior year should be electing honors courses and year three of their world language. See the International Baccalaureate section of this guide for more information.

### 6. Career and Technology Center (CTC):

Sophomore students planning to attend the CTC during their junior or senior year should consult with their counselor to ensure that they have chosen all the appropriate courses to meet entrance requirements. Students typically apply to the CTC during the winter of their sophomore year. Additional information about the CTC is available in this planning guide, on the course selection website, and at [www.lcctc.org](http://www.lcctc.org).

### 7. 4-Year Plan:

Consider writing out all the courses you think you'd like to take over your remaining three years. Many courses are only offered in alternate years and many programs have prerequisites that you will need to complete before taking other courses. By putting together a four year plan it becomes more likely that you will be able to take all the courses you would like to. This is also critical if you are considering attending the CTC or participating in the IB program during your Junior Year.

### 8. Early Graduation/Early College Attendance Options:

Students who earn more than the required number of credits during their first three high school years may be eligible to graduate from high school early or to attend college part-time or full-time during their Senior Year. Students who are interested in this option should see the Early Graduation/Early College Attendance section in the Planning Guide and consult with their guidance counselor.

## SUGGESTED JUNIOR GUIDELINES

### 1. A junior schedule must include between six and seven credits.

#### **Core Courses (4 credits):**

English (full year – 1 credit)  
Social Studies (full year – 1 credit)  
Science (full year – 1 credit)  
Mathematics (2 semesters – 1 total credit)

#### **Additional Required Courses (1 total credit):**

Physical Education (semester – ½ credit)  
Health (semester – ½ credit)

#### **Elective Courses (1 - 2 credits):**

World Language  
and/or  
Family & Consumer Science Electives,  
Technology Electives, Business Electives, Art  
Electives, Music Electives

### 2. English, Mathematics, Science, and Social Studies:

You should consult with your current teacher to determine the appropriate selection in these areas. Some courses have prerequisite requirements you must meet during your sophomore year.

### 3. World Languages:

Continued study of a world language is recommended for college preparatory students. Students with an aptitude for world languages should plan four or five years of one world language rather than two years of two world languages. Students are **not** required to take a world language to meet graduation requirements.

### 4. Electives and Alternates:

Wherever possible, the pursuit of electives is encouraged. You should also identify alternate elective choices in case your first choices are not available. Carefully read through the entire planning guide to identify courses that may interest you.

### 5. Career and Technology Center (CTC):

Juniors who have already been accepted into a cluster program should select an English 11 course, a U.S. History course, 2 semesters of Mathematics (generally Algebra 2), Contracted Physical Education, and also select Half-Day CTC Program. Students should also consult with their counselor to ensure that they have completed all requirements for graduation. Additional information about the CTC is available in this planning guide, on the course selection website, and at [www.lcctc.org](http://www.lcctc.org).

### 6. 4-Year Plan:

Consider writing out all the courses you think you'd like to take over your remaining two years. Many courses are only offered in alternate years and many programs have prerequisites that you will need to complete before taking other courses. By putting together a four year plan it becomes more likely that you will be able to take all the courses you would like to.

### 7. Early Graduation/Early College Attendance Options:

Students who earn more than the required number of credits during their first three high school years may be eligible to graduate from high school early or to attend college part-time or full-time during their Senior Year. Students who are interested in this option should see the Early Graduation/Early College Attendance section in the Planning Guide and consult with their guidance counselor.

## SUGGESTED SENIOR GUIDELINES

### 1. A senior schedule must include between five and seven credits.

#### **Core Courses (2 credits):**

English (full year – 1 credit)  
Social Studies (2 semesters – 1 total credit)

#### **Additional Required Courses ( $\frac{1}{2}$ credit):**

Physical Education (semester –  $\frac{1}{2}$  credit)

#### **Elective Courses ( $2\frac{1}{2}$ - $4\frac{1}{2}$ credits):**

World Language  
and/or  
Family & Consumer Science Electives,  
Technology Electives, Business Electives, Art  
Electives, Music Electives

### 2. English, Mathematics, Science, and Social Studies:

Seniors students generally must select courses to complete their 4<sup>th</sup> English and Social Studies credit. If students have already completed three credits in Mathematics and/or Science they need not select any courses in those areas; however, students planning to attend college after graduation are encouraged to complete four years of Mathematics and Science.

### 3. World Languages:

Continued study of a world language is recommended for college preparatory students. Students with an aptitude for world languages should plan four or five years of one world language rather than two years of two world languages. Students are **not** required to take a world language to meet graduation requirements.

### 4. Electives and Alternates:

Wherever possible, the pursuit of electives is encouraged. You should also identify alternate elective choices in case your first choices are not available. Carefully read through the entire planning guide to identify courses that may interest you.

### 5. Career and Technology Center (CTC):

Seniors who have already been accepted into a full-day program should select Contracted Physical Education and also select Full-Day CTC Program. Students should also consult with their counselor to ensure that they have completed all requirements for graduation.

### 6. Internships:

Seniors who wish to gain experience in a certain occupational field are strongly encouraged to select an Internship as one of their course selections. Students can earn  $\frac{1}{2}$  credit for logging 60 hours during a semester. See the Business section of the planning guide for more information.

### 7. College Coursework:

Students interested in pursuing college coursework during their senior year should see the Early Graduation and Early College Attendance section of the planning guide. College courses may be used to meet the senior five credit requirement.

### 8. Senior Privileges:

Senior students can take advantage of a variety of privileges so long as they maintain certain attendance and grade requirements. Students can get more information about senior privileges in the student handbook.



## HOW TO UNDERSTAND COURSE DESCRIPTIONS

All courses are described in paragraph form on the following pages. Below is an example of how to interpret the additional information associated with a course description. This information is very helpful when deciding who may take the course and the credit value assigned to each course.

### EXAMPLE:

#### Honors Global Perspectives (Grades 10/11/12) #0133

(a)	(b)	(c)
1/2 credit	weight 1.05	5 periods (S)
(d)	(e)	(f) (g)
<i>Prerequisite: successful completion ....</i>		
(h)		

- (a) Course title
- (b) Usual student grade level
- (c) Course number
- (d) Credit earned by successfully completing the course
- (e) Course weights are 1.05 or 1.10. If no weight is listed, the course weight is 1.
- (f) Number of periods per week the class meets
- (g) S indicates the course is one semester in length, FY indicates the course is for the full year
- (h) Prerequisite describes requirements that must be satisfied before taking the course

The listing of a specific course in this planning guide does not guarantee that it will be taught each school year. Administration determines whether or not a course will be offered based upon the total course enrollment, the type of course involved, and available staffing. Even if a course is offered, students are not guaranteed enrollment. Students may have conflicts in their schedule or the capacity of a course may be reached. Consequently it is very important that students select alternate choices to maximize the chance that they will have a complete schedule.

Curriculum revision is an ongoing process with students, faculty and administrators making recommendations for curriculum additions periodically. Therefore the course offerings may be modified after this guide is published and before student schedules are generated. When possible, students will be notified of these changes so that selections can be modified. **The Board of School Directors makes the final determination on the curriculum offered by the school district.**

## ART COURSES

### **Foundations of Fine Art** (Grade 9) #ART011

*Formerly titled: Foundations Art 1*

½ credit

5 periods (S)

This introductory elective course will increase a freshman's understanding of the elements of fine art and the principles of design, covering a broader range of topics and skills than the Design Foundations course. Foundations is a studio-based art course that gives students an early opportunity to evaluate their interests in the visual arts. Students may enjoy this first experience simply as an enrichment course or as the beginning of a four-year high school journey in the fine arts. Most art students would agree that the freshman year is the best time to explore the high school fine arts program. *This course is designed for the high school freshman.*

### **Foundations of Design** (Grades 10/11/12) #ART012

*Formerly titled: Design Foundations*

½ credit

5 periods (S)

This semester elective course will provide the student with an applied arts, rather than a fine arts background, in two- and three-dimensional design. This course will also better prepare students for Ceramics, Photography, Graphic Communications, Architectural Drawing and Contemporary Crafts.

### **Art 1** (Grades 10/11) #ART021

1 credit

5 periods (FY)

This elective course provides the student with an opportunity to explore various media. Students are encouraged to creatively solve art and design problems. Drawing, painting, printmaking, mixed media, film, and sculpture are definitely areas of exploration. Sketchbook assignments are important to the course. Art history and student research in art history are incorporated covering Prehistoric Art through the Renaissance. Students will also learn the principles of art criticism.

### **Art 2** (Grades 11/12) #ART022

1 credit

5 periods (FY)

**Prerequisite:** *a minimum grade of 80% in Art 1.*

This more serious-level course builds upon experiences learned in Art 1 and provides more in-depth exploration and personal expression. Complex problems in drawing, painting, printmaking, mixed media, film and sculpture become more challenging at this level. Sketchbook assignments are frequently required. Western art history covered will include Baroque to Post-Modern.

### **Ceramics 1** (Grades 10/11/12) #ART031

½ credit

5 periods (S)

This course will give students opportunities in basic construction yet will allow personal expression within assignments. Sketchbooks are required as a tool in this artistic process. Students will develop an appreciation of ceramic art through discussion and analysis of each other's work, as well as, ceramics in a historical context. Wheel throwing skills begin in this course.

## **Ceramics 2, 3, 4** (Grades 11/12) #ART032/ART033/ART034

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 80% in previous Ceramic course.

These advanced courses encourage students to further their ceramic knowledge and creativity through more technically and contextually challenging assignments. Students are expected to bring their prior knowledge learned in Ceramics. Sketchbooks are required. Sculptural and functional work is the focus of this course. Students' wheel throwing skills advance in this course.

## **Crafts 1** (Grades 11/12) #ART041

*Formerly titled: Contemporary Crafts*

½ credit

5 periods (S)

This course encourages students to investigate a variety of craft media used in construction in both functional and decorative contemporary objects. Media may include clay, glass, textiles, metals, paper, organics and wood. Techniques of modern fine arts craftsmen are examined, discussed and explored. Sketchbook and journaling assignments are required. **There will be a \$20.00 lab fee for specialized craft materials.**

## **Crafts 2, 3** (Grades 11/12) #ART042/ART043

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 80% in previous Crafts course.

This course is a continuation of individual investigation of contemporary craft media and techniques with emphasis upon personal expression of ideas. Advanced Crafts curriculum is designed for highly motivated and hard working art students who are self-starters, willing to problem solve and are able to stay focused on long-term goals and works of art on a more independent level. Exploration of teacher and student agreed upon themes, advanced techniques and media manipulation will be expected. **There will be a \$20.00 lab fee for specialized craft materials.**

## **Sculpture 1** (Grades 10/11/12) #ART051

½ credit

5 periods (S)

This course will introduce students to a variety of materials, techniques and styles in Sculpture. Students will demonstrate their understanding of form and space through hands on units of study, which examine famous sculptors and their works of art. The concepts of temporary as well as permanent sculpture will be discussed in relation to the materials used by artists. Students will understand how sculptures are displayed in various settings. Some locations discussed will be the National Gallery of Art Sculpture Garden, Grounds for Sculpture, and many other public spaces such as airports, train & bus stations, sports complexes, etc.

## **IB Theatre** (Grade 11/12) #IBO611

1 credit

weight 1.10

5 periods (FY)

Students interested in performing arts should consider this course. The course description can be found in the International Baccalaureate section of the guide. Students wishing to elect this course can find the course in the elective English area of the selection sheet.

## **IB Visual Art** (Grade 11/12) #IBO613

1 credit

weight 1.10

5 periods (FY)

\* This course still requires MTSD Board Approval. If approved, it will be offered for the 1<sup>st</sup> time during the 2012-13. Further information about the course can be found in the IB section of the planning guide.

## BUSINESS COURSES

### **Introduction to Business** (Grades 9/10) #BUS011

½ credit

5 periods (S)

This course has been designed to introduce students to the functional areas of business including, but not limited to: accounting, financial literacy, entrepreneurship, marketing, and computer skills using Microsoft Office Suite focusing on Word, PowerPoint, and Excel. In addition, students will be using the latest technology to complete real-world business projects. This course is perfect for students who are planning to take future courses in business as well as students who would just like to increase their overall business knowledge. Every aspect of this course has *real-life application* for all students.

This course is **not** a prerequisite for enrollment in other business courses.

### **Accounting 1** (Grades 10/11/12) # BUS031

1 credit

5 periods (FY)

Accounting 1 introduces the student to the orderly procedures of the accounting cycle and to specific problem solving within that cycle. It provides a background into the financial operation of a business. Emphasis is placed on the analysis of transactions for sole-proprietorship businesses. Students will be introduced to computerized accounting and use accounting software during the course. This is a valuable course for anyone planning to enter the business world after high school or college. It is also profitable for anyone considering a career in accounting. Two accounting courses are normally required for graduation if a college major in a business associated field is chosen. One third of all college majors end up in a field associated with business, such as marketing/sales, banking, insurance, real estate, law, financial management or accounting.

### **Accounting 2** (Grades 11/12) # BUS032

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** a minimum grade of 70% in Accounting 1.

This course concentrates on the various types of accounting systems such as partnerships and corporate accounting, and the systems and controls used in accounting. Included in this course are procedures of accounting for taxes, notes and drafts as well as the study and use of computerized accounting. Students will complete a simulation at the end of the course using both computerized and manual accounting concepts learned during the year.

### **Accounting 3** (Grade 12) # BUS033

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** a minimum grade of 70% in Accounting 2 and a teacher recommendation.

Students will meet five times per week to utilize the computer, which will be their guided instructor throughout the course. Students will work at their own pace but will be required to meet teacher-appointed deadlines. Topics covered will be procedures used in the accounting systems of departmentalized, branch and manufacturing businesses, and not-for-profit organizations; analysis and interpretation of financial statements; and the role the computer plays in maintaining accounting records. Students will master and use the numeric keypad.

### **Marketing (Grades 10/11/12) #BUS041**

½ credit

5 periods (S)

Marketing is one of the largest and most exciting careers in business today. It is the business function that identifies customer needs and wants, determines which target markets the organization can serve best, and designs appropriate products, services, and programs to serve these markets. It guides the entire organization. This class has been developed to help students learn basic marketing skills and concepts with emphasis on selling, promotion, product/service management, pricing and distribution. Students will be introduced to real-world marketing activities by participating in authentic projects. Students will learn the fundamental marketing functions, analyze ethical and legal issues, recognize how technology is used in marketing, and acquire an in-depth knowledge on marketing-information, product/service management, advertising and selling functions.

### **Sports and Entertainment Marketing (Grades 11/12) #BUS042**

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Marketing.*

Sports and Entertainment Marketing is a multi-billion-dollar industry that has a definite impact on the economy and is rapidly growing. Whether it's the family vacation centered on a soccer tournament or the Orange Bowl for a national football championship, large sums of money are spent on sporting events and entertainment related products and services. In this class you will explore the intriguing world of sports and entertainment in the American culture. Sports and Entertainment Marketing is an extension of the Marketing course in which students will apply their introductory knowledge of marketing to these two specific industries. This course would interest those considering careers in marketing and advertising.

### **Entrepreneurship (Grades 11/12) #BUS046**

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Accounting 1 or Marketing or teacher recommendation.*

Have you ever wondered what it is like to run your own business? Do you dream of becoming an entrepreneur some day? Are you interested in pursuing a business degree in post-secondary education? Then this is the class for you! Besides classroom instruction, you will gain valuable "hands-on" experience by helping to manage and operate the Manheim Township High School Store. You will participate in the financial, management and sales/marketing teams working in both the classroom and the school store. From the start of the class, you will learn to develop business plans, hire and train employees done in collaboration with the full-time Learning support class, order, price, and stock inventory, choose and work with vendors, keep financial records, perform inventory audits, manage and provide customer service, advertise and promote the school store, plus more! Come and be a part of this unique learning experience,

### **Financial Literacy (Grades 11/12) #BUS048**

½ credit

5 periods (S)

**Prerequisite:** *It is recommended that students have successfully completed Accounting 1 and/or Introduction to Business.*

The statistics are staggering! If you DO NOT know what to do with your money, except spend it, this class is for you! Financial Literacy enables teenagers to understand vital personal finance, saving, and investing principles — knowledge that will empower them for a future of successful financial management. Students will learn financial skills using real-world problems and activities. Topics to be covered include: goal setting, basic life planning, money basics, credit and debt, career paths, educational planning, taxes and payroll deductions, the world of banking, living on a budget, spending decisions, automobiles, housing and home ownership,

insurance, retirement planning, and saving and investing. The goal is to equip students with skills and knowledge needed to make sound financial decisions for life.

**Internship (Grade 12) #BUS061**

½ credit

60 total hours (S)

An internship is an unpaid work-related experience for senior students who wish to develop experience in a certain occupational field. Students who log 60 hours during a semester will earn a ½ credit. A flexible schedule (e.g. early release, late arrival, etc.) will be available to students participating in the internship. Students will record a weekly journal reflecting their internship experiences. Only students who have previously applied to participate in the Internship program should elect this course.

**Cooperative Education – 10 Hour (Grade 12) #BUS062**

**Cooperative Education – 15 Hour (Grade 12) # BUS063**

1 or 2 credits

10/15 hours per week (FY)

Cooperative Education (Co-op) is a school-to-career program of study designed to assist students in making a smooth transition into the world of work. This course offers students opportunities to experience the work world firsthand while still in school and obtain credit for their efforts. During a normal school day, students selecting Cooperative Education will have school-based instruction, for the first six periods of the day, and employability skills training and work release time during period seven. This program prepares students for paid work-based experiences with Lancaster County businesses and/or industries outside the traditional classroom setting in a matched job that links the student's academic and career objectives. Learning is supervised and monitored by a certified cooperative education teacher/coordinator and an employer/mentor who assesses the student's performance while on the job. Students who work ten hours per week will earn one credit, and those who work 15 hours a week will earn two credits.

## **CAREER & TECHNOLOGY CENTER**

Over forty unique programs of study are available to students through the Lancaster County Career and Technology Centers. Through these programs students can receive specific training in a field of interest and earn required certifications necessary to work in the field. Additionally, many of the programs include dual enrollment courses where students can earn college credit while completing their Mathematics and English courses at the CTC.

Manheim Township students participate in ½ day programs as a junior and full day programs as a senior. If you are interested in learning more about the Career and Technology Center programs, see the supplemental Pathways materials on the Course Selection of the website, visit [www.lcctc.org](http://www.lcctc.org), or make an appointment with your counselor. For those viewing this document online, the individual programs are linked to the Career and Technology Center webpages that describe the programs.

The application process for the CTC typically occurs in January of students' sophomore and junior years. If any rising junior or senior is interested in attending the CTC but has not yet applied, they should contact their counselor immediately to see about any remaining openings. Rising freshman and sophomores should make note of the application timeframe and begin talking with their counselor to ensure they are on track for admission.

**The available CTC Programs are listed on the following page.**

### **Half-Day CTC Programs (Grade 12) #CTC001**

3 credits

appx. 3 1/2 hours per day (FY)

Students who have already applied to the Half-Day programs should select CTC001 during the course selection process while also selecting an English, Social Studies, Mathematics, and the CTC PE Contract course. The high school will enter the student's specific program numbers in the fall when students begin attending. The CTC offers the following half-day programs for our students:

[Construction Cluster](#)

[Culinary Cluster](#)

[Health Care Cluster](#)

[Manufacturing Cluster](#)

[Transportation Cluster](#)

[Visual Communications Cluster](#)

### **Full-Day CTC Programs (Grade 12) #CTC002**

6 credits

appx. 6 1/2 hours per day (FY)

Students who have already applied to the Full-Day programs should select CTC002 during the course selection process while also selecting the CTC PE Contract Course. The high school will enter the student's specific program numbers in the fall when students begin attending. The CTC offers the following full-day programs for our students:

#### **Advanced Manufacturing Center**

[Mechatronics Engineering Technology](#)

[Sheet Metal Technology](#)

[Welding Technology](#)

#### **Agriscience Center**

[Environmental Horticulture](#)

[Large Animal Science](#)

[Veterinary Assistant](#)

#### **Consumer Services Center**

[Cosmetology](#)

[Early Childhood Education](#)

#### **Construction Technologies Center**

[Architectural CAD – Design](#)

[Cabinet Making & Millwork](#)

[Commercial Construction/Management](#)

[Electrical Construction Technology](#)

[HVAC/R](#)

[Masonry](#)

[Painting, Ceramic Tile & Vinyl](#)

[Plumbing](#)

[Residential Carpentry](#)

#### **Culinary Arts Center**

[Baking & Pastry Arts](#)

[Culinary Arts/Chef](#)

[Event Planning & Tourism Services](#)

[Management](#)

#### **Health Care Center**

[Clinical Care Assistant \(Hospital\)](#)

[Dental Assistant](#)

[Medical Administrative Assistant](#)

[Medical Assistant](#)

[Nursing Assistant/Home Health Aide](#)

#### **Information Technology Center**

[Computer Systems Technology](#)

[Web Design](#)

#### **Protective Services Center (at the Lancaster County Public Safety Training Center)**

[Emergency Medical Services](#)

[Fire Protection](#)

[Law Enforcement, Corrections & Security](#)

#### **Transportation Technologies Center**

[Automotive Mechanics](#)

[Automotive Technology](#)

[Collision Repair](#)

[Diesel Equipment Technology](#)

[Highway Construction/Heavy Equipment](#)

[Operation & Maintenance](#)

[RV & Outdoor Power Equipment](#)

#### **Visual Communications Center**

[Commercial Art](#)

[Digital Design/Print Media](#)

[Photography & Digital Imaging](#)



## COMMUNITY SERVICE

### Community Service (Grades 9/10/11/12)

¼ credit per 25 hours of community service

Manheim Township high school wishes to encourage and recognize students who are actively involved in community service. Students who are engaged in community service can be recognized with a ¼ credit for every 25 hours of service they perform. While **this credit will not count towards graduation requirements**, it will appear on students' official transcripts as if it were an elective course. Credit will only be awarded for hours served during the high school years. Interested students should see their guidance counselor for more information and/or an application. The College and Career Center maintains a list of possible service opportunities. A flexible schedule (e.g. early release.) can also be made available to seniors wishing to pursue community service hours.

## ENGLISH COURSES

### REQUIRED COURSEWORK

#### **Fundamentals of English** (Grades 9/10/11/12) #ENG001

1 credit

5 periods (FY)

Fundamentals of English is designed to assist students with reading comprehension and written language with the goal of providing students with the fundamental skills necessary to move into and be successful in the regular education program. Students will develop skills and receive instruction as appropriate in grammar, mechanics, vocabulary, structured sentence writing, structured paragraph writing, speaking, composition, and research (including completion of a research project and paper). Students will also read selections from the approved canon.

After completing Fundamentals of English, students who have not yet mastered the content necessary to move into English 9, 10, 11, or 12 will continue with another year of Fundamentals of English, where they can further develop skills in their area of need.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

#### **English 9** (Grade 9) #ENG011

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students identified to take Strategic Literacy 1 and/or scored Below Basic on the Reading or Writing PSSA in 8<sup>th</sup> Grade.

Freshman English is designed to offer intensive help to students struggling with grade level proficiencies in reading, writing, speaking and listening. The class is designed to meet the needs of students who are considering advancing to college preparatory courses in the future or considering placement in the Work Prep program in grade 10. Activities in grammar, spelling, vocabulary, usage and composition will be an integral part of the course and will be designed to meet the needs of the students in the class. Required reading will be in accordance with the district-approved literary canon. Students will be introduced to the research process and will be required to complete an informative research project.

#### **College Prep English 9** (Grade 9) #ENG012

1 credit

5 periods (FY)

College Prep Freshman English serves as a transitional step from the development of basic skills in reading, writing, speaking and listening in the middle school to the application of those skills in appreciation of all literary forms in senior high school. The course is intended for freshmen who are considering college enrollment. Activities in grammar, spelling, vocabulary, usage and composition will be an integral part of the course and will be designed to meet the needs of the students in the class. Required reading will be in accordance with the district-approved literary canon. Students will be introduced to the research process and will be required to complete an informative research project.

#### **Honors English 9** (Grade 9) #ENG013

1 credit

weight 1.05

5 periods (FY)

The Honors English 9 course is designed for those students who already possess interest and motivation in the discipline of language arts. As in all English courses, activities in grammar, vocabulary, usage and composition are an integral part of the curriculum. In this course, however, the study of language is integrally related to the

study and analysis of literature. Students who choose this level of study will most likely proceed through the Honors courses to Advanced Placement courses in the junior and senior years although other acceptable options are available at all grade levels. Students at this level must complete an extensive, informative research project.

### **English 10 (Grade 10) #ENG021**

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students who previously took Strategic Literacy 1 or took English 9 (ENG011) and earned less than 80%.

Sophomore English offers intensive help to students struggling with grade level proficiencies in reading, writing, speaking and listening. The class is designed to meet the needs of students who are considering advancing to college preparatory courses in the future or considering placement in the Work Prep program in grade 11. Sophomore English is an overview of world literature from either a genre or world literature perspective. In the former, emphasis is placed upon short stories, non-fiction, poetry, drama and the novel; in the latter, emphasis is placed upon a survey of literature from various cultures, past to present. Continued instruction in grammar, spelling, vocabulary, usage and composition will be an integral part of the course. Required reading will be in accordance with the district-approved literary canon. Students will be required to complete a persuasive research project.

### **College Prep English 10 (Grade 10) #ENG022**

1 credit

5 periods (FY)

College Prep Sophomore English is an overview of world literature from either a genre or world literature perspective. In the former, emphasis is placed upon short stories, non-fiction, poetry, drama and the novel; in the latter, emphasis is placed upon a survey of literature from various cultures, past to present. The course is intended for sophomores who are considering enrolling in college after high school. Continued instruction in grammar, spelling, vocabulary, usage and composition will be an integral part of the course. Reading will be in accordance with the district-approved literary canon. Students complete a persuasive research project.

### **Honors English 10 (Grade 10) #ENG023**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of College Prep English 9 or Honors English 9. Students who select this course after College Prep English 9 are recommended to have had a minimum grade of 85%.

The Honors English 10 course is designed for those students who have succeeded in their freshman year of study and want to continue with a rigorous program of English instruction. Grammar, vocabulary, usage and composition are taught on an as-needed basis, assuming that students in this course already possess a working knowledge of the language. Literature study includes selections from the world's masterpieces as well as a number of required full-length texts. Students who successfully complete this course will most likely opt for Advanced Placement Language and Composition in their junior year although other acceptable options are available at all grade levels. Students will complete an extensive persuasive research project.

### **English 11 (Grade 11) #ENG031**

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students who previously took Strategic Literacy 1 or took English 10(ENG021) and earned less than 80%.

Junior English offers intensive help to students struggling with grade level proficiencies in reading, writing, speaking listening. The class is designed to meet the needs of students who are considering advancing to

college preparatory courses in the future or considering a senior year placement at the Career and Technology Center. Junior English is primarily a course in the study of American literature and in composition based on literary study. Grammar, spelling, vocabulary, usage and composition are taught as needed and as they relate to the literature under consideration. Required reading will be in accordance with the district-approved literary canon. Students will be required to complete a research project.

### **College Prep English 11 (Grade 11) #ENG032**

1 credit

5 periods (FY)

College Prep Junior English is primarily a course in the study of American literature and in composition based on literary study. The course is intended for juniors who are considering enrolling in college after high school. Grammar, spelling, vocabulary, usage and composition are taught as needed and as they relate to the literature under consideration. Required reading will be in accordance with the district-approved literary canon. Students will be required to complete a research project.

### **Honors English 11 (Grade 11) #ENG033**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *successful completion of College Prep English 10 or Honors English 10. Students who select this course after College Prep English 10 are recommended to have had a minimum grade of 85%.*

The Honors English 11 course is designed for those students who have succeeded in their sophomore year of study but who do not wish to attempt Advanced Placement Language and Composition. Grammar, vocabulary, usage and composition are taught on an as-needed basis, building upon the instruction provided in the freshman and sophomore years. Literature study includes selections from the masterpieces of American literature, as well as a number of required full-length texts. Students who successfully complete this course may opt for Advanced Placement Literature and Composition, Western Literature and Thought, or Honors English 12 in their senior year. Students must complete an extensive research project.

### **Advanced Placement English Language and Composition (Grade 11) #ENG037**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *10<sup>th</sup> grade teacher recommendation and students who select this course are recommended to have had a minimum grade of 85% in Honors English 10.*

Advanced Placement English Language and Composition is offered in lieu of English 11. The course is a seminar that encourages independent thinking and research through discussion and writing about representative works of American literature. The writing component emphasizes the expository, analytical and argumentative writing that forms the basis of academic and professional communication as well as the personal and reflective writing that fosters the development of writing facility in any context. Its purpose is to enable students to read complex texts with understanding and to write prose of sufficient richness and complexity to communicate effectively with mature readers. Many colleges award credit and/or placement if a student scores satisfactorily on the Advanced Placement Examination, which is given nationwide in May. Students must complete two summer reading/writing assignments before the beginning of the course.

### **IB English Year 1 (Grade 11) #IBO111**

1 credit

weight 1.10

5 periods (FY)

Students participating in the International Baccalaureate Diploma Program during their junior year will satisfy their 11<sup>th</sup> grade English graduation requirements through the completion of this course. This course may also be elected by students who are not participating in the International Baccalaureate Diploma Program if they satisfy the entrance requirements for the program. The course description can be found in the International Baccalaureate section of the planning guide.

### **English 12 (Grade 12) #ENG041**

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students who previously took Strategic Literacy 1 or took English 11 (ENG031) and earned less than 80%.

Senior English offers intensive help to students struggling with grade level proficiencies in reading, writing, speaking and listening. The class is designed to meet the graduation requirements of students who are not intending immediate enrollment in college after high school. Senior English is primarily a course in the study of English literature and in composition based on literature studies. Grammar, spelling, vocabulary, usage and composition are taught as needed and as they relate to the literature under consideration. Required reading will be in accordance with the district-approved literary canon. Students in this course must complete a research project.

### **College Prep English 12 (Grade 12) #ENG042**

1 credit

5 periods (FY)

College Prep Senior English is primarily a course in the study of English literature and in composition based on literature studies. The course is intended for seniors who are planning to enroll in college. Grammar, spelling, vocabulary, usage and composition are taught as needed and as they relate to the literature under consideration. Required reading will be in accordance with the district-approved literary canon. Students in this course must complete a research project.

### **Honors English 12 (Grade 12) #ENG043**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of College Prep English 11 or Honors English 11. Students who select this course after College Prep English 11 are recommended to have had a minimum grade of 85%.

The Honors English 12 course is designed for those students who have succeeded in their junior year of study but who do not wish to attempt Advanced Placement Literature and Composition or Western Literature and Thought. Grammar, vocabulary, usage and composition are taught on an as-needed basis, assuming that students already possess a working knowledge of the language. Literature study includes selections from the masterpieces of British Literature as well as a number of required full-length texts. Students who successfully complete this course will be prepared for a rigorous college freshman composition/literature course. Students must complete an extensive research project.

### **Honors Western Literature and Thought (Grade 12) #ENG045**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** 11<sup>th</sup> grade teacher recommendation and a minimum grade of 85% in Honors English 11 or 85% in College Prep English 11.

This course is offered in lieu of regular English 12. The central themes of the course are Westerners' search for meaning through the ages, and the vision of tragedy with most emphasis on the Hebrews, Greeks, Middle Ages, the Renaissance and 20<sup>th</sup> century culture. The purpose of all phases of the course—lecture, reading, discussion, composition—is to enable the student to realize through an acquaintance with the ideas, art, architecture, literature and music of the West, that other people in other times have asked “Who am I? From where have I come? What is the meaning of life? What have I created?” In addition, emphasis is placed on the students' achieving a greater understanding of literature, music and art as creative forms. Selections from the Old Testament, Greek plays, *King Lear*, *Macbeth*, *Waiting for Godot* and *England in Literature* are some of the works read. Students who have a strong interest in the arts, enjoy challenging reading and can participate confidently in class discussions are well suited for this course. Competent research skills and writing skills are also necessary to succeed.

## **Advanced Placement English Literature and Composition (Grade 12) #ENG047**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** 11<sup>th</sup> grade teacher recommendation and students who select this course are recommended to have had a minimum grade of 85% in Honors English 11, a minimum grade of 85% in English 101 (HACC), or successfully completed AP English Language and Composition.

Advanced Placement English Literature and Composition is offered in lieu of English 12. The course is a seminar that encourages independent thinking and research through discussion and writing about representative works of literature from several genres and periods. As recommended by the College Board Commission on Advanced Placement, the course emphasizes the development of the skills of critical analysis and the appreciation of literature that is rich in language and thought. Many colleges award credit and/or placement for satisfactory scores on the Advanced Placement Examination that is given nationwide in May. Students must complete two summer reading/writing assignments before the beginning of the course.

### **IB English Year 2 (Grade 12) #IBO112**

1 credit

weight 1.10

5 periods (FY)

*While this course will not be offered until the 2012-13 school year, Students participating in the International Baccalaureate Diploma Program during their senior year will satisfy their 12<sup>th</sup> grade English graduation requirements through the completion of this course. This course may also be elected by students who are not participating in the International Baccalaureate Diploma Program if they satisfy the entrance requirements for the program. The course description can be found in the International Baccalaureate section of the planning guide.*

## **ENGLISH LANGUAGE LEARNERS**

**English I** (Grades 9/10/11/12) #ENG081

**English II** (Grades 9/10/11/12) #ENG082

2 credits

5 periods (FY)

**English III/IV** (Grades 9/10/11/12) #ENG083

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students who are currently identified as having Limited English Proficiency. The ELL Teacher will assign the students to one of the four classes depending on the student's needs.

These English classes are specially designed to meet the language arts needs of students whose first language is not English. Students will learn the skills of listening, speaking, reading and writing at the beginning, intermediate and advanced levels and learn to apply these skills to other subject areas. They will also learn English for life skills and American acculturation. **These courses can be used to satisfy the students' English course requirements towards graduation.**

## **ELECTIVE COURSES**

Elective courses may **not** be substituted for the regular English requirements. Elective courses **may** be offered on an alternate-year basis.

**Public Speaking 1** (Grades 10/11/12) #ENG051

*Formerly titled: Fundamentals of Speech*

½ credit

5 periods (S)

This one-semester elective is designed to familiarize students with the most common speech situations and to facilitate students' ability to adjust to a given situation confidently. Through such speech types as the speech of introduction, the speech to inform, the speech to persuade, and the speech to entertain, students are guided to a better and more practical understanding of their speaking potential.

**Public Speaking 2** (Grades 10/11/12) #ENG052

*Formerly titled: Advanced Speech*

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Public Speaking 1 (Fundamentals of Speech).*

This one-semester elective is designed for students who have mastered the fundamentals of public speaking. Activities include practice in persuasion, group dynamics, oral interpretation, the dramatic arts, broadcast journalism and forensics.

**Composition 1** (Grades 9/10/11/12) #ENG055

*Formerly titled: Fundamentals of Composition*

½ credit

5 periods (S)

This one-semester elective is designed for those students who desire to improve their writing skills. Through the use of the writing process, the course will cover the entire writing experience, including invention, planning, drafting, revising, editing, proofreading and publishing. Additional instruction in the usage and mechanics of Standard Written English will be an integral part of the course.

**Composition 2** (Grades 11/12) #ENG056

*Formerly titled: Advanced Composition*

½ credit

5 periods (S)

Advanced Composition is a one-semester elective for students who have mastered the basic skills of grammar and composition and who are ready to write longer, more complex papers. Students will strive for competence in writing well-organized expository, descriptive, narrative and persuasive essays, including the explication of both poetry and prose. Time will also be devoted to mastering those composition skills that students in the class may require. These items may include, but are not limited to, subordination, parallelism, clarity and coherence, sentence variety, transitions within and among paragraphs and standard English usage. **Previous enrollment in Composition 1 is not required.**

**Journalism 1** (Grades 9/10/11/12) #ENG065

*Formerly titled: Fundamentals of Journalism*

½ credit

5 periods (S)

**Prerequisite:** *a minimum 80% average in English 9, 10 or 11. Freshmen will be admitted upon the recommendation of their eighth grade English teacher and a B average in English.*

This introductory course teaches appreciation for newspaper reading and the relevancy of the newspaper as a tool for creating an informed and active citizenry. The content includes use of journalistic language, writing styles and editing techniques in composing news, features, sports and editorials, the design and layout of newspapers, as well as, learning ethical and legal considerations in journalism. The writing students produce will be considered for publication in the student newspaper.

**Journalism 2** (Grades 10/11/12) #ENG066

*Formerly titled: Advanced Journalism 1*

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Journalism 1 (Fundamentals of Journalism) and teacher recommendation.*

In a newsroom-type setting, students will utilize the skills learned in Fundamentals of Journalism to produce the student newspaper. Students will continue to hone their writing, interviewing and photography skills, layout and design techniques, and learn the business, marketing and legal sides of running a newspaper. Advanced skills will be taught, including the use of software programs such as Quark to produce the newspaper and Photoshop to scan and crop photographs.

### **Journalism 3** (Grades 10/11/12) #ENG067

*Formerly titled: Advanced Journalism 2*

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Journalism 2 (Advanced Journalism 1) and teacher recommendation.*

In a newsroom-type setting, students will continue to hone the skills introduced in Fundamentals of Journalism and Advanced Journalism 1 while beginning to assume leadership roles as editors in charge of managing a staff and shepherding regular editions of the newspaper through from conception to distribution.

### **Journalism 4** (Grades 11/12) #ENG068

*Formerly titled: Advanced Journalism 3*

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Journalism 3 (Advanced Journalism 2) and teacher recommendation.*

In a newsroom-type setting, students will solidify their roles as editors in charge of every aspect of newspaper production, including conducting daily and weekly staff meetings and monitoring the financial side of the business. Students will develop and maintain a newspaper website that will compliment the printed version of the student newspaper. Students will work with the Digital Video Production class to make the website multimedia presentation.

### **Creative Writing 1** (Grades 10/11/12) #ENG061

½ credit

5 periods (S)

**Prerequisite:** *a minimum grade of 80% in English 9, 10, or 11 or a teacher recommendation.*

This semester elective is open to students who meet the prerequisites listed below and are enthusiastic about developing their skills as practitioners of the art of creative writing and in understanding their relationship between careful reading and good writing. The course will involve the reading of representative shorter works by established authors to help students develop a critical sense. The main focus of the course will involve writing in a workshop format that will deal with drafting, revising and publishing the students' own works in poetry and fictive prose. Students will be assessed on both their critical and creative performance using pre-established and corrective rubrics as well as the Pennsylvania Writing Assessment Holistic Scoring Guide.

### **Creative Writing 2** (Grades 10/11/12) #ENG062

½ credit

5 periods (S)

**Prerequisite:** *successful completion of Creative Writing 1 or permission of the instructor.*

Students in this course will analyze the "how" of written communication, from literary technique to publication, investigating models of literary technique and effects, and genre structures more intensely than in Creative Writing 1. As a natural extension to Creative Writing 1, this course is writing intensive, and students will be creating and experimenting with the application of literary tools, from technique to structures, to establish a desired effect in mood, tone and overall literary art. Consequently, students will be encouraged to specialize in a genre, conduct guided investigation in published models, self-select reading and produce original works. A substantial portfolio of revised, polished work for entry-level publication is expected.



**Mass Media** (Grades 11/12) #ENG071

½ credit

5 periods (S)

Media no longer just shape our culture; they are our culture. We are exposed to thousands of images and ideas everyday, not only from television but now also from newspaper headlines, magazine covers, movies, websites, video games and billboards. Students in this course will become more intelligent consumers of media by learning to distinguish between questions about everything they watch, hear or read. Students will develop the ability to access, analyze, evaluate and create media in a variety of forms.

**IB Theater** (Grade 11/12) #IBO611

1 credit

weight 1.10

5 periods (FY)

This course is offered through the International Baccalaureate Program and is available to any student who is interested in studying Theatre and/or the performing arts. Students do not need to be pursuing an IB Diploma to elect the course. The course description can be found in the International Baccalaureate section of the planning guide.

## **FAMILY AND CONSUMER SCIENCE COURSES**

### **REQUIRED COURSE**

***Completion of Family and Consumer Management is required for graduation.***

**Family and Consumer Management** (Grades 10/11/12) #FCS011 (Traditional)

**Family and Consumer Management** (Grades 10/11/12) #FCS011VT (Virtual)

½ credit

5 periods (S)

This course is delivered in two formats: traditional classroom and virtual classroom. This **required** semester course will develop life management skills that will enable students to set goals and make intelligent decisions concerning their lives. Students will use real-life scenarios to enhance their ability to use interpersonal communication skills, handle financial situations wisely and implement effective parenting techniques. This course includes: consumer behavior; career exploration; personal finances; relationship skills; positive parenting; child health and safety issues; and life skills development.

### **ELECTIVE COURSES**

**Basic Culinary Arts** (Grade 9) #FCS021

½ credit

5 periods (S)

This one-semester course is designed to provide experience in the culinary field for personal and possible career use. The course emphasizes nutrition, culinary consumer skills and culinary preparation. Included are units on personal nutrition, microwave cooking, grains, pasta, breads and fruits.

**Nutrition American Style** (Grades 10/11/12) #FCS022

½ credit

5 periods (S)

Hoppin' John, Gumbo, Brown Bread and Peanut Brittle. In Lancaster County we know buttered noodles and shoofly pie, but what is the origin of these other foods? As we study American cuisine, students will learn about foods from seven major regions of the United States, what constitutes a healthy diet, the warning signs of diet-related illnesses, and the history and types of ethnic foods indigenous to each region. Throughout the course, students will prepare menus and sample recipes from each region.

**Incredible Edible Science** (Grades 10/11/12) #FCS023

½ credit

5 periods (S)

Introduction to food science principles and food preparation techniques. Emphasis on ingredient functions and interaction; technique, production and sensory evaluation standards, food safety, sanitation and nutrient values. Core components: Food principles; Food preparation terminology and techniques; Ingredient functions and interaction; Product standards and evaluation; Food equipment and utensils; Food storage; Sanitation and safety; Nutrient retention.

**Child Development** (Grades 10/11/12) #FCS030

½ credit

5 periods (S)

This course explores the family dynamics of having children. Prenatal development including birth defects is studied. The course focuses on the physical, intellectual, social and emotional development of the child from birth through age three. Parenting techniques are also explored. Students participate in a simulated parenting role. This course is recommended to students who are interested in pursuing a career in Early Childhood Education, Elementary Education, Child Psychology or related fields dealing with children.

### **Preschool Practicum 1 (Grades 11/12) #FCS031**

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 80% in Child Development.

This course is designed to help students improve their understanding of children through direct interaction in the preschool setting. The students, under the supervision of the high school teacher, teach the preschoolers. Class sessions will be used for theory and instruction, preparation of instructional material, discussion of individual child observations and evaluation. The areas of play, reading, art, music, nutrition and movement in developmentally appropriate curriculum for preschoolers will be emphasized. This course is recommended for students who are interested in pursuing a career in Early Childhood Education, Elementary Education, Child Psychology or related fields dealing with children.

### **Preschool Practicum 2 (Grades 11/12) #FCS032**

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 80% in Preschool Practicum 1.

This class is designed to further a student's knowledge of children through direct interaction with preschoolers in the preschool program. The student will write daily lesson plans to be used with the preschoolers in a specific unit. The student will also be responsible for creating bulletin boards and learning centers. Students will also track one of the children throughout the semester, observing their changes in development.

### **Textile Design (Grades 9/10/11/12) #FCS041**

½ credit

5 periods (S)

This course is designed to follow the journey of textiles from the laboratory and natural settings into the fabrics we use today. Fashion designers and their impacts on style will be explored along with the history of fashion in each decade of the 20<sup>th</sup> century. Design principles including line, proportion, and color will be included to show how textiles create healthy self images. The culmination of the course will include machine construction and traditional handwork construction techniques to create a usable garment or accessory. This course is recommended for students who are interested in fashion design, fashion merchandising and retailing, and theatre and costume design. **Students will need to purchase fabric, thread, yarn or other materials based on their choice of project.**

## **GIFTED & TALENTED PROGRAM**

Student participation in the Gifted & Talented program is determined by the Gifted IEP process. To participate in the courses below students must qualify as Gifted and have an active Gifted Individual Education Program that identifies the goals students will be attempting to achieve through the offerings below.

### **Gifted 9 (Grade 9) #GFT001**

½ credit (Pass/Not Pass)

5 periods (S)

This one-semester elective is designed to give gifted students the opportunity to supplement their education beyond what is offered in typical freshman level honors coursework. Students in this program will explore topics from their traditional coursework at a greater level of depth and thought while also exploring other topics and skills that extend beyond what is offered in the traditional education program. These topics may include but are not limited to: 7 Habits of Highly Effective Teenagers, Debate, Research into Cultures, International Games, and Environmental Concerns. Through these topics students will have the opportunity to develop their skills as identified in their gifted goals while also working to meet objectives that are shared in common by the students. Students will be graded on a Pass or Not Pass basis.

### **Gifted 10 (Grade 10) #GFT002**

¼ credit (Pass/Not Pass)

3 periods (S)

This one-semester elective is designed to give gifted students the opportunity to supplement their education beyond what is offered in typical sophomore level honors coursework. Students in this program will explore topics from their traditional coursework at a greater level of depth and thought while also exploring other topics and skills that extend beyond what is offered in the traditional education program. These topics may include but are not limited to: Parliamentary Procedures and Psychology as it related to giftedness. Through these topics students will have the opportunity to develop their skills as identified in their gifted goals while also working to meet objectives that are shared in common by the students. Additionally, students will complete an independent project in a topic of interest under the close guidance of their gifted teacher. Students will be graded on a Pass or Not Pass basis.

### **Gifted 11 (Grade 11) #GFT003**

### **Gifted 12 (Grade 12) #GFT004**

¼ credit (Pass/Not Pass)

2 periods (S)

This one-semester elective is designed to address the needs of gifted students beyond what is available through the traditional academic program. During this time, students will be engaged in a seminar format where the students and teachers identify topics such as current events, controversial topics, and other issues related to and/or important to young adults. The students will engage in discussion and debate regarding the topics. Through these topics students will have the opportunity to develop their skills as identified in their gifted goals while also working to meet objectives that are shared in common by the students. Additionally, students will complete an independent project in a topic of interest under the close guidance of their gifted teacher. Students will be graded on a Pass or Not Pass basis.

# INTERNATIONAL BACCALAUREATE

The district is offering the International Baccalaureate (IB) Diploma Programme for the first time to 11th graders beginning in 2011-12. The program offers highly motivated students the opportunity to earn an internationally recognized IB Diploma. The International Baccalaureate Organization is a worldwide consortium of schools offering a comprehensive program that emphasizes interdisciplinary learning, rigorous academic standards, international-mindedness, and a holistic approach to student learning. Students who enroll in the program will take an intensive, highly structured curriculum in their junior and senior years. More information about the International Baccalaureate organization is available at [www.ibo.org](http://www.ibo.org). Specific details about the program at MTHS is available at [www.mtwp.net/ib](http://www.mtwp.net/ib).

## Information for Rising 9<sup>th</sup> and 10<sup>th</sup> graders:

While the IB program is exclusively for 11<sup>th</sup> and 12<sup>th</sup> graders, 9<sup>th</sup> and 10<sup>th</sup> graders interested in the program have special scheduling considerations. Students intending to apply to the International Baccalaureate program should prepare themselves during the freshman and sophomore years by enrolling in honors-level and AP coursework. A minimum expectation of students entering the IB program is an average of 85 percent in honors-level/AP courses in each of the disciplines (math, science, social studies, English, world languages, and the arts). Students enrolling in the IB program will need as a prerequisite a minimum of three years of a World Language (German, French or Spanish); meaning they must have taken a language in middle school and continued that study with level 2 and 3 during the freshman and sophomore year respectively. Students interested in pursuing the IB diploma will apply to the program in their sophomore year. The application process is not intended to discourage students from entering IB, but to ensure incoming students understand the rigors, expectations, and intents of the IB program and to assess each candidate's level of preparation for the program. Applications will include a review of student transcripts, teacher recommendations, parental statement of intent, an essay, and an interview with IB faculty.

## Information for Rising 11<sup>th</sup> Graders:

The International Baccalaureate Diploma Programme at Manheim Township High School is a cross-curricular program designed to allow students to earn the IB Diploma. **Students who have applied and been accepted into the MTHS IB Diploma program will be given priority during scheduling; however any student who meets the criteria for entrance into the program may elect IB courses. Non-diploma students should also select a traditional course as an alternate because there will only be a limited number of spots available in the IB courses.** Students accepted into the diploma program are strongly encouraged to consult Mr. Penner regarding their course selections.

## International Baccalaureate Course Offerings

- [IB Theory of Knowledge](#)
- [IB English](#)
- [IB World Languages](#)
  - [IB French](#)
  - [IB German](#)
  - [IB Spanish](#)
- [IB Social Studies \(History\)](#)
- [IB Science](#)
- [IB Mathematics](#)
- [IB "Electives"](#)

### IB Theory of Knowledge - Part 1 (Grade 11) #IBO001

½ credit

weight 1.10

4 periods (S-Spring)

**Prerequisite:** Acceptance into the IB Diploma Programme.

Students pursuing the IB diploma enroll in The Theory of Knowledge course for spring of their Junior year and fall of their Senior year. Theory of Knowledge is central to the educational philosophy of the International Baccalaureate program. It utilizes an interdisciplinary approach with the aim of developing coherence in learning and knowledge. It challenges students to reflect on diverse ways of knowing and areas of knowledge, to understand and empathize with the viewpoints of others, and to consider the role which knowledge plays in a global society. It encourages students to become aware of themselves as thinkers, to consider the complexity of knowledge, and to recognize the need to act responsibly in an increasingly interconnected world.

### **IB Theory of Knowledge - Part 2(Grade 12) #IBO002**

1 credit

weight 1.10

4 periods (S-Fall)

*This course will be offered in 2012-13 for students to complete their IB Theory of Knowledge requirements.*

### **IB English Year 1 (Grade 11) #IBO111**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** Acceptance into the IB Diploma Programme or a minimum grade of 85% in Honors English 10.

Designed for students pursuing the IB diploma, IB English Year 1 can be taken in lieu of the 11<sup>th</sup> Grade English requirement. The course is aimed at developing an understanding of the techniques involved in literary criticism and promoting the ability to form independent literary judgments. To this end, the course will examine a diverse range of literature from various cultures, with an emphasis on English literature. Study will include perspectives on genre, historical context, close reading, and comparative literature. Students will be encouraged to develop their writing voice as they write in response to literature. Attention will be given to compositional style and to the conventions of academic writing. The course involves summer assignments completed prior to junior year.

### **IB English Year 2 (Grade 12) #IBO112**

1 credit

weight 1.10

5 periods (FY)

*This course will be offered in 2012-13 for students to complete their IB English requirements.*

### **IB French Language B Year 1 (Grade 11) #IBO121**

*Replaces Former Course: French 4*

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** Completion of French 3 or demonstration of equivalent proficiency through placement exam.

Designed for students pursuing the IB diploma and other students who are pursuing academic study of World Language, this course represents the fourth course in the French sequence of study. This course prepares students to learn and use French to communicate about a wide variety of personal and social topics through listening, reading, writing, and speaking. Through their use of a second language, students will develop personal understanding of contemporary global issues affecting society. The topics presented in the course are aimed at promoting understanding of a different point of view, enabling students to see themselves as members of a global society, and seeking solutions to issues affecting local and global society. Students will learn to appreciate the different perspectives unique to the French language and culture of French speaking societies.

### **IB French Language B Year 2 (Grade 12) #IBO122**

1 credit

weight 1.10

5 periods (FY)

*This course will be offered in 2012-13 for students to complete their IB French requirements.*

**IB German Language B Year 1 (Grade 11) #IBO131**

*Replaces Former Course: German 4*

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *Completion of German 3 or demonstration of equivalent proficiency through placement exam.*

Designed for students pursuing the IB diploma and other students who are pursuing academic study of World Language, this course represents the fourth course in the German sequence of study. This course prepares students to learn and use German to communicate about a wide variety of personal and social topics through listening, reading, writing, and speaking. Through their use of a second language, students will develop personal understanding of contemporary global issues affecting society. The topics presented in the course are aimed at promoting understanding of a different point of view, enabling students to see themselves as members of a global society, and seeking solutions to issues affecting local and global society. Students will learn to appreciate the different perspectives unique to the German language and culture of German speaking societies.

**IB German Language B Year 2 (Grade 12) #IBO132**

1 credit

weight 1.10

5 periods (FY)

*This course will be offered in 2012-13 for students to complete their IB German requirements.*

**IB Spanish Language B Year 1 (Grade 11) #IBO141**

*Replaces Former Course: Spanish 4*

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *Completion of Spanish 3 or demonstration of equivalent proficiency through placement exam.*

Designed for students pursuing the IB diploma and other students who are pursuing academic study of World Language, this course represents the fourth course in the Spanish sequence of study. This course prepares students to learn and use Spanish to communicate about a wide variety of personal and social topics through listening, reading, writing, and speaking. Through their use of a second language, students will develop personal understanding of contemporary global issues affecting society. The topics presented in the course are aimed at promoting understanding of a different point of view, enabling students to see themselves as members of a global society, and seeking solutions to issues affecting local and global society. Students will learn to appreciate the different perspectives unique to the Spanish language and culture of Spanish speaking societies.

**IB Spanish Language B Year 2 (Grade 12) #IBO142**

1 credit

weight 1.10

5 periods (FY)

*This course will be offered in 2012-13 for students to complete their IB Spanish requirements.*

**IB Spanish Language B Year 1 - Accelerated (Grade 11) #IBO146**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *Completion of Spanish 4*

Designed specifically for students pursuing the IB diploma who have already completed level 4 Spanish, this course incorporates IB Spanish Language B content and requirements with Spanish instruction at the year 5 level.

### **IB History Year 1: History of the Americas (Grade 11) #IBO211**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** Acceptance into the IB Diploma Programme or a minimum grade of 85% in AP World History.

Designed for students pursuing the IB diploma, IB History Year 1 can be taken by any student in lieu of the U.S. History requirement. This course aims at developing depth of historical understanding and the ability to comprehend, interpret and evaluate historical events and documents. The course will explore the evolution of our complex global society as the culmination of interdependent events. Year one of IB History includes a regional focus on the Americas. The course also lays the groundwork for IB History Year 2, which will examine modern and contemporary world topics such as World Wars I and II, the Arab-Israeli conflict, and post World War II independence and nationalist movements in Africa, Asia and Europe. Throughout the program, students will be exposed to an array of historical documents and will learn how to effectively interpret and analyze these sources. IB History will foster a respect for other cultures and will prepare students to become successful global citizens. The course involves summer assignments completed prior to junior year.

### **IB History Year 2: Contemporary Global Issues (Grade 12) #IBO212**

1 credit

weight 1.10

5 periods (FY)

*This course will be offered in 2012-13 for students to complete their IB History and Social Studies requirements.*

### **IB Physics (Grade 11/12\*) #IBO421**

1 credit

weight 1.10

6 periods including lab period (FY)

**Prerequisite:** Acceptance into the IB Diploma Programme or a minimum grade of 85% in Honors Physical Science, Honors Algebra 2 and enrollment in or successful completion of Trigonometry.

Designed for students pursuing the IB diploma, IB Physics can be taken by any student in lieu of Honors Physics. In IB Physics students will explore how the physical universe works. Topics will include Newtonian mechanics, thermostatics, waves, electricity & magnetism (including fields and forces), and some topics in modern physics (such as the atom, nuclear reactions, and climate change). Laboratory experiences will help develop the ability to question, investigate, analyze, and evaluate the physical laws of the universe. The course will provide opportunities to develop skills and methods used by the international community of scientists.

\* This course may only be offered in alternate years so students interested in taking IB Physics should plan to take the course in 2011-12.

### **IB Chemistry (Grade 11\*/12) #IBO411**

1 credit

weight 1.10

6 periods including lab period (FY)

**Prerequisite:** Acceptance into the IB Diploma Programme or a minimum grade of 85% in Honors Physical Science.

Designed for students pursuing the IB diploma, IB Chemistry can be taken by any student in lieu of Honors Chemistry. The course includes all the topics traditionally included in Chemistry courses including thermodynamics, acids and bases, redox, and organic chemistry. Beyond content, students will also learn to think scientifically as they develop and test ideas in extensive lab work. Students will learn to be creative, self-initiated thinkers and to appreciate the work others have contributed to grow global science knowledge and our understanding of our world.

\* This course will first be offered in 2012-13 and after that may only be offered in alternate years.

### **IB Mathematics Year 1 (Grade 11) #IBO311**

1 credit

weight 1.10

5 periods (FY)



**Prerequisite:** Acceptance into the IB Diploma Programme or a minimum grade of 85% in Honors Algebra 2 and Honors Geometry.

Designed for students pursuing the IB diploma, IB Mathematics can be taken by any student in lieu of Honors Trigonometry and Pre-Calculus AB or BC. The IB Mathematics Year 1 course will cover concepts in Precalculus and Trigonometry, and will prepare students for further study of Calculus and Statistics and Probability in IB Mathematics Year 2. Students will be expected to apply mathematical concepts to solve problems and to model real life situations. Attention will be given to mathematical inquiry and to the application of mathematical concepts to global issues.

**IB Mathematics Year 2 (Grade 12) #IBO312**

1 credit

weight 1.10

5 periods (FY)

*This course will be offered in 2012-13 for students to complete their IB Mathematics requirements.*

**IB Mathematics Year 1 - Accelerated (Grade 11) #IBO316**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** Completion of Theoretical (Honors) Trigonometry and Pre-Calculus BC

Designed for students who have completed Trigonometry and Pre-Calculus in their sophomore year, this course incorporates requirements of IB Mathematics into a calculus-based course. Prerequisite: completion of Theoretical Trigonometry and Pre-Calculus BC. Students should consult with the IB coordinator before enrolling in this course.

**IB Theatre (Grade 11/12) #IBO611**

1 credit

weight 1.10

5 periods (FY)

IB Theater will explore both the history and the production aspects of theater, with students involved in both study and performance. The course will explore diverse forms of theater of various cultures and time periods. A journal is required. This IB elective is open to non-IB students who are interested in studying theater as well as to IB diploma candidates.

**IB Music (Grade 11/12) #IBO612**

1 credit

weight 1.10

5 periods (FY)

*This course aims to develop an appreciation and understanding of music both analytically and experientially. The course studies music of diverse cultural and historical traditions, and offers students the opportunity for individual and/or group performance. The course blends experiential and critical approaches to fostering musical understanding. Assessments include both critical listening and student generated compositions and/or performances. This IB elective is open to non-IB students who are interested in studying music as well as to IB diploma candidates.*

*\* This course still requires MTSD Board Approval. If approved, it will be offered for the 1<sup>st</sup> time during the 2012-13 or 2013-14 school years.*

**IB Visual Art (Grade 11/12) #IBO613**

1 credit

weight 1.10

5 periods (FY)

*This course aims to develop both appreciation and skill in visual arts. Students will be introduced to the visual arts of diverse cultural and historical traditions. Much of the course will be dedicated to production of the students' own original creative work. Students will participate in selecting media and in developing their own expressive ideas. Assessment will include a portfolio of student work and the development of a personal reflective workbook/journal. This IB elective is open to non-IB students who are interested in studying music as well as to IB diploma candidates.*

*\* This course still requires MTSD Board Approval. If approved, it will be offered for the 1<sup>st</sup> time during the 2012-13 or 2013-14 school years.*

# MATHEMATICS COURSES

## Mathematics Strands

The mathematics department offers content in two different strands. Each strand is unique and is designed to meet the different current and future needs of students.

**College Prep Strand:** Non-Honors College Preparatory strand for students not intending to pursue a collegiate mathematics or science major.

**Honors Strand** (formerly called *Theoretical*): Honors-level College Preparatory strand designed to prepare students for collegiate study of mathematics or science majors. [NOTE: Students who completed Algebra 1 in the middle school will enter this strand of study.]

## Course Selection Policy

Mathematics courses are designed in a specific sequence to ensure students learn all the appropriate mathematics content prior to taking the PSSA (Pennsylvania System of School Assessment) and/or Keystone Exams. The program is designed so that all students complete at least Algebra 1, Geometry, and Algebra 2 by the end of their Junior year. ***Students wishing to changes strands must be cautious to ensure they are meeting this requirement. Furthermore, changing strands generally includes a significant change in the rigor and expectations placed upon students. Therefore it is recommended that students have earned at least an 85% in a College Prep course before moving to an Honors course.***

Students making selections based upon the traditional sequence of courses can do so without any consultation. Students wishing to make selections that deviate from the recommended sequence or involve a change in strand should consult with their teacher, their counselor, and possibly the mathematics content specialist to ensure it is an appropriate decision for the student.

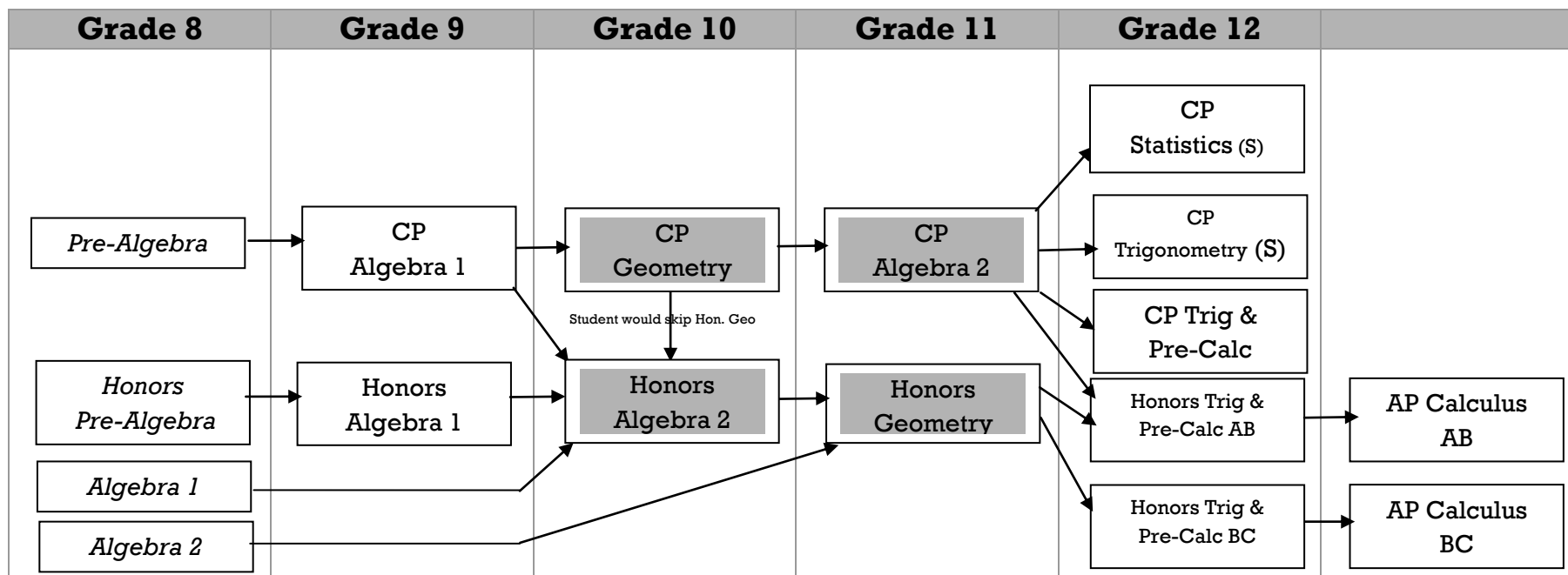
## Changes for 2011-12

Anyone familiar with the mathematics program will notice continued substantive and significant changes in the coming year. The department has completed the phased removal of the Integrated strand. All students who would have traditionally been interested in the Integrated program will participate in the College Prep program starting with Algebra 1. With this phased removal many additional support structures have been put in place to ensure the best opportunity for students to experience success.

The other major change in 2011-12 is the renaming of courses. Courses formerly titled Theoretical will now be called Honors. This document uses the term Honors whenever possible.

## Manheim Township High School Course Selection Mathematics Flowchart – 2011-12

The grade levels shown on the chart assume no acceleration. Students who take Algebra 1 in the middle school or who chose to take two math courses during the same year should adjust their grade level ahead accordingly.



- **2 courses are not shown on the diagram above:**
  - Pre-Algebra – a required semester “elective” math course for any student who performed non-proficient on PSSA in 8<sup>th</sup> grade.
  - Survey of Math – a required semester “elective” math course for any student who performed non-proficient on PSSA in 11<sup>th</sup> grade.
- In 2011-2012, CP Algebra 1, CP Geometry, and CP Algebra 2 will be taught as two separate semester courses.
- The “traditional path” of courses is horizontal in nature for grades 9-11. Any path that “changes strands” or is not shown on the chart should only be made with consultation of current math teacher, guidance counselor, and the mathematics content specialist.
- The choice of mathematics courses for “grade 12” is fundamentally interest based determined on students future goals. Consultation with the current math teacher and guidance counselor is strongly recommended.
- Students wishing to take Calculus during their senior year who did not have algebra in the middle school are recommended to “double-up” by taking Honors Algebra 2 and Honors Geometry during their sophomore year.

Electives
AP Statistics
Computer Programming*
AP Computer Science A*
* Courses will be offered in alternate years.

### **Fundamentals of Mathematics** (Grades 9/10/11/12) #MTH001

1 credit

5 periods (FY)

The goal of this course is to provide a bridge for underclassmen students between the middle school mathematics program and the traditional high school Algebra 1 course. This course will help students build a strong foundation for high school mathematics by learning and applying a variety of mathematics content from the five mathematics strands: numbers and computation, measurement, geometry, algebraic concepts, and data analysis and statistics. A specific emphasis is based upon using step-by-step problem-solving and reasoning throughout the curriculum.

After completing Fundamentals of Mathematics, students who have not yet mastered the content necessary to move into Algebra 1 will continue with another year of Fundamentals of Mathematics, where they will delve into the same areas; however, the content increases in difficulty.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

### **Pre-Algebra** (Grade 9) #MTH001

$\frac{1}{2}$  credit

5 periods(S)

Students will focus on the development of pre-algebra skills including order of operations, solving equations, graphing and interpreting linear functions, writing linear equations, problem solving, and mathematical communication. The fundamental purpose of the course is to serve as a bridge between the Middle School program and the High School Regular strand for students who need assistance to be successful in Algebra 1.

**Enrollment Information:** Any freshman student not enrolled in Basic Mathematics 1 who scores Below Basic or Low Basic on the eighth grade PSSA or does not successfully complete eighth grade math will have his/her schedule changed during the summer to this course in lieu of study halls or another elective. Students will also be concurrently enrolled in Algebra 1.

### **Survey of Mathematics** (Grade 12) #MTH040

$\frac{1}{2}$  credit

5 periods(S)

Students will cover content from each of the five mathematics strands: numbers and computation, measurement, geometry, algebraic concepts, and data analysis and statistics, as well as, learning strategies for mathematical reasoning, problem solving and communication. The fundamental purpose of the course is to ensure students have mastered the PA Mathematics Standards prior to graduation. Students will take assessments to identify their strengths and weaknesses and instruction will be tailored to the individual needs of the students.

**Enrollment Requirement/Restriction:** Any students attending the high school during their senior year who were non-proficient on the 11<sup>th</sup> grade administration of the PSSA and are not registered for another mathematics course must take this course. This course will be assigned to students during the summer in lieu of study halls or another elective.

## **COLLEGE PREP STRAND**

### **College Prep Algebra 1 – Part 1** (Grade 9) #MTH011

### **College Prep Algebra 1 – Part 2** (Grade 9) #MTH012

$\frac{1}{2}$  credit (1<sup>st</sup> Semester)

5 periods(S)

$\frac{1}{2}$  credit (2<sup>nd</sup> Semester)

5 periods(S)

**Prerequisite:** previously taken Middle School Math 8 and/or Middle School Pre-Algebra

This full-year course has been divided into two separate semesters. Students must elect to take both semesters. This course is designed for the student who is not likely to pursue a mathematical or scientific major. Topics covered will include: algebraic rules, solving, graphing and writing linear equations and inequalities, systems of linear equations and inequalities, exponents and exponential functions, quadratic equations, polynomials, and factoring. **Note:** Students failing either semester will have their schedule adjusted during the school year or during the summer to allow them to make-up the  $\frac{1}{2}$  credit at the earliest possible time.

**College Prep Geometry – Part 1** (Grade 10) #MTH021  
**College Prep Geometry – Part 2** (Grade 10) #MTH022

$\frac{1}{2}$  credit (1<sup>st</sup> Semester)  
 $\frac{1}{2}$  credit (2<sup>nd</sup> Semester)

5 periods(S)  
 5 periods(S)

**Prerequisite:** *previously taken Algebra 1-Part 1*

This course is designed for the student who is not likely to pursue a mathematical or scientific major. The course will include the following topics: sets, distance, lines, planes, angles, triangles, congruence, perpendicular lines and planes, parallel, area, similarity, coordinate geometry, circles and spheres, volume, and basic algebra review. **Note:** Students failing either semester will have their schedule adjusted during the school year or during the summer to allow them to make-up the  $\frac{1}{2}$  credit at the earliest possible time. **Special Note:** Students can take this course along with an Algebra 2 course during the same school year. Students wishing to take Calculus or Honors Trigonometry courses are discouraged from taking this Geometry course. If possible, students should elect to take Honors Geometry.

**College Prep Algebra 2 – Part 1** (Grade 11) #MTH031  
**College Prep Algebra 2 – Part 2** (Grade 11) #MTH032

$\frac{1}{2}$  credit (1<sup>st</sup> Semester)  
 $\frac{1}{2}$  credit (2<sup>nd</sup> Semester)

5 periods(S)  
 5 periods(S)

**Prerequisite:** *previously taken Geometry-Part 1 and Algebra 1-Part 2*

This course is designed for the student who is not likely to pursue a mathematical or scientific major. This course will build on the concepts developed in Algebra 1. Topics covered will include: Algebra 1 review, linear equations and inequalities, systems of linear equations and inequalities, matrices, quadratic functions and parabolas, functions, powers, roots and radicals, exponential and logarithmic functions, polynomial functions, and rational functions. **Note:** Students failing either semester will have their schedule adjusted during the school year or during the summer to allow them to make-up the  $\frac{1}{2}$  credit at the earliest possible time. **Special Note:** Students can take this course along with a Geometry course during the same school year. Students wishing to take Calculus or Honors Trigonometry courses are discouraged from taking this Algebra 2 course and should elect to take Honors Algebra 2.

**College Prep Trigonometry and Pre-Calculus** (Grade 12) #MTH043

1 credit

5 periods (FY)

**Prerequisite:** *successful completion of Geometry - Part 2 and Algebra 2*

This course builds upon the skills and concepts developed in Algebra 1, Algebra 2 and Geometry. The following topics will be stressed: functions and graphs, polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, analytic trigonometry, systems of equations and inequalities, and sequences and series. **Special Note:** Juniors who enroll in this class may not take AP Calculus during their senior year. Their only mathematics course option during the senior year will be AP Statistics or a semester of College Prep Statistics.

### College Prep Trigonometry (Grade 12) #MTH041

½ credit

5 periods(S)

**Prerequisite:** successful completion of Geometry - Part 2 and Algebra 2

This course is intended to provide the student with sufficient skills to successfully pursue college courses in Business Administration and Applied Calculus. Topics include: circular and trigonometric functions, graphing, solving triangles, elementary identities and solving trigonometric equations and applied problems. **Special Note:** This course does not serve as a prerequisite for any other mathematics course in the high school, so it should only be taken as preparation for further mathematics study after high school.

### College Prep Statistics (Grade 12) #MTH042

½ credit

5 periods(S)

**Prerequisite:** successful completion of Geometry - Part 2 and Algebra 2

This course focuses on the collection, organization, analysis and interpretation of data with an emphasis on hypothesis formulation and testing. The course is intended to provide an introduction to Elementary Statistics and is recommended for students who have determined that they will pursue business or social science curricula in college. **Special Note:** Students may not take this course in addition to AP Statistics. This course may be taken as an elective in the event that the mathematics graduation requirements have been fulfilled.

## HONORS STRAND (formerly called Theoretical)

### Honors Algebra 1 (Grade 9) #MTH013

Formerly titled: Theoretical Algebra 1

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of Middle School Honors Pre-Algebra

This honors-level course is designed for college-bound students with a demonstrated aptitude in mathematics. A Honors approach to concepts will be stressed. Topics will include: an introduction to logic; a review of set theory; a detailed study of the algebra of the reals including axioms and theorems of equality; relations and functions; first degree equations and inequalities in one variable, polynomials; linear equations in two variables, systems of linear equations in two and three variables; rational algebraic expression, roots; radicals; and quadratic equations.

### Honors Algebra 2 (Grades 9/10) #MTH033

Formerly titled: Theoretical Algebra 2

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of College Prep or Honors Algebra 1. Students who select this course after College Prep Algebra 1 are recommended to have had a minimum grade of 85%

This course is a continuation of the Honors Algebra 1 course. Problem Solving will be stressed. Topics covered include: a review and use of the axioms and theorems of the real numbers system; functions and relation theory in the real and complex systems; the study and application of exponents and radicals; first degree equations and inequalities in one and two variables; systems of linear equations and inequalities in two and three variables; rational expressions and equations; quadratic equations in one variable; complex number system; logarithmic and exponential functions; and polynomial functions. **Special Note:** Students can take this course along with a Geometry course during the same school year. Students wishing to take Calculus or Honors Trigonometry courses are encouraged to take this Honors Algebra 2 course.

### **Honors Geometry** (Grades 9/10/11) #MTH023

*Formerly titled: Theoretical Geometry*

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *successful completion of Honors Algebra 2.*

This course builds on the concepts and skills developed in Honors Algebra 1 and Honors Algebra 2. The course will develop geometry as a deductive system and the relationships that exist between the elements of the system will be studied. Emphasis will be on the use of symbolic logic and proof. **Special Note:** Students can take this course along with an Algebra 2 course during the same school year. Students wishing to take Calculus or Honors Trigonometry courses are encouraged to take this Honors Geometry course.

### **Honors Trigonometry and Pre-Calculus AB** (Grades 11/12) #MTH044

*Formerly titled: Theoretical Trigonometry and Pre-Calculus AB*

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *successful completion of College Prep or Honors Algebra 2 and College Prep or Honors Geometry. Students who select this course after College Prep courses are recommended to have had a minimum grade of 85% in those courses.*

This course is designed to prepare the student for the Advanced Placement Calculus AB course. Topics will include: a brief review of sets, relations, functions, and logic; circular and trigonometric functions including their graphs and inverses as well as applications; analytic geometry concepts; and selected topics of advanced algebra. **Special Note:** This course is a prerequisite for AP Calculus AB. Students

### **Honors Trigonometry and Pre-Calculus BC** (Grades 10/11) #MTH045

*Formerly titled: Theoretical Trigonometry and Pre-Calculus BC*

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *successful completion of Honors Algebra 2 and Honors Geometry.*

This course is designed to prepare the student for the Advanced Placement Calculus BC course. The course will briefly review logic, sets, relations, functions and operations. New material developed will include: circular and trigonometric functions including their graphs and inverses as well as applications, absolute value inequalities, mathematical induction, and analytic geometry concepts. In addition, this course will introduce concepts of Calculus as preparation for AP Calculus BC. **Special Note:** This course is a prerequisite for AP Calculus BC.

### **Advanced Placement Calculus AB** (Grades 11/12) #MTH047

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *successful completion of Honors Trigonometry and Pre-Calculus AB.*

This is an introductory calculus and analytic geometry course with emphasis on applications and is taught from an intuitive approach which provides a foundation for preparation for the Advanced Placement Calculus AB examination. The following concepts are discussed: functions, limits, and continuity, derivatives, antiderivatives, definite integrals and infinite series.

### **Advanced Placement Calculus BC** (Grades 11/12) #MTH048

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *successful completion of Honors Trigonometry and Pre-Calculus AB or BC.*



This is a full-year calculus and analytic geometry course with emphasis on theory and applications and is taught with a formal axiomatic approach. The course will prepare a student for the Advanced Placement Calculus BC examination. The following concepts are discussed: functions, limits, continuity, derivatives, antiderivatives, definite integrals, and infinite series.

[IB Mathematics Year 1 \(Grade 11\) #IBO311](#)

[IB Mathematics Year 2 \(Grade 12\) #IBO312](#)

[IB Mathematics Year 1 - Accelerated \(Grade 11\) #IBO316](#)

Students participating in the International Baccalaureate Program during their Junior and Senior year will satisfy their mathematics graduation requirements through the completion of some of these courses. IB Mathematics Year 1 can be taken in lieu of Honors Trigonometry and Pre-Calculus AB or BC. The course descriptions can be found in the International Baccalaureate section of the planning guide.

## ELECTIVES

**Elective courses cannot be taken as replacement mathematics credit for any mathematics course prior to and including a trigonometry course. Computer courses cannot be counted as a mathematics credit for graduation.**

### **Advanced Placement Statistics** (Grade 12) #MTH057

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *successful completion of any Trigonometry and Pre-Calculus course.*

This is an activity-based course in which students actively construct their own understanding of the concepts and techniques of Statistics. Topics include: exploring data, planning and design of a study, anticipating patterns and making statistical inference. **Special Note:** AP Statistics cannot be taken as a replacement for a Trigonometry and Pre-Calculus class but may be taken concurrently with one of the three Trigonometry and Pre-Calculus courses.

### *Honors Computer Programming* (Grades 9/10/11/12) #MTH051

*½ credit*

*weight 1.05*

*5 periods (S)*

**Prerequisite:** *successful completion of Algebra 1*

*For students who intend to pursue a computer-related or engineering program in college, this course will introduce object-oriented programming using the Java-based language of Karel as well as objectdraw using Java. Students will learn the fundamentals of program design and implementation, focusing on objects and methods. Within this context, students will learn the basics of control structures, loops, user interfaces and graphics. This course is required for any student who plans to take AP Computer Science A in the future. Any student not taking this course and going on to AP Computer Science A will be required to complete some summer activities to ensure adequate preparation for the AP course. **This course is offered in alternate years. It will not be offered in 2011-12. The course will be offered in 2012-13 and 2014-15.***

### **Advanced Placement Computer Science A** (Grades 10/11/12) #MTH052

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *successful completion of Algebra 2 and Honors Computer Programming. Students may take the course without having previously completed Honors Computer Programming, but they will be required to complete some summer activities to ensure sufficient preparation for the course.*

For students who intend to pursue a computer-related or engineering program in college, this course will utilize the Advanced Placement Computer Science A curriculum in the language Java. Topics include: variables, classes, objects, control structures, arrays, object-oriented design, inheritance, polymorphism and recursion. Students will be exposed to large-scale projects as case studies and implement a software engineering project. At the conclusion of the curriculum, students will be prepared to take the Advanced Placement Computer Science A examination. ***This course is offered in alternate years and will be offered in 2011-12. The course will be offered in 2011-12, 2013-14, and 2015-16.***

**[Independent STEM Research 1 \(Grades 9/10/11/12\) #SCI051](#)**

**[Independent STEM Research 1 \(Grades 9/10/11/12\) # SCI051VT \(Virtual\)](#)**

**[Independent STEM Research 2 \(Grades 9/10/11/12\) #SCI052](#)**

**[Independent STEM Research 2 \(Grades 9/10/11/12\) #SCI052VT \(Virtual\)](#)**

Students can pursue scientific research in fields related to mathematics and computer science through the Independent STEM Research course. Students will receive guidance in scientific inquiry from a science teacher and will receive guidance from a mathematics or computer teacher regarding their research interests. The formal course description can be found in the Science section of the planning guide.

## MUSIC COURSES

### **Music Appreciation** (Grades 9/10/11/12) #MUS012

*Formerly titled: Understanding Music*

½ credit

5 periods (S)

This course aims to provide the foundation for a lifelong knowledge and appreciation of music. It is designed for students who have a general interest in music, but may not necessarily have experience in performing music. It is an excellent “starter” music course for students who may want to take other music history courses. In this course, students will learn to identify fundamental elements of music that exist within a variety of genres and styles of music and intelligently listen to a variety of music. In addition, an overview of the evolution of music composition and performance from the middle ages to the present will provide an opportunity to address different genres of music (symphonic, vocal, jazz, popular, world) and to compare and contrast the music of yesterday with the music of today.

### **Music Theory 1** (Grades 9/10/11/12) #MUS011

½ credit

5 periods (S)

This course is an in-depth study of the fundamentals of music. The topics include the properties of sound, music notation, intervals and scales, transposition, chords, symbolization and musical terms. Additionally, there is an introductory ear training component to this course that includes sight-singing and melodic dictation. Students who enroll in this course should have a command of basic music reading skills and are recommended (but not required) to take Music Keyboarding as a prerequisite.

### **Musical Theater** (Grades 9/10/11/12) #MUS015

½ credit

5 periods (S)

This course is designed for students who wish to develop a deeper understanding of musical theater and wish to develop their skills as a musical theater performer. The class will trace the development of this art form, focusing on major trends, composers and pivotal shows during the past 100 years. Students will learn helpful strategies for auditioning for musical theater on the high school, community and professional levels. Students will learn how to prepare an appropriate resume and how to choose audition songs and monologues. All students enrolled will be expected to participate fully in the performance component of this class, which will include singing, dancing and acting. Each student will be required to complete in-class solo performances of one musical theater song and one monologue each marking period.

### **Popular Music in America** (Grades 10/11/12) #MUS014

½ credit

5 periods (S)

*Popular Music in America* is designed for students who have an interest in music but may or may not be inclined toward musical performance. The lecture-based course will introduce the history and influence of American music within the broader context of American culture. The primary goal of the course is to forge connections between the world of contemporary pop music (with which most students are intensely involved) and the historical roots of this music (which most know very little about). Students will learn to distinguish between different styles and genres and will gain a solid understanding of how popular music is constructed and produced. Although there are no prerequisites, this course is recommended as a follow-up to the more general *Understanding Music* and is designed for students seeking a more sophisticated and in-depth classroom experience. ***This course is not offered every year. It will be offered in 2011-12, 2012-13, and 2014-15.***

### **Music Keyboarding** (Grades 9/10/11/12) #MUS041

½ credit

5 periods (S)

This course allows students to develop basic keyboard skills and music reading skills. Students will master the playing of a variety of scales, chords, and arpeggios and will learn to harmonize melodies at the keyboard. Experiences with individual and ensemble playing are incorporated throughout the course. Beginners and experienced keyboardists are encouraged to enroll.

### **Jazz Lab** (Grades 10/11/12) #MUS043

½ credit

5 periods (S)

*Students enrolled in Jazz Lab will learn techniques for interpreting a piece of jazz music on their instrument. They will master a basic jazz repertoire in a solo and combo setting and learn basic jazz harmony and improvisation. In addition, they will explore the history of jazz music as it developed as an art form throughout the 20<sup>th</sup> century. Ninth grade students admitted with the recommendation of the Middle School Jazz Band Director. **This course is not offered every year. It will be offered in 2012-13 and 2014-15.***

### **Guitar Lab 1** (Grades 9/10/11/12) #MUS031

½ credit

5 periods (S)

This course is designed for any student who wishes to learn the fundamentals of playing the guitar. A solid foundation of guitar technique, note reading and ensemble experiences will be presented to the student. Students will develop proficiency in the following areas: reading standard music notation, playing melodies in first position, strum patterns, open chords, and playing in an ensemble. The students' guitar playing will be assessed through proficiencies and in class recitals. Successful completion of Guitar Lab 1 will provide the student with a solid foundation for future guitar studies. Students do not need to provide their own guitar in order to take this course

### **Guitar Lab 2** (Grades 9/10/11/12) #MUS032

½ credit

5 periods (S)

**Prerequisite:** successful completion of Guitar Lab 1 or permission from the instructor.

This course is designed for the guitarist who has become proficient in the skills presented in Guitar Lab 1. Continued development of guitar technique, note reading and ensemble experience will be presented to the student. Students will develop proficiency in the following areas: scales and melodies in higher positions, advance strumming techniques, barre chords, reading more complicated rhythms, beginning fingerstyle technique, and improvisation. Students do not need to provide their own guitar in order to take this course.

### **Guitar Lab 3** (Grades 10/11/12) #MUS033

½ credit

5 periods (S)

**Prerequisite:** successful completion of Guitar Lab 2 or permission from the instructor.

This course is designed for the guitarist who has become proficient in the skills presented in Guitar Lab 1 and 2. A major focus of this class will be to develop the skills needed to play in the high school jazz band. Topics include: jazz chords, comping techniques, improvisation, developing a jazz repertoire, playing melodies in higher position, and creating walking bass lines. The history of the guitar in jazz will also be discussed. Students are strongly encouraged to have access to a guitar at home while taking this course.

### **Guitar Lab 4** (Grades 10/11/12) #MUS034

½ credit

5 periods (S)

**Prerequisite:** successful completion of Guitar Lab 3 or permission from the instructor.

*This course is designed for the advanced guitarist who has become proficient in the skills presented in Guitar Lab 1, 2 and 3. In an open lab setting, students will continue to develop their guitar technique, note reading or improvisation, and repertoire by focusing on a style of their choice. The student can choose from the following areas to focus on in this class: rock, jazz, classical/fingerstyle, or singer-songwriter. Students are strongly encouraged to have access to a guitar at home while taking this course. **This course is not offered every year. It will be offered in 2012-13 and 2014-15.***

### **AP Music Theory** (Grades 10/11/12) #MUS021

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** successful completion of Music Theory 1 **and** Music Keyboarding **or** permission from the instructor.

This course is designed to be the equivalent of an introductory college-level music theory course addressing the structural elements of music. The topics include: functional harmony, melodic organization, texture, voice leading, seventh and ninth chords, secondary dominant and leading tones chords, modulation and form. Additionally, there is an advanced ear training component to this course, which includes sight-singing and melodic dictation. **This course is not offered every year. The course will be offered in 2011-12, 2013-14, and 2015-16.**

### **IB Music** (Grade 11/12) #IBO612

1 credit

weight 1.10

5 periods (FY)

\* This course still requires MTSD Board Approval. If approved, it will be offered for the 1<sup>st</sup> time during the 2012-13. Further information about the course can be found in the IB section of the planning guide.

## **CO-CURRICULAR MUSIC ELECTIVES**

**Students electing Co-Curricular music electives should be aware that in addition to classroom activities during the school day, students are also required to participate in additional concerts/performance outside of the school day.**

### **Ninth Grade Girls Chorus** (Grade 9) #MUS047

½ credit

5 periods (S)

In this course, girls will have an opportunity to perform and study a wide variety of choral literature. A strong emphasis will be placed on improving individual music reading ability and vocal production. Evaluative criteria will include attendance at a school-scheduled concert, completion of music reading proficiencies, and rehearsal contribution, involvement, and preparation. Girls enrolled **must** attend a mandatory concert and dress rehearsal that is published on the official district calendar.

*There is no audition for entrance into this organization.*

### **Chorus** (Grades 10/11/12 Boys) #MUS061B

### **Chorus** (Grades 10/11/12 Girls) #MUS061G

½ credit

2 periods (FY)

In this course, students will have an opportunity to perform and study a wide variety of choral literature. A strong emphasis will be placed on improving individual music reading ability and vocal production. Evaluative criteria will include: attendance at school-scheduled concerts, completion of music reading proficiencies, and rehearsal contribution, involvement, and preparation. Students enrolled in Chorus are required to attend small group rehearsals (sectionals) two times per marking period according to a rotating "pull-out" schedule. Students **must**

also attend two mandatory concerts and dress rehearsals (winter and spring), which are published on the official district calendar.

*There is no audition for entrance into this organization.*

**Concert Choir & Chorus** (Grades 9/10/11/12 Boys) #MUS062B

**Concert Choir & Chorus** (Grades 10/11/12 Girls) #MUS062G

½ credit

3 periods (FY)

**Prerequisite:** *membership in the high school Chorus. Students may only select Concert Choir if they are currently members of the Concert Choir. All other students will have the opportunity to audition for Concert Choir in the Chorus “course”.*

The Concert Choir is an extension of the high school Chorus. It is a 50- to 60-voice choir selected by audition each September. Admission to this ensemble is based heavily on music reading ability. The concert choir is intended to provide its members with an opportunity for further musical growth through the performance of challenging choral literature.

**Orchestra** (Grades 9/10/11/12) #MUS053

½ credit

3 periods (FY)

This course provides students of orchestral string instruments (violin, viola, cello and string bass) an opportunity to study and perform varied styles of orchestra music as well as develop individual performance skills. Students with previous experience on string instruments will receive automatic entrance into the Symphonic Orchestra and String Orchestra, while winds and percussionists will be selected by audition from those registered for Symphonic Band. (See separate course description.) Students enrolled in Orchestra are required to attend small group rehearsals (sectionals) two times per marking period according to a rotating “pull-out” schedule. Students **must** also attend two mandatory concerts and dress rehearsals (winter and spring), which are published on the official district calendar.

**Symphonic Band – Traditional Instruments** (Grades 9/10/11/12) #MUS051

**Symphonic Band – Percussion** (Grades 9/10/11/12) #MUS052

½ credit

3 periods (FY)

Symphonic Band provides students who study traditional band and percussion instruments the chance to discover, analyze, and perform both traditional and contemporary band music, as well as to improve their own individual skill on their chosen instrument. Students will develop critical and creative thinking skills in the following areas: aural awareness, individual playing skills, and ensemble precision and balance. Students with previous experience on traditional band instruments (flute, oboe, bassoon, clarinet, saxophone, trumpet, horn, trombone, euphonium/baritone, and tuba) are automatically admitted to the Symphonic Band. A seating audition will be used to determine each individual’s part in the ensemble. Percussion students who enroll in band are automatically entered into Percussion Ensemble, a musical group that allows percussion students to explore the wide variety of instruments/techniques/musical styles within their chosen family of instruments. All students enrolled in band/percussion ensemble are required to attend small group rehearsals (sectionals) two times per marking period according to a “pull out” schedule. Attendance at dress rehearsals and concerts outside of the regular school day are also required. (These dates are published on the official school calendar.)

**Symphonic Band & Orchestra** (Grades 9/10/11/12) #MUS054

½ credit

3 periods (FY)

This course is for students interested in participating in both the Symphonic Band and the Orchestra. See the course descriptions above for information on both courses.

## **PHYSICAL EDUCATION, HEALTH and WELLNESS EDUCATION COURSES**

### **HEALTH**

***Completion of Health is required for graduation.***

**Health and Wellness (Grade 10\*/11) #HPE061**

**Health and Wellness (Grade 10\*/11) #HPE061VT (Virtual)**

½ credit

5 periods (S)

An examination of mental, emotional, physiological and social health issues of young adults occurs in this course. Emphasis on healthful decision-making, long- and short-term goal setting, and looking into the future of one's quality of life will be discussed, debated and researched. Students will be engaged in learning aspects of human anatomy and physiology related to problems associated with disease prevention and how to determine and access good healthful information based on reliable media and other associated sources of information.

***\*Sophomores can elect this course if they have special circumstances that will limit their ability to take the course during their junior year. Otherwise, students should elect the course during their junior year.***

### **PHYSICAL EDUCATION OFFERINGS**

***Completion of 4 Physical Education Courses (2 credits) is required for graduation.***

**Adapted Physical Education (Grades 9/10/11/12) #HPE001**

**Personal Fitness and Wellness (Grades 9/10/11/12) #HPE002**

**Physical Education – Medical (Grades 9/10/11/12) #HPE003**

½ credit

5 periods (S)

**These courses are designed for students who are physically unable, either temporarily or permanently, to meet the demands of a regular physical education class.** These courses offer flexible and adaptive activities to meet the needs of the students who have a physician's directive.

**Lifetime Sports, Fitness, and Recreational Education (Grades 9/10/11/12) #HPE031**

½ credit

2 periods (FY)

This coeducational course is designed for any student who is involved in **band, chorus or orchestra**. This course emphasizes physical fitness, swimming, and life-long sport and recreational activities. This course is designed to help students experience the social and wellness aspects of physical fitness and activity that promotes healthy and productive lives.

### **PHYSICAL EDUCATION FOR GRADES 9 AND 10**

**Sports and Fitness 9 - Boys (Grade 9) #HPE011B**

**Sports and Fitness 9 - Girls (Grade 9) #HPE011G**

½ credit

5 periods (S)

This course is designed for all ninth grade males and females. The course emphasizes physical fitness, swimming, dance, and modified small-sided team games. This course is designed to help students consider

opportunities to participate in interscholastic and intramural activities within the community, as well as, develop the student's physical fitness.

**Lifetime Recreation and Fitness 10 - Boys** (Grade 10) #HPE021B  
**Lifetime Recreation and Fitness 10 - Girls** (Grade 10) #HPE021G

½ credit

5 periods (S)

This course is designed for all tenth grade males and females. The course emphasizes physical fitness, swimming and life-long recreational activities (tennis, archery, softball ultimate frisbee, ping pong, racquetball, volleyball and badminton). This course is designed to help students experience the social and wellness aspects of physical fitness and activity that promotes healthy and productive lives.

**ELECTIVE PHYSICAL EDUCATION FOR GRADES 11 & 12**

**Net Results-Racquet Attack** (Grades 11/12) #HPE041

½ credit

5 periods (S)

This coeducational course is designed for any students interested in a variety of lifetime sports. The class will enable students to identify activities that can be pursued later in life as a means of maintaining or increasing physical fitness. Portions of the course include fitness training, swimming and various activities such as bicycling, tennis, archery, softball, ultimate frisbee, ping pong, racquetball, volleyball and badminton.

**Team Aerobic Games (TAG)** (Grades 11/12) #HPE042

½ credit

5 periods (S)

This course is designed for any student interested in an intense game environment. Course activities include fitness training, swimming, football, soccer, softball, floor hockey, basketball, engleball and speedball. This course is for the student seeking rigorous activities **in a highly competitive environment**.

**Creative Movement** (Grades 11/12) #HPE043

½ credit

5 periods (S)

This coeducational course is designed for any student interested in alternative forms of fitness activities. Course activities include fitness training, swimming, pilates, step aerobics, "core" exercises and dance choreography experiences.

**ADVANCED COURSES**

**Strength Training** (Grades 10/11/12) #HPE044  
**Extended Sports & Strength Training\*** (Grades 9/10/11/12) #HPE044EX

½ credit

5 Periods (S)

**Prerequisites:** a minimum grade of 90% or higher in the most recent physical education class and recommendation of instructor.



This co-educational course is designed for students in grades 9-12 interested in Strength Training and Conditioning. This course focuses solely on Strength Training and Conditioning and does not include games, or recreational activities. **Students will participate in an intense strength and aerobic training program designed to produce strength gains and improve their overall health and well-being.** Class activities are conducted in the Human Performance Center, indoor track and outdoor running loop.

\*Students can extend their strength training course with additional time **from 7:00 AM to 7:40 AM in addition to a first period Strength Training course** by selecting this course offering. During this time, students will complete sport specific training including additional strength and aerobic training, as well as specific skills, concepts and activities related to such sports under the direction of Manheim Township coaches. It is designed to better prepare the students for the rigors of their sport. Students interested in this option should consult with the varsity coach of the sport they are interested in prior to selecting this option

### **Iron Man or Iron Woman Triathlon Training** (Grades 10/11/12) #HPE045

½ credit

5 periods (S)

**Prerequisites:** *a minimum grade of 90% or higher in the most recent physical education class and recommendation of instructor.*

This coeducational course is designed for any student interested in cross-training to achieve physical fitness. This course focuses primarily on fitness training and does not include games or activities. Students will participate in cross-training activities such as swimming, running, biking and strength training. This is a vigorous program with a high degree of physical development.

## **CONTRACTED PHYSICAL EDUCATION**

### **CTC Physical Education Contracting** (Grades 11/12) #HPE051

½ credit

Min. 2 hours per week (FY)

**This course is designed for students attending the Career and Technology Center (CTC).** Students must fulfill contract obligations in order to receive credit. Student obligations include maintaining an activity log and participating in performance assessment tests at the beginning, midyear and end of the school year. Students will be tested on 1.5 mile performance and strength progress/development throughout the school year.

### **Senior Athletic Performance/Leadership** (Grade 12) #HPE052

½ credit

One Sports Season

Senior students who earned a varsity letter in their junior year in a PIAA sanctioned competitive school sport are eligible to be evaluated on their leadership, role modeling, practice and performance in that particular varsity sport during their senior year at MTHS. Students who quit voluntarily prior to the end of the sport season, or are dismissed from the team for academic, school or athletic policy violation during the sport season will fail the course and will either be rescheduled for a regular physical education course or summer school. Students who are injured and complete less than 80% of the season and students who do not make the team will be moved to an adaptive physical education course during the semester of their Senior Student-Athlete Performance and Leadership Contract.

Students are required to keep a daily log during their sport competition season that the coach signs weekly indicating the student's adherence to the program contract. Students are assessed each week using the Performance and Leadership Rubric that is used to evaluate the student-athlete's progress and development.

**Next Level Competitor/Dance Performer (Grades 9/10/11/12) #HPE053**

½ credit

Min. 10 hours per week (FY)

This course is a full year course for self-directed individuals who seek to use their year round training in dance or competitive sport(s) as their Physical Education requirement. Students must complete an application with their parents and coach(s), and submit the application to the guidance office for approval by Administration. **Any student participating in Manheim Township sports during the fall, winter, and spring seasons or any combination of Manheim Township sports and outside competition activities that encompass all three sport seasons may apply to be part of this program.**

The student will be graded on their daily athletic and/or dance activities, their weekly fitness activities, their performances or competitions, and a performance evaluation that reflects fitness improvement or a high level of physical fitness maintenance. The performance evaluation will consist of testing the student's 1.5 mile performance and strength and fitness development throughout the school year.

## SCIENCE COURSES

### SCIENCE GRADUATION REQUIREMENTS

Three credits of science are required for graduation:

- Physical Science 1 which is taken in 9<sup>th</sup> grade.
- Biology which is generally taken in 10<sup>th</sup> grade but can also be taken in 11<sup>th</sup> grade.
- Chemistry, Physics, or Physical Science 2 which is generally taken in 11<sup>th</sup> grade but can also be taken in 10<sup>th</sup> grade to allow students to complete the prerequisites so that they can take AP Physics or AP Chemistry during their 11<sup>th</sup> or 12<sup>th</sup> grade year.

Semester electives do not meet graduation requirements. All students are encouraged to take science courses beyond the three credits that are required for graduation. In addition, students planning to attend college should take physical science, biology, chemistry, and physics at the college prep or honors level.

### OTHER NOTE ABOUT SCIENCE COURSES:

Beginning in 2012-13, AP Physics and AP Chemistry will be offered every other year. Consequently, underclassmen students interested in taking AP Physics or AP Chemistry must plan their schedules carefully to ensure they complete the prerequisite courses. For example: 2011-12 sophomores who wish to take AP Physics prior to graduation will need to elect Honors Physics during the 2011-12 school year so that they can take AP Physics during their junior year (2012-13).

#### Fundamentals of Science (Grades 9/10/11/12) #SCI001

1 credit

5 periods (FY)

Fundamentals of Science is designed to assist students in developing the fundamental knowledge of scientific skills so that they can move into and be successful in the regular education program. Students will develop skills related to collecting, analyzing, and reporting data and focus on the fundamental concepts of Biology, Chemistry, and Physics.

After completing Fundamentals of Science, students who have not yet mastered the content necessary to move into Physical Science or Biology will continue with another year of Fundamentals of Science, where they can further develop skills in their area of need.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

#### Physical Science 1 (Grade 9) #SCI011

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students identified to take Strategic Literacy 1 and/or scored Below Basic on the Science or Mathematics PSSA in 8<sup>th</sup> Grade.

This course offers an introduction to the basic concepts of the physical sciences and processes necessary for courses that students will elect in the high school science program. Students will learn to collect, analyze and report data in the study of physical and chemical systems. Topics of study include the nature of science, forces and motion, matter and its interactions, and energy. Students will apply basic mathematics and graphing skills to analyze data. Simple algebraic procedures will be introduced as necessary in the analysis. Language development will be supported through the use of content area literacy strategies. This transitional course is designed for students who will benefit from additional instructional support in science, mathematics, and reading skill development, and reduced details in science content.

### **College Prep Physical Science 1 (Grade 9) #SCI012**

1 credit

5 periods (FY)

This college-preparatory course is designed to introduce the concepts and processes necessary for courses students will elect in the high school science program, especially chemistry and physics. Topics of study include the nature of science, forces and motion, matter and its interactions, and energy. Students will use mathematical models, simple algebraic procedures and graphical representations in the study of these physical and chemical concepts and they will learn procedures for collecting, analyzing and reporting data. This course is recommended for those who will be taking Algebra 1 or Theoretical Algebra.

### **Honors Physical Science 1 (Grade 9) #SCI013**

1 credit

weight 1.05

5 periods (FY)

This rigorous college-preparatory course is designed as an introductory course in the physical sciences that will prepare students for the honors and advanced placement courses offered in chemistry and physics. The course is well suited for students who are interested in pursuing a college degree in a STEM (Science, Technology, Engineering, and Math) field. An emphasis will be placed on the development of complex cognitive processes through labs and activities developed to enhance student understanding of atomic structure, interactions of matter, and mechanics. Students will learn procedures for collecting, analyzing and reporting data, and will be introduced to the method for writing a formal lab report through firsthand experiences.

### **Biology (Grade 10/11/12) #SCI021**

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students who previously took Strategic Literacy 1 or took Physical Science (SCI011) and earned less than 80%.

Basic Biology deals with the fundamental principles governing all living things and the methods by which scientists and students gain knowledge. Emphasis in this course will be based on practical applications of the following biological fields: cell biology, genetics, microbiology, animal and plant structure and function, and ecology. Language development will be supported through the use of content area literacy strategies. This transitional course is designed for students who will benefit from additional instructional support in science, mathematics, and reading skill development, and reduced details in science content.

### **College Prep Biology (Grade 10/11/12) #SCI022**

1 credit

5 periods (FY)

**Prerequisite:** successful completion of Physical Science 1.

Biology is a college-preparatory course that deals with the basic principles governing all living things, the nature of science, and the methods by which scientists and students gain knowledge. The cell is treated as the structural and functional basis of all organisms. Areas of concentration will be molecular and cellular biology, genetics, evolution, the diversity of life, and ecology.

### **Honors Biology (Grade 10/11/12) #SCI023**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of College Prep or Honors Physical Science 1. Students who select this course after College Prep Physical Science 1 are recommended to have had a minimum grade of 85%.

Honors Biology is a rigorous college-preparatory course designed to promote learning of the living systems through an approach using molecular biology as the central theme. Topics will include investigations of the cell

as the basic unit of structure and function, the exploration of nucleic acid structure and function underlying genetics, evolution, the diversity of life, and population ecology. Students will engage in an independent research project, and experience writing formal lab reports throughout the year as part of the course requirements. The course is designed for the high level thinker and will challenge students to think critically about the biological world. It is well suited for students who are interested in pursuing a college degree in a STEM (Science, Technology, Engineering, and Math) field.

### **College Prep Chemistry (Grades 10/11/12) #SC032**

1 credit

5 periods (FY)

**Prerequisite:** successful completion of *Physical Science 1* and concurrent enrollment in or successful completion of *Algebra 2*.

This college-preparatory course will help students recognize and understand the importance of chemistry as it applies to their lives. Major topics of chemistry include: atomic theory, periodic properties, bonding, types of compounds, chemical and physical changes, energy transformations, equilibrium, and kinetics.. The development of problem-solving and critical thinking will be emphasized.

### **Honors Chemistry (Grades 10/11/12) #SCI033**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of *College Prep or Honors Physical Science 1* and *Algebra 2*. Students who select this course after *College Prep Physical Science 1* or *College Prep Algebra 2* are recommended to have had a minimum grade of 85% in those courses.

This rigorous college-preparatory course is designed to challenge exceptional students and is well suited for students who are interested in pursuing a college degree in a STEM (Science, Technology, Engineering, and Math) field. Topics include: atomic and molecular structure, chemical bonding, kinetic and molecular theory, thermochemistry, electrochemistry, acid base theory, reaction kinetics, nuclear chemistry, equilibrium, and oxidation-reduction reactions. The content and skills learned through this course will serve as a solid background for those students who wish to take AP Chemistry in their junior or senior year. **Students wishing to take AP Chemistry may need to take this course during their sophomore year to be able to take AP Chemistry. Check the AP Chemistry description to see the years that AP Chemistry is offered.**

### **College Prep Physics (Grades 10/11/12) #SCI042**

1 credit

5 periods (FY)

**Prerequisite:** successful completion of *Physical Science 1* and concurrent enrollment in or successful completion of *Algebra 2*.

This college-preparatory course will provide students with a conceptual understanding of the field of physics through laboratory experiences. Students will confront the problems that face the working scientist, through a sequence that will lead to a better understanding of the physical structure of the universe and the systems within it. Topics include: mechanics, conservation laws, energy, waves, light, sound, and electricity. This course meets the needs of the college-bound students and challenges them to become more scientifically literate. In addition, Physics can provide the background required for taking the AP Physics B course the following year.

### **Honors Physics (Grades 10/11/12) #SCI043**

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of *College Prep or Honors Physical Science 1*, *Algebra 2*, and enrollment in or successful completion of *Trigonometry*. Students who select this course after *College Prep Physical Science 1* or *College Prep Algebra 2* are recommended to have had a minimum grade of 85% in those courses.

This rigorous college-preparatory course is designed to challenge exceptional students and is well suited for those who are interested in pursuing a college degree in a STEM (Science, Technology, Engineering, and Math) field. Honors Physics concentrates heavily on conceptual understanding, problem solving and laboratory experiences. The pace and depth of the class will prepare students for AP level courses or college courses. Topics include: mechanics, conservation laws, gravitation, waves, light, sound electricity, and some topics in modern physics. Additionally, students will apply and expand what they learned in previous courses to write formal lab reports throughout the year as part of the course requirements. The content and skills learned through this course will serve as a solid background for those students who wish to take the second-year AP Physics B course or the second-year AP Physics C course. **Students wishing to take AP Physics may need to take this course during their sophomore year to be able to take AP Physics. Check the AP Physics description to see the years that AP Physics is offered.**

### Physical Science 2 (Grades 11/12) #SCI031

1 credit

5 periods (FY)

**Prerequisite:** successful completion of Physical Science 1.

**Registration Restriction:** Enrollment in this class is restricted to students who previously took Strategic Literacy 1 or took Physical Science (SCI011) or Biology (SCI021) and earned less than 80%.

This course continues the study of the fundamentals of chemistry and physics beyond the ninth grade physical science course. It is a laboratory-centered course and stresses measurement of matter, techniques used in the modern approach to the study of the physical sciences, and an orderly and scientific method of evaluation of problems and experiences. One semester of the course is devoted to chemistry concepts and one semester is physics. Topics include: nature of science, linear and projectile motion, Newton's Laws, work/power/energy, properties of matter, atomic structure, molecular bonding, mixtures/solutions, and interactions of matter (acid-base, oxidation-reduction). Language development will be supported through the use of content area literacy strategies. This transitional course is designed for students who will benefit from additional instructional support in science, mathematics, and reading skill development and reduced details in science content. **This course is not available to students that have taken Chemistry or Physics due to significant course overlap.**

## ELECTIVES

### Advanced Placement Biology (Grades 11/12) #SCI024

1 credit

weight 1.10

5 periods + 1 lab period (FY)

**Prerequisite:** successful completion of Honors Biology and Honors Chemistry with a recommended minimum grade of 85% in both courses or successful completion of College Prep Biology and College Prep Chemistry with a recommended minimum grade of 90% in both courses.

The AP Biology course is a second-year biology course that is designed to be the equivalent of a college introductory biology course usually taken by first year college students. The course covers the following three general areas: (1) molecules and cells; (2) heredity and evolution; and (3) organisms and populations. The three main goals of AP Biology are to help students develop a conceptual framework for modern biology, to help students gain an appreciation of science as a process, and to provide a more extensive laboratory experience. Please note this course requires an extra lab period 1 day a week. Additionally, students taking AP Science courses are encouraged to also elect [Independent STEM Research](#) to extend their experience.

### Advanced Placement Chemistry (Grades 11/12) #SCI034

1 credit

weight 1.10

5 periods + 1 lab period (FY)

**Prerequisite:** successful completion of Honors Chemistry with a recommended minimum grade of 85% or successful completion of College Prep Chemistry with a recommended minimum grade of 90%.

**Advanced Placement Physics B (Grades 11/12) #SCI044**

5 periods + 1 lab period (FY)

**Advanced Placement Physics C (Grades 11/12) #SCI045**

5 periods + 1 lab period (FY)

**IB Physics (Grade 11/12) #IBO421**

**IB Chemistry** (Grade 11/12) #IBO411 (not offered in 2011-12)

**Independent STEM Research 1 (Grades 9/10/11/12) #SCI051**  
**Independent STEM Research 1 (Grades 9/10/11/12) #SCI051VT (Virtual)**

2 periods (S)

**Prerequisite:** recommendation of the current science, mathematics, or technology education teacher, given the type of research the student wishes to do.

This course is for students who want to pursue a long-term study in science, mathematics, or engineering. This could include, but is not limited to, preparation of a project for the science fair, in-depth study of a topic to prepare for competition (i.e. Chemistry Olympiad, Physics Olympiad, Envirothon, etc.), or interning at a local facility as an exploration of career goals. This introductory course will include direct instruction in scientific methods, use of primary resources, journal writing, and laboratory skills appropriate to the student's project. Students will be expected to keep a journal of activities, and will be assessed against a variety of rubrics depending on their particular project. A final report and/or presentation of the student's project will be required at the end of the term, unless the project is continued into the second semester. Students who have already taken this course, but wish to continue with their project, or start a new project, should enroll in Independent Science Research 2.

**Independent STEM Research 2 (Grades 9/10/11/12) #SCI052**  
**Independent STEM Research 2 (Grades 9/10/11/12) #SCI052VT (Virtual)**

¼ credit

weight 1.05

2 periods (S)

**Prerequisite:** successful completion of Independent Science Research 1.

This course is for students who want to pursue and/or continue a long-term study in science, mathematics, or engineering and who have already successfully completed Independent STEM 1. Students will work more independently than in the ISR 1 course, but will still be required to keep a journal of activities and write a final report and/or present their project at the end of the term. For students that are continuing a project in which experimentation was completed during Independent STEM 1 during the first semester, an emphasis will be placed on statistical analysis of data and preparation of a formal paper for presentation. This course can be repeated, as necessary, to further continue or pursue scientific research.

**Anatomy & Physiology (Grades 11/12) #SCI053**

½ credit

5 periods (S)

**Prerequisite:** successful completion of Biology and concurrent enrollment in or successful completion of Chemistry.

This one-semester elective combines the study of essential principles of human anatomy and physiology, subdivisions of biology. The subject matter emphasizes the structure and function of the human body and its mechanisms for maintaining homeostasis. Topics include basic chemical processes that play a role in organisms, cell and tissue studies, and body systems. This course also serves as an introduction to related careers for those students that are interested in the health and medical fields.

**Astronomy: The Sky and the Stars (Grades 10/11/12) #SCI054**

½ credit

5 periods (S)

**Prerequisite:** successful completion of Physical Science and Algebra 1.

This one-semester elective takes students on a journey of exploration to understand the sky and the stars with the use of the Manheim Township Planetarium. Students will have hands-on experience using the computer program Starry Night, a desktop version of planetarium software, to explore such topics as the sky and its cycles, telescopes, the life and death of stars, neutron stars, and black holes. **Beginning in 2011-12 this course MAY be offered every other year. Students wishing to take the course should choose the course in 2011-12.**

**Astronomy: The Solar System and the Universe (Grades 10/11/12) #SCI055**

½ credit

5 periods (S)

**Prerequisite:** successful completion of Physical Science and Algebra 1.



This one-semester elective takes students on a journey of exploration to understand our solar system, our Milky Way Galaxy, and the Universe with the use of the Manheim Township Planetarium. Students will have hands-on experience using the computer program Starry Night, a desktop version of planetarium software, to explore such topics as life on other worlds, airless worlds, Mars, Jupiter, Pluto (the "dwarf planet"), Super-massive Black Holes, and the Big Bang. **Beginning in 2011-12 or 2012-13 this course MAY be offered every other year. Students wishing to take the course should choose the course in 2011-12.**

### **Geology (Grades 10/11/12) #SCI056**

½ credit

5 periods (S)

**Prerequisite:** successful completion of Physical Science.

*The focus of this Geology course includes the formation of the planet, Rocks & Minerals, Volcanoes, Earthquakes, Caves, Mountain Building, and Earth's geologic history. Using the theory of Plate Tectonics, students will explore hands-on the geologic changes and the reasons these changes occur. Students will also explore the non-tectonic changes such as glaciation, weathering, and water and wind erosion. **This course is offered in alternate years. This course will NOT be offered in 2011-12. The course will be offered in 2012-13 and 2014-15.***

### **Oceanography and Meteorology (Grades 10/11/12) #SCI057**

½ credit

5 periods (S)

**Prerequisite:** successful completion of Physical Science.

*The focus of this Oceanography and Meteorology course includes the exchange of energy within and between the hydrosphere and the atmosphere. Fundamentals of oceanography, meteorology and climatology will be explored hands-on as students investigate the driving forces behind such topics as ocean currents, tides, weather, cloud formation and types, and earth's ever-changing climate. Students will also investigate and predict our local weather conditions using Manheim Township's very own weather station. **This course is offered in alternate years. This course will NOT be offered in 2011-12. The course will be offered in 2012-13 and 2014-15.***

### **Environment & Ecology (Grades 11/12) #SCI058**

½ credit

5 periods (S)

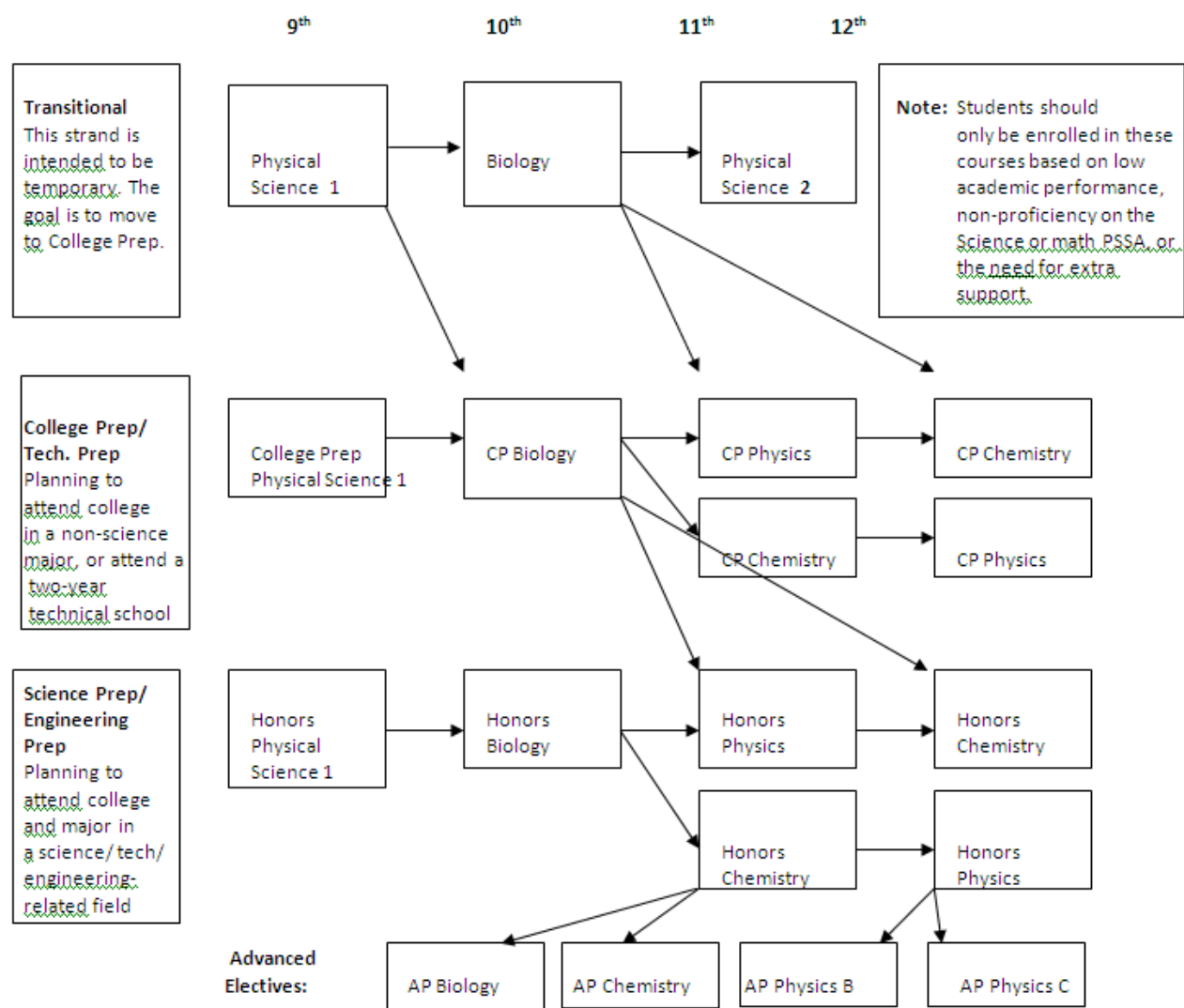
**Prerequisite:** successful completion of Physical Science and Biology.

This one-semester elective combines lab experiences and field investigations in the study of watershed and wetland ecology, local environmental issues, land, air, and water pollution, conservation, human impact on the environment, and environmental laws. Students will apply studies of physical, chemical and biological concepts from previous courses to real-life situations in the natural world. A class project will be selected during the first marking period and completed during the second, so that students have a firsthand opportunity to experience the positive impact that they can have on the environment through making informed decisions and taking action. **This course is offered in alternate years. This course is offered in 2011-12. The course will next be offered in 2013-14 and 2015-16.**

# **Manheim Township High School** **Recommended Science Pathways 2011-12**

The pathways on this chart illustrate the recommended and commonly followed sequence of courses. There are some students who may find it necessary to deviate from the typical "path" to take courses that are more or less rigorous based on need or career plans. Students wishing to do so should consult with their counselor and or teacher to ensure the choice is appropriate. They will also need to meet published pre-requisites. Please note that all students are required to take physical science, biology, and an additional physical science (practical physical science, chemistry, or physics) in order to meet graduation requirements; however, college-bound student should plan to take Physical Science, Biology, Chemistry, and Physics.

Students should plan to take Physical Science during their Freshman year and Biology during their Sophomore year. All other non-AP core science courses can be taken during or after the sophomore year and students may want to consider taking Biology and another class during their Sophomore year since subsequent AP Chemistry and Physics courses will only be offered every other year.



<b>Semester Electives:</b>	Geology	Oceanography Meteorology	Environment/ Ecology	Astronomy: Sky & Stars	Astronomy: Solar System	Anatomy/ Physiology	Independent Research I/II
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## SOCIAL STUDIES COURSES

The Social Studies department has been implementing a shift in what grade year certain content will be taught. Therefore there are slightly different requirements for 2011-12 Seniors than for students at lower grade levels. These requirements are as follows:

### Seniors (Class of 2012):

To graduate, seniors must have completed four credits in Social Studies. As underclassmen, rising seniors should have completed a US History course, a World History course, one semester of Civics and Economics and one semester of Global Perspectives. To complete the required four credits, students can select from among any of the social studies electives. If a senior has not completed one of the earlier listed courses, they must elect that course during their senior year.

### Underclassmen (Classes of 2013, 2014, and 2015):

Freshmen must take Ancient History; sophomores are required to take Modern World History; juniors are required to take US History, and as a senior, students will take one semester of Civics and Economics and one semester of Global Perspectives. In addition to the required courses, students can take additional social studies courses that will count towards the required elective credits to graduate.

### Fundamentals of Social Studies (Grades 9/10/11/12) #SCI001

1 credit

5 periods (FY)

Fundamentals of Social Studies is designed to assist students in learning the fundamental social studies skills and knowledge so that students can move into and be successful in the regular education program. Students will learn about Ancient History, Modern World History, US History, Civics, and Global Perspectives as appropriate for their grade level.

After completing Fundamentals of Social Studies, students who have not yet mastered the content necessary to move into the regular education program will continue with another year of Fundamentals of Social Studies, where they can further develop skills in their area of need.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

### Ancient History (Grade 9) #SST011

1 credit

5 periods (FY)

**Registration Restriction:** Enrollment in this class is restricted to students identified to take Strategic Literacy 1 and/or scored Below Basic on the Reading or Writing PSSA in 8<sup>th</sup> Grade.

The Ancient World History course begins with the prehistoric period of human development and continues through Early Civilizations, the development of Empires, the Ancient Greeks and Romans, the Kingdoms of Africa, great civilizations in India and China, Islamic Civilizations and Empires and ends with the Rise of Medieval Europe. Students will read both primary and secondary sources and will participate in class discussions, historical inquiry, and group and individual presentations. Map skills as well as literacy and writing skills will all be emphasized and developed in the course. **Enrollment in this class is restricted to students identified to take Strategic Literacy 1 and/or scored Below Basic on the Reading or Writing PSSA in 8<sup>th</sup> Grade.**

### College Prep Ancient History (Grade 9) #SST012

1 credit

5 periods (FY)

The Ancient World History course begins with the prehistoric period of human development and continues through Early Civilizations, the development of Empires, the Ancient Greeks and Romans, the Kingdoms of

Africa, great civilizations in India and China, Islamic Civilizations and Empires and ends with the Rise of Medieval Europe. Students will read both primary and secondary sources and will participate in class discussions, historical inquiry, and group and individual presentations. Our historical study will seek to link ancient history themes to modern American and global developments.

### **Honors Ancient History (Grade 9) #SST013**

1 credit

weight 1.05

5 periods (FY)

The Ancient World History course begins with the prehistoric period of human development and continues through Early Civilizations, the development of Empires, the Ancient Greeks and Romans, the Kingdoms of Africa, great civilizations in India and China, Islamic Civilizations and Empires and ends with the Rise of Medieval Europe. Students will read both primary and secondary sources and will participate in class discussions, historical inquiry, and group and individual presentations. Our historical study will seek to link ancient history themes to modern American and global developments. Regular writing of essays and use of document-based questions form a central component of the course. Summer assignments are assigned and required for the Honors Level Course.

### **College Prep Modern World History (Grade 10) #SST022**

1 credit

5 periods (FY)

World History is intended for sophomores who are considering enrolling in college after high school. Emphasis will be placed on practicing the reading, writing and research skills necessary to succeed in college. This course examines the many varied societies of the world by focusing on cultural developments from 1500 to the present. Included in the study are the geography, history, economics and political institutions of Africa, Asia, Latin America and Europe. While the textbook continues to be the primary resource, students will gain additional experience with primary documents and other research materials when examining each topic. Assessments involving assisted and independent reading, research and writing will be incorporated into the curriculum.

### **AP World History (Grade 10) #SST023**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** a minimum average grade of 85% in previous social studies courses. While not a prerequisite, it is strongly encouraged that students selecting this course completed Honors Ancient History as a freshman.

AP World History helps students to develop greater understanding of the evolution of global processes and contacts in different types of human societies. 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 analysis of types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Other specific themes provide further organization to the course, ex: consistent attention to contacts among societies. AP World 10 utilizes the same text as Honors Ancient History and begins where the course concluded. Summer papers are used as part of the first quarter grade and will be assigned in May. **Note:** A variation of this course is listed below for seniors who previously completed a general World History course.

### **College Prep United States History (Grade 11) #SST032**

1 credit

5 periods (FY)

United States History is intended for juniors who are considering enrolling in college after high school. The course will look at American history from the Progressive Era to the present day. Units of focus include the Progressive Era, World War I, The Great Depression, World War II, the Cold War Era, Civil Rights, the Turbulent 60's 70's, and Post-Vietnam Era. Students will learn about American social, cultural, political, economic, and foreign policy history. Students will be asked to think critically in writing and will frequently have to analyze primary sources. Heavy emphasis will be placed on examining the roots of historical decisions and events in our every day lives.

### **AP United States History** (Grades 11) #SST033

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** a minimum average grade of 85% in previous social studies courses. While not a prerequisite, it is strongly encouraged that students selecting this course have previously taken Honors or AP Social Studies courses.

The Advanced Placement course in United States History is a survey of United States history from the pre-Columbian era to the present. The course uses a college-level text and supplemental readings. A very academically demanding and challenging course, students will be expected to read independently, synthesize ideas, write intelligent essays, and be able to communicate ideas and opinions. Major units include: Colonial America, Nation Building, Civil War, Industrialization and 20<sup>th</sup> Century History. Students in the course must be self-motivated and independent learners. A summer assignment will be included as part of the first marking period grade. College credit and/or placement may be obtained by achieving satisfactory scores on the standardized advanced placement exam. **Note:** This course is also listed in the elective area for seniors to choose as an elective.

### **IB History Year 1: History of the Americas (Grade 11) #IBO211** **IB History Year 2: Contemporary Global Issues (Grade 12) #IBO212**

Students participating in the International Baccalaureate Program during their Junior and Senior year will satisfy their social studies graduation requirements through the completion of these courses. The course descriptions can be found in the International Baccalaureate section of the planning guide.

### **College Prep Global Perspectives** (Grades 11/12) #SST042 **College Prep Global Perspectives** (Grades 11/12) #SST042VT (Virtual)

½ credit

5 periods (S)

Global Perspectives is intended for juniors who are considering enrolling in college after high school. Emphasis will be placed on the reading, writing and research skills necessary to succeed in college or in more challenging electives during the senior year. Topics of global significance will be pursued to portray the interdependence and impact nations have on each other. Areas of consideration are geography, demography, food, energy, environment, human rights and terrorism. There is no textbook for this course; however, students will be provided with primary and secondary resources, alternative materials and diverse learning strategies to enhance understanding when examining each topic. Assessments involving assisted and independent reading, research and writing skills will be incorporated into the curriculum. **Note:** a limited number of sections of this course will run to accommodate seniors who were not able to meet the requirement as underclassmen. Juniors may elect this course; however, seniors will be given priority for the limited number of available seats

### **College Prep Civics and Economics** (Grades 11/12) #SST045 **College Prep Civics and Economics** (Grades 11/12) #SST045VT (Virtual)

½ credit

5 periods (S)

Civics and economics is a critical course in preparing students for participation as an American citizen. Emphasis will be placed on the reading, writing, and research skills necessary to succeed in college or in more challenging electives during the senior year. Topics include United States geography, micro and macro economics, the three branches of government, the Constitution of the United States, civil rights and current events. While the textbook continues to be the primary resource, student will gain additional experience with primary documents and other research materials when examining each topic. Assessments involving assisted and independent reading, research and writing will be incorporated into the curriculum. **Note:** a limited number of sections of this course will run to accommodate seniors who were not able to meet the requirement as underclassmen. Juniors may elect this course; however, seniors will be given priority for the limited number of available seats

## **ELECTIVES COURSES\***

**These elective courses should also be used by seniors to satisfy their required fourth social studies credit. After the 2011-12 school year, the semester electives listed below will begin to be offered on an every other year basis. Please consider the years listed below as you plan your schedule for the next and subsequent years.**

### **College Prep Anthropology (Grades 10/11/12) #SST071**

½ credit

5 periods (S)

Anthropology literally means “study of man.” Two primary topics are pursued: the scientific theory of humankind’s evolution and unique cultural groups and their lifestyles. The purpose is to provide a basic understanding of people and an appreciation of cultures. ***Beginning in 2012-13 this course will be offered every other year. The course will be offered in 2011-12, 2012-13, and 2014-15.***

### **College Prep General Psychology (Grades 10/11/12) #SST074**

½ credit

5 periods (S)

This program is calculated to give the student as comprehensive an exposure as possible in a single semester to the major concepts of the field. Emphasis will be given to those areas of psychology that are most related to the high school student. Recent research in psychology will be featured. Students should gain some understanding into their own behavior and build a basis for effective living. Some independent reading will be required, accompanied by short reports. ***Beginning in 2012-13 this course will be offered every other year. The course will be offered in 2011-12, 2012-13, and 2014-15.***

### **College Prep The Vietnam War and Its Societal Implications (Grades 10/11/12) #SST051VT (Virtual)**

½ credit

5 periods (S)

Enlist for a virtual tour of duty through the Vietnam War. Use technology to learn about the longest war in which our country has ever been involved. Use 20/20 hindsight to analyze the politics and tactical strategies of the Vietnam conflict. Join anti-war protesters as you study the societal implications of the war from recent American and world history. The course uses a topical approach to the study of America's least popular war. There is a special emphasis on problem solving and student interaction. ***Beginning in 2012-13 this course will be offered every other year. The course will be offered in 2011-12, 2012-13, and 2014-15.***

### **College Prep Sociology (Grades 10/11/12) #SST075**

½ credit

5 periods (S)

Sociology deals mainly with the total social environment and its effect on the personal development of each individual. Students will examine and discuss group relationships, social values, social institutions, changing nature of families, social crises and the effects of societal changes on the individual and society. Students will learn to think like sociologists, develop a sociological imagination, and understand and appreciate the rich diversity that is possible in social life. ***Beginning in 2011-12 this course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.***

### **College Prep World Religions (Grades 10/11/12) #SST076**

½ credit

5 periods (S)

Understanding the cultures of other people is necessary in an age of national diversity and international cooperation. A basic knowledge of the world's religions can provide an entrance to that understanding. The two goals of the course in World Religions are 1) to expose students to the belief systems of various religions, and 2)

to examine how those belief systems have developed and changed over time, with an emphasis upon the present day. **Beginning in 2011-12 this course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.**

### **College Prep Constitutional Law** (Grades 10/11/12) #SST072

½ credit

5 periods (S)

The Constitution is the foundation of American political life. Lawyers, judges, politicians, professors and most importantly, citizens, all play a part in interpreting and creating Constitutional law. In this course, students will examine the importance of the Constitution in American history, politics and culture. Special attention will be paid to civil rights and liberties and landmark court cases. Students will be expected to participate in research and in lively classroom discussions and debate. **Beginning in 2011-12 this course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.**

### **College Prep Contemporary Problems** (Grades 10/11/12) #SST073

½ credit

5 periods (S)

Contemporary Problems is a discussion-based course that focuses on controversial issues, problems and situations facing the youth of contemporary America. Students investigate the topics introduced in class as well as try to find possible solutions to problem-based situations. Some of the possible topics of study may be, but are not limited to, gun control, abortion, school prayer, youth violence, animal rights, censorship, capital punishment and gay rights. Students are encouraged to develop their own opinions based on factual knowledge as they examine these issues. **The last year for this course will be 2011-12. Any student wishing to take this course must select it in the 2011-12 school year.**

### **AP United States Government and Politics** (Grades 10/11/12) #SST082

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** a minimum average grade of 85% in previous social studies courses. While not a prerequisite, it is strongly encouraged that students selecting this course have previously taken Honors or AP Social Studies courses.

The Advanced Placement course in United States Government and Politics is an in-depth study of the United States political infrastructure and processes such as political parties, special interest groups and the media. Emphasis is placed on the participatory role of each student culminating in a required field project. Textbooks and additional readings are college-level. Analysis and synthesis skills are to be demonstrated in well-organized essays, oral presentations and debates. College credit and/or placement may be obtained by achieving a satisfactory score on the standardized advanced placement exam. **Starting in 2012-13, this course will satisfy one of the four required Social Studies credits instead of taking Civics and Economics and Global Perspectives credits, therefore it is recommended that only seniors register for the course in 2011-12.**

### **AP Psychology** (Grades 12) #SST081

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** a minimum average grade of 85% in previous social studies courses. While not a prerequisite, it is strongly encouraged that students selecting this course have previously taken Honors or AP Social Studies courses.

Advanced Placement Psychology is an in-depth study of human behavior. Topics such as learning, personality, abnormal psychology, therapy and human development will be studied. Students will be expected to complete a special topics project/presentation. Textbooks are college-level and students will be expected to read independently. Analysis and synthesis will be demonstrated through the writing of essays and participation in discussion. College credit and/or advanced placement may be obtained by achieving a satisfactory score on the standardized Advanced Placement Psychology exam. **This course will be offered annually.**

### **AP United States History** (Grades 12) #SST084

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *a minimum average grade of 85% in previous social studies courses. While not a prerequisite, it is strongly encouraged that students selecting this course have previously taken Honors or AP Social Studies courses.*

The Advanced Placement course in United States History is a survey of United States history from the pre-Columbian era to the present. The course uses a college-level text and supplemental readings. A very academically demanding and challenging course, students will be expected to read independently, synthesize ideas, write intelligent essays, and be able to communicate ideas and opinions. Major units include: Colonial America, Nation Building, Civil War, Industrialization and 20<sup>th</sup> Century History. Students in the course must be self-motivated and independent learners. A summer assignment will be included as part of the first marking period grade. College credit and/or placement may be obtained by achieving satisfactory scores on the standardized advanced placement exam. **Note:** This course is also listed above as a course offering for juniors to satisfy their US History requirement.

### **AP World History** (Grades 12) #SST083

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *a minimum average grade of 85% in previous social studies courses. While not a prerequisite, it is strongly encouraged that students selecting this course have previously taken Honors or AP Social Studies courses.*

AP World History helps students to develop greater understanding of the evolution of global processes and contacts in different types of human societies. 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 analysis of types of historical evidence. Periodization, explicitly discussed, forms an organizing principle to address change and continuity throughout the course. Other specific themes provide further organization to the course, ex; consistent attention to contacts among societies. While not a prerequisite, it is strongly encouraged that students selecting this course have already completed Honors Ancient History. Summer papers are used as part of the first quarter grade and will be assigned in May. **Note:** A variation of this course is listed above for sophomores who completed the pre-requisite Ancient World History course.



## SUPPORT COURSES/PROGRAMS

### ALTERNATIVE EDUCATION PROGRAM

The Alternative Education Program (AEP) is designed for students who are in need of a hybrid schedule. Enrollment allows students to participate in a blending of the virtual environment along with traditional courses. Students in this program engage in one or more classes in a carefully structured environment under the guidance of the program AEP staff. To be enrolled students must be referred to the program by counselors or administrators; students may not simply elect to participate in the program.

The courses offered in alternative education are taught in a virtual fashion utilizing the virtual courses of Manheim Township as well as courses offered by other virtual course providers. Students in the Alternative Education Program can conceivably complete the following core academic requirements within this program. The course descriptions for these courses can be found in the various content areas of this guide.

#### English:

CP English 9 (Grade 9)	#ENG012AE	Full-Year	1 Credit
CP English 10 (Grade 10)	#ENG022AE	Full-Year	1 Credit
CP English 11 (Grade 11)	#ENG032AE	Full-Year	1 Credit
CP English 12 (Grade 12)	#ENG042AE	Full-Year	1 Credit

#### Mathematics:

CP Algebra 1 – Part 1 (Grade 9)	#MTH011AE	Semester	½ Credit
CP Algebra 1 – Part 2 (Grade 9)	#MTH012AE	Semester	½ Credit
CP Geometry – Part 1 (Grade 10)	#MTH021AE	Semester	½ Credit
CP Geometry – Part 2 (Grade 10)	#MTH022AE	Semester	½ Credit
CP Algebra 2 – Part 1 (Grade 11)	#MTH031AE	Semester	½ Credit
CP Algebra 2 – Part 2 (Grade 11)	#MTH032AE	Semester	½ Credit

#### Science:

CP Physical Science 1 (Grade 9)	#SCI012AE	Full-Year	1 Credit
CP Biology (Grade 10/11/12)	#SCI022AE	Full-Year	1 Credit
CP Chemistry (Grades 10/11/12)	#SCI032AE	Full-Year	1 Credit
CP Physics (Grades 10/11/12)	#SCI042AE	Full-Year	1 Credit

#### Social Studies:

CP Ancient History (Grade 9)	#SST012AE	Full-Year	1 Credit
CP Modern World History (Grade 10)	#SST022AE	Full-Year	1 Credit
CP United States History (Grade 11)	#SST032AE	Full-Year	1 Credit
CP Global Perspectives (Grades 11/12)	#SST042AE	Semester	½ Credit
CP Civics and Economics (Grades 11/12)	#SST045AE	Semester	½ Credit
CP Sociology (Grades 10/11/12)	#SST075AE	Semester	½ Credit
CP General Psychology (Grades 10/11/12)	#SST074AE	Semester	½ Credit
CP The Vietnam War (Grades 10/11/12)	#SST051AE	Semester	½ Credit

#### Health:

Health & Wellness (Grade 11)	#HPE061AE	Semester	½ Credit
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#### Family and Consumer Science:

Fam. & Cons. Management (Grades 10/11/12)	#FCS011AE	Semester	½ Credit
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Students in need of credits other than those listed above could possibly make requests, which would be addressed on a case-by-case basis by consulting with administration and the guidance department.

## ENGLISH LANGUAGE LEARNERS

English Language Learners have access to specially designed English classes which can be accessed in the [English](#) section of the guide. ELL students also have access to a support classroom during the school day where they can receive additional support for the language development and classroom needs.

## LEARNING SUPPORT: CO-TEACHING SUPPORT

Many of the core (English, Mathematics, Social Studies, Science, and Reading) academic courses are taught using a co-teaching model to support learning support students as they participate in the regular academic program. Co-teaching is a service delivery option that involves one regular education and one special education professional, assigned to one classroom and one group of students. The amount and type of support is based on professional special education services and support provided to the student during the school day and documented on the IEP.

## LEARNING SUPPORT: CORE COURSES

The core (English, Mathematics, Social Studies, Science, and Reading) academic courses for special education students are listed in the individual content areas. These courses are designed to provide services for students who require services primarily in the areas of reading, writing, math or speaking and listening skills related to academic performance. The special education staff will assist with scheduling students into the appropriate level of instruction whether that course is a Special Education or Regular Education course.

The following courses are exclusively for special education students who are not yet prepared for a traditional regular education class:

- [Fundamentals of English](#)
- [Fundamentals of Mathematics](#)
- [Fundamentals of Science](#)
- [Fundamentals of Social Studies](#)
- [Fundamentals of Reading](#)

## LEARNING SUPPORT: SUPPORT COURSES

### **Academic Support** (Grades 9/10/11/12) #SPE001 (Scheduling Course ID)

¼ credit

2 or more periods (FY)

The purpose of Academic Support is to reinforce the regular education classroom instruction. Organizational strategies, study skills, support for on-line coursework and specialized testing assistance is available. Eligible students may take the course for credit, or may participate on an as-needed basis, depending on their individual plans developed. Students will be registered for this class based upon student needs as described in the IEP.

Students may earn a maximum of ¼ credit by completing the equivalent of 2 periods a week for the year.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

### **Career Exploration** (Grades 9/10/11/12) #SPE011

½ credit

5 periods (S)

Students electing this course will participate in the process of vocational exploration through an overview of careers and personal goal setting. Students will explore various careers and identify personal strengths that

correspond to these careers. Strengths and aptitudes will be explored through a series of personal inventories. Students will be expected to complete a resume and a mock interview.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

**Core Values 9-10** (Grades 9/10) #SPE021  
**Core Values 11-12** (Grades 11/12) #SPE022

½ credit

5 Periods (S)

**Core Values** (Grades 9/10/11/12) #SPE023ES

1 credit

5 Periods (FY)

These courses are designed to help students with emotional, behavioral, and organizational needs learn the skills to be successful in the educational and community settings. Students will work on improving themselves and their relationships with others. They will focus on developing skills such as self-advocacy, dealing with difficult situations, time management, organization skills, and interpersonal relationships. Students will be required to participate in group discussions and complete projects, which will focus on individual needs as outlined in IEPs.

**Enrollment Information:** To enroll in these courses, students must have an IEP. Placement into the course is at the discretion of the special education staff.

**LIFE SKILLS PROGRAM**

The Life Skills Program is designed to provide services for students with a disability who require services primarily in the area of academic, functional, or vocational skills necessary for independent living. Participation in the program is determined through the coordination of a student's parents and the special education staff.

**Functional Academics 9-10** (Grades 9/10) #SPE101  
**Functional Academics 11-12** (Grades 11/12) #SPE102

2 credits

5 or more periods (FY)

This course addresses skills, which apply academic skills to real life situations at home, on the job, or in the community. This program is designed for secondary students with significant cognitive disabilities and who will be following a curriculum based on the Pennsylvania Alternate State Standards in the areas of Math, Language Arts, Science and Social Studies.

**Enrollment Information:** To enroll in these courses, students must have an IEP. Placement into the course is at the discretion of the special education staff.

**Independent Living Skills 9-10** (Grades 9/10) #SPE105  
**Independent Living Skills 11-12** (Grades 11/12) #SPE106

2 credits

5 or more periods (FY)

This course will address the personal maintenance skills, domestic maintenance skills, social skills, and safety and health skills needed to prepare students for life after high school. Students will participate in a variety of performance-based activities in school and the community to build and maintain these skills. This class will assist students in developing the skills essential to become productive and independent citizens. Students will gain practical knowledge and skills in the areas of self-care, budgeting, consumer education, vocational options and recreation and leisure.

**Enrollment Information:** To enroll in these courses, students must have an IEP. Placement into the course is at the discretion of the special education staff.

**Transition Skills 9-10** (Grades 9/10) #SPE107  
**Transition Skills 11-12** (Grades 11/12) #SPE108

2 credits

5 or more periods (FY)

This class has a focus on life activities and pursuits, such as work, post-secondary training, transportation, community access, etc. A general exploration of post high school education and skills needed for careers that students might be interested in pursuing is emphasized. This course provides an opportunity for students to relate classroom vocational skills to a school-based job site or competitive community employment situation. A job trainer is available to assist with work crews, career exploration, and job readiness skills. Job skills will be evaluated by staff through work-based rubrics and evaluations.

**Enrollment Information:** To enroll in these courses, students must have an IEP. Placement into the course is at the discretion of the special education staff.

**MATHEMATICS SUPPORT**

**Mathematics Support** (Grades 9/10/11/12) #MTH007  
*Formerly Titled: Math Lab*

Mathematics Support is a program where students can receive extra help with their mathematics coursework. Students will receive a combination of computerized targeted instruction for remediation of previously identified needs and face-to-face support with current classroom material. Students will be scheduled into the center to complete courses for credit recovery, or for remedial course work. During the school year when openings exist, students may also “elect” enrollment into the center by contacting their counselor.

**READING SUPPORT**

For students that demonstrate reading difficulties in their coursework and/or on district administered assessments, Manheim Township High School offers a variety of supplemental reading courses. The primary goal for these courses is to help students develop the reading skills needed to successfully read and comprehend the challenging texts they will encounter during their high school experience and beyond. Please refer to Course Descriptions for complete information about the specific focus areas for each set of courses.

Students do not elect these courses. The courses will be assigned to students based upon the following criteria:

- **Fundamentals of Reading:** Only students who currently have an IEP are eligible for this course. This course is designed to increase both reading comprehension and fluency levels of students reading three or more levels below their current grade level.
- **Strategic Literacy:** Students scoring two or more grade levels below current grade in comprehension on the GRADE+ test (Standard Score of 95 or below), are assigned to the appropriate Strategic Literacy course. For ninth and tenth grade students meeting the placement criteria, Strategic Literacy is required.
- **Reading Lab:** Ninth through eleventh grade students identified as non-proficient according to one or more of the following: Reading PSSA, Reading 4Sight, HS Reading screener, English teacher recommendation. Twelfth grade students required to re-take the 11<sup>th</sup> grade Reading PSSA are also assigned to this program.

**Fundamentals of Reading 1** (Grades 9/10/11) #REA001

1 credit

5 periods (FY)

The Reading Strategies class is a learning support class for students, determined by their IEP, who need additional reinforcement in comprehension, decoding and/or fluency. Comprehension skills are introduced and reinforced through direct instruction activities including learning and applying reading strategies and

vocabulary development. Fluency practice is a daily part of this class to develop intonation and appropriate reading rate. Decoding skills are reviewed on an ongoing basis to aid in the pronunciation of words.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

### **Fundamentals of Reading 2 (Grades 10/11/12) #REA002**

1 credit

5 periods (FY)

The course will be a sequel to the Fundamentals of Reading 1 course. The intent of the course is to continue to intensify comprehension strategies and add Functional Reading skills for students with IEPs. The course aligns with Strategic Literacy 2, but will be modified to meet the needs of students with disabilities, while aiming to meet state reading standards. Students will continue to build reading fluency skills, reading comprehension skills, vocabulary skills, and functional reading skills.

**Enrollment Information:** To enroll in the course, students must have an IEP. Placement into the course is at the discretion of the special education staff.

### **Strategic Literacy 1 (Grades 9/10/11/12) #REA011**

1 credit

5 periods (FY)

This is an introductory high school level reading course that is required for students who have tested significantly below their current grade placement on a standardized reading assessment. Using a variety of texts from many genres, this course focuses primarily on improving comprehension, vocabulary, writing, and fluency through the teaching and use of active reading strategies.

**Enrollment Information:** To enroll in the course, students must have been identified by reading staff as needing supplemental reading instruction.

### **Strategic Literacy 2 (Grades 10/11/12) #REA012**

1 credit

5 periods (FY)

*In 2011-12, student may receive their strategic literacy support directly within their English and/or Social Studies classes rather than participating in an additional reading course. Students electing this course will have their schedule modified to ensure they receive reading support.*

This reading course builds on reading strategies introduced in Strategic Literacy 1 and is required for students who have tested significantly below their current grade placement on a standardized reading assessment. Using primarily nonfiction text sources, this course is designed to improve comprehension, vocabulary, fluency, and written expression, and places special emphasis on analysis of text structures.

**Enrollment Information:** To enroll in the course, students must have been identified by reading staff as needing supplemental reading instruction.

### **Strategic Literacy 3 (Grades 11/12) #REA013**

½ credit

2 periods (FY)

*In 2011-12, student may receive their strategic literacy support directly within their English and/or Social Studies classes rather than participating in an additional reading course. Students electing this course will have their schedule modified to ensure they receive reading support.*

This reading course is designed for ongoing practice and use of active reading skills. Special emphasis is placed on helping students successfully apply strategies to their own content area texts to support independent learning.

**Enrollment Information:** To enroll in the course, students must have been identified by reading staff as needing supplemental reading instruction.

**Reading Support** (Grades 9/10/11) #REA021 (Scheduling Course ID)

*Formerly Titled: Reading Lab*

¼ credit

2 or more periods (FY)

The Reading Lab is designed to provide identified students with explicit support to achieve success in the area of reading comprehension as it related to meeting Pennsylvania's State Reading Standards. Using results from formal screening data, each student's instruction in the Reading Lab is tailor-made to address specific areas of need, and is continually modified as students make progress. This targeted instruction is designed to not only assist students with reaching proficiency in standardized testing, such as the PSSA, but also to help students apply skills acquired to their content area learning. Students assigned to the Reading Lab will earn 1/4 credit per semester in a pass/fail format.

Students may earn a maximum of ¼ credit by completing the equivalent of 2 periods a week for the year.

**Enrollment Information:** To enroll in the course, students must have been identified by reading staff as needing supplemental reading instruction.

## TECHNOLOGY EDUCATION COURSES

The technology education department offers coursework in a variety of disciplines for students interested in technology. Courses are offered in woodworking, metal working, graphics, computerized drafting and design, electronics, digital media, and engineering. The department offers two general introductory courses for students interested in multiple areas; however, students may also choose to move directly into their area of interest by electing Course 1 of the sequence. Students interested in technology should also review the materials regarding the Career and Technology Center (CTC). Students can receive further training and certifications in the various technology areas by attending the CTC during their junior and/or senior year.

For students interested in Engineering, the department offers Project Lead the Way courses that are affiliated with collegiate and university engineering programs and offer the potential for college credit and/or acceleration in college engineering programs.

- [Introductory Courses](#)
- [Woodworking](#)
- [Metal Technology](#)
- [Computer Aided Drafting & Design \(CADD\)](#)
- [Graphics](#)
- [Video Production](#)
- [Other Technology Electives](#)
- [Independent Study and Research](#)
- [Engineering: Project Lead the Way](#)

### INTRODUCTORY COURSES

#### **Communication Technology** (Grades 9/10/11/12) #TED011

½ credit

5 periods (S)

Students will explore current technological methods and tools used for communication. Through guided experiences, they will gain an understanding about how today's communication media is affecting society and their future. Students will actively apply design processes and 21<sup>st</sup> century technology in graphic design, video production, and technical drawing (including CADD.) This course provides a foundation for Graphics 1, Digital Video Production 1, and CAD 1: Introduction to CADD.

#### **Energy, Power, & Transportation** (Grades 9/10/11/12) #TED012

½ credit

5 periods (S)

Students will study energy sources, uses, and conversion mechanisms as they are related to energy and transportation systems. Learning activities include designing, building, and testing mechanical energy conversion devices, model transportation devices and electronic control system devices. Various industrial materials and manufacturing equipment are essential to the hands-on problem solving activities based around the technology problem-solving method. This course provides a foundation for the Electricity/Electronics and Applied Engineering courses.

### WOODWORKING

#### **Woodworking 1** (Grades 9/10/11/12) #TED021

*Previously Titled: Construction/Manufacturing*

½ credit

5 periods (S)

This course is designed to introduce basic manufacturing processes in a materials technology environment. The student will learn about basic woodworking by using wood shop tools and machines to make at least two unique wood projects. The first project will be a common class project made by each student. This project will then be

compared to a class-manufactured project. **Students who previously took Industrial Materials cannot select this course.**

### **Woodworking 2** (Grades 10/11/12) # TED022

*Previously Titled: Cabinetmaking and Manufacturing 1*

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 70% in Woodworking 1 or Industrial Materials (in prior school years).

This course is devoted to more complex aspects of woodworking, including principles of wood joinery, concepts of basic cabinetmaking, methods of advanced wood finishing and related practical techniques used universally in the woodworking industry. Students are encouraged to design or select their own projects. A unit on manufacturing will be included and the class will design and develop tooling and fixtures in order to produce a product by the line production method. **A materials fee is required.**

### **Woodworking 3** (Grades 11/12) # TED023

*Previously Titled: Cabinetmaking and Manufacturing 2*

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 70% in Woodworking 2.

After completing Woodworking 2, the student has developed a working knowledge of machine operations and has designed a project that reflects basic proficiency in woodworking technology. Individual research in such areas as period furniture design, advanced cabinet construction, and modern production methods are stressed in this course. A unit on manufacturing will be included and the class will design and develop tooling and fixtures in order to produce a product by the line production method. **A materials fee is required.**

## **METAL TECHNOLOGY**

### **Metal Technology 1** (Grades 9/10/11/12) # TED025

*Previously Titled: Industrial Materials (FY Course)*

½ credit

5 periods (S)

This course is a hands-on study of technology in the areas of metalworking and plastics. Students are required to use laboratory equipment to gain experience and learn the fundamentals of using tools and processing materials in each area. Safety, troubleshooting and problem-solving techniques are emphasized throughout the course. Students are required to make well-designed, practical projects in each area of study. Required projects are used to introduce and teach fundamental concepts and techniques. **Students who previously took Industrial Materials cannot select this course. A materials fee is required.**

### **Metal Technology 2** (Grades 10/11/12) #TED026

*Previously Titled: Metal Technology 1*

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 70% in Metal Technology 1 or Industrial Materials (previous school years).

This course is designed for the student who has developed an interest in metalworking from previous experience. Students spend one semester in advanced metalworking activities. A combination of required projects and independent study is used as students expand upon metalworking skills, methods and techniques introduced in Metal Technology 1. Advanced metalworking techniques are introduced such as machining, MIG welding, production sheet metalwork, and more sophisticated methods of foundry molding. **A materials fee is required.**



### **Metal Technology 3** (Grades 11/12) #TED027

*Previously Titled: Metal Technology 2*

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 70% in Metal Technology 2.

This course is designed to give students opportunities to pursue metalworking through an independent method of study. Students are required to select one or more methods of metalworking and to design, build, test and evaluate more complicated, detailed and advanced metalworking projects than completed in Metal Technology 2. **A materials fee is required.**

## **COMPUTER AIDED DRAFTING AND DESIGN (CADD)**

### **CAD 1: Introduction to CADD** (Grades 9/10/11/12) #TED031

*Previously Titled: Technical Drawing/CAD*

½ credit

5 periods (S)

Students will learn the global language of industry. Drafting is producing technical drawings that completely and accurately represent objects, and communicate how to make objects. American National Standards Institute (ANSI) drawing standards are studied and applied to the following kinds of technical drawings: pictorial, working drawings, and pattern developments. Sketching, mechanical drawing, and CADD (computer-aided drafting and design) skills are developed and practiced throughout the course.

### **CADD 2** (Grades 10/11/12) #TED032

*Previously Titled: CADD 1*

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% in Technical Drawing/CAD or Introduction to Engineering Design.

CADD (computer-aided drafting and design) software is an essential tool used by designers and engineers to communicate their ideas. CADD 2 applies the fundamental knowledge and skills acquired in CAD 1. Students will invent/innovate objects following a design process. ANSI (American National Standards Institute), ISO (International Standards Organization) and SAE (Society of Automotive Engineers) drawing standards are studied and applied.

### **CADD 3** (Grades 11/12) # TED033

*Previously Titled: CADD 2*

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% in CADD 1.

CADD (Computer-aided drafting and design) software is an essential tool used by designers and engineers to communicate their ideas. CADD 3 builds upon the drawing knowledge and skills acquired in CADD 2. Advanced skills in sketching and CAD (Autodesk), including secondary auxiliary views and perspective drawing, will be practiced throughout the course. Design problems will require students to practice both traditional and concurrent design processes. All drawings will apply drawing standards set by ANSI, ISO, and SAE.

## **GRAPHICS**

### **Graphics 1** (Grades 9/10/11/12) # TED041

½ credit

5 periods (S)

This course is an introduction course to Graphic Design and Printing. Students will learn to use their creativity to design and produce printed images for various design challenges. To create their solutions students will use state of the art software programs like Adobe InDesign® and Photoshop®, and will be introduced to printing methods such as Silkscreen printing and Offset printing.

### **Graphics 2** (Grades 9/10/11/12) # TED042

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% in Graphics 1.

This course enables students to develop advanced skills as Graphic Designers. The course focuses on the digital applications of visual communications. Students will use state of the art software programs like Adobe InDesign®, Photoshop® and Illustrator®. They will design solutions to challenges from the instructor, as well as outside design challenges, that will help develop their design, printing and presentation skills. Digital photography will be covered along with other digital-related communication methods.

## **VIDEO PRODUCTION**

### **Video Production 1** (Grades 9/10/11/12) #TED045

*Previously Titled: Digital Video Production 1*

½ credit

5 periods (S)

This project-based course introduces the video production process. Students are introduced to basic pre- and post-production skills of storyboarding, scriptwriting, camera techniques, visual composition, sound gathering and lighting techniques. The class will be instructed in Final Cut Pro editing software to create a variety of group and individual video projects. The Technology Education and English departments share the planning and instruction for this course.

### **Video Production 2** (Grades 10/11/12) #TED046

*Previously Titled: Digital Video Production 2*

½ credit

5 periods (S)

**Prerequisite:** minimum grade of 80% in Video Production 1 **and** teacher recommendation.

This project-based course builds on concepts introduced in VP 1 and encourages students to increase their proficiency in videography and explore advanced editing techniques. More emphasis will be placed on advanced camera functions, lighting and sound options and story development. Students will work independently to produce a variety of projects for the morning TV broadcast (feature and sports stories, commercials, interviews, commentaries) as well as an original short feature. The Technology Education and English departments share the planning and instruction for this course.

### **Video Production 3** (Grades 11/12) #TED047

*Previously Titled: Digital Video Production 3*

½ credit

5 periods (S)

**Prerequisite:** minimum grade of 80% in Video Production 2 **and** teacher recommendation.

The VP 3 class is responsible for the planning, production and broadcast of Blue Streak News. Rotating through each position, students will train in all job responsibilities, including lighting, camera and teleprompter operation, graphics, sound and video mixing, directing and news scriptwriting. Specific production assignments are included in each rotation. Students are evaluated on their contribution to and their performance during the broadcast. The Technology Education and English departments share the planning and the instruction of this course.

### **Video Production 4** (Grades 11/12) #TED048

½ credit

5 periods (S)

**Prerequisite:** minimum grade of 80% in Video Production 3 **and** teacher recommendation.

The VP 4 students will have the opportunity to advance their skills in areas that they have practiced during earlier levels of video production: creating news, feature, and sports stories, original short videos, documentaries or animated shorts for the school broadcast. Students may be called on to assist with the morning broadcast, if needed or may choose to concentrate their efforts in that area. Students in VP 4 should plan to enter a minimum of two projects in local or national contests throughout the semester. They may select their own format and contest as available.

### **OTHER TECHNOLOGY ELECTIVES**

#### **Black & White Photography** (Grades 11/12) #TED051

½ credit

5 periods (S)

This course is designed to help beginners and skilled photographers improve their photographic abilities. The course will cover units dealing with the history of photography, photographic equipment, lighting, composition and darkroom techniques. Students will learn special techniques ranging from development manipulations to Photoshop® applications. Course will conclude with learned skills applied to digital photography. **The students will need to provide their own photographic paper (approximate cost is \$20.00).**

#### **Electricity & Electronics** (Grades 10/11/12) # TED053

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% in Algebra I.

This course is a hands-on study of fundamental electrical systems. Students are required to use laboratory equipment to test and analyze direct current circuits. Units of instruction will include introductions to solid state and digital electronics. Direct applications of science and mathematics are reinforced throughout the course. Students are required to make projects, including assembling electronic circuits and building cases for complete, usable projects. **A materials fee is required.**

#### **Applied Engineering** (Grades 11/12) #TED054

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% Algebra I.

The purpose of this course is to provide an orientation to the careers and challenges of engineering and to introduce students to the core skills required for entrance in the fields of engineering. The course will be taught in a laboratory setting that provides access to tools and materials for individual, small-group and large-group problem-solving activities. This course begins with the instructor being the initiator of the problem-solving process. As the course progresses, the instructor takes on the role of facilitator and mentor as students take ownership of the entire problem-solving process. Students will apply mathematical, scientific and technological concepts as they design, build, test and evaluate solutions to real world engineering problems. Course content includes structural and mechanical engineering concepts.

#### **Architectural Drawing 1** (Grades 11/12) #TED055

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% in CADD 1.

This introductory course acquaints the student with the design process used for planning a typical residence. The subject includes a brief historical review of architectural styles and their relation to modern structures. Architectural features such as materials and spatial requirements are studied and applied as the student designs and develops his/her own set of house plans by means of sketching, mechanical drawing and CAD.

### **Architectural Drawing 2 (Grades 11/12) #TED056**

½ credit

5 periods (S)

**Prerequisite:** a minimum grade of 75% in Architectural Drawing 1.

Architectural Drawing 2 provides additional class time and knowledge for Architectural Drawing 1 students to complete a full set of house plans for their house design. In addition to the floor plans developed in Architectural Drawing 1, the student will complete a foundation plan, a typical wall section, and elevations.

## **INDEPENDENT STUDY & RESEARCH**

### **Independent Technology Project (Grades 11/12) #TED061**

½ credit

5 periods (S)

**Prerequisites:** Completion of all offered courses in the selected area of Technology Education for the project and prior arrangements made with the teacher that will facilitate instruction for the planned independent project.

This course is for students who want to pursue an advanced, independent project in technology education. This could include, but is not limited to a project in materials processing/ manufacturing, CAD/D, energy/ power/ transportation, graphic design, or video production. Students will be expected to keep a journal of activities, and will be assessed against a variety of rubrics depending on their particular project. A final report and/or presentation of the student's project will be required at the end of the term, unless the project is continued into a second semester. Enrollment in this course can be repeated, as necessary, to continue or pursue a new technology education project.

### **Independent STEM Research 1 (Grades 9/10/11/12) #SCI051**

### **Independent STEM Research 1 (Grades 9/10/11/12) #SCI051VT (Virtual)**

### **Independent STEM Research 2 (Grades 9/10/11/12) #SCI052**

### **Independent STEM Research 2 (Grades 9/10/11/12) #SCI052VT (Virtual)**

Students can pursue scientific research in fields related to technology and engineering through the Independent STEM Research course. Students will receive guidance in scientific inquiry from a science teacher and will receive guidance from a technology education teacher regarding their research interests. The formal course description can be found in the Science section of the planning guide

## **ENGINEERING COURSES- PROJECT LEAD THE WAY**

The Project Lead the Way (PLTW) engineering curriculum engages students in a rigorous, hands-on learning experience. Students learn theory which allows them to solve engineering and technological problems in an innovative way. Students learn to use the design process to develop new and innovated ways to solve

challenges; and students develop prototypes to learn materials processes and test their engineering designs. If you are interested in more information about the PLTW courses, contact the technology education staff. You can also access more information at <http://www.pltw.org/our-programs/our-programs>.

**PLTW: Introduction to Engineering Design** (Grades 9/10/11/12) #TED071

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *Recommendation from current Technology Education or Science Teacher.*

This computer intensive course is one of two introductory courses in the Project Lead the Way engineering program that is offered through the STEM Academy. Introduction to Engineering Design teaches students the process of product design through the use of CAD and computer modeling software. Students use a problem-solving model to improve existing products and invent new ones. They also learn how to apply this model both in and out of the classroom. Emphasis is placed on analyzing potential solutions, both qualitatively and quantitatively, and communicating the ideas to others. Students are required to purchase an Engineer's Notebook.

**PLTW: Principles of Engineering Design** (Grades 9/10/11/12) #TED072

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *concurrent enrollment in college preparatory mathematics and science. It is also recommended that students have completed Algebra 1 and Introduction to Engineering Design.*

This course provides an overview of the **world of engineering**. Students will develop problem-solving skills by tackling real-world engineering problems. This course provides a hands-on approach to science, math, and technology. Through theory and practical hands-on experience, students will become familiar with the multifaceted career of engineering. This course will explore the following topics: mechanisms, energy sources, energy applications, machine control, fluid power, statics, material properties, material testing, statistics, and kinematics. Students will work on projects such as energy transfer devices, marble "trash" sorters, structural design and testing, pneumatic systems, electronic control systems, ping-pong ball launchers, hero's engines, and a material tensile testing activity. Students are required to purchase an Engineer's Notebook. Students successfully completing the POE course may qualify for engineering technology elective college credits at universities across the United States. See details at <http://www.pltw.org/universities>.

**PLTW: Digital Electronics** (Grades 10/11/12) #TED073

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *recommendation from current Technology Education or Science Teacher.*

*Digital Electronics is an introductory level course highly recommended for any student interested in the Project Lead the Way Engineering program. Students will be challenged to apply the theory of operations in digital electronics with modern design concepts and practical applications needed to be competitive in a technical world. This course is offered in alternate years. This course will NOT be offered in 2011-12. The course will be offered in 2012-13 and 2014-15.*

**PLTW: Aerospace Engineering** (Grades 10/11/12) #TED074

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** *concurrent enrollment in college preparatory mathematics and science. It is also recommended that students have completed Introduction to Engineering Design or Principles of Engineering Design.*

This course engages students in engineering design problems related to the world of aviation and space travel. Using hands-on, project based learning, students will explore concepts related to: aerospace information systems, astronautics, rocketry, propulsion, the physics and biology of space science, principles of aeronautics,

aviation structures and materials, and systems control engineering. Students successfully completing the POE course may qualify for engineering technology elective college credits at universities across the United States. See details at <http://www.pltw.org/universities>. **Beginning in 2011-12 this course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.**

**PLTW: Biotechnical Engineering** (Grades 11/12) #TED075

1 credit

weight 1.05

5 periods (FY)

**Prerequisites:** successful completion of Biology I and Algebra I. It is also recommended that students take Chemistry I, and either Introduction to Engineering Design or Principles of Engineering prior to taking this course.

*This rigorous course is one of two field-specific courses in the Project Lead the Way engineering program that is currently offered through the STEM Academy. Biotechnical Engineering teaches students advanced skills in biology, chemistry, applied physics, and mathematics. These skills are applied to real-world biotechnology experiences in a variety of industries. Engineering design challenges will address the areas of biomechanics, cardiovascular engineering, genetic engineering, agricultural biotechnology, tissue engineering, biomedical devices, forensics, and bio-ethics. **This course is offered in alternate years. This course will NOT be offered in 2011-12. The course will be offered in 2012-13 and 2014-15.***

**PLTW: Civil Engineering and Architecture** (Grades 11/12) #TED076

**Prerequisites:** successful completion of Physical Science and Algebra I. It is also recommended that students take Physics I, CAD 1 : Introduction to CADD, Introduction to Engineering Design, and Principles of Engineering Design.

1 credit

weight 1.05

5 periods (FY)

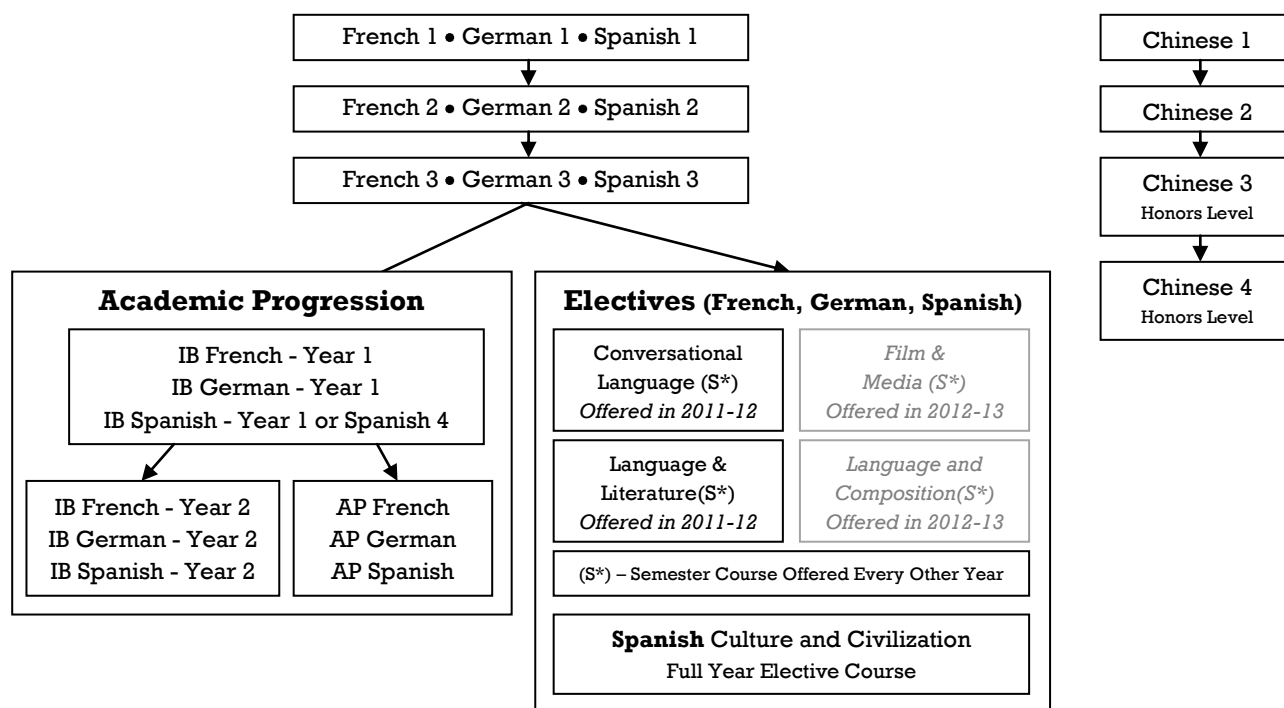
This course offers students the fundamental knowledge and experience to apply mathematical, scientific, and engineering principles to the design, development, and evaluation of a property. Classroom instruction provides creative thinking and problem-solving activities using software that allows students to design, test, and evaluate a variety of civil engineering and architecture based problems. Students are required to purchase an Engineer's Notebook. **Beginning in 2011-12 this course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.**

## WORLD LANGUAGE COURSES

The World Language department offers language study in French, German, Spanish and Chinese. In 2011-12, students will notice changes to the French and German programs [Spanish and Chinese will remain largely the same]. Students will now have more options after having completed the third year of the language. Students can continue to pursue academic study in their language by taking their 4<sup>th</sup> and 5<sup>th</sup> years of the language in the IB and AP program or they can pursue conversational electives where students will develop their cultural knowledge and speaking ability.

The department will also offer Latin 2 virtually for any students who have previously started Latin study. 2011-12 will be the last year Latin will be offered through the high school.

The diagram below demonstrates the paths students can take in French, German, and Spanish. [Chinese will maintain the traditional 4 year sequence].



For the traditional languages (French, German, and Spanish) the first three years and all electives are considered college preparatory in nature and are weighted as such (1.0). The academic progression includes more significant rigor and consequently are weighted 1.05 or 1.1. The learning of Chinese requires a different progression and rigor. Chinese 1 and 2 are considered college preparatory (1.0) and Chinese 3 and 4 are considered honors level courses and are weighted 1.05.

Ongoing success in learning a second language requires continual achievement. Students must earn a minimum of 75% in a course to move onto the subsequent course. Students who fail to meet that requirement must receive special permission from the instructor to continue in the program.

## CHINESE

### Chinese 1 (Grades 9/10/11/12) #WLA011

1 credit

5 periods (FY)

In this introductory course, students will be learn to communicate at a novice level using simple sentences and common vocabulary about topics such as School, Classmates & Teachers, Hanging out with Friends, Family, Telling time, and the Seasons.

### Chinese 2 (Grades 10/11/12) #WLA012

1 credit

5 periods (FY)

**Prerequisite:** successful completion of Chinese 1 with a minimum grade of 75%.

In this second course, students will learn to communicate at an advanced-beginner level expanding on learned vocabulary and structures to personalize their communication. Students will communicate with topics including Color, Clothing, Food, Health and Sports, Hobbies.

### Chinese 3 (Grades 11/12) #WLA013

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of Chinese 2 with a minimum grade of 75%.

In this third course, students will learn to communicate at an intermediate level, using increasingly complex vocabulary and structures. Speaking and writing will become more fluid and natural. Students will communicate with topics including Diet, Entertainment, Occupation, The Environment, Holiday Celebrations, and Summer Vacation.

### Chinese 4 (Grade 12) #WLA014

1 credit

weight 1.05

5 periods (FY)

**Prerequisite:** successful completion of Chinese 3 with a minimum grade of 75%.

In this fourth course, students will learn to communicate at a pre-advanced level, using more sophisticated vocabulary and structures. Speaking and writing will continue to become more fluid and natural. Students will communicate with topics including Family & Generations, Leisure Time, Travel and Transportation, Cities and Cultures, Diet and Health, and Geography.

## FRENCH

### French 1 (Grades 9/10/11/12) #WLA021

1 credit

5 periods (FY)

In this introductory course, students will be learn to communicate at a novice level using simple sentences and common vocabulary about topics such as Likes and Dislikes, School & Leisure activities, Foods and Clothing, Francophone cultures, and Family and Friends.

### French 2 (Grades 9/10/11/12) #WLA022

1 credit

5 periods (FY)

**Prerequisite:** successful completion of French 1 with a minimum grade of 75%.



In this second course, students will learn to communicate at an advanced-beginner level expanding on learned vocabulary and structures to personalize their communication. Students will communicate with topics including The home, Travel and Shopping, School and Leisure activities, Francophone cultures, Health, Storytelling, and Special occasions.

**French 3** (Grades 10/11/12) #WLA023

1 credit

5 periods (FY)

**Prerequisite:** successful completion of French 2 with a minimum grade of 75%.

In this third course, students will learn to communicate at an intermediate level, using increasingly complex vocabulary and structures. Speaking and writing will become more fluid and natural. Students will communicate with topics including Personal and social responsibilities, Family relationships, Health and Fitness, Television and Media, Francophone cultures, and Future plans.

**Conversational French** (Grades 11/12) #WLA026

½ credit

5 periods (S)

**Prerequisite:** successful completion of French 3 with a minimum grade of 75%.

This course will develop students' ability to converse in French at an intermediate to advanced level on such topics as: music, literature, art, culture, current events, and history. Learning activities will include: Spontaneous speaking activities (dialogs and interviews), Prepared speaking activities (debates and recordings), Writing activities (scripts), Listening & Reading activities (current events and commercials). This course will also emphasize the proper and standard pronunciation of French and its variations. ***This course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.***

**French Language and Literature** (Grades 11/12) #WLA027

½ credit

5 periods (S)

**Prerequisite:** successful completion of French 3 with a minimum grade of 75%.

This is a semester course focusing on French language acquisition and development through the study of authentic Francophone literature in a variety of genres and from a range of time periods and settings. Texts studied may include: Plays, Short stories, Poems, Fairy tales, Essays, Folk tales, Novellas and Novels. Activities such as class and small group discussions, student presentations and projects, and various writing activities are designed to deepen students' knowledge and appreciation of various Francophone cultures while improving their skills in listening to, reading, speaking and writing French. ***This course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.***

**French Film and Media** (Grades 11/12) #WLA028

**French Language and Composition** (Grades 11/12) #WLA029

½ credit

5 periods (S)

*These two course offerings have not yet been approved by the Board of Education. If approved they will first be offered in the 2012-13 school year and in subsequent alternating years.*

**IB French Language B Year 1 (Grade 11/12) #IBO121**

**IB French Language B Year 2 (Grade 12) #IBO122**

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** successful completion of French 3 with a minimum grade of 75%.

Students participating in the International Baccalaureate Program during their Junior and Senior year will satisfy their world language requirements through the completion of these two courses. **Year 1 of the course is also appropriate for any junior or senior wishing to pursue a fourth year of academic language preparation.** Year 2 represents the fifth year of study. The course descriptions can be found in the International Baccalaureate section of the planning guide.

### **AP French Language** (Grade 12) #WLA025

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** *successful completion of French 4 with a minimum grade of 75%.*

The AP French Language and Culture course continues to develop students' abilities to demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings/situations. Learning objectives identifying what students should know and be able to do cover the following areas: Spoken Interpersonal Communication, Written Interpersonal Communication, Audio, Visual, and Audiovisual Interpretive Communication, Written and Print Interpretive Communication, Spoken Presentational Communication, and Written Presentational Communication.



### **German 1** (Grades 9/10/11/12) #WLA031

1 credit

5 periods (FY)

In this introductory course, students will learn to communicate at a novice level using simple sentences and common vocabulary about topics such as Basic personal information, Family and Youth Activities, School and Weather, Food and Dining customs, Clothing and Shopping traditions, and Homes and Special occasions.

### **German 2** (Grades 9/10/11/12) #WLA032

1 credit

5 periods (FY)

**Prerequisite:** *successful completion of German 1 with a minimum grade of 75%.*

In this second course, students will learn to communicate at an advanced-beginner level expanding on learned vocabulary and structures to personalize their communication. Students will communicate with topics including Body Parts and Sports, Travel and Transportation, Outdoor Activities and Vacations, Urban and Rural lifestyles, and Food and Dining customs.

### **German 3** (Grades 10/11/12) #WLA033

1 credit

5 periods (FY)

**Prerequisite:** *successful completion of German 2 with a minimum grade of 75%.*

In this third course, students will learn to communicate at an intermediate level, using increasingly complex vocabulary and structures. Speaking and writing will become more fluid and natural. Students will communicate with topics including Shopping and Commerce, Adventure Sports, Hobbies and Interests, Festivals and Holidays, Media and Communication, Health and Wellness, and Travel and Transportation.

### Conversational German (Grades 11/12) #WLA036

½ credit

5 periods (S)

**Prerequisite:** successful completion of German 3 with a minimum grade of 75%.

This course will develop students' ability to converse in German at an intermediate to advanced level on such topics as: music, literature, art, culture, current events, and history. Learning activities will include: Spontaneous speaking activities (dialogs and interviews), Prepared speaking activities (debates and recordings), Writing activities (scripts), Listening & Reading activities (current events and commercials). This course will also emphasize the proper and standard pronunciation of German and its variations. ***This course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.***

### German Language and Literature (Grades 11/12) #WLA037

½ credit

5 periods (S)

**Prerequisite:** successful completion of German 3 with a minimum grade of 75%.

This is a semester course focusing on German language acquisition and development through the study of authentic German literature in a variety of genres and from a range of time periods and settings. Texts studied may include: Plays, Short stories, Poems, Fairy tales, Essays, Folk tales, Novellas and Novels. Activities such as class and small group discussions, student presentations and projects, and various writing activities are designed to deepen students' knowledge and appreciation of various Germanic cultures while improving their skills in listening to, reading, speaking and writing German. ***This course will be offered every other year. The course will be offered in 2011-12, 2013-14, and 2015-16.***

### German Film and Media (Grades 11/12) #WLA038

### German Language and Composition (Grades 11/12) #WLA039

½ credit

5 periods (S)

*These two course offerings have not yet been approved by the Board of Education. If approved they will first be offered in the 2012-13 school year and in subsequent alternating years.*

### IB German Language B Year 1 (Grade 11/12) #IBO131

### IB German Language B Year 2 (Grade 12) #IBO132

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** successful completion of German 3 with a minimum grade of 75%.

Students participating in the International Baccalaureate Program during their Junior and Senior year will satisfy their world language requirements through the completion of these two courses. **Year 1 of the course is also appropriate for any junior or senior wishing to pursue a fourth year of academic language preparation.** Year 2 represents the fifth year of study. The course descriptions can be found in the International Baccalaureate section of the planning guide.

### AP German Language (Grade 12) #WLA035

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** successful completion of German 4 with a minimum grade of 75%.

The AP German Language and Culture course continues to develop students' abilities to demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings/situations. Learning objectives identifying what students should know and be able to do cover the following areas: Spoken Interpersonal Communication, Written Interpersonal Communication, Audio, Visual, and

Audiovisual Interpretive Communication, Written and Print Interpretive Communication, Spoken Presentational Communication, and Written Presentational Communication.



**Spanish 1** (Grades 9/10/11/12) #WLA041

1 credit

5 periods (FY)

In this introductory course, students will learn to communicate at a novice level using simple sentences and common vocabulary about topics such as School, Family and House, Foods and Clothing, Cultures of Mexico, Puerto Rico, Spain, and Ecuador.

**Spanish 2** (Grades 9/10/11/12) #WLA042

1 credit

5 periods (FY)

**Prerequisite:** successful completion of Spanish 1 with a minimum grade of 75%.

In this second course, students will learn to communicate at an advanced-beginner level expanding on learned vocabulary and structures to personalize their communication. Students will communicate with topics including Travel and Vacation, Sports and Fitness, Shopping Customs, Cultures of Costa Rica, Argentina, and Puerto Rico

**Spanish 3** (Grades 10/11/12) #WLA043

**Spanish 3 for Immersion/Native Speakers** (Grade 9) #WLA043I

1 credit

5 periods (FY)

**Prerequisite:** successful completion of Spanish 2 with a minimum grade of 75%.

In this third course, students will learn to communicate at an intermediate level, using increasingly complex vocabulary and structures. Speaking and writing will become more fluid and natural. Students will communicate with topics including Latino/Spanish culture and traditions, Family relationships, Personal and social responsibilities, Future goals and Professional plans, and Social networking.

**Conversational Spanish** (Grades 10 Immersion/11/12) #WLA046

½ credit

5 periods (S)

**Prerequisite:** successful completion of German 3 with a minimum grade of 75%.

This course will develop students' ability to converse in Spanish at an intermediate to advanced level on such topics as: music, literature, art, culture, current events, and history. Learning activities will include: Spontaneous speaking activities (dialogs and interviews), Prepared speaking activities (debates and recordings), Writing activities (scripts), Listening & Reading activities (current events and commercials). This course will also emphasize the proper and standard pronunciation of Spanish and its variations. ***This course will be offered every year.***

**Spanish Culture and Civilization** (Grades 10 Immersion/11/12) #WLA044

1 credit

5 periods (FY)

**Prerequisite:** successful completion of Spanish 3 with a minimum grade of 75%. Tenth grade Immersion students may also elect this course.

In this course, students will study the main indigenous Latin American cultures and civilizations. Students will analyze and investigate the origins and contributions Latin Americans have offered to global civilization. In addition, the course will cover various topics of Hispanic theatre, art and modern cultural events. Course objective is to present an authentic cultural connection with the Hispanic world from past to present day.

#### **Spanish 4** (Grades 10 Immersion/11/12) #WLA044A

1 credit

weight 1.05

5 periods (FY)

This course stresses reading, understanding and analyzing of stories and classic novels. Students will converse more spontaneously and discuss works using previously learned vocabulary and grammar. Emphasis will be placed on a more natural writing and speaking style utilizing new and previously learned grammar.

[IB Spanish Language B Year 1 \(Grade 11/12\) #IBO141](#)

[IB Spanish Language B Year 2 \(Grade 12\) #IBO142](#)

[IB Spanish Language B Year 1 - Accelerated \(Grade 11\) #IBO146](#)

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** successful completion of Spanish 3 with a minimum grade of 75%.

Students participating in the International Baccalaureate Program during their Junior and Senior year will satisfy their world language requirements through the completion of these two courses. **Year 1 of the course is also appropriate for any junior or senior wishing to pursue a fourth year of academic language preparation.** Year 2 represents the fifth year of study. The course descriptions can be found in the International Baccalaureate section of the planning guide.

#### **AP Spanish Language** (Grade 12) #WLA045

1 credit

weight 1.10

5 periods (FY)

**Prerequisite:** successful completion of Spanish 4 with a minimum grade of 75%.

The AP Spanish Language and Culture course continues to develop students' abilities to demonstrate an understanding of the culture(s), incorporate interdisciplinary topics, make comparisons between the native language and the target language and between cultures, and use the target language in real-life settings/situations. Learning objectives identifying what students should know and be able to do cover the following areas: Spoken Interpersonal Communication, Written Interpersonal Communication, Audio, Visual, and Audiovisual Interpretive Communication, Written and Print Interpretive Communication, Spoken Presentational Communication, and Written Presentational Communication.



#### **Latin 2 (Virtual)** (Grades 10/11/12) #WLA052

1 credit

This course will build on the Latin grammar and vocabulary in Latin I and will emphasize structure and expression. Students will also learn about Roman engineering, art and architecture, commerce, government and the courts, poets and statesmen and historical battles. Roman mythology will also be included. *This course is taught by instructors from the Florida Virtual School. Students wishing to take this course will be required to make a deposit to participate in the course. When the student successfully completes the course, the deposit will be returned.*



1. 2. 3.

4. 5. 6.

1. 2. 3.

4. 5. 6.



The Manheim Township School District reserves the right to alter requirements and offerings as printed when deemed to be the result of sound educational planning or when the result of changes in federal, state or local regulations. Changes that are made will be explained to students via an addendum sheet and/or by counselors in student informational meetings each year prior to scheduling.

The Manheim Township School District, an equal opportunity employer, will not discriminate in employment, educational programs or activities, based on race, color, national origin, sex or handicap. In addition the Manheim Township High School, Middle School, Brecht Elementary School, Neff Elementary School, W.E. Nitrauer Elementary School, Reidenbaugh Elementary School and Schaeffer Elementary School are now accessible to and usable by the physically handicapped. For information about your rights or grievance procedures, contact the Manheim Township School District Office. Phone: (717) 569-8231.