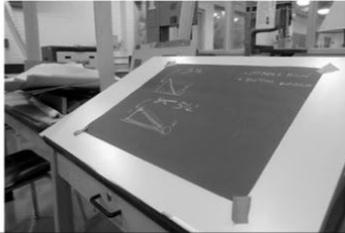


# Program of Studies



**Innovation  
Challenges**



**Diversity  
Experiences**



**GO  
VIKINGS!**



**2021-2022**



**Courses:**  
\*CMTHS  
\*Electives  
\*Core Classes

# UPPER MERION AREA SCHOOL DISTRICT

## BOARD OF SCHOOL DIRECTORS

Dr. Gary Ledebur(President)  
Mrs. Melissa Galvan(Vice President)  
Ms. Maura Buri  
Mr. Troy Chiddick  
Mr. Eric Elvanian  
Mrs. Margaret Philips  
Mr. Brett Olson  
Dr. Eric Wellington

## CENTRAL ADMINISTRATION

Dr. John Toleno.....Superintendent  
Dr. Susan Silver.....Assistant Superintendent for Curriculum and Instruction  
Dr. Sean Gardiner.....Director of Curriculum and Instruction-STEM  
Dr. Andrew Kuhn.....Director of Curriculum and Instruction-Humanities  
Mr. John Moody.....Director of Student Services  
Mrs. Staci Futrick.....Supervisor of Special Education  
Mrs. Treena Sadler.....Supervisor of Special Education

## HIGH SCHOOL ADMINISTRATION

**Mr. Jonathan Bauer**  
Principal

**Mrs. Shannon Newhard - Class of 2022 & 2024**  
Assistant Principal

**Mr. Victor Brown - Class of 2021 & 2023**  
Assistant Principal

**Mr. Michael Fabrizio**  
Director of Athletics and Student Activities

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## **UMAHS Mission Statement**

**District Mission:** Inspiring Excellence... in every student, every day.

**Upper Merion Area High School Mission:** The mission of UMAHS, a challenging diverse, caring learning community is to inspire excellence in every student by fostering lifelong learners who recognize and achieve their fullest potential.

### **GOALS**

#### **1. Ensuring Accomplishments and Achievement for All Students**

**We Envision:**

- A 21st Century culture for customized learning.
- Programs and instruction that prepare all students to graduate college and career ready.
- A balanced and consistent assessment system.
- Professional learning that is focused, job-embedded, and results in a 21st century culture of learning for all students.
- Smooth transitions that support all students as they move from grade to grade, building to building, district to district and high school to post-secondary.
- Student participation in athletics and extracurricular activities and organizations.

#### **2. Strengthening and Expanding District And Community Engagement and Partnerships**

**We Envision:**

- Improved district communications and deepen community and partnership engagement.

#### **3. Ensuring safety and wellness across the District**

**We Envision:**

- Safe facilities and transportation.
- A climate and culture of safety, security, and wellness across the district.

#### **4. Maximizing Efficacy and Coordination across District Support Systems**

**We Envision:**

- Fiscal stability in the District.
- Sufficient and safe facilities within which to support a 21st century.
- A District that is well maintained in a timely manner.
- High levels and use of technology across the District.
- An efficient transportation infrastructure.

**Upper Merion Area High School  
2021-2022 Faculty**

**Computers/Business**

Denise Jowett\*  
Rachel Albright  
Rebecca Brown  
Jennifer McCarthy

**English**

Jennifer Rieger\*  
Jason Darnell  
Rachel Darnell  
Joan Durland  
Laura Ebersole  
Hollis Gelber  
Erika Imhoff  
Candice Stinson  
Rebecca McDonnell  
Katelyn Nagy  
Kim Oren  
Thomas Schurtz  
Dan Taylor-Storm  
Daryl Schumacher  
Jennifer Williams

**Foreign Language**

Jennifer Sharp\*  
Philippe David  
Brian Diehl  
Andrea Jaggers Brown  
Ana Lisi  
Isabel Ocampo  
Jeffrey Skonier  
Neena Swartz

**Guidance**

Erik Enters\*  
Patricia Brower  
Kim Jackson  
Nicole Miller  
Allison Pymer

**Media Center**

Kelly Bontempo

**Viking Channel**

Brian Reagan

**Mathematics**

Katherine Schneider\*  
Jaime Baxter, III  
Jeffrey Bowlby  
Katherine Cavanaugh  
Matthew Collins  
Lisa Haney  
Joseph Heinz  
Susan Helenski  
Hilary Mapson  
Jill Murray  
Danielle Sabato

**Science**

Peter Vreeland\*  
Sarah Bearoff  
Jeffrey Bugenhagen  
Scott Cox  
Kelly Cross  
Justin Damm  
Michelle Franko  
Dawn Hallquist  
Laura Himler  
Jeff Kushner  
Ashley McDermott  
David Montalvo  
Lynda Newhart  
Andrew Restad  
Danielle Staley  
Michael Werner

**Health Services**

Iris Washington  
Patricia Neary

**Family & Consumer  
Sciences**

Leslie Clifton\*  
Megan Barner

**Technology Education**

Peter Vreeland

**School Safety Officer**

James Godby

**Social Studies**

Stephen Kozol\*  
Michael Barash  
Stephanie Dell'Elmo  
Melanie Gogarty  
Michael Griffith  
Edward Helenski  
Ryan Larkin  
Matthew Mitchell  
Maria Savini  
Candice Stinson  
Melissa Toto

**Special Education**

Cheryl Bacchi\*  
Colleen Buchinsky  
Joseph Canac  
Ashley Cook  
Nicole Darley  
Rocco Gambone  
Gregory Kane  
Eileen Kenny  
Rachelle Lehman  
Edward Lindsay  
Jennifer Pierce  
Kelly Pruessner  
Lauren Roder  
Gail Ward  
Matthew Wanamaker  
Kristine Wynant

**Arts**

Lisa Burns\*  
Troy Burkhart  
Diana Helmetag  
Timothy Spangler

**Health/Physical Ed**

Angie Yanocha\*  
Corey Besz  
Robert Dever  
Patricia Ehret  
Joseph Heffernan

**\*Subject Area Leader**

## **GUIDANCE AND COUNSELING SERVICES**

It is the goal of Upper Merion Area High School to encourage students to become active learners and responsible, well-rounded citizens. In keeping with this goal, each student is provided assistance in educational and career planning.

The staff strives to meet the unique needs of each student by careful placement in courses commensurate with abilities and interests. Teacher recommendations, test scores, grades, parent and student input are used to make the most accurate placements possible.

Confidential counseling services are available for students who have personal problems. The school has the services of an SAP Counselor to assist students in need of additional help. Counselors are members of the Instructional Support Team (IST) and Student Assistance Program (UMAAT). These two committees have been designed to promote and assist students in their educational and emotional adjustment.

The success of our students is a cooperative effort between the home and the school. The school staff encourages parents to participate in their child's high school career. Parents are invited to contact the guidance office with any concerns and to take advantage of all the services offered.

### **COUNSELOR ASSIGNMENTS FOR 2021-2022**

The Upper Merion Area High School Guidance Department is a hybrid counselor distribution that incorporates the better of two models. It is a dual grade-level alphabetical system. Two counselors share two grade levels and are assigned to students by alphabet. Each grade is divided alphabetically by last name: A-K and L-Z with a counselor assigned to that particular caseload. Assistant Principals are aligned with the counselors. This provides each counselor with the opportunity to work with students in each grade level over a four year period.

Students A-K 10th & 12th*	Kim Jackson	610-205-3870
Students L-Z 10th & 12th*	Nicole Miller	610-205-3873
Students A-K 9th & 11th*	Trish Brower	610-205-3840
Students L-Z 9th & 11th*	Allison Lowry	610-205-3841
College Counselor	Erik Enters	610-205-3839
Guidance Technician	Elaine Berman	610-205-3821
Guidance Clerk	Diane Coxe	610-205-3899

### **THE "HUB"**

Parents and students are urged to take full advantage of the resources in the HUB. Current information is available through the guidance tab at [www.umasd.org/domain/497](http://www.umasd.org/domain/497). All guidance related materials and links are now available through your student's Naviance account - <http://connection.naviance.com/uppermhs>.

### **Post-Secondary Planning Opportunities – include:**

Scholarship Information	College Catalogs
Training Course Brochures	Military Guides
Financial Aid Information	SAT/ACT Test Prep Info
Occupational & Career Information	College Resource Books

## **Naviance Family Connection**

Family Connection is a comprehensive website that you and your child can use to help in making plans about courses, colleges, and careers. Family Connection is linked with Naviance Succeed™, a service that we use in our office to track and analyze data about college and career plans. It provides up-to-date information that is specific to our school.

Family Connection will allow you and your child to:

- Get involved in the planning and advising process – Build a resume, complete online surveys, and manage timelines and deadlines for making decisions about colleges and careers
- Research colleges – Compare GPA, standardized test scores, and other statistics to actual historical data from our school for students who have applied and been admitted in the past
- Research careers – Research hundreds of careers and career clusters, and take career assessments like the Do What You Are® test.
- Create plans for the future – Build course plans, create goals and to-dos, and complete tasks assigned to you by the school to better prepare yourself for your future college and career goals.

Family Connection also lets us share information with you and your child about upcoming meetings and events, local scholarship opportunities, and other resources for college and career information.

To visit our school's Family Connection site, use your browser to connect to:

**<http://connection.naviance.com/uppermhs>**

To sign in - the student should type in their student id in email/user name space. Your password is your birthday - yyyymmdd. Guests may access the site but will be limited to basic information and not be able to use all of the features of the website. If you have problems accessing your Naviance account please contact your individual counselor.

## **College Application Process**

The College Counselor is available to all students to discuss their future plans. Students thinking about entering college after graduation are encouraged to plan early. Colleges look closely at the level of coursework a student has chosen throughout high school. It is imperative for students to challenge themselves academically in order to prepare for college level work.

## **Athletes**

In order to participate in Division I or Division II athletics and receive athletically-based financial aid, students must register with the NCAA Initial-Eligibility Clearinghouse and meet eligibility standards. If they wish to register on-line with the Clearinghouse, they must have a valid U.S. Social Security Number and a valid credit card (Visa or MasterCard.) The Clearinghouse ensures that students are academically qualified to play by reviewing their high school transcripts. Students cannot register until they have completed their junior year. More information is available at [www.ncaaclearinghouse.net](http://www.ncaaclearinghouse.net)

## College Planning Guide

It is recommended that you do not wait until junior or senior year to begin planning for college. Remember that colleges will receive your 9th, 10th and 11th grade courses and grades. Take the most challenging courses you can handle and do your best work.

### Freshman Year

- Meet with your counselor to go over a plan of action for college preparation
- Become familiar with college entrance requirements
- Join extracurricular activities
- Continue or begin saving for college
- Research college costs
- Explore your career interests

### Sophomore Year

- Continue to take challenging high school courses
- Continue to explore careers and the education required to be successful in the careers that interest you
- PSAT is given to every sophomore. Review your PSAT scores with your Guidance Counselor and/or the College Counselor
- Create a College Board account. Connect to Khan Academy for personalized SAT preparation
- Begin collecting college information
- Attend a summer program at a college to experience a college atmosphere
- Visit colleges and talk with college students
- Decide what kind of college you would like to attend (large vs small, urban vs rural, etc)
- Continue to save for college
- Continue and/or join extracurricular activities
- Begin to do community service (colleges are now EXPECTING that students are participating in some type of community service in high school)

### Junior Year

- PSAT is given to every Junior
- Meet with your Guidance Counselor for a Junior Conference
- Counselors meet with each of their juniors to go over credits, discuss senior year courses, evaluate career plans and discuss post-secondary options
- KEEP YOUR GRADES UP! Junior year is an important year to the colleges considering your application
- Register for the SAT and/or ACT in the spring - take one test in January or February and one in May or June
- Visit colleges - prepare a list of questions to ask when you visit. Take notes of characteristics you like and dislike and start to narrow the list of schools to which you plan to apply
- Put together an activities resume and/or portfolio that highlights special skills or talents you have
- Volunteer for activities and clubs related to your career interests
- Get a part-time job, internship or job shadow in a profession that interests you
- Attend college fairs
- Ask for letters of recommendation from your teachers and counselor

## Senior Year

### September - December

- Meet with your Guidance Counselor to review your credits and make sure that your transcript is correct
- Meet with the College Counselor to discuss your college choices and review the application process
- Write your college essay (it will be the first theme in your senior English class)
- Keep track of your application deadlines and submit your applications and transcript requests in a timely fashion
- Apply for financial aid using the FAFSA (Free Application for Federal Student Aid) - go to [Fafsa.ed.gov](http://Fafsa.ed.gov) for more information
- Complete the CSS Profile financial aid form if the school to which you are applying requires it
- Make sure you have completed all of the required financial aid forms for the colleges to which you are applying (FAFSA, Institutions forms, CSS Profile).

### January - May

- Keep track of and observe deadlines for all required fees and paperwork
- Look for scholarship information (there is a scholarship board in the Hub )
- Look for your Student Aid Report (SAR) from the colleges to which you have been accepted
- Compare financial aid packages from your schools
- Do additional visits to help you in your final decision making
- Decide which college you plan to attend by May 1

**College Representatives** – visits are held throughout the year (primarily in the fall) so that students and parents can meet with admissions representatives to get information about a specific college, their academic programs, campus life, and admissions policies. All students are encouraged to attend these programs regardless of grade level, although they are designed primarily for juniors and seniors. Students are asked to not abuse the privilege of missing instructional time to meet with college reps and to check with their classroom teacher for permission prior to coming to the HUB.

### **College and Career Readiness Evening Presentations**

The College Counselor also sponsors multiple evening programs throughout the school year designed to inform students and parents on topics related to the college admission/financial aid processes, options for post-secondary education, and to help students become college and career ready. These programs are typically held at 6:30 PM in the HUB or the LGI.

## College Application Process

### 1. College Selection

- Students are encouraged to use our Naviance program to help identify their post-secondary plans, research potential colleges and careers, and create a list of schools to which they may apply.
- Students should be aware and take note of all deadlines associated with their college applications.
- When searching for schools to apply to, we stress the importance of selecting institutions that are a good fit for the student based on their academic profile, their interests and intended major, and admissibility to the school. Students should be sure to follow this general guideline:
  - 1-2 “safety schools” on their list (very likely to be accepted)
  - 2-3 “fit schools” (probable that the student will be accepted)
  - 1-2 “reach schools” (admissions qualifications may be a bit higher than what the student has demonstrated)

### 2. Teacher/Counselor Recommendations

- In their junior year, students are encouraged to identify and ask teachers for recommendation letters before the end of the school year. All student requests for letters of recommendation must be completed in Naviance as well as asking the teacher in person. Please complete the Student Self-Assessment questionnaire that provides the staff member with important information about the student’s interests, plans, and achievements that is available on the “About Me” tab in Naviance.

### 3. The Application

**\*Students are asked to complete and submit a Transcript Request Form for each college to which they are applying. This form must be turned in before any transcripts can be sent. Students must also complete the requisite steps in Naviance – listing the colleges to which they have applied, request the transcript be sent, and request teacher recommendations through Naviance.**

- Online applications must be completed by the student and submitted before the college’s deadline. Students should print out any supplemental forms that need to be filled out by the counselors and submit them, along with their Transcript Request Form.
- Paper applications are rare but should be turned in with the Transcript Request Form to the College Counselor. They should include the essay, application fee, and other supplemental forms that need to be sent to the college.

## COURSE SELECTION PROCESS

The scheduling process is built on a seven-period academic day over a six-day cycle. Students must schedule a minimum of 36 class periods but may not schedule more than 42 class periods, which is the maximum available.

### **STEP 1: REVIEW GRADUATION REQUIREMENTS**

All students who wish to earn an Upper Merion Area High School diploma must meet certain standards. The PA State Board of Education and the Upper Merion Area Board of School Directors set the requirements after considerable review with citizens, parents, teachers and students. Please refer to the graduation requirements as you design an individual program of studies.

### **Graduation Requirements**

In the list below are the minimum number of credits required of all students who wish to earn an Upper Merion Area School District Diploma. Successful completion of these standards must be met by all students who wish to earn the Upper Merion Area High School diploma. Successful completion of these standards and any required state assessments, must be met by all students who wish to earn the Upper Merion Area High School Diploma. These are set by the Pennsylvania State Board of Education and the Upper Merion Area Board of School Directors after careful review. You must refer to this list as you design an individual program of studies.

Listed below are the minimum number of credits required for all students who wish to earn an Upper Merion Area School District Diploma.

English	4.0	Computers	0.5
Social Studies	3.5	Health	0.5
Mathematics	3.0	Arts & Humanities	2.0
Science	3.0	Electives	5.5
Physical Education	1.0	Teenage Issues	0.5

Total 23.5

**Below are the number of credits needed to be considered in:**

Grade 12 – 17 credits

Grade 11 – 11 credits

Grade 10 – 5 credits

Social Studies-Students may elect the half or full credit Government and Economics course in the senior year.

Arts and Humanities-Credits may be accumulated from Art, Business, Computer, Family and Consumer Science, Foreign Language, Music, Physical Education or Technology Education. Electives found in English, Social Studies, Math or Science may qualify if they include standards in Arts and Humanities.

## **STEP 2: ANALYZE PERSONAL GOALS**

Students should be thinking seriously of the type of work that they want to do and the kind of life they want to lead. Decisions should be based on personal analysis and consideration of long-range personal goals, rather than on a semester's schedule or choice of friends.

Be realistic and consider what will happen after graduation. Will there be an opportunity for college or some special training for a vocation? Competition in the world today is keen and you should aim high.

If college is the immediate goal, be aware that requirements differ significantly among schools. The best way to plan for college is to study admissions requirements in college catalogs or other guides available in the HUB, through the Naviance system or online.

If you are preparing for a special career or job, you should investigate requirements for that position. Confer with your counselor, teachers, and people in the community working in related fields.

## **STEP 3: REVIEW THE INFORMATION**

Counselors will meet with each student to discuss the course selection procedure. Counselors will stress the importance of completing the Four-Year Individual Course Selection Planning Guide (found in the back of the book). This will help students recognize what the graduation requirements are and if they are taking the appropriate courses.

Course offerings and descriptions are listed by Department. Students and parents should note that the high school requires selections for both fall and spring semesters. The course selection worksheet should be returned on time; if not, the student will be placed in subjects as recommended by teachers and the counselor. Each subject is assigned .2 of a credit for the number of times it meets per week per year. A major subject that meets six days a cycle all year earns 1.0 credit; a major that meets six days a cycle for a semester earns .5 credit. Minor subjects receive credit as listed.

## **STEP 4: COURSE SEQUENCE RECOMMENDATIONS**

Students receive core course recommendations from their current teachers, as part of the second marking period report card. Core courses include English, Social Studies, Mathematics, and Science. We encourage parents and students to analyze the information provided about each course in the course descriptions and on the sequencing charts from each department. Students will be given a course verification sheet after selecting their elective courses. Please review the courses listed on the form to ensure their accuracy. Any questions or concerns should be directed to the appropriate counselor or teacher.

Courses are listed as Advanced Placement (AP), Honors (Hon), College Preparatory (CP), or simply by course name.

## **STEP 5: SELECTING ELECTIVE COURSES**

Students should review the course offerings in the Curriculum Guide for available electives. Please be sure to check the prerequisites for these courses. Elective courses should be chosen based on the student's interests and future educational goals. Elective coursework helps prepare students to meet the demands of post-secondary training, education, and employment. By gaining practical knowledge and skills in specific areas, students are more likely to achieve success in their future education and careers.

Please refer to departmental listings, consult with your teachers, or meet with your counselor to help determine which courses are best able to meet your needs.

When students have made their choices of elective courses, they will select courses through the Community Web Portal: Students will meet with a Guidance Counselor to review their selections and make any necessary adjustments. Students will receive a course verification form to review with parents/guardians, and return the signed form to the HUB.

## **STEP 6: THE SCHEDULE**

All requests to change courses must be made prior to the first day of school. After this date, schedule change requests will only be considered in cases that demonstrate a compelling educational need. Change forms must be submitted to the Guidance Office by 3:00 pm on the sixth (6th) day of each semester (spring semester will only be for spring elective courses). Late forms will NOT be accepted. Schedule Change Committee approval is required. The Committee will meet on the seventh (7th) day of the semester. The final date for requesting course level changes, without penalty will be the last day of the first (1st) marking period. After this date, approved level changes will carry a penalty of withdrawal fail (WF).

### **The following are acceptable reasons for schedule review and possible changes:**

1. To correct/change level of academic classes (may require parent override)
2. To increase the number of academic classes.
3. To fulfill district and/or state graduation requirements.
4. To fulfill district and/or summer school requirements.

### **The following are not acceptable reasons for schedule changes:**

1. Teacher or period preference.
2. Personal convenience of the student, such as having classes or lunch with a friend, not having P.E. first period, having classrooms closer together.
3. Decreasing the number of academic classes
4. Change of elective choice

## COURSE LEVELS

UMAHS has leveled courses in English, Social Studies, Mathematics, Science, and Foreign Language. Students can take courses listed as Honors/Advanced Placement (H/AP), College Preparatory (CP), or Academic (no designation). Honors and Advanced Placement courses deliver the most rigorous coursework available to our students and are appropriate for students with the ability to handle the most academically challenging material. College Preparatory courses are academically rigorous and intended to prepare students for successful post-secondary educational or career opportunities. Modified and Learning Support coursework is also available but restricted to those students recommended for such coursework through the IEP process. Modified and Learning Support courses are listed in the Special Education section of this course selection guide.

	<b>9th grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>
<b>English</b>	Humanities Eng H Humanities Eng CP	English 10 H English 10 CP	AP Lang & Comp English 11 CP	AP Lit. & Comp. English 12 CP English 12
<b>Social Studies</b>	Humanities SS H Humanities SS CP	AP World History World History CP	AP US History American Cultures CP	AP US Govt & Politics Economics H Government CP Economics CP Consumer Economics
<b>Mathematics</b>	Algebra II H Algebra II CP Algebra IB CP Geometry H	Pre-Calculus H Pre-Calculus CP Geometry H Geometry CP Algebra II H Algebra II CP	AP Calculus AB Calc & Applications H Pre-Calculus H Pre-Calculus CP Stats & Math Mod CP Geometry H Geometry CP Algebra II H Algebra II CP	AP Calculus BC AP Calculus AB AP Statistics Calc & Applications H Pre-Calculus H Pre-Calculus CP Stats & Math Mod CP
<b>Science</b>	Sci & Tech H Sci & Tech CP Bio H	Biology H Chemistry H Biology CP AP Biology II	Chemistry H Physics H Chemistry CP AP Chemistry II Ap Biology II	Physics H AP Biology II AP Chemistry II AP Physics C Mech Physics CP
<b>Foreign Language</b>	German I CP German II CP French I CP French II CP Spanish I CP Spanish II CP	German II CP German III CP German III H French II CP French III CP French III H Spanish II CP Spanish III CP Spanish III H	German IV H French IV H Spanish IV H German III H French III H Spanish III H German III CP French III CP Spanish III CP	AP German Lang. & Cult. AP French Lang. & Cult. Ap Spanish Lang. & Cult.

## **CLASS RANK/GRADE POINT AVERAGE**

Class rank and GPA are an important part of the college admission process. Upper Merion Area High School ranks students within each grade level based on all courses taken with the exception of Pass/Fail courses. Courses are graded on an A through F basis. Weighted class rank is cumulative.

**Course Weighting and Class Rank:** Commensurate weighted values are given to all Honors/Advanced Placement core level courses, e.g., English, Math, Social Studies, Science and Foreign Language (courses IV and V only) and Advance Music.

Weighted and unweighted grade point averages shall be computed cumulatively at the end of each school year using final course grades.

A student's unweighted grade point average will be based upon numerical values of A=4, B=3, C=2, D=1 and F=0 for all levels of instruction. All coursework taken will be included in the calculation of a student's unweighted grade point average with the exception of courses graded on a Pass/Fail basis.

A weighted grade point average will be calculated for each student in order to reflect the increased academic rigor of Honors and Advanced Placement coursework. A student's weighted grade point average will be based on a bonus point system. Bonus points will be added to a student's unweighted grade point average for Honors or Advanced Placement courses in the following manner.

Each Honors or Advanced Placement course in which a student has received a grade of "C" or better will award the student .2 bonus points per credit awarded. Bonus points for partial credit courses will be pro-rated accordingly. A student may earn a maximum of .8 bonus points per school year, the equivalent of 4 one-credit Honors or AP courses.

A student's weighted and unweighted grade point averages will be entered on his/her record and shall be subject to the Board's policy on release of student records.

No class rank will be recorded on a student's record. Additional information will be provided on the high school profile in order to inform post-secondary institutions of a student's relative academic placement among his/her peers. A distribution of the range of weighted grade point averages for each decile ranking will be recorded for each graduation class at the end of the 11th grade year. The maximum, median, and minimum weighted grade point averages will also be part of the high school profile. Any institution may request in writing the class rank of any student, if class rank is required for admission to the school or for scholarship purposes. In this case a numerical class rank will be released using the student's weighted grade point average.

## GRADING SYSTEM

Letter	4.0 System	Percentages	Comment
A	4.0	90-100	Excellent
B	3.0	80-89	Good
C	2.0	70-79	Average
D	1.0	65-69	Passing
F	0	0-64	Failure

Percentage grades **are not** used for consideration of final average, class rank, or honor roll.

## OTHER OPTIONS FOR EARNING CREDIT

Parents and students must confer with the counselor regarding these opportunities before pursuing.

**Courses Not Taken Through Upper Merion Area School District:** Students wishing to take courses for credit outside of those offered by Upper Merion Area High School must first receive prior approval from both the guidance counselor and administrator. Students must provide a course description and an outline for the requested course. Courses taken prior to receiving approval cannot be guaranteed to be given credit. Courses taken prior to the student's first day of 9th grade are not considered for credit and will not be shown on a student's transcript.

**Make-up Credits:** Students may attend summer or evening school programs at another school district, junior college, college, university, or on-line District approved courses. Parents and students should note that prior approval from the appropriate assistant principal is required for make-up credits.

## **Independent Study Procedures**

An independent study program is available for students who wish to extend their learning outside of regularly scheduled classes. Independent study courses involve academic work chosen or designed by the student with the approval of the department concerned, under an instructor's supervision. This work is usually undertaken outside of the regular classroom structure. If students wish to pursue a current course offering as an independent study, they will need to provide a detailed explanation as to why the course cannot be taken as part of their normal schedule.

Proposals for independent study must be submitted to the guidance counselor within the first ten days of the semester in which the work will begin. Applications can be obtained in the Guidance Office. All applications must include specific, measurable, instructional objectives and standards with a specific timeline for work completion. Administrators will approve independent study requests. If approved, the administrator and the independent study teacher will decide on course value and course level.

The student assumes full responsibility for completing academic coursework as proposed. Students are also responsible for creating a portfolio of work that includes an activity log. Meetings between the student and sponsoring teacher should take place regularly and need to occur twice a month at a minimum. The completed activity log and all supporting coursework must be submitted to the teacher within the final week of each marking period. Once approved, students are committed to completion of the course and will receive a final letter grade. Withdrawal and Incomplete grades will be issued in the same manner as all other coursework.

The role of the sponsoring teacher will be to monitor progress toward course completion, be available as a resource to the student in their area of expertise, grade progress on a quarterly basis and complete a final evaluation upon completion of the coursework which will include a final letter grade. Course credit will only be awarded upon final review of all the requirements by an administrator.

## **SPECIAL PROGRAMS**

### **SERVICE LEARNING FOR CREDIT**

Students may elect to participate in service learning as part of their school day. Service placements are limited and students should be willing to dedicate their time and talents consistently in meeting community needs. Pass/Fail credit is based upon hours of service. Interested students should discuss possible service opportunities with their guidance counselor.

### **VIRTUAL HIGH SCHOOL (VHS)**

Virtual High School courses are offered to students as an opportunity to enrich Upper Merion's curriculum with a wide array of courses not offered in our building. Students may not substitute online courses for courses offered face to face, except under special circumstances. Scheduling priority for virtual high school classes will consider the following:

1. Specially designed instruction in individual education plans (IEP).
2. Graduation year (seniors having course registration priority).
3. Scheduling conflicts.

### **DUAL ENROLLMENT**

Upper Merion partners with Montgomery County Community College (MCCC) to offer dual enrollment and credit for several courses. Students in these courses who choose to participate in dual enrollment are admitted as students in MCCC but they take these courses here at Upper Merion High School with Upper Merion teachers who have been accepted as professors in the respective department at MCCC. Students will receive the grade assigned by the teacher on both their high school transcript and their MCCC transcript. Juniors and seniors are encouraged to talk with their guidance counselors about this opportunity to earn college credits while still in high school at an extremely reduced cost.

The following courses will be eligible for dual enrollment and college credit:

Upper Merion Course	MCCC Course	Credits Possible
121 AP English 11	ENG 101	3 credits
131 AP English 12	ENG 102	3 credits
132 English 12 CP	ENG 101	3 credits
221 AP U.S History	HIS 203, HS205	6 credits
222 American Cultures CP	HIS 203, HS 205	6 credits
504 German IV H	GERM 101, GER 102	6 credits
505 AP German V	GER 201, GER 202	6 credits
514 French IV H	FRN 101, FRN 102	6 credits
515 AP French V	FRN 201, FRN 202	6 credits
524 Spanish IV H	SPN 101, SPN 102	6 credits
525 AP Spanish V	SPN 201, SPN 202	6 credits

## ENGLISH

	<b>9th Grade</b>	<b>10th Grade</b>	<b>11th Grade</b>	<b>12th Grade</b>
<b>Honors/AP</b>	Honors 9	Honors 10	Advanced Placement	Advanced Placement
<b>College Prep</b>	English 9 CP	English 10 CP	English 11 CP	English 12 CP
<b>Academic</b>				English 12

The English Program strives to improve each student's reading, writing, speaking, and listening skills. An English 9, 10, 11, 12 course must be taken and passed in the high school in order to graduate. Electives may not be taken in place of required grade-level courses, nor may a community or four-year college course be substituted—though both kinds of experiences are encouraged for enrichment

### **English 101: HUMANITIES/ENGLISH**

### **HONORS**

**Credit 1.0**

The Humanities/World Cultures and Humanities/English courses complement each other and equip students with knowledge and skills to form an enduring understanding of what it means to be human. To do so students examine four essential questions based on themes common to all humans: economics, leadership, artistic expression, and religion. The main goal of this honors-level course is to provide students with accelerated and enhanced opportunities for reading, writing, speaking, listening, and researching. Students will be exposed to various forms of literature, including, but not limited to, poetry, short story, drama, fiction, nonfiction, folktales, and mythology mainly written by non-western authors. Our literature units will parallel the geographic, historic, political, economic, and cultural characteristics presented in the Social Studies component of the Humanities course. Through collaborative and individual work, students will discover how readers and writers reflect, question, and interpret the world around them. Students will also learn to enhance their critical reading and thinking skills. Students will be encouraged to respond to literature in its varied forms.

### **English 102: HUMANITIES/ENGLISH**

### **COLLEGE PREP**

**Credit 1.0**

The Humanities/World Cultures and Humanities/English courses complement each other and equip students with knowledge and skills to form an enduring understanding of what means to be human. To do so students examine four essential questions based on themes common to all humans: economics, leadership, artistic expression, and religion. The main goal of this course is to provide students with multiple opportunities for reading, writing, speaking, listening, and researching. Students will be exposed to various forms for literature, including, but not limited to, poetry, short story, drama, fiction, nonfiction, folktales, and mythology mainly written by non-western authors. Our literature units will parallel the geographic, historic, political, economic, and cultural characteristics presented in the Social Studies component of the Humanities course. Through collaborative and individual work, students will discover how readers and writers reflect, question, and interpret the world around them. Students will also learn to enhance their critical reading and thinking skills. Students will be encouraged to respond to literature in its varied forms. A Special Education Teacher consults with the subject area teacher to support students with IEP's enrolled in the course.

**111 ENGLISH 10 (Year-Daily)****HONORS****Credit 1.0**

The primary goal of this program is to help students develop habits of reflective thinking through reading and discussing literary works that present a special challenge to understanding. The Honors level is devoted to students who like challenging books, who are highly motivated, and who have excellent reading and writing skills. In addition to the core readings of the 10th grade course, the Honors level will present readings from a variety of scholarly works of literature will be analyzed. The writing strand of the course stresses coherent narratives, persuasive essays, research papers, and literature-based themes. All students will take the Keystone Literature Exam at the completion of this course.

Prerequisite: A grades of B or higher in Humanities/English 9 Honors, and recommendation of 9th grade English teacher.

**112 ENGLISH 10 (Year-Daily)****COLLEGE PREP****Credit 1.0**

English 10 CP focuses on the unique literary contributions of our diverse world and the universal themes common to many people in various eras. The course serves as a survey of literature from a thematic standpoint. The writing strand of the course stresses coherent narratives, persuasive essays, and literature-based themes. Students will produce multi-media reports to demonstrate their ability to make thematic connections throughout a variety of genres. There are also units on research, critical reading, discussion skills, propaganda, and magazine writing. A Special Education Teacher consults with the subject area teacher to support students with IEP's enrolled in this course. All students will take the Keystone Literature Exam at the completion of this course.

Prerequisite: A passing grade in Humanities/English 9 CP.

**121 AP LANGUAGE & COMPOSITION (Year-Daily) HONORS****Credit 1.0**

Required readings from The Writer's Reader, selections from American Literature and other prose and poetry comprise the majority of this course. In addition to writing essays that respond to literature, students will write on self-selected nonliterary topics, and will plan, write, and edit a literary research paper. This course is for the independently motivated student who enjoys reading and writing, and can showcase critical thinking skills through class discussion. Students are recommended to take the Advanced Placement Language and Composition Examination in May of their Junior Year. Scoring well on this exam, students might expect to be granted college credit for one or two semester courses in college. This course is available for Dual Enrollment through Montgomery County Community College. **A student must take this course for Dual Enrollment if they wish to take Dual Enrollment for AP Literature & Composition their senior year, or score a 3 or higher on the AP Language & Composition AP exam.**

Prerequisite: A grade of B or better in an English 10 Honors, recommendation of English 10 teacher.

**122 ENGLISH 11 (Year-Daily)****COLLEGE PREP****Credit 1.0**

“American Literature” traces the historical and cultural panorama of writing in the United States from its early classical traditions to the diverse styles of contemporary works. The writing strand stresses various modes of clear and effective exposition. An important component of the course is a major research project. There are also units on reading competency, public speaking, and recognizing stereotypes and bias. A Special Education Teacher consults with the subject area teacher to support students with IEP's enrolled in this course.

Prerequisite: A passing grade in an English 10 course.

**131 AP LITERATURE & COMPOSITION (Year-Daily) HONORS****Credit 1.0**

The course evolves from classical literature as well as other prominent contemporary works. It is a course for the highly engaged student who enjoys reading, writing, and thinking in and outside of class. In addition to the required advanced readings, there will be assignments to enrich the student's literary background and to provide foundation for the AP Literature and Composition Exam. Generally, in 12th grade Honors/AP, we consider British authors in order to complete the survey of exceptional writers undertaken during the previous years' study. The primary focus will be on classical plays, epics, and novels, as well as a significant amount of poetry, philosophy, and literary theory. Students are expected to read, write, and discuss at high levels of engagement and demonstrate these critical thinking skills on the AP Exam in May. Scoring well on this exam, students might expect to be granted college credit for one of two semester courses in college. This course is available for Dual Enrollment through Montgomery County Community College. In order to take this course for Dual Enrollment a student must have taken Dual Enrollment in AP Language & Composition as a Junior, or scored a 3 or higher on the AP Language & Composition exam.

Prerequisite: A grade of B or better in an English 11 Honors/AP, and recommendation of teacher.

**132 ENGLISH 12 (Year-Daily)****COLLEGE PREP****Credit 1.0**

The course serves as a culminating investigation into classical pieces and how their universality influences modern writers. Students are taught how to criticize and evaluate literature using objective standards rather than mere personal opinion. Selected authors serve as models to develop and fine-tune students' own writing, and individual works are selected to promote engaging class discussion. Introductory college-level writing assignments are designed to hone skills with the continued practice of style and grammar. This course is available for Dual Enrollment through Montgomery County Community College. **Students taking this course for Dual Enrollment will receive 3 credits for English 101 through Montgomery County Community College.**

Prerequisite: A passing grade in an English 11 course.

**133 ENGLISH 12 (Year-Daily)****Credit 1.0**

The course serves as a culminating investigation into classical pieces and how their universality influences modern writers. Students read and evaluate literature using objective standards rather than mere personal opinion. Various shorter pieces serve as a guide to develop and fine-students' own writing. The writing strand of the course stresses reflective assignments to hone skills with the continued practice of style and grammar.

Prerequisite: A passing grade in an English 11 course.

**196F/196S WRITING WORKSHOP (Semester 3x/Cycle)****Credit .25**

Writing Workshop is for students who demonstrate an interest and a need for support with writing skills. In addition to assisting with successful classroom strategies, the skills of reading and interpreting fiction, poetry and non-fiction literature reinforce the students' learning in their English and Social Studies classes. Students can elect this course or are scheduled based on performance on standardized tests, diagnostic tests, teacher recommendation, and/or course grades.

**197F/197S KEYSTONE LITERATURE (Semester 3x/Cycle)****Credit .25**

Keystone Literature is a required remedial course for students who did not demonstrate proficiency on the Keystone Literature Exam. The course is designed to prepare students to retake the Keystone Exam by building on each student's strengths and focusing instruction on the student's areas of needs. Students are preliminarily scheduled in these classes based on mid-year data, such as diagnostic tests. Final placement is determined in the summer after the results from the spring testing session are released.

**198F/198S READING (Semester)****Credit 0.5**

This is a course in literacy aimed at developing the ability to comprehend, analyze, and evaluate texts using reading and vocabulary strategies. It will also help students build a positive reader identity and experience personal success as a reader and learner.

## ELECTIVES

The English Department also offers a number of electives, which students may take in addition to the required English courses.

**161 CREATIVE WRITING (Semester-Daily)****Credit 0.5**

This is a hands-on course where each student is expected to write daily and be comfortable receiving feedback from peers. Students will write both poetry and prose experimenting with a variety of genres and styles. As the course progresses, students' work will reflect not only their natural creativity and experience, but also a more sophisticated use of figurative language, sensory details, and other literary devices. This course will help the writer balance creative freedom with discipline in order to communicate with a reader. Combined these enhance a student's skills as both a writer and a reader. Throughout this course, students work together sharing and refining ideas as they learn to express themselves creatively.

**NOTE:** Outside reading may be required to reinforce or further examine a particular idea, concept, or style being studied.

**162 ADVANCED CREATIVE WRITING (Semester-Daily)****Credits 0.5**

This course is a continuation of Creative Writing but will rely on the experience gained from the previous course to further advance writers' skills. This is also a hands-on course with much independent learning which will result in the culmination of a writing portfolio and possible publications.

Prerequisite: Successful completion of Creative Writing.

**164 JOURNALISM (Semester - Daily)**

**Credit 0.5**

In this course the student will learn to think and act like a journalist through hands-on experience in how to gather news; how to write stories, features, columns, reviews, and straight news articles. Students will also learn how to design, edit and produce a publication and will work in conjunction with the staff of the school newspaper.

**165 ADVANCED JOURNALISM (Semester - Daily)**

**Credit 0.5**

This course is a continuation of Journalism but will rely on the experience gained from the previous course to enhance the publication of the school newspaper. Instruction will be given to meet the current needs of the newspaper staff. This is also a hands-on course with much independent learning.

Prerequisite: Successful completion of Journalism.

**167 ACTING (Semester-Daily)**

**Credit 0.5**

The acting elective introduces students to the beginning stages of drama. The course focuses on the history of drama and its impact on society. Students will perform various monologues and scenes through the ages as well as develop interdisciplinary scenes. An in-depth study of improvisation techniques prepares students to develop scenes of their own. The course combines a historical view of acting with a performance element to provide the students with a well-rounded background in acting.

**171 SCIENCE FICTION (Semester-Daily)**

**Credit 0.5**

This course introduces the student to the popular realm of science fiction in both literature and film. Students should be prepared to read several novels and a number of short stories. They should also be prepared to participate in discussions and analyze films. The basic skills of reading and writing are stressed.

**172 FANTASY AND SUSPENSE (Semester-Daily)**

**Credit 0.5**

This course is split into two response areas of study. Works of fantasy in both literature and film are examined in the first segment, while the world of suspense dominates the second. Students are expected to read and discuss the material. Each student will write a short story.

**180 ENGLISH AS A SECOND LANGUAGE (BEGINNER) (2 periods daily) Credit 2.0  
(Year-Daily)**

Students in the early stages of language acquisition are scheduled for two periods of English daily. The focus of this level is on developing reading, writing, speaking and listening skills in English as well as encouraging cultural awareness. Students will receive 1 English and 1 Social Studies credit toward their graduation requirement.

Prerequisite: Placement is based on teacher recommendation and/or testing.

**181 ENGLISH AS A SECOND LANGUAGE 2 (INTERMEDIATE)(Year-Daily) Credit 1.0**

Students in the intermediate stages of language acquisition are scheduled for 1 period ESL support and one period of English instruction daily with the grade level English instruction on a Pass/Fail basis. The focus of this level continues to be on the 5 main skill areas in English with special emphasis on developing academic reading and writing proficiency.

Prerequisite: Placement is based on teacher recommendation and/or testing.

**182 ENGLISH AS A SECOND LANGUAGE TUTORIAL (All Levels) Credit 1.0  
(Year-Daily)**

Students at all stages of language acquisition are scheduled for ESL tutorial. This class provides a supervised setting in which students receive support in content-area classwork.

Prerequisite: Placement is based on teacher recommendation and/or testing.

**721 FILM AND TELEVISION HISTORY (Semester-Daily) Credit 0.5**

The Film and Television History course provides a broad look at the history of the moving picture. The class begins by studying the advancements of photography itself and then acknowledges the efforts of early silent films. After the silent era, the class will study various genres of films including animation, special effects, musicals, and comedies. Students will also engage in studies of famous directors and film stars whose work has shaped the course of film development. Next, a brief look at the history of television will define the evolution of TV as an entertainment medium and how it impacts society. Throughout the course, students will have an opportunity to create their own films as well. On the whole we will explore how television and film relate to us today technologically, critically, and historically.

**722 TELEVISION PRODUCTION-Independent Study Credit 0.5**

This course familiarizes students with the language and technique of television production from the viewpoint of the television producer-director. Students produce a variety of videos ranging from field shoots, such as interviews to three camera studio shoots. Students learn by actual experience and will be required to produce and direct a series of mini TV projects. Students will be encouraged to participate in the morning announcements and they will be given the opportunity to participate in the after school activities of the Viking Channel. Areas of study include television audio, lighting, graphics, camera technique, editing, special effects, and producer-director concerns. This course is offered as an independent study.

**SPECIAL EDUCATION 9-12**

**909S DEVELOPMENTAL READING (Year-Daily) Credit 2.0**

This is a class for students who have difficulty reading accurately and fluently. This course concentrates on teaching letter sounds and blending to reading passages typical of textbook material. This class is designed for students who read without understanding; the Comprehension program helps develop vocabulary, information, and comprehension strategies needed for academic success.

**Prerequisite:** Individualized Education Plan (IEP).

**910S READING CONCEPTS (Year-Daily)****Credit 2.0**

Reading Concepts offers students a balanced approach to the development of reading skills that are essential for engaging with literature. The course will focus on specific skills related to Linguistics, Reading Comprehension, oral Expression, and Writing. The phonics section of the course is based on the Orton – Gillingham method. Additionally, the course uses individualized assessment to identify target skills and follows an instructional format that includes:

1. Direct instruction of the concepts and skills of language
2. Presentation of concepts and skills in their dependent order, from simplest to most complex
3. Multisensory strategies and materials created specifically for each concept and skill

The course offers students a viable and effective opportunity to master the symbol system of language in reading, writing and oral expression and meaningful exposure to literature. Students will receive 1 English and 1 Social Studies credit toward their graduation requirement.

**Prerequisite:** Individualized Education Plan (IEP).

**911S ENGLISH CONCEPTS (Year-Daily) MODIFIED****Credit 1.0**

This course is designed to meet individual needs of identified students in English. This is a standards driven course focusing on continuous improvement through guided practice, mastery, and application of basic skills in listening and speaking, reading and literature, written composition, applied writing, and the study of basic language.

**Prerequisite:** Individualized Education Plan (IEP).

**912S READING MODIFIED (Year-Daily)****Credit 2.0**

Reading Modified is a comprehensive two period course designed to help students acquire reading strategies necessary for reading comprehension. Given both fiction and nonfiction texts, students focus on writing, speaking, and listening skills. Additionally, students apply and analyze literary terms in text and focus on using context clues for vocabulary acquisition. Students work towards independently applying learned comprehension skills through grade level texts. Students will receive 1 English and 1 Social Studies credit toward their graduation requirement.

**Prerequisite:** Individualized Education Plan (IEP).

## Social Studies

<b>Honors/AP</b>	Honors Humanities SS	AP World History	AP United States History	AP US Gov't & Politics Honors Economics
<b>College Prep</b>	Humanities SS CP	World History CP	American Cultures CP	Government/ Economics
<b>Academic</b>				Consumer Economics

The Social Studies Program strives to improve each student's awareness of his/her culture, history, and world around them, as well as to develop his/her reading, writing, speaking, research, and listening skills. A Social Studies 9, 10, 11, and 12 course must be taken and passed in the high school in order to graduate. Electives are encouraged but may not be taken in place of required grade-level courses.

### **GRADE-9**

**Each ninth grade student must take one of the following:**

**201 HUMANITIES / WORLD CULTURES (Year-Daily) HONORS Credit 1.0**

The Humanities/World Cultures and Humanities/English courses are linked together as a cross-curricular course. This course equips first-year high school students with knowledge and skills to consider what it means to be human, examining a set of essential questions based on themes common to all humans. The honors level Humanities/World Cultures course examines the historical and contemporary issues of non-Western cultures through five themes: Identity, Traditions and Transitions, Borders, Protests and Rebellions, and the Human Footprint. In addition to the factual content that is studied, students will be pushed to strengthen their critical reading, writing, and thinking skills. Research skills will be broadened as students are introduced to new library databases, and students' thinking will be sharpened in seminar discussions and activities such as debate. Among other goals, the honors level Humanities course helps prepare students for Advanced Placement English, history, and government courses in later grades.

**202 HUMANITIES / WORLD CULTURES (Year-Daily) COLLEGE PREP Credit 1.0**

The Humanities/World Cultures and Humanities/English courses are linked together as a cross-curricular course. This course equips first-year high school students with knowledge and skills to consider what it means to be human, examining a set of essential questions based on themes common to all humans. The college prep level Humanities/World Cultures course examines the historical and contemporary issues of non-Western cultures through five themes: Identity, Traditions and Transitions, Borders, Protests and Rebellions, and the Human Footprint. Students in this course begin to develop high school-level reading, writing, and speaking skills. Students leave this first-year course with key understandings of several non-Western cultures and how those cultures compare to each other across the five themes of the course.

## GRADE-10

Each tenth grade student must take one of the following:

**211 AP WORLD HISTORY (Year-Daily) HONORS Credit 1.0**

*\*Previously AP European History*

Modern students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. This course is designed to simulate college-level academic work.

Prerequisite: Department and/or counselor recommendation suggested. Summer reading required.

**212 WORLD HISTORY CP (Year-Daily) COLLEGE PREP Credit 1.0**

*\*Previously Western Civilization*

Modern students investigate significant events, individuals, developments, and processes from 1200 to the present. Students will develop skills such as: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore throughout the course in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation. This course is designed to prepare students for college-level academic work.

## GRADE-11

Each eleventh grade student must take one of the following:

**221 AP UNITED STATES HISTORY (Year- Daily) HONORS Credit 1.0**

This program provides students with analytic skills and factual knowledge necessary to deal critically with problems and materials in American history. It prepares students for intermediate and advanced college courses by making demands equivalent to a full-year introductory college course. Students learn to assess historical materials, their relevance to a given interpretive problem, their reliability, and their importance, and to weigh the evidence and interpretations presented in historical scholarship. This program develops the skills necessary to arrive at conclusions on the basis of informed judgments, and to present ideas clearly and persuasively.

The Advanced Placement course also trains students to analyze and interpret primary sources, including documentary material, maps, statistical tables and pictorial and graphic evidence of historical events. Students learn to take notes from both printed materials and discussions, write essay examinations, take multiple choice tests and write critical and analytical papers. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. **A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.**

Prerequisite: Department and/or counselor recommendation suggested. Summer reading required.

**222 AMERICAN CULTURES (Year-Daily)****COLLEGE PREP****Credit 1.0**

This program is for college bound students and includes work in skill and knowledge areas necessary to achieve at a college level. Required assignments include position papers, research papers and additional work necessary for college preparation. Students review American Cultures concepts and themes. This review centers on the nature of the American revolutionary experience, the development of the Constitution, the evolution of a national versus state power system as developed by a succession of administrations, and the emergence of those domestic factors which shaped the United States by 1900. The remainder of the American Cultures program focuses on the twentieth century. Themes include development of the United States as a world power, evolution of the modern presidency, the recurrent reform spirit in American culture, the evolution of a technological society, the adjustment to rapid change and the assimilation of minorities into the mainstream of American life. This course is available for Dual Enrollment through Montgomery County Community College. **A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.**

**GRADE-12**

**Each twelfth grade student must take at least one of the courses listed below. However, all students are encouraged to complete a full year of Social Studies.**

**231 AP US GOVERNMENT AND POLITICS (Year-Daily)****Credit 1.0**

This course is designed to give students a critical perspective on politics and government in the United States. The program involves both the study of general concepts used to interpret original American conceptions of republican democracy and emphasizes the analysis of specific case studies that culminates in the application of abstract concepts to practical, contemporary contexts. While it requires a degree of familiarity with the various institutions, groups, beliefs, and ideas that make up the American political reality, the curriculum is fundamental and geared toward establishing a rich foundation of civic awareness to encourage civic participation and provide for the development of a strong political and social consciousness. Intensive preparation and practice is provided for the AP exam in United States Government and Politics

Prerequisite: Department and/or counselor recommendation suggested. Summer reading required.

**244 GOVERNMENT/POLITICS (Semester-Daily)****COLLEGE PREP****Credit 0.5**

This program is for college bound students and includes work in skill and knowledge areas necessary to achieve at a college level. It covers (a) the structure and operation of the federal government, (b) the structures and operation of the state and local governments, with emphasis of Pennsylvania, Montgomery County, Upper Merion Township, and the Boroughs of Bridgeport and West Conshohocken, and (c) political issues, such as voting, lobbying, and political parties.

**261 ECONOMIC HONORS (Semester-Daily) HONORS Credit 0.5**

Honors Economics introduces students to the theoretical basis and political application of micro-and macro-economics. This course focuses on decisions made by individuals and firms, and the effect of various factors on supply and demand. It also focuses on issues facing our economy such as inflation and unemployment, and students will learn how our government confronts these problems. The final portion of this course compares the United States' capitalist economy to other economic systems.

**234 ECONOMICS (Semester-Daily) COLLEGE PREP Credit 0.5**

This program is for college bound students and includes work in skill and knowledge areas necessary to achieve at a college level. Students learn real-life, applicable skills in an open discussion-based environment. They are encouraged to bring their insight and experiences to the class, where they are integrated into the curriculum. The study of production, money, taxes, and government's role in the economy is brought to life through the use of simulations, audio-visuals, and creative projects.

**238 CONSUMER ECONOMICS (Semester-Daily) Credit 0.5**

This course provides students with the following: (1) an introduction to basic economic concepts, (2) an overview of investing and savings, and (3) a survey of consumer spending on insurance, housing and automobiles. This course focuses more on consumer-oriented matters and less on theory than does the offering in the College Prep course. Students receive enhanced academic support as needed.

## **ELECTIVES**

**232 ANTHROPOLOGY (Semester-Daily) Credit 0.5**

This course introduces a broad scientific field involving the study of humans. Humans in all times and places will be analyzed in units on archaeology, human evolution, the history of humans in America, marriage systems and traditions, verbal and non-verbal language, the role of religion and the supernatural, and art

**241 AP PSYCHOLOGY (Full Year) HONORS Credit 1**

This course is designed to provide students with both an in-depth study of human behavior and an analytical framework to explore mental processes. Students examine theories and approaches in the field of psychology through an analysis of elements, concepts, and phenomena in various academic and social disciplines. Additionally, students learn the methodological and ethical parameters that drive psychologists within the field. Given that the study of psychology encourages both critical analysis and metacognition, critical thinking skills are employed throughout the course as students address relevant cutting edge issues and evaluate how psychologists confront them. Comprehensive preparation and guided practice for the AP Psychology Exam is also provided.

**242 PSYCHOLOGY (Semester-Daily)****Credit 0.5**

Students investigate normal and abnormal behavior and mental processes, such as learning, perception and memory. They also explore the contributions of famous psychologists, various theories of development, current issues and career opportunities in the field. Activities include demonstrations and experiments, personal and/or group reports, guest speakers and class discussions. Students develop new insights into their own behavior and acquire effective tools for coping with stress, as well as a deeper understanding about individual differences among people.

**243 SOCIOLOGY (Semester-Daily)****Credit 0.5**

Society is divided into three basic units organized to maintain continuity and relationships. Part one orients the students to sociology through the study of society. Part two concentrates on social roles and social worlds. Part three involves the continuing problems of society.

**246 ANCIENT WORLD (Semester-Daily)****Credit 0.5**

Students will explore the ancient world through a close look at civilizations such as ancient Egypt, Greece, and Rome, in order to develop an understanding of the foundations of modern day societies. Examinations of ancient governments and religions will show students the influence that the past has on the current global climate as well as their own lives. Students will also learn about the way historians analyze and interpret artifacts to reconstruct civilizations from long ago.

**248 YOU AND THE LAW (Semester-Daily)****Credit 0.5**

Students discuss and analyze their rights and responsibilities as American citizens and residents. Case studies and mock trials are used to illustrate legal issues in the areas of criminal law, torts, contracts, family relations, housing, consumer purchases and individual rights and liberties.

**249 REEL HISTORY (Semester-Daily)****Credit 0.5**

Through the study of major motion pictures, Reel History offers the opportunity for students to examine several events and topics which have had profound effects on American history, culture, psyche, politics and economics. This is not a film course in the traditional sense of analyzing film production and the creative process. Rather, the films provide insight to several points of view concerning a particular sociological or historical topic. Students are asked to analyze the topic through discussion and critical writing. Units of study may include Soldiers & War, Social Issues, Politics, and History through Sports.

**251 COMMUNITY SERVICE (Semester-Daily)****Credit 0.5**

This course in applied citizenship provides students with the opportunity to experience academic, personal and social growth. Each student learns how to assess areas of community need and then plan, perform, and evaluate personal service. Class release time is granted four periods a week so the students can more readily perform the required minimum of 50 hours at the service site (school, nursing homes, soup kitchens, shelters, hospitals, etc).

Parents must complete permission and insurance forms. Transportation to and from service sites must be provided by the student/parent.

## **SPECIAL EDUCATION 9-12**

### **918S CONCEPTS IN GOVERNMENT AND CONSUMER ECONOMICS**

**Credit .5 or 1.0**

The first semester of this course covers (a) the structure and operation of the federal government, (b) the structures and operation of the state and local governments, with an emphasis on Pennsylvania, Montgomery County, Upper Merion Township, and the Boroughs of Bridgeport and West Conshohocken, and (c) political issues, such as voting, lobbying, and political parties. This component of the course fosters the development of requisite knowledge and tools necessary for civic engagement. The second semester of the course provides students with the following: (d) an introduction to basic economic concepts, (e) an overview of investing and savings, and (f) a survey of consumer spending on insurance, housing, and automobiles. The second component of the course focuses more on consumer-oriented matters and the development of personal finance, in support of the transition to independent living, rather than academic theories of Economics. Throughout both semesters students will develop essential reading, writing, and critical thinking skills in support of Individualized Education Plans.

Prerequisite: IEP

# Business & Computer Science Education

## BUSINESS COURSES

INTRODUCTION TO BUSINESS  
 MARKETING  
 ACCOUNTING I  
 ACCOUNTING II  
 ENTREPRENEURSHIP  
 INTERNATIONAL BUSINESS  
 BUSINESS LAW  
 PERSONAL FINANCE  
 CAREER WORK STUDY (CO-OP)

## COMPUTER/INFORMATION TECHNOLOGY COURSES

DIGITAL ACADEMY  
 WEB DESIGN I  
 WEB DESIGN II  
 3D MODELING & ANIMATION  
 INTRO TO COMPUTER SCIENCE  
 AP COMPUTER SCIENCE PRINCIPLES

The goal of the Business and Computer Department is to prepare students for a successful future whether continuing on to college or entering the business and marketplace after high school, the courses available in the department are invaluable to anyone's success. A unique department, all of the courses in this department focus on the development of problem solving and communication skills, and the modeling of different technologies and business processes that are used in the 21<sup>st</sup> century workplace.

The board of School Directors in the Upper Merion Area School District recognizes the growing importance of computers in all facets of life. Therefore, all graduates of our high school are required to complete at least .5 credits in Digital Academy to meet graduation requirements.

Here is a suggested list of courses for the department:

	10th-12th Grade Suggested Semester Course path suggestions for Computer Science and Design					
9th Grade Requirement						
<b>Computer Design/ Graphics Focus</b>	Digital Academy*	Web Design I	Web Design II	3D Modeling	Intro to Computer Science	AP Computer Science Principles**
Computer Programming Focus	Digital Academy*	Intro to Computer Science	3D Modeling	AP Computer Science Principles**	AP Computer Science A (VHS 2021-2022)	Intro to Engineering see Science courses

\*Required Upper Merion graduation requirement and a full year course

\*\*AP Computer Science Principles is a full year course, all others semester based

10th-12th grade semester course path suggestions for Business Areas of Focus

<b>Business Finance Focus</b>	Intro to Business	Accounting I	Accounting II	Personal Finance	Business Law	
<b>Business Marketing Focus</b>	Marketing	Intro to Business	Web Design I	Entrepreneurship	International Business	
<b>Business Entrepreneurship Focus</b>	Intro to Business	Entrepreneurship	Accounting I	Business Law	Marketing	Personal Finance
<b>Business General Business Ed Focus</b>	Intro to Business	Marketing	International Business	Business Law	Accounting I	Personal Finance

## COMPUTER/INFORMATION TECHNOLOGY

### **607 WEB DESIGN I (Semester-Daily)**

**Credit 0.5**

This course is an introduction to Web Design and will create a basis for the learner to create an actual website. Students learn how to use HTML to design their own Web pages. The course covers basic HTML and CSS. Through real-world design scenarios and hands-on projects, students create usable web pages using the latest suite of tools. Students learn how to critically evaluate website quality and learn how to create and maintain quality web pages. They will explore web design standards and why they are important, and learn to create and manipulate images. The course progresses from introductory work on web design to a culminating project in which students design and develop a real world website. Tools used may include, but are not limited to HTML, CSS, JavaScript, Photoshop, Brackets and Dream Weaver. **No experience needed** to succeed in this fun and project based course. You will leave the course with the ability to create a website.

### **609 WEB DESIGN II (Semester-Daily)**

**Credit 0.5**

This course is for students who have successfully completed Web Design I and want to learn tools and techniques in the Web Design world. The course will delve further into HTML5 CSS/Bootstrap and JavaScript, as well as other tools. Projects will include real world/community projects including creating website proposals for clients. This class is ideal for students who are both artistic and technical and are interested in learning skills that will focus on advanced web design techniques. This course is designed to be a rewarding and fun learning experience for all students regardless of ability and can actually prepare you to get paid side projects creating websites.

Prerequisite: A passing grade in Web Design I or Teacher recommendation

**613 \*DIGITAL ACADEMY (Year-3x cycle)****Credit 0.5**

Digital Academy will serve as the entry point for student participation in the Upper Merion Area High School one-to-one computer initiative. The course will introduce students to techniques that will allow them to use technology as a tool for lifelong learning. Students will develop their academic skills and reflect on their role in a digital world. The course will provide care and operating instructions for their MacBook. Students will utilize various applications and web-based tools to meet learning objectives across their curriculum. Digital Academy students will identify what it means to be a good digital citizen by examining 21st century issues like cyber-bullying, information security, online piracy, and overall responsible use of technology as they consider their own identity and future in a digital age.

**\*COURSE REQUIRED AS COMPUTER SCIENCE CREDIT FOR GRADUATION.**

**617 3D MODELING & ANIMATION (Semester)****Credit 0.5**

In this class you will learn how to make animated cartoons as well as create 3D objects including printing some of your designs on 3D printers. This class is ideal for students who may be interested in art, graphic design, programming, engineering and/or animation. This class requires NO experience or knowledge of animation and 3D models and will teach you how to do it in a fun and project based environment. The class will utilize animation tools and 3D modeling software as well as a full review of the history of animation and CGI graphics in everyday use. Upon completion, students will be able to create 3D models and actual animations using 2D and 3D modeling tools such as, but not limited to Animate and Blender.

Prerequisite: Passing grade in Digital Academy

**634 INTRO TO COMPUTER SCIENCE/PROGRAMMING (Semester-Daily)****Credit 0.5**

This course introduces students to the basic concepts of computer science and programming and challenges them to creatively explore how computing and technology can affect their daily life. While learning about the many facets of computer science fields, students will be engaged in several projects such as programming robots using Java language and creating projects on Raspberry Pi microcomputers utilizing the Python language. This is a fun project based class that will review all areas of computer science including Robotics/AI, history, big data, machine learning, ethics and much more. Highly recommended for anyone and **no experience needed.**

Prerequisite: Passing grade in Digital Academy

**635 AP COMPUTER SCIENCE PRINCIPLES (Year-Daily) HONORS****Credit 1.0**

The AP Computer Science Principles course is designed to be equivalent to a first-semester introductory college computing course and is perfect for those majoring in the humanities in college. No experience at all is needed for this fun class that is designed to appeal to a diverse audience. This course involves discussions and hands-on activity based learning that will cover a wide variety of topics such as how the Internet works, ethics, programming, data representation, and security. Students will also develop effective communication and collaboration skills by working individually and collaboratively to solve problems, and will discuss and write about the impacts these solutions could have on their community, society, and the world. Programming languages that may be used include JavaScript, Java and/or Python. Highly recommended for anyone and **no experience needed.**

Prerequisite: Passing grade in Digital Academy

## **BUSINESS APPLICATION**

### **615 INTRODUCTION TO BUSINESS (Semester-Daily)**

**Credit 0.5**

Students are introduced to the dynamics of the world of business as they examine what businesses are, how they operate and how they are structured and what influences them. Concepts are connected to real life situations including social responsibility, personal finance, business ethics and culture, international business, business technologies, real world business connections and lifelong skills that can be applied to any career choice or college major. Whether planning for a business major in college or a business related career, this course is the perfect start towards a successful future.

### **621 ACCOUNTING I (Semester-Daily)**

**Credit 0.5**

This course is offered for students who have an interest in pursuing a business career, or want to better understand how to manage their own personal finances. The basic principles, concepts and procedures of the accounting cycle will be introduced to students. This objective is accomplished through the use of problems, projects, practice sets and readings. A live national interactive stock market game teaches the skills of trading stock. Exposure to Microsoft Office (Word, Excel and PowerPoint) preferred.

### **622 ACCOUNTING II (Semester-Daily)**

**Credit 0.5**

Building on the learning experience developed in Accounting I, this course highlights various real life applications in partnerships and corporations. The accounting cycle is emphasized through various real life applications including budgeting and retail management. Exposure to Microsoft Office (Word, Excel and PowerPoint) preferred.

Prerequisite: Passing grade in Accounting I

### **632 BUSINESS LAW (Semester-Daily)**

**Credit 0.5**

This course is designed to introduce students to the field of law and strengthen their knowledge of business concepts and practice. Students will utilize research and case law to explore topics including the foundations of our legal system, civil and criminal law, and employment law. The class provides a hands-on, active approach to Business Law as students spend time examining real life cases, exploring the evidence, determining legal outcomes, and discussing the impact those cases have on our society.

Prerequisite: A passing grade in Intro to Business or teacher recommendation

### **642 PRINCIPLES OF MARKETING (Semester-Daily)**

**Credit 0.5**

This is a fun project-based course that will facilitate learning about marketing and advertising. You will develop marketing skills, which are used in almost all business practices, and you will be a smarter consumer and/or businessperson. Students will learn that marketing is one of the largest and most exciting career areas in business today. Whether you are planning a career in marketing or want to enhance your business knowledge, the skills and information you take from this class will be invaluable. This is a hands-on class that utilizes all areas of marketing including sports & entertainment, tourism and advertising.

**643 ENTREPRENEURSHIP (Semester-Daily)****Credit 0.5**

Entrepreneurship is a course designed to acquaint students with the private enterprise system from the perspective of a small business owner. The students will learn what it takes to plan, develop, and run a business. The class will focus on recognizing business opportunities, researching and planning a business venture, and maintaining day-to-day operations of a small business. Business, human resource management, financing the business, accounting principles, managing risk, as well as the social and ethical responsibilities of businesses in the 21st century. Students will be tasked with simulating their own start-up venture to be used as a learning tool to examine the course content.

Prerequisite: A passing grade in Intro to Business or teacher recommendation

**644 INTERNATIONAL BUSINESS (Semester-Daily)****Credit 0.5**

The Business Education Department recognizes the ever-expanding global marketplace. International Business will introduce students to the understanding of the relationships between different countries' business policies and practices. Topics covered include foundations of International Business; the global business environment; international banking, finance and investment; international communications and culture; and ethical and social responsibilities in a global economy. Students will also have opportunities to make real-world connections by hearing from local business professionals with experience in the global marketplace.

Prerequisite: A passing grade in Intro to Business or teacher recommendation

**624 PERSONAL FINANCE (Semester-Daily) *\*New Course for 2021-2022*****Credit 0.5**

This course prepares students to analyze choices and develop tools to make wise decisions in future financial planning. Students will use a variety of on-line and print resources to develop knowledge and skills relative to managing individual resources, consumer rights and responsibilities, consumer advocacy and technology available for consumers. Careers, paychecks, budgets, housing, insurance, purchasing a car, investments and the stock market are explored in this course. Community resources will enhance students' understanding of content.

Prerequisite: None

**646 CO-OP: OCCUPATIONAL SEMINAR AND WORK EXPERIENCE****Credit 0.5-1.0**

The Co-Op experience is a semester course that provides seniors with the opportunity to earn credit by working in area businesses and learning skills not taught in the regular school curriculum. Students with a job can leave school early to go to work and receive course credits. Students can earn .5 credit per semester or 1 credit per semester depending on hours worked per week. The teacher mentor will support the student by providing related classroom instruction in the areas of productive work habits, cooperation and teamwork, safety, time management, career development and budgeting. The teacher-mentor will also visit the student on the job site in order to collect feedback from the employer, discuss any work-related issues, and evaluate the student's learning. Co-Op is an opportunity for the student to gain practical work experience that complements their academic experience. It is highly recommended students already have a job before applying for this course. Transportation for Co-Op students is not provided by the school district.

Prerequisite: Current work experience and must be a Junior or a Senior

**646M OCCUPATIONAL SEMINAR AND WORK EXPERIENCE MODIFIED**  
**Cooperative/Transition Education Program**

**Credit 1.0 to 2.0**

The Cooperative/Transition Education Program provides students in special education with a structured educational program integrating classroom studies with productive work experiences in a field related to a student's academic or career goals. This program provides students with guidance and training through vocational exploration, employment planning, community-based assessments and eventual competitive job placement. Ongoing employment support (job coaching) is provided when necessary, to assist in successful school-to-work transitions. Participation in this program requires students to attend a weekly 1 period Seminar class, in addition to completing the minimum required hours within an approved work or training site. All interested juniors and seniors must receive approval from the Transition Coordinator or Co-Op Supervisor prior to being scheduled for this course.

Prerequisite: Individualized Education Program (I.E.P.)

# MATHEMATICS

## HONORS/AP

Algebra II H Geometry H	Geometry H Pre-Calc H	Pre-Calc H AP Calc AB Calc & App H AP Statistics	AP Calc BC	
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## COLLEGE PREP

Algebra 1B CP	Algebra II CP	Geometry CP	Pre Calc CP Stat & Math Models	Stat & Math Models
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In order to graduate, students must successfully complete three full-year courses (or equivalent) in math. Computer Science may not be applied to this requirement.

For non-native students taking courses which require the use of English, student placement is based upon demonstrated mathematical ability rather than English proficiency.

**Note:** Mathematics courses require the use of a graphing calculator. Students are strongly encouraged to have either a trigonometric or graphing calculator (T1-84) for use in class and at home.

**325 ALGEBRA IB (Year-Daily) COLLEGE PREP Credit 1.0**

This course is offered to students who have completed Algebra IA. Students will learn to solve equations with 2 variables, solve quadratic equations, and work with radicals and irrational numbers. The pace of the course allows for additional practice for students as they continue to progress through the study of Algebra. A Special Education Teacher consults with the subject area teacher to support students with IEP's enrolled in the course. All students will take the Keystone Algebra Exam at the completion of this course.

**331 GEOMETRY (Year-Daily) HONORS Credit 1.0**

This course is a comprehensive study of Euclidean and related Geometries. It is the third course offered in the advanced sequence, culminating in the study of calculus in the senior year.

**332 GEOMETRY (Year-Daily) COLLEGE PREP Credit 1.0**

This course is the study of Euclidean Geometry and is designed for the student who wishes to continue academic development in math or science. A Special Education Teacher consults with the subject area teacher to support students with IEP's enrolled in the course

**341 ALGEBRA II (Year-Daily) HONORS Credit 1.0**

This course is a logical extension of Honors Algebra I. An example of concepts to be covered include radicals, exponents, conic sections, and logarithms. It is the second course offered in the advanced sequence, culminating in the study of Calculus in the senior year. Students will need a TI-84 graphing calculator.

**342 ALGEBRA II (Year-Daily) COLLEGE PREP Credit 1.0**

This course is a logical extension of the Algebra I program focusing on more detailed algebraic functions. It is for students who demonstrate proficiency in high school Algebra I and are continuing their academic development in math or science. A Special Education Teacher consults with the subject area teacher to support students with IEP's enrolled in the course. Students will need a TI-84 graphing calculator.

**351 PRE-CALCULUS (Year-Daily) HONORS Credit 1.0**

This course is taken in the fourth year of the sequence that leads to Advanced Placement Calculus. Topics include: Trigonometry, an introduction to Calculus and some discrete Mathematics. Students will need a TI-84 graphing calculator.

**352 PRE-CALCULUS (Year-Daily) COLLEGE PREP Credit 1.0**

This course is designed for students who need a strong background in mathematics leading to advanced math courses such as Calculus. Topics include trigonometry functions, and an introduction to Calculus. Students will need a TI-84 graphing calculator.

**354 STATISTICS AND MATHEMATICAL MODELING COLLEGE PREP Credit 1.0  
(Year-Daily)**

This course provides students with the opportunity to use practical applications for the exploration of advanced mathematical topics necessary for post-secondary success. The first part of the course focuses on statistics and probability. Following that, mathematical models will be used to emphasize skills involving algebra, geometry, and other advanced math topics. This course will further promote understanding of statistics, probability, and advanced math topics through integration and manipulation of math concepts and skills into real world situations and problems. Prerequisite: Completion of Geometry and Algebra II. Formally Applications of Advanced Math Topics

Prerequisite: Completion of Geometry and Algebra II

**360 AP CALCULUS AB (Year-Daily) HONORS Credit 1.0**

This is a standard college course in differential and integral Calculus, designed to conform to the College Board Advanced Placement program. College credit is available under conditions outlined by the College Board and the college of the student's choice. A graphing calculator from the College Board's approved list is required. It is expected that all students enrolled in the class will take the Advanced Placement Mathematics examination at the end of the year.

**361      CALCULUS AND APPLICATIONS (Year-Daily)      HONORS      Credit 1.0**

This course provides students with the fundamental concepts involved in differential calculus. Students will learn various applications of these concepts. An introduction to integral calculus is also included. This course prepares students to enter into a first year college calculus course. Students will need a TI-84 graphing calculator.

**362      AP CALCULUS BC (Year-Daily)      HONORS      Credit 1.0**

This is a standard college course in differential and integral Calculus, designed to expand on all the topics from the AB Calculus course with the new concepts introduced. College credit is available under conditions outlined by the College Board and the college of the student's choice. A graphing calculator from the College Board approved list is required. It is expected that all the students enrolled in the class will take the Advanced Placement Mathematics examination at the end of the school year. The AP Calculus BC course provides the students with opportunities to analyze parametric, polar and vector functions, more involved applications of the derivatives and integrals, numerical approximations to definite integrals, polynomial approximations and series, and investigate convergence test on power series.

**365      AP STATISTICS (Year-Daily)      HONORS      Credit 1.0**

Advanced Placement Statistics acquaints students with the major concepts and tools for collecting, analyzing, and drawing conclusions from data. Students will work on projects involving the hands-on gathering and analysis of real world data. Ideas and computations presented in this course have immediate links and connections with actual events. The TI-83/84 graphing calculator will allow students to focus deeply on the concepts involved in statistics. This course prepares students for the Advanced Placement examination in Statistics and its four broad Conceptual themes:

- Exploring Data: Observing Patterns and departures from patterns,
- Planning a Study: Deciding what and how to measure,
- Anticipating Patterns: Producing models using probability and simulation,
- Statistical Inference: Confirming models.

**328F/328S      KEYSTONE ALGEBRA PREP (Semester 3x/Cycle)      Credit .25**

Currently taking Algebra I or Algebra IB. Additional prep to taking the Keystone Algebra Exam. Keystone Algebra Prep Class is required for students in Algebra I and Algebra IB who demonstrate a need for additional review prior to the Keystone Algebra Exam so they are in the best position to pass the test on their first attempt. Individual student data will be used to identify each student's strengths and areas of need. In addition to preparing for the state-mandated test, the practice of algebraic skills will reinforce the students' learning in their other math classes. Students are scheduled in these courses based on performance on standardized tests, diagnostic tests and course grades.

**329F/329S KEYSTONE ALGEBRA (Semester 3x/Cycle)****Credit .25**

Keystone Algebra is a required remedial course for students who did not demonstrate proficiency on the Keystone Algebra Exam. Individual student data will be used to identify each student's strengths and areas of need in preparation for Keystone Algebra retesting. Students are preliminarily scheduled in these classes based on mid-year data, such as diagnostic tests. Final placement is determined in the summer after the results from the spring testing session are released.

**SPECIAL EDUCATION 9 - 12****934S MATH CONCEPTS (Year-Daily)****Credit 1.0**

This course is designed to meet the individual needs of identified students in the area of Algebra. A standards driven integrated approach focusing on algebra is central to the course. Students will learn to solve equations with two variables, solve absolute value equations, functions, inequalities, slope, and some advanced algebra topics. This course may be repeated as needed to fulfill the Math graduation requirements.

Prerequisite: Individualized Education Plan (IEP)

**938S REAL-LIFE MATH (Year-Daily)****Credit 1.0**

This course is designed to make math meaningful by providing students with problems and examples demonstrating its applications in everyday life. This course provides comprehensive instruction that students need for independent living. It focuses on using math skills in real-life situations for those who have basic computational skills but need practice in applying these skills.

## SCIENCE

The science program at Upper Merion Area High School is designed to prepare students for their role in a scientific world. The table below outlines the scope and sequence of the science courses offered at the high school.

	9th Grade	10th Grade	11th Grade	12th Grade
<b>Honors 2nd year Focus</b>	Honors Biology	Honors Chemistry	Honors Physics	Second Year Science*
<b>Honors</b>	Honors Scie & Tech	Honors Biology	Honors Chemistry	Honors Physics
<b>College Prep</b>	CP Science & Tech	CP Biology	CP Chemistry	CP Physics

Students must successfully complete three (3) courses in science in order to graduate. Students from the classes of 2020-2021 and after, will also need to score proficient or advanced on the Biology Keystone exam or complete a project based assessment to graduate. All of the science courses are aligned with the Pennsylvania Academic Standards for Science and Technology.

**\* The Second Year Science Courses are AP Biology, AP Chemistry, and AP Physics (C)**

**Science and Technology Overview** – The Science and Technology program provides a foundation for all high school science courses. Students will investigate the designed world by studying how materials, energy, electricity, and information have shaped our modern world. Topics will include those of physical science, modern technology, and social issues involving science and technology. Each quarter students will be completing a long term project. The students will be trained in the methods of science and laboratory skills.

### **401 SCIENCE AND TECHNOLOGY (Year-Daily) HONORS Credit 1.0**

This course places high academic demands on the student and requires independent scientific research. This course is appropriate for the student who plans to major in science in a four-year college after high school but does not plan to take a second year science course at the high school. There is a strong focus on the mathematical and analytical tools necessary to pursue an academic career in the sciences. Independent projects will be assigned.

### **402 SCIENCE AND TECHNOLOGY (Year-Daily) COLLEGE PREP Credit 1.0**

This course is intended to build the basic skills required for studying academic science. The course is designed to introduce students to fundamental science concepts through an analysis of the technologies that rely on those concepts. There is a focus on developing the academic skills necessary for success in college level science. A Special Education teacher consults with the subject area teacher to support students with IEP's enrolled in this course.

**Biology Overview** - Biology concerns living things, their appearance, different types of life, the scope of their similarities and differences, where they live and how they live. Through the study of the diversity of life, students learn to understand how life has changed over a long period of time. This great variety of life forms continues to change even today as genetic instructions within cells are passed from generation to generation, yet the amazing integrity of most species remains. (from Pennsylvania's Academic Standards for Science and Technology)

**411 BIOLOGY (Year-Daily)**

**HONORS**

**Credit 1.2**

This course places high academic demands on the students and requires independent scientific research. This course is appropriate for the student who plans to major in science in a four-year college after high school and plans to take a second year science course at the high school. There is a strong focus on developing the laboratory and communication skills necessary to pursue an academic career in the sciences. Independent projects will be assigned. This course will have two double lab periods each six-day cycle. Students enrolled in this course will take the Biology Keystone Exam at the conclusion of the course.

Prerequisite: A passing grade in Honors Science and Technology or a grade of B or better in College Prep Science and Technology or a recommendation from their eight grade science teacher.

**412 BIOLOGY (Year-Daily)**

**COLLEGE PREP**

**Credit 1.2**

This course is intended to introduce students to the fundamental concepts in biology while focusing on the connections between those concepts. The course is designed to help students gain a detailed understanding of cells, cell processes, and the continuity and unity of life. There is a focus on reinforcing and further developing the academic skills necessary for success in college level science. This course is not intended for ninth grade students. This course will have one double lab period each six day cycle. This can be taken as a co-taught class. Students enrolled in this course will take the Biology Keystone Exam at the conclusion of the course. A Special Education teacher consults with the subject area teacher to support students with IEP's enrolled in this course.

Prerequisite: A passing grade in College Prep Science and Technology. Teacher recommendation required in this prerequisite is not met.

**Note:** CMTHS students in College Prep Biology should register for section 412T for 1.0 credit.

**Chemistry Overview** - Chemistry involves the study of matter and its properties. Students examine changes to materials and learn how to observe and measure results. Students study the relationship between matter, atomic structure and its activity. Laboratory investigations of the properties of substances and their changes through a range of chemical interactions provide a basis for students to understand atomic theory and a variety of reaction types and their applications in business, agriculture and medicine. (from Pennsylvania's Academic Standards for Science and Technology)

**421 CHEMISTRY (Year-Daily)**

**HONORS**

**Credit 1.2**

This course places high academic demands on the students and emphasizes quantitative problem solving. This course is appropriate for the student who plans to major in science or engineering in a four-year college after high school and plans to take a second year science course at the high school. There is a strong focus on developing the laboratory and communication skills necessary to pursue an academic career in the sciences. Formal laboratory reports will be required. This course will have two double lab periods each six day cycle.

Prerequisite: A passing grade in Honors Biology or a grade of B or better in College Prep Biology and a passing grade in Honors Algebra II or Honors Geometry or a grade of B or better in College Prep Algebra II or College Prep Geometry. Teacher recommendation required if these prerequisites are not met.

**422 CHEMISTRY (Year-Daily)**

**COLLEGE PREP**

**Credit 1.2**

This course is intended to introduce students to the fundamental concepts in chemistry while focusing on the connections between those concepts. The course emphasizes quantitative and qualitative problem solving. The course is designed to help students gain a detailed understanding of the structure and properties of matter and chemical interactions between atoms and molecules. There is a focus on reinforcing and further developing the laboratory skills necessary for success in college level science. Formal laboratory reports will be required. This course will have one double lab period each six day cycle. A Special Education teacher consults with the subject area teacher to support students with IEP's enrolled in this course.

Prerequisite: A passing grade in College Prep Biology and a passing grade in Algebra I. Teacher recommendation required if these prerequisites are not met.

**Note: CMTHS students in College Prep Chemistry should register for section 422T for 1.0 credits.**

**Physics Overview** - Physics involves the study of matter and energy. Students examine moving objects and explore the forces and energy that influence their motions. The study of Physics deepens the understanding of the structure and properties of materials and includes atoms, waves, light, electricity, magnetism and the role of energy, forces and motion. (from Pennsylvania's Academic Standards for Science and Technology)

**431 PHYSICS (Year-Daily)**

**HONORS**

**Credit 1.2**

This course places high academic demands on the students and emphasizes quantitative problem solving. This course is appropriate for the student who plans to major in science or engineering in a four-year college after high school and plans to take a second year science course at the high school. There is a strong focus on developing the laboratory and communication skills necessary to pursue an academic career in the sciences. The design, execution, and evaluation of advanced laboratory experiments will be required. This course will have two double lab periods each six day cycle.

Prerequisite: A passing grade in Honors Chemistry or a grade of B or better in College Prep Chemistry and a passing grade in Honors Algebra II or Honors Pre-Calculus or a grade of B or better in College Prep Algebra II or College Prep Pre-Calculus. Teacher recommendation required if this prerequisite is not met.

**432 PHYSICS (Year-Daily)**

**COLLEGE PREP**

**Credit 1.2**

This course is intended to introduce students to the fundamental concepts in physics while focusing on the connections between those concepts. The course is designed to help students gain a detailed understanding of motion, forces, momentum and energy. There is a focus on reinforcing and further developing the laboratory skills necessary for success in college level science. The design, execution, and evaluation of advanced laboratory experiments will be required. This course will have one double lab period each six day cycle.

Prerequisite: A passing grade in College Prep Chemistry and a passing grade in Algebra I. Teacher recommendation required if these prerequisites are not met.

**Note: CMTHS students in College Prep Physics should register for section 432T for 1.0 credits.**

**Advanced Placement Courses in Science** – College Board's Advanced Placement Program in science provides students with the opportunity to study college level course material in a high school classroom. In addition to studying college level material, students develop skills essential to success in college level science courses. Students electing to take the Advanced Placement exam have the opportunity to earn college credit while enrolled in high school. Please visit the College Board website for information about participating colleges/universities and qualifying scores.

**440 AP BIOLOGY (Year-Daily) HONORS Credit 1.2**

This course is designed to be the equivalent of a college course in introductory biology for biology majors. This course focuses on molecules and cells, heredity and evolution, and organisms and population, and will prepare students for the AP Biology Exam in May. Laboratory work is an essential part of the course. The course activities, assignments, laboratory work, and exams are equivalent to those given in college-level biology classes. This course will have two double lab periods each six day cycle.

Prerequisite: A grade of B or better in Honors biology or a grade of A in CP Biology. Students should have already completed or be concurrently enrolled in Chemistry I. Teacher recommendation required if these prerequisites are not met.

**450 AP CHEMISTRY (Year-Daily) HONORS Credit 1.2**

This course is designed to be the equivalent of a college course in introductory chemistry for chemistry majors. The topics of the course include the structure of matter, the states of matter, reactions, and descriptive chemistry. Laboratory work, chemical calculations, and the mathematical formation of principles are essential parts of the course. The course activities, assignments, laboratory work, and exams are equivalent to those given in college-level chemistry classes. This course will have two double lab periods each six day cycle.

Prerequisite: A grade of B or better in Honors Chemistry or a grade of A in CP Chemistry and a grade of B or better in Honors Algebra II or grade of A in College Prep Algebra II. Students should have already completed or be concurrently enrolled in Physics I. Teacher recommendation required if these prerequisites are not met.

**455 AP PHYSICS C: Mechanics (Year-Daily) HONORS Credit 1.2**

This course is designed to be the equivalent of a calculus based college course in physics for physics/engineering majors. The course focuses on Newtonian Mechanics and will prepare students for the AP Physics C Mechanics exam in May. Problem solving is an essential part of the course. After the exam, special topics will be covered. The course activities, assignments, laboratory work, and exams are equivalent to those given in college-level physics classes. This course will have two double lab periods each six day cycle.

Prerequisite: A grade of B or better in Honors Physics and a grade of B or better in Honors Pre-Calculus. Calculus AB or Honors Calculus and Applications strongly recommended as a co-requisite. Teacher recommendation required if these prerequisites are not met. Teacher recommendation required for students who have completed CP Physics.

## **SPECIAL EDUCATION 9 - 12**

### **935S SCIENCE CONCEPTS (Year-Daily)**

**Credit 1.0**

This course is designed to meet the needs of identified special education students in the area of science. A standards driven, integrated approach focusing on biology is central to the course. Science Concepts covers the same topics that are covered in the CP Biology classes in a more supported manner at a moderated pace. Topics covered follow the eligible content for the biology Keystone Exam which students will take in the spring of their sophomore year. This course may be repeated as needed to fulfill the science graduation requirements.

Prerequisites: IEP

### **939S REAL LIFE SCIENCE (Year-Daily)**

**Credit 1.0**

Designed for reluctant readers or those who require additional help to grasp basic and life science concepts. It offers a systematic overview of key scientific concepts. It is especially useful for students who require extra attention or need additional assistance.

## **FOREIGN LANGUAGES**

Acquisition of a modern language requires a sequential study to develop basic proficiency in interpretive, interpersonal and presentational communication. Students may select French, German, or Spanish as one of their core academic requirements. Students may also elect to study an additional modern language as well.

Upper Merion Area School District's foreign language program begins in the 6th grade with the FLEX program (Foreign Language Exploratory), when Middle School students receive instruction in all three modern languages: French, German, and Spanish. Students may select a language for intensive study beginning in 7th grade. Daily instruction continues in 8th grade.

Students who have matriculated through the Middle School program continue with level 2 of the selected target language. Students initiating their foreign language study begin in level 1. The High School curriculum continues through AP Level. Students surpassing AP Language and Culture courses may continue with an independent study program.

Focus on proficiency through the use of the target language for instruction and the use of authentic materials leads students to an understanding of the target language cultures and basic proficiency in interpretive, interpersonal and presentational communication.

### **500 GERMAN I**

**COLLEGE PREP**

**Credit 1.0**

This introductory course is for students who have never studied or who have minimal knowledge of the language. Class activities emphasize cultural similarities and differences between the German and American cultures. Vocabulary and grammatical structures are recycled systematically to help students' bridge from the known to the unknown.

### **502 GERMAN II**

**COLLEGE PREP**

**Credit 1.0**

This course is sequential to German I. German is spoken extensively, building on the base established in the language 1 program. With proficiency as a philosophy, learners are involved in student-centered activities in which the teacher is the facilitator. Proficiency activities focus first on Interpretive Communication, then grow to include more Interpersonal and Presentational Communication.

Prerequisite: C or better in German I or teacher's recommendation.

### **503/503H GERMAN III**

**COLLEGE PREP OR HONORS**

**Credit 1.0**

Recycling previous vocabulary and grammatical structure, students continue in proficiency based activities that will assist multiple learning styles. The teacher continues using German in instruction and students become more confident using the language. Activities are structured to avoid the use of English in the classroom. Topics expand to involve vocabulary needed in a shrinking world. Assessments for the Honors level will begin to target the deeper proficiency levels needed to prepare for the German Advanced Placement examination.

Prerequisite: C or better in German II or teacher's recommendation.

**504 GERMAN IV****HONORS****Credit 1.0**

This course is sequential to German III. Emphasis is placed on oral and written proficiency. The vocabulary topics expand and contemporary readings serve as a model for correct language usage. Games, films, and interactive exercises serve as an entertaining use of the language in the cultural context. Students discover more ways to negotiate meaning and increase their awareness of linguistic tasks and variables. Students who were enrolled in the college prep level for German III may need to do additional summer work for this course. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.

Prerequisite: C or better in German III Honors or teacher's recommendation.

**505 AP GERMAN LANGUAGE & CULTURE HONORS****Credit 1.0**

Students have a sound proficiency base and continue expanding vocabulary and facility with the language. In addition to contemporary authentic sources, students complete excerpts from classical writers. Films in the foreign language provide a common basis for student discussion. Class activities and assignments are designed to prepare students for the AP German language and culture exam. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.

Prerequisite: C or better in German IV or teacher's recommendation.

**510 FRENCH I****COLLEGE PREP****Credit 1.0**

This introductory course is for students who have never studied or who have minimal knowledge of the language. Class activities emphasize cultural similarities and differences between Francophone and American Cultures. Vocabulary and grammatical structures are recycled systematically to help students' bridge from the known to the unknown.

**512 FRENCH II****COLLEGE PREP****Credit 1.0**

This course is sequential to French I. French is spoken extensively, building on the base established in the language 1 program. With proficiency as a philosophy, learners are involved in student-centered activities in which the teacher is the facilitator. Proficiency activities focus first on interpretive communication, then grow to include more interpersonal and presentational communication.

Prerequisite: C or better in French I or teacher's recommendation.

**513/513H FRENCH III****COLLEGE PREP OR HONORS****Credit 1.0**

Recycling previous vocabulary and grammatical structure, students continue in proficiency based activities that will assist multiple learning styles. The teacher continues using French in instruction and students become more confident using the language. Activities are structured to avoid the use of English in the classroom. Topics expand to involve vocabulary needed in a shrinking world. Assessments for the Honors level will begin to target the deeper proficiency levels needed to prepare for the French Language and Culture Advanced Placement examination.

Prerequisite: C or better in French II or teacher's recommendation.

**514 FRENCH IV****HONORS****Credit 1.0**

This course is sequential to French III. Emphasis is on oral and written proficiency. The vocabulary topics expand and contemporary readings serve as a model for correct language usage. Games, films, and interactive exercises serve as an entertaining use of the language in the cultural context. Students discover more ways to negotiate meaning and increase their awareness of linguistic tasks and variables. Students who were enrolled in the college prep level for French III may need to do additional summer work for this course. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.

Prerequisite: C or better in French III Honors or teacher's recommendation.

**515 AP FRENCH LANGUAGE & CULTURE HONORS****Credit 1.0**

Students have a sound proficiency base and continue expanding vocabulary and facility with the language. In addition to contemporary authentic sources, students complete excerpts from classical writers. Films in the foreign language provide a common basis for student discussion. Class activities are designed to prepare students for the AP French Language and Culture exam. This course is available for Dual Enrollment through Montgomery County Community College. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.

Prerequisite: C or better in French IV or teacher's recommendation.

**520A SPANISH I****COLLEGE PREP****Credit 1.0**

This introductory course is for students who have never studied or who have minimal knowledge of the language. Class activities emphasize cultural similarities and differences between Hispanic and American cultures. Vocabulary and grammatical structures are recycled systematically to help students' bridge from the known to the unknown.

**522 SPANISH II****COLLEGE PREP****Credit 1.0**

This course is sequential to Spanish I. Spanish is spoken extensively, building on the base established in the language 1 program. With proficiency as a philosophy, learners are involved in student-centered activities in which the teacher is the facilitator. Proficiency activities focus first on Interpretive Communication, then grow to include more Interpersonal and Presentational Communication.

Prerequisite: C or better in Spanish I or teacher's recommendation.

**523/523H SPANISH III****COLLEGE PREP OR HONORS****Credit 1.0**

Recycling previous vocabulary and grammatical structures students continue in proficiency based activities that will assist multiple learning styles. The teacher continues using Spanish in instruction and students become more confident using the language. Activities are structured to avoid the use of English in the classroom. Topics expand to involve vocabulary needed in a shrinking world. Assessments for the Honors level will begin to target the deeper proficiency levels needed to prepare for the Spanish Language and Culture Advanced Placement examination.

Prerequisite: C or better in Spanish II or teacher recommendation.

**524 SPANISH IV****HONORS****Credit 1.0**

This course is sequential to Spanish III. Emphasis is on oral and written proficiency. The vocabulary topics expand and contemporary readings serve as a model for correct language usage. Games, films, and interactive exercises serve as an entertaining use of the language in the cultural context. Students discover more ways to negotiate meaning and increase their awareness of linguistic tasks and variables. Students who were enrolled in the college prep level for Spanish III may need to do additional summer work for this course. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.

Prerequisite: C or better in Spanish III Honors or teacher recommendation.

**525 AP SPANISH LANGUAGE & CULTURE HONORS****Credit 1.0**

Students have a sound proficiency base and continue expanding vocabulary and facility with the language. In addition to contemporary authentic sources, students complete excerpts from classical writers. Films in the foreign language provide a common basis for student discussion. Class activities are designed to prepare students for the Spanish AP Language and Culture exam. This course is available for Dual Enrollment through Montgomery County Community College. This course will be divided into two semesters, Fall and Spring. A final grade will be given at the end of each semester and .5 credits will be earned at the end of each semester.

Prerequisite: C or better in Spanish IV or teacher recommendation.

## ART

### Scope & Sequence for the Art Courses Offered at the High School For students interested in majoring in Art in college

Studio Art Major	Drawing & Sculpture Or Studio Art I	Studio Art II	Studio Art III <b>or</b> AP 2D Design <b>or</b> AP Drawing
Ceramics Major	Ceramics I	Ceramics II	Advanced Ceramics <b>or</b> Design <b>or</b> AP 3D <b>or</b> Design & Ceramics

#### Electives - Semester

Drawing  
Painting  
Basic Ceramics  
Sculpture  
Art of Digital Photo

#### Electives - Yearlong

Studio Art I  
Ceramics I

#### **660 DRAWING (Semester-Daily)**

**Credit 0.5**

Drawing is fundamental to the vocabulary of an artist, and is an essential tool for observing, recording and responding to the world around us. This course is ideal for those who need to sharpen their basic drawing skills, whether you are a new or experienced artist! Using a variety of drawing materials including pencil, charcoal, marker or ink, students are introduced to the technical elements of line, tone, form and composition. It is an excellent foundation course for students looking to progress into Studio Art I.

#### **661 STUDIO ART I (Year-Daily) \*\***

**Credit 1.0**

In this fundamental art course, students will practice basic techniques in drawing, painting, printmaking, graphic arts, and sculpture. Students should have knowledge of color theory, range of value, paint properties, and compositional balance. This is a good course for any student that wants to pursue a career in any of the visual arts. Students will receive quarterly sketchbook assignments.

\*\*Completion of both Drawing & Sculpture with a "B" average can be substituted for Studio Art I.

#### **662 STUDIO ART II (Year-Daily)**

**Credit 1.0**

This course is an expansion of Studio Art I, focusing on a greater knowledge of artistic fundamentals and skills. It is designed for serious students who aspire to attend an art school. Students' focus will be to express their creativity in all art forms. A greater emphasis will be placed on portfolio preparation, evaluation and critique sessions. Students will receive quarterly sketchbook assignments.

Prerequisite: Drawing and Sculpture completed together or STUDIO ART I

**663 STUDIO ART III (Year-Daily)**

**Credit 1.0**

An expansion of Studio Art II, it is designed for the passionate student that wishes to convey their creativity in all art forms. A greater emphasis will be placed on portfolio preparation through the investigation of design elements, production and evaluation/critique sessions. Additional outside of class preparation is necessary for completion of projects.

**AP STUDIO ART (Year-Daily)**

Each AP Studio Art course is designed for students who are seriously interested in the practical experience of art. AP Studio Art is not based on a traditional exam; instead, students submit portfolios and artist statements to the College Board for evaluation at the end of the school year. The AP Studio Art Program consists of three portfolio options — **2-D Design(664), Drawing(665), and 3-D Design/Ceramics(667)** - corresponding to the three most common college foundation courses. According to surveys of comparable curricula at four-year colleges and universities, they are each **equivalent to a college art course**.

The Advanced Placement Studio Art course will:

- Encourage creative and systematic investigation of formal and conceptual issues.
- Emphasize making art as an ongoing process that involves the student in informed and critical decision making.
- Help students develop technical skills and familiarize them with the functions of the visual elements.
- Encourage students to become independent thinkers who will contribute inventively and critically to their culture through the making of art.

Comprehensive preparation and guided structure for the AP Studio Art Portfolio is also provided.

Prerequisite: Art Teacher recommendation or grade of B or higher in Studio Art II or Ceramics II. Summer work required.

**664 AP STUDIO ART: 2D Design Art & Design (Year-Daily) HONORS**

**Credit 1.0**

For this portfolio, students are asked to demonstrate understanding of 2-D design, through the use and interpretations of the elements of art and principles of design, via any two dimensional medium or process, including, but not limited to, graphic design, digital imaging, photography, collage, fabric design, weaving, illustration, painting, and printmaking.

**665 AP STUDIO ART: Drawing (Year-Daily)**

**HONORS**

**Credit 1.0**

The drawing portfolio is intended to address a very broad interpretation of drawing issues and media. Line quality, light and shade, rendering a form, composition, surface manipulation, the illusion of depth and mark making are drawing issues that can be addressed in the creation of representational or abstract art through painting, printmaking, charcoal, pencil, ink, and mixed media.

**667 AP STUDIO ART: 3D Art & Design (Year-Daily) HONORS Credit 1.0**

For this portfolio, students are asked to demonstrate understanding of 3-D design through any three dimensional approach, including, but not limited to, figurative or non-figurative sculpture, metal work, ceramics, pottery, glass work, installation, and assemblage.

**669 SCULPTURE (Semester-Daily) Credit 0.5**

This course is designed to focus on the three dimensional aspects of art. Unconventional sculpture assignments encourage exploration of the relationship between materials, tools, sculptural form, and aesthetics in the creation of structures. Some of the materials that may be explored will be paper/cardboard, papier-mâché, clay, metals, and wire. Using a large variety of scavenged, recycled and natural materials, students will stretch their creative problem-solving skills.

**670 BASIC CERAMICS (Semester-Daily) Credit 0.5**

Basic Ceramics is a beginning course focused on the three hand building methods in clay. Students will explore pinch, coil, and slab methods and their many possibilities. They will also learn the science of the ceramic process through the clay and glaze reactions in the kiln. Wheel instruction is not included. This is a semester course designed for students who have not taken Ceramics I or II.

**671 CERAMICS I (Year-Daily) Credit 1.0**

The ceramics course is designed for the student who is interested in working with clay. It includes the use of the potter's wheel and introduces students to the basic construction methods (pinch, coil, slab, sculpture). Students will be required to use each method to complete projects. Students will be required some outside time to plan these projects. Basic ceramics is not a requirement for this course.

**672 CERAMICS II (Year-Daily) Credit 1.0**

Students will improve proficiency in wheel throwing, hand-building and glazing techniques through all steps of the ceramics process. Ceramics II will serve students with an emphasis on functional, sculptural and decorative pottery techniques. Students are encouraged to explore and utilize all the facets of this rewarding medium. Students may require some outside time to plan these projects.

Prerequisite: B or better in Ceramics I.

**673 ADVANCED CERAMICS DESIGN (Year-Daily) Credit 1.0**

A continuation of the skills, techniques and processes acquired in the Ceramics II course, the students will be exploring further possibilities in the medium of clay and other 3 dimensional materials. Students will be required to work on a larger scale and produce more advanced work. Students will be required to plan these projects outside of class.

Prerequisite: B or better in Ceramics I and II

**675 PAINTING (Semester-Daily)**

**Credit 0.5**

This is an introductory course that covers basic painting techniques with an emphasis on classic and contemporary application of watercolor, acrylic, and tempera media. Students will learn to express themselves through color and composition with various painting styles and applications.

Prerequisite: Drawing skills recommended but not required.

**753 THE ART OF DIGITAL PHOTOGRAPHY (Semester-Daily)**

**Credit 0.5**

This photographic course is designed to acquaint students with the ins and outs of digital imaging and publication by applying them to digital cameras and the computer. From capture to print, learn to optimize, manipulate and compose photographic imagery using the computer as a tool to enhance the art elements and compositional criteria of a photograph or digital image. Required course materials include a digital camera with SD card.

## MUSIC

Concert Choir	Concert Band	Concert Orchestra
Advanced Choir	Advanced Band	Advanced Orchestra
Guitar Class	Music Theory 1	AP Music Theory

Concert band, chorus, and orchestra provide environments where students experience a varied repertoire and continuous development of techniques and skills. Direction is provided for present and future utilization of students' talents. Participation in school and community performances contributes to student social, emotional and academic growth through sharing responsibilities and goals.

<b>700</b>	<b>CONCERT CHOIR</b>	<b>(Year-6 times/cycle)</b>	<b>Credit 1.0</b>
<b>700A</b>	<b>CONCERT CHOIR</b>	<b>(Year-5 times/cycle)</b>	<b>Credit 0.9</b>
<b>700B</b>	<b>CONCERT CHOIR</b>	<b>(Year-4 times/cycle)</b>	<b>Credit 0.8</b>
<b>700C</b>	<b>CONCERT CHOIR</b>	<b>(Year-3 times/cycle)</b>	<b>Credit 0.5</b>
<b>700D</b>	<b>CONCERT CHOIR</b>	<b>(Year-2 times/cycle)</b>	<b>Credit 0.4</b>

Choir is open to all students interested in singing in the high school chorus. Curricular instruction included signing technique, basic music theory and exploration of various forms of choral music. The Choir rehearses to perform at three yearly concerts, graduation and numerous school and community events. Interested and qualified Viking Choir members may audition for District Chorus.

Prerequisite: Ability to sing on pitch.

Prerequisite: Students must have the ability to read music intermediate level.

<b>703</b>	<b>MUSIC THEORY I (Year-Three times/cycle)</b>	<b>Credit 0.5</b>
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This course will acquaint students with the basics of music theory including music notation, intervals, chords, scales, rhythm, listening and dictation skills and elementary harmony. The course will include keyboard instruction. This course will serve as an introduction to AP Music Theory.

Prerequisite: Students must have the ability to read music at an intermediate level.

<b>704</b>	<b>AP MUSIC THEORY (Year-Daily)</b>	<b>HONORS</b>	<b>Credit 1.0</b>
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This course will continue the musical concepts covered in Music Theory I. Instruction will include harmonic progression, part writing, non-harmonic tones, and listening and dictation skills. This course is particularly useful for students interested in studying music after graduation. Students will be prepared to take the AP exam in Music Theory. Will be available alternating academic years.

Prerequisite: Students must have successfully completed Music Theory I.

<b>706</b>	<b>ADVANCED CHOIR (Year-6 times/cycle)</b>	<b>Credit 1.0</b>
<b>706A</b>	<b>ADVANCED CHOIR (Year-5 times/cycle)</b>	<b>Credit 0.9</b>
<b>706B</b>	<b>ADVANCED CHOIR (Year-4 times/cycle)</b>	<b>Credit 0.8</b>
<b>706C</b>	<b>ADVANCED CHOIR (Year-3 times/cycle)</b>	<b>Credit 0.5</b>
<b>706D</b>	<b>ADVANCED CHOIR (Year-2 times/cycle)</b>	<b>Credit 0.4</b>

This advanced vocal group will meet during zero period (7:00-7:45 am). An audition is required which can be arranged with the choral director in Room A111 prior to course registration. Curricular emphasis includes advanced vocal technique, music theory and study of various choral styles such as Sacred and Secular Choral Music, Broadway, Jazz, and Popular Music. The choir rehearses occasionally in the evening to prepare for various school and community concerts and for choral festivals and competitions.

Participation in this group requires a serious commitment to the music program.

Prerequisite: Participation in Credit Choir or approval by the choral director.

<b>708</b>	<b>GUITAR CLASS (Year-Three times/cycle)</b>	<b>Credit 0.5</b>
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This course is designed for any student with the desire to play the guitar, and is open to beginning or novice players. Advanced players will be accepted by teacher recommendation only. Course content includes: assembly and tuning of guitar, basic playing technique, music theory and ensemble playing.

<b>710</b>	<b>CONCERT BAND (Year- 6 times/cycle)</b>	<b>Credit 1.0</b>
<b>710A</b>	<b>CONCERT BAND (Year- 5 times/cycle)</b>	<b>Credit 0.9</b>
<b>710B</b>	<b>CONCERT BAND (Year- 4 times/cycle)</b>	<b>Credit 0.8</b>
<b>710C</b>	<b>CONCERT BAND (Year- 3 times/cycle)</b>	<b>Credit 0.5</b>
<b>710D</b>	<b>CONCERT BAND (Year- 2 times/cycle)</b>	<b>Credit 0.4</b>

Concert Band is open to all students who play a woodwind, brass, or percussion instrument. Concert Band will meet during the school day. Concert Band will also have several evening rehearsals and performances. Band students may elect to participate in the Viking Marching Band. The marching band rehearses twice each week and performs at football games and other special events throughout the area.

Prerequisite: Students must be able to play a concert band instrument.

<b>711</b>	<b>ADVANCED BAND (Year-6 times/cycle)</b>	<b>Credit 1.0</b>
<b>711A</b>	<b>ADVANCED BAND (Year-5 times/cycle)</b>	<b>Credit 0.9</b>
<b>711B</b>	<b>ADVANCED BAND (Year-4 times/cycle)</b>	<b>Credit 0.8</b>
<b>711C</b>	<b>ADVANCED BAND (Year-3 times/cycle)</b>	<b>Credit 0.5</b>
<b>711D</b>	<b>ADVANCED BAND (Year-2 times/cycle)</b>	

Advanced Band is composed of students selected by audition who play a woodwind, brass or percussion instrument. Advanced Band members will be encouraged to prepare the solo selection for District Band. Students will perform the Concert Band music in addition to the Advanced Band music. This advanced instrumental group will meet daily during zero period (7:00-7:45 am). Advanced Band will also have several evening rehearsals and performances. Students in Advanced Band may elect to participate in the Viking Marching Band. The marching band rehearses twice each week and performs at football games, and other special events throughout the area.

Prerequisite: Students will be selected by audition.

<b>716</b>	<b>CONCERT ORCHESTRA</b>	<b>(Year-6 times/cycle)</b>	<b>Credit 1.0</b>
<b>716A</b>	<b>CONCERT ORCHESTRA</b>	<b>(Year-5 times/cycle)</b>	<b>Credit 0.9</b>
<b>716B</b>	<b>CONCERT ORCHESTRA</b>	<b>(Year-4 times/cycle)</b>	<b>Credit 0.8</b>
<b>716C</b>	<b>CONCERT ORCHESTRA</b>	<b>(Year-3 times/cycle)</b>	<b>Credit 0.5</b>
<b>716D</b>	<b>CONCERT ORCHESTRA</b>	<b>(Year-2 times/cycle)</b>	<b>Credit 0.4</b>

Concert Orchestra is open to all students who play the violin, viola, cello, or string bass. Students will be required to submit one recording each marking period (a total of four throughout the year) and perform all of the orchestra pieces in the winter, Pops and Spring Concerts. Members of the orchestra may also audition for the UMHS Chamber Strings, the Montgomery County Honors Orchestra, and the PMEA District, Region and All-State Orchestras.

Prerequisite: Successful participation in the middle school Orchestra program and a teacher recommendation.

<b>717D</b>	<b>ADVANCED ORCHESTRA</b>	<b>(Year-2 times/cycle)</b>	<b>Credit 0.4</b>
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Advanced Orchestra is open to students who play violin, viola, cello, or string bass; woodwind, brass, percussion and piano students by audition only. Students will be required to submit one recording each marking period (a total of four throughout the year) and perform all of the orchestra pieces in the winter, Pops and Spring Concerts. More advanced string literature, techniques and ensemble playing may also be studied and performed in this class. Advanced Orchestra will meet during zero period (7:00 – 7:45 am.)

Prerequisite: An 'A' or 'B' in Concert Orchestra, or an 'O' in 8th Grade Orchestra, and a teacher recommendation.

## **TECHNOLOGY AND ENGINEERING**

### **Technology and Engineering Education**

The Technology and Engineering Education program provides students with the opportunity to investigate the relationships between science, technology, engineering, and mathematics and apply their understanding of those relationships in different project-based learning activities.

All of the courses in the program focus on the development of problem solving and communication skills, systems thinking, and the modeling of different technologies and processes that are used in the 21st century workplace.

#### **731 STEM: Principles and Processes (Semester-Daily) Credit 0.5**

This course focuses on how technology and engineering is used to solve problems and understand the world we live in. The students will examine existing and emerging technologies and evaluate how they were developed and could be modified to solve problems in the future. The primary focus in the course is on developing an understanding of the ways technology has been used to create new and innovative products and processes. Students will complete case studies, design challenges, and technical reports as they investigate the principles and processes used to create our technological world.

#### **732 STEM: Design and Fabrication (Semester-Daily) Credit 0.5**

This course addresses how technology and engineering principles are applied to the design of materials, objects, structures, and systems. The use of design challenges and prototyping activities will provide students with the opportunity to design, construct, and evaluate a number of different structures. The primary focus of the course is on using design processes to systematically construct and evaluate a number of different structures and systems. Students will complete prototyping activities, technical drawings, and design challenges as they apply their understanding of design and fabrication to a number of different projects.

#### **733 Introduction to Engineering (Semester-Daily) Credit 0.5**

This course introduces students to the various fields of engineering and provides students with the opportunity to engage in engineering activities. The course will begin with an overview of the engineering principles common to all of the engineering fields and then focus on the concepts that distinguish between the different engineering fields. Students will work on a number of projects that incorporate design challenges, technical drawings, and digital integration as they develop an understanding of important engineering principles.

#### **741 Engineering Systems (Semester-Daily) Credit 0.5**

This course is a second engineering course for students who have completed "Introduction to Engineering" and focuses on how the different engineering fields interact to complete both large and small projects. In addition to discussing engineering principles, students will explore how financial, marketing, and regulatory agencies impact and influence any engineering project. Students will complete a number of design challenges, presentations, and manufacturing simulations as they expand their understanding of engineering principles.

Prerequisite: Introduction to Engineering

**742 Advanced topics in Engineering (Semester-Daily)**

**Credit 0.5**

This course is a third engineering course for students who have completed the “Introduction to Engineering” and “Engineering Systems” courses and serves as an independent study course for students to pursue topics of their own interest. The final project will incorporate a number of smaller projects and will be of a size and a scope to reflect a semester dedicated to the understanding, investigating, and presentation of an important technological or engineering idea or concept.

Prerequisite: Engineering Systems

## **FAMILY AND CONSUMER SCIENCES**

Family and Consumer Sciences courses inspire students to achieve success in their future through communication and project driven courses. The following courses provide a foundation for students to transition into adult life by gaining knowledge and skills needed for successfully living and working in a diverse global environment. Through project based and experiential learning opportunities, the lab and studio courses develop teamwork, leadership, and technology skills that enable students to become critical thinkers and positive contributors in society.

### **761 Introduction to Culinary Arts (Semester-Daily)**

**Credit 0.5**

Experience the excitement of preparing, experimenting and tasting food. In this introductory course, students will improve their fundamental knowledge and skills in the areas of food safety, planning, preparing and serving meals. Fundamental nutrition facts for recipes will be incorporated into daily/weekly labs.

### **762 Culinary Arts I (Semester-Daily)**

**Credit 0.5**

Culinary Arts I- course is designed to incorporate principles of food preparation and apply appropriate food safety and sanitation practices. This class will use prior and new terminology and abbreviations used in food preparation while interpreting a wide variety of recipes from different countries. Students will incorporate the food pyramid and nutritional value of different foods to create meals. Students will explore and prepare different cultural cuisines. Students will also infer the effectiveness of the use of meal management principles. Students are encouraged to prepare a meal and present it with a creative style.

Prerequisite: A grade of "B" or better in Introduction to Culinary Arts and teach recommendation.

### **763 Culinary Arts II (Semester-Daily)**

**Credit 0.5**

This course is designed to advance and continue the principles of food preparation while students explore newer methods and techniques for the preparation of healthy appealing recipes. The course will incorporate prior knowledge while analyzing fundamental practices in the food industry. The students are given the opportunity to research and develop nutritional practices that can be incorporated into their daily lives. Active class members participate in UM Steel Chef, while giving back to the UM community through the inter-school district and giving to community events.

Prerequisite: A grade of "B" or better in Intro to Culinary Arts Lab I and teacher Recommendation.

### **764 Up-cycling Design (Semester-Daily)**

**Credit 0.5**

This course is designed to teach the arts and the upcoming trends that may be used to recycle, refurbish and reuse to reflect your personal persona. Multiple projects will be completed to enhance your creative outlet. Through class discussions, personal reflection, and teacher guidance, the student will learn to analyze and critique his/her own projects while using projects as portfolio pieces.

Students will be required to bring in up-cycling supplies for projects.

**765 Interior Design (Semester-Daily)****Credit 0.5**

This course will allow students to use their inner creativity to transform old, impractical spaces into new updated, lively, functional settings for various purposes. Students will gain an understanding of the elements and principles of design while transforming old outdated furnishings into new updated space. Students will learn to analyze appropriate selections of colors, fabrics, lighting, and furniture. Class projects include decorating sample rooms, designing and analyzing floor plans as well as transforming “junk” into beautiful and everyday usable objects! The student will create a small portfolio by completing a variety of projects.

Students will be required to bring in supplies for projects.

**768 Fashion Design I (Semester-Daily)****Credit 0.5**

This course begins with a short review of sewing techniques for the construction of projects with or without a pattern. Students will learn how to use their creativity to analyze their individual style/personal vision and create pieces including, jewelry, clothing and accessories. Students will research upcoming trends and designers while creating garments/projects to reflect student’s personal fashion preferences.

Students will be required to bring in supplies for projects.

**769 Fashion Design II (Semester-Daily)****Credit 0.5**

This course further develops techniques in clothing construction and design. Students will be responsible for designing their own logo to accompany their own line of clothing and accessories. This will be achieved through various hands on methods. Classroom presentations and critiquing will be a part of this artistic adventure. This course will also prepare students for a college portfolio dedicated for fashion arts.

Students will be required to bring in supplies for projects.

Prerequisite: A grade of “B” or better in Fashion Design Lab I.

**771 Early Childhood Education Lab I (Semester-Daily) 10-12 Grades****Credit 0.5**

Students will study the physical, social, emotional, and intellectual development of children three through five years of age. This course will include Pre-K lesson planning, preparation and student teaching experiences. Daily participation through hands-on activities and observation in the Little Vikings Lab School is an integral part of the learning experience.

**772 Early Childhood Education Lab II (Semester-Daily) 10-12 Grades****Credit 0.5**

Students will plan and organize the Little Vikings Lab School Program including classroom work learning centers, arts & crafts, storytelling, music, physical activities, field trips, and science labs. They will research and analyze children’s behavior based on current child development theories to better understand the roles of caregivers and parents.

Prerequisite: A grade of “B” or better in Early Childhood Lab I and teacher recommendation.

**773 Elementary Education Lab Experience (Semester-Daily)**

**Credit 0.5**

Students will work closely with a teacher in a district classroom. This course is designed for students who are interested in pursuing careers dealing with young children.

Prerequisite: A grade of "B" or better in Early Childhood Lab I & II, teacher recommendation and must be a senior.

## **PHYSICAL EDUCATION**

All students are required to successfully complete 1.0 credit of Physical Education. It is recommended that students take advantage of the opportunity to earn more Physical Education credits after achieving the graduation requirement.

In order to attain the 1.0 credit graduation requirement, all students must pass .4 credits of Physical Education 818 and .6 credits (3 semesters) of Physical Education 819. The completion of Physical Education 818 is a prerequisite for taking the 819 course. Below is a description of all Physical Education offerings.

**818A PHYSICAL EDUCATION (FALL – 2 times/cycle) Credit 0.2**

**818B PHYSICAL EDUCATION (SPRING – 2 times/cycle) Credit 0.2**

This course is a basic introduction to Physical Education at the High School. It includes two eighteen-week sessions of a variety of activities and experiences that may include weight training, cardiovascular fitness, games, physical fitness, and a number of indoor and outdoor sports and activities.

**819A PHYSICAL EDUCATION (Fall-2 times/cycle) Credit 0.2**

**819B PHYSICAL EDUCATION (Spring-2 times/cycle) Credit 0.2**

This course offers students the opportunity to select from a variety of activities to participate in during two, nine week periods. A sampling of these activities includes creative games, ultimate frisbee, team sports, personal fitness, basketball, lifetime sports, floor hockey and volleyball.

Prerequisite: Course 818A/ 818B

## **ELECTIVES**

**820A ADVANCED PHYSICAL EDUCATION (Semester-2 times/cycle) Credit 0.2**

**820B ADVANCED PHYSICAL EDUCATION (Semester-2 times/cycle) Credit 0.2**

This course is designed to develop leadership skills, allow students opportunities to acquire useful skills that are transferable into the community and to promote cooperative and team building qualities to our students. Course objectives include peer teaching 818 classes and teaching elementary students the importance of physical fitness. In addition, this is a great course for students wishing to pursue a career in the area of coaching or Health and Physical Education. Units of study include competitive team sports, individual life-long activities, adventure-based education and coaching/officiating.

Prerequisite: Successful completion of Physical Education 818 and 0.4 credits of 819.

**821A PHYSICAL EDUCATION (Fall-2 times/cycle) Credit 0.2**

**821B PHYSICAL EDUCATION (Spring-2 times/cycle) Credit 0.2**

The focus of this course will be sport specific weight training. This course meets during zero period (7 AM-7:45 AM). Students participating in this class must provide their own transportation.

**827S ADAPTIVE PHYS. ED. (Year – 2 times/cycle)**

**Credit 0.4**

This course is designed to meet the needs of individuals who are unable to participate in the regular program because of a physical handicap, disability, or other special need.

Prerequisite: Individualized Education Plan (IEP), Recommendation or Physician's Note.

**814B AQUATIC / LIFEGUARD TRAINING (Semester- 4 times/cycle)**

**Credit 0.4**

This course affords students the opportunity to do independent lap swimming at an individual pace. Aquatic aerobics and other forms of aquatic fitness will be available. The course also affords students the opportunity to gain Lifeguard Training and Certification. The American Red Cross certification requirements include mastery of first aid skills, CPR, and rescue skills. Lifeguard certification will not be issued to anyone who cannot satisfactorily demonstrate certification in all required skills. There will be a nominal financial charge to meet Red Cross certification and course costs.

Prerequisite: Successful Completion of Physical Education 818 and 0.4 credits 819. Sophomores may take this course without meeting the prerequisite if they receive permission from the instructor.

## **Teenage Issues and Health**

**800 TEENAGE ISSUES (Year – 3 x cycle)**

**Credit 0.5**

A team of teachers from the Health Department teach this course. The content of the course includes drug and alcohol education, human sexuality, nutrition, self-esteem, safety and first aid, mental health, and other pertinent health issues. This can be taken as a co-taught class.

This course is a graduation requirement and must be completed prior to taking Health in 11th grade.

**830 HEALTH (Semester-Daily)**

**Credit 0.5**

This course is a continuation of the study of basic health concepts. Included are health practices, nutrition, diseases, human sexuality, family relationships, mental health, and decision making processes. This course is a graduation requirement. Recommended to be taken in 11th grade.

Prerequisite: Successful Completion of Teenage Issues 800.

**830V HEALTH (Semester - Daily - Online)**

**Credit 0.5**

This course will cover all the same curriculum as course 830 Health. Students will be scheduled for a class period during their school day for time to focus on course completion but all class activities, discussions and assignments will be completed online.

**795 CHOICES (Semester-Daily)**

**Credit 0.5**

Students will develop skills in active listening, questioning, and group dynamics. These skills will be used in the investigation of self-awareness, learning preferences and character development. Activities will include Socratic Seminars using current events, literature selections, and popular music selections; personality and

interest inventories, learning style preference scales, and written assessments including journals and reflection papers.

## **SPECIAL EDUCATION**

The special education program is highly individualized and flexible to allow eligible students the opportunity to reach their potential. Each student has an Individualized Education Plan (IEP) and may receive a specially designed program that provides Learning Support, Emotional Support, Work Study, Regular Education Co-taught classes, Autistic and Life Skill support, and Gifted Seminar, depending on the student's individual needs.

In order to meet the criteria for special education consideration, a multidisciplinary team completes a Comprehensive Evaluation and provides recommendations to the Individualized Education Program Team. The IEP team determines the student's eligibility. If the student is determined to need specially designed instruction, the IEP team provides the exceptional student the most appropriate educational program and placement in the least restrictive environment. The commonwealth of Pennsylvania establishes standards and regulations for such placement.

### **SPECIAL EDUCATION SUPPORTS & SERVICES**

The philosophy of the high school program for eligible students is to place students in the least restrictive environment, while providing an individualized approach to meet their educational needs. Those students with the greatest need in a particular course are often scheduled into smaller classes while students with less need may participate in large group instruction with support and/or direct instruction from the regular and special education teacher.

Students are not restricted to special education courses. Flexibility in scheduling is provided and encouraged for students who have acquired proficient skills. It is also recognized and addressed. For some students, the provision of support in the emotional area may also be essential to increase the student's academic performance and overall emotional stability.

### **962S CAREER WORK EXPERIENCE (Includes seminar 1 day per week)**

The Career Work Experience provides students in emotional support or learning support with the opportunity to work on a site within the local community for a partial day with the hope that this experience will lead to future employment. Students in this program are closely supervised and provided job counseling. Eligible junior and seniors need to make an application in writing to the work study teacher.

### **951S SOCIAL SKILLS**

Social skills class is where students build upon their social-emotional skill strengths. They have the opportunity to work on skills such as: self-control, decision making, problem solving, and responsibility, caring for one's self, and caring for others. Students will have the ability to make social choices that will strengthen their relationships and facilitate success in and out of school.

Prerequisite: Individualized Education Program (I.E.P.)

**948-950 STUDY SKILLS****Credit (Varies)**

This course is designed for students receiving special education services. Students work on study skills in order to enhance their success in the regular education curriculum. This is a pass/fail course. Credit varies depending on the number of times attended weekly.

Prerequisite: Individualized Education Plan (IEP)

**953 STUDY SKILLS II****Credit (Varies)**

The Study Skills II is designed to provide academic, behavioral, and emotional support to students who are experiencing behavioral or emotional difficulties in the classroom. The primary goal of this program is to improve the students' academic and behavioral skills necessary to be successful in the classroom setting.

Prerequisite: Students should have an Individualized Education Plan (I.E.P.)

**946 PRE-VOCATIONAL SKILLS**

Students scheduled for the pre-vocational/social skills classes will take part in a series of hands-on real life skills to prepare for transition from high school to post-graduation jobs and/or placement at a vocational center. Some of the activities are as follows:

1. Job Skills – Students will take part in running a district-wide business called Letters to Go. The students work with all aspects of the business. All job tasks are adapted to meet individual needs. Jobs include sorting by shape/color/size, running the Accu-Cut machines, counting/measuring finished products, laminating, and sending out completed orders.
2. Community Outings- A wide selection of community outings will be planned throughout the school year. A number of the outings will include public transportation training when possible. Public transportation may include using a SEPTA bus, the Upper Merion Ramble, and the R-6 train to Philadelphia. Locations of the outings will vary.
3. Food Prep – Students will take part in cooking/baking activities which include finding/reading recipes, developing a shopping list, purchasing ingredients (though community outing experiences), following recipe measurements and instructions, and complete clean-up of the kitchen area. Special activities such as planning and cooking a luncheon meal for up to 20 various staff members on a few occasions throughout the school year will offer students real-life experiences such as those found in the restaurant industry.
4. School Service – Students will offer free shredding services to all staff members in the high school. They will also take care of the planning, upkeep, and changing of the high school marquee sign board located by the football stadium. Taking part in these services not only provides invaluable hands-on job experiences, but also develops school pride and a sense of accomplishment.

## COOPERATIVE/TRANSITION EDUCATION PROGRAM

The Cooperative/Transition Education Program provides students in special education with a structured educational program integrating classroom studies with productive work experiences in a field related to a student's academic or career goals. This program provides students with guidance and training through vocational exploration, employment planning, community-based assessments and eventual competitive job placement. Ongoing employment support (job coaching) is provided when necessary, to assist in successful school-to-work transitions. Participation in this program requires students to attend a weekly 1 period Seminar class, in addition to completing the minimum required hours within an approved work or training site. All interested juniors and seniors must receive approval from the Transition Coordinator or Co-Op Supervisor prior to being scheduled for this course.

### CO-TAUGHT CLASSES

Each of these classes is taught by a general education teacher and supported by a special education teacher (up to 6x per 6 day cycle). These classes are available to both general education students as well as those students that have an Individualized Education Plan.

Study Skills is available for students receiving special education services. Within the study skills class, progress of each student is monitored and study skills teachers will work as a liaison between the student and his/her teachers if needed. Academic study skills will be reinforced as students are guided in applying certain study skills to their academic assignments. The study skills class is designed to help students with self-advocacy as well as encourage independence. Emphasis is placed on students taking responsibility for being independent learners.

Below is a list of all the Special Education course offerings. Each course is thoroughly described in the appropriate subject area section of the Program of Studies Guide.

### SPECIAL EDUCATION COURSES

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## Gifted Seminar

**199V GIFTED SEMINAR (Semester – 3 times per cycle - Online)**

**Credit 0.25**

This is an elective for gifted and talented students in grades 9-12. This course is designed to challenge students to reflect critically on diverse ways of knowing and areas of knowledge, and to consider the role which knowledge plays in a global society. Students will be challenged to become aware of themselves as learners and thinkers, to become aware of the complexity of knowledge, and to recognize the need to act responsibly in an increasingly interconnected world. This course will be offered in an online format only. Students will be scheduled for a class period during their school day for time to focus on course completion but all class activities, discussions and assignments will be completely online.

Prerequisite: GIFTED OR ACADEMICALLY TALENTED

## **CENTRAL MONTCO TECHNICAL HIGH SCHOOL**

Central Montco Technical High School (CMTHS) provides a variety of educational programs that prepare students to enter the workforce or to continue their education at colleges, universities and technical schools. In addition to occupation specific training, CMTHS promotes the development of civic responsibility, employability skills, leadership and professionalism. All programs are competency based and designed to meet the needs, skills, interests, abilities and preferences of the individual student.

### ***Shaping Today's Students for Tomorrow's Careers***

CMTHS is also committed to serving the business and industry sector of the community by providing programs that assist in meeting local, state and national workforce requirements. At CMTHS, caring and professionally certified staff share their skills while challenging and mentoring their students. Many of the instructors have established high profiles in their fields of expertise prior to becoming teachers. Teachers serve as mentors and respond to individual needs as they extend their support and enthusiasm while preparing students for the future. Students are able to obtain a variety of state and nationally recognized certifications and professional licenses.

## **2021-2022 COURSE SELECTION GUIDE**

Automotive Repair Technology

Baking & Pastry Arts

Collision Repair/Refinishing Technology

Cosmetology

Culinary Arts & Restaurant Management

Building Trades

Early Childhood Education

Health Care Sciences

Landscaping Design & Construction

Networking Technology

Public Safety

Video, Sound, and Music Production

Visual Communications

### **SENIOR-ONLY PROGRAMS**

Allied Health

## **ADMISSIONS PROCESS**

Admission to CMTHS is based upon the recommendation of home school staff and/or IEP team. An application with a copy of the IEP, if applicable, is required before enrollment. The school enrolls students who thrive in a competitive environment. Through careful scheduling with home school counselors, students are able to meet most college entrance requirements and attend CMTHS. We encourage all students and parents to visit our school and meet with the CMTHS school counselor in order to select the most appropriate program and schedule of academic classes. Although our programs are developed around a three-year curriculum, students may enter CMTHS in 10<sup>th</sup>, 11<sup>th</sup> or 12<sup>th</sup> grade.

CMTHS registration forms are available at the home school counseling office and at the CMTHS website [www.cmths.org](http://www.cmths.org) under prospective students— student application. A PDF version of the student application will download to your computer. You may print and handwrite the application or fill in the blanks using a PDF writing utility program. Please give the application to your home school counselor.

## **EQUITY STATEMENT**

Central Montco Technical High School does not discriminate in its education programs, activities or employment practices based on sex, color, national origin, race, sexual orientation, disability, age, religion, ancestry, political opinions or affiliations, or lawful activity in any employee organization. Central Montco Technical High School provides equal access to the Boy Scouts and other designated youth groups. For information about your civil rights and grievance procedures contact the Equal Rights Coordinator at (610) 277-2301.

## **DISCLAIMER**

Articulation agreements between the Pennsylvania Department of Education / Bureau of Career and Technical Education and post-secondary schools are subject to change as they are annually negotiated and updated. See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for more information on articulations.

## **SPECIAL SERVICES**

### **STUDENT SUPPORT SERVICES**

- Career portfolio instruction
- School counseling – Career, Academic, and Social & Emotional
- Career-related math instruction
- Learning support services

### **WORK-BASED STUDIES**

- Job Shadowing – An opportunity for students to observe or ‘shadow’ someone in their chosen career in the actual place of work.
- Internships: Paid and non-paid work-based experiences for a specified length of time.
- Clinical Experiences: Non-paid, work-based experiences in hospitals, long term care facilities and day care centers.
- Cooperative Education: Program related placements that are paid, on-the-job training positions and are considered an extension of the classroom. The timeline for placement is individualized and based on student need. Students are trained under the direct supervision of the employer and are assigned a mentor. Students’ progress is monitored and evaluated by the school and the employer on a continual basis.

## **STUDENT ORGANIZATIONS**

### **SKILLSUSA & HEALTH OCCUPATIONS STUDENTS OF AMERICA (HOSA)**

SkillsUSA and HOSA have very active chapters at CMTHS. These programs are nationally recognized organizations in which all students participate. SkillsUSA is a national partnership of students, teachers, and industry working together to ensure America has a skilled workforce through leadership training and student governments.

### **COUNCIL OF PRESIDENTS**

The Council of Presidents is established for each session with representation from all program areas. Meetings are held on a monthly basis with the primary goal of functioning as a student government.

### **NATIONAL TECHNICAL HONOR SOCIETY**

The National Technical Honor Society is the acknowledged leader in the recognition of outstanding achievement in career and technical education. Over 2000 schools and colleges throughout the U.S. and its territories are affiliated with the Society. Member schools agree that NTHS encourages higher scholastic achievement, cultivates a desire for personal excellence, and helps students find success in today's competitive workplace.

### **ALLIED HEALTH** *(Senior Only)*

**Course Description:** Allied Health Technology is a course designed for students who wish to pursue a career in healthcare professions. Students are supervised during clinical rotations in medical, surgical, support, and administrative services. The course is open to upperclassmen students who meet the required prerequisites: specific GPA, specific math & science courses, along with excellent attendance and no discipline record.

**Course Content:** Students learn to plan, organize, interact with patients, assume responsibilities and develop critical thinking and problem solving skills. The curriculum is designed to facilitate communication, cognitive, social-emotional, and developmental skills necessary for an entry-level position in the health field and continued education on the post-secondary level. Topics of study include:

- Legal and ethical standards in health care
- Communications and Leadership through HOSA (Health Occupations Students of America)
- Body systems in wellness and disease; and infection control
- Health care delivery, safety and emergency systems
- Medical Terminology; principles of nutrition; and current issues in healthcare

#### **Admission Criteria:**

- Specific GPA
- Specific Math and Science Courses
- Excellent Attendance
- Excellent behavior

#### **State or National Certifications:**

- NOCTI Skills Certificate
- AMCA Medical Assisting

**Related Occupations:** Physicians, Pharmacists, Occupational Therapists, Physician Assistants, Radiologist, Radiologist Technicians, Nurses (BSN, RN), Respiratory Therapists, Surgical Assistants

**Equipment & Tools Needed:** Hospital Scrubs/white leather shoes/watch with a second hand/background checks/physical/updated immunizations. *(No visible tattoos or facial piercings, artificial or long nails or polish)*

## **AUTOMOTIVE REPAIR TECHNOLOGY**

**Course Description:** The Automotive Repair Technology program introduces students to the Automotive Service Industry (ASE). The program focuses on developing the hands-on and intellectual skills required of an entry-level automotive technician. The program is NATEF (National Automotive Technicians Education Foundation) certified. Students who meet the academic and employability skills qualifications may apply for membership in the AYES (Automotive Youth Educational Systems) Program.

**Course Content:** The Auto Tech course focuses on developing the tactile and intellectual skills required for an entry-level auto technician. The course is NATEF (National Automotive Technicians Education Foundation) certified of which only 30% of the secondary programs in the nation carry this endorsement. Hands-on auto work experiences are available so that the student is prepared to service today's complex vehicles. Students must be able to work as a part of a team, lift approximately 50 pounds and bend at the knees and waist without difficulty. Topics of study include:

- Suspension and Steering, & Brakes
- Electrical and Electronics Systems
- Engine Repair and Engine Performance
- Vehicle Maintenance and Reconditioning
- Heating and Air Conditioning

### **State or National Certifications Available at CMTHS:**

- NOCTI Skills Certificate
- Automotive Service Excellence (8 areas of certification)
- Freon Handler's License
- SP/2 (Safety & Pollution 2) Certificate
- State Inspection License
- AC Delco Certificates (5 areas of certification)

**Articulation Agreement:** Automobile / Automotive Mechanic Technology / Technician CIP Code: 47.0604

See [www.pacollegetransfer.com](http://www.pacollegetransfer.com) for program specific articulation agreements.

Credit for prior learning is awarded to CMTHS students (student must take placement test) at UTI, ATC and Lincoln Tech.

**Related Occupations:** Auto Technician, Auto Parts Sales, Transportation Inspector

**Equipment & Tools for CMTHS Automotive Technology Program:** A uniform consisting of Dark blue Dickies® pants, leather work boots and T-shirt are required and available from [www.cmths.org](http://www.cmths.org). Tool box, lock and tools (required tool list provided by the instructor)

## BAKING AND PASTRY ARTS

**Course Description:** A pathway of the Culinary Arts program, the Baking and Pastry Arts Program covers the skills and knowledge needed to produce bakery items and operate a retail bakery operation. Students will have opportunities to demonstrate their skills in a student run bakery. There will also be opportunities for students to work at Central Montco Tech sponsored catering functions. All students have participated in our work-based studies programs which includes: job shadowing, internships, and Co-op programs.

**Course Content:** The Baking and Pastry Arts learning experience will reflect the realistic conditions found in the hospitality / food service industry. Students learning is facilitated by an 11,000 sq. ft. commercial kitchen and baking area and a fully operational restaurant and retail bakeshop. Students participate in a special classroom management system validated by the American Culinary Federation.

- Safety and sanitation practices
- Business and Math Skills
- Baking Preparation
- Basic Baking Skills
- Product Merchandising
- Purchasing, Receiving and Storage Practices
- Nutrition

### **State or National Certifications Available at CMTHS:**

- NOCTI Skills Certificate
- ServSafe® Sanitation Certificate

**Articulation Agreement:** Baking & Pastry Arts/Baker/Pastry Chef - CIP 12.050. See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Chefs & Head Cooks, Food Prep Supervisor, Cake Decorator, Pastry Chef, Baker

**Equipment & Tools for CMTHS Culinary Arts Program:** The following items are required for this class: chef coat and pants, apron and hat. Uniforms are available at [www.cmths.org](http://www.cmths.org).

## BUILDING TRADES

**Course Description:** The Building Trades Program is an excellent option for students interested in a career related to residential and commercial construction. This program includes coursework in Carpentry, Masonry, Electricity, Plumbing, and Building Maintenance.

**Course Content:** Students are taught hand and power tool safety as well as electrical safety, scaffold/ladder safety and fall protection. Residential wiring topics include various switching and receptacle installation and National Electrical Code requirements are covered. Carpentry topics utilize technical drawings to produce student made projects. Plumbing topics include PVC, copper and the installation and repair of various plumbing fixtures. Masonry topics in the first year include building block walls, corners and foundations. Students are taught blueprint reading and drawing and use those skills to draw a structure that they then build. This project includes installing sheetrock, taping and finishing, painting as well as wiring and copper water lines. Students learn to install 100 amp residential service, proper grounding techniques and power panel circuit breaker installation. Project-based assignments such as: Using blueprints, students layout and build a foundation. A powder room or bathroom is framed. Electrical, tub, toilet, sink, sheetrock, windows, roofing, siding, painting, tile and a water heater is installed.

### State or National Certifications Available at CMTHS:

- NOCTI Skills Certificate
- OSHA 10-hour Safety Certification

**Articulation Agreement:** Building/Property Maintenance & Manager—CIP Code: 46.0401 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Carpenter, Cement Mason, Construction Manager, Electrician, HVAC Tech, Plumber

**Equipment & Tools for CMTHS Construction Technology Program:** Construction Trades black T-shirt /Sweatshirt [www.cmths.org](http://www.cmths.org) . Student must wear leather work boots. Students must have a tool box, tool belt and tools (A list will be provided by the instructor).

## **COLLISION REPAIR/REFINISHING TECHNOLOGY**

**Course Description:** Collision Repair/Refinishing Technicians are skilled workers who repair minor and major defects such as scratches, chips, dents, surface rust and rust outs. The technician also welds torn metal, replaces damaged parts, and estimates repairs. A person in this trade should have the desire to work with metal and finishing metals such as paints, solvents, and waxes. The program is A.S.E. (Automotive Service Excellence) and ICAR gold certified.

**Course Content:** I-Car Curriculum prepares students to remove excessively damaged fenders, panels and grills using wrenches and cutting tools and attaching or manufacturing replacements by bolting, gluing or MIG welding them in place. Topics of study include:

Perform non-structural repairs (metal straighten repairs, body fillers and metal finishing glazes, panel replacement, panel alignment, interior trim, hardware and glass replacement)

- Complete surface preparations (sanding techniques, machine and hand)
- Identify paint code on each car and transfer code to paint mixing room computer for paint formula for each vehicle
- Mix paint formula using computer to match paint on vehicle; Mask and paint vehicles
- Perform undercoats / corrosion protection usage for metal, plastic, fiberglass and carbon fiber materials.
- Perform vehicle cleanup and detailing
- Demonstrate welding, including MIG, resistance spot and plasma arc cutting.

### **State or National Certifications Available at CMTHS:**

- NOCTI Skills Certificate
- S/P2 Safety Certificate
- PPG On-Line Training and Refinishing (12 certificates)
- I-CAR PDP Education Edition (17 certificates)

**Articulation Agreement:** Autobody/Collision & Repair Technology Technician - CIP Code: 47.0603 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Auto Glass Installer, Auto body Technician, Insurance Adjuster, Painter, Transportation

**Equipment & Tools for CMTHS Collision Repair Program:** Collision printed T-shirt, Dickies® work pants and leather work boots are required [www.cmths.org](http://www.cmths.org).

## COSMETOLOGY

**Course Description:** Cosmetology is a PA State Approved Course which allows students to earn 2.5 hours per day (average 400-420 hours per year) towards the required 1250 clock hours as mandated for licensure by the Pennsylvania State Board of Cosmetology. The Pennsylvania State Board of Professional and Occupational Affairs mandates that the CMTHS Cosmetology program include:

- 50 hours in Professional Practices including bacteriology, disinfection, sanitation, professional attitude, business practices, Pennsylvania Cosmetology Law;
- 200 hours in Sciences; histology, trichology, chemistry, physiology, cosmetic dermatology, electricity;
- 1000 hours in Cosmetology Skills - Cognitive & Manipulative.

**Course Content:** The curriculum for the Cosmetology course consists of theoretical instruction and practical skills covering practices constituting the art of Cosmetology. Such theoretical instruction and practical skills include:

- Orientation: History and career opportunities, life skills, professional image and communication
- General Sciences: Infection control, Anatomy and Physiology, skin, nails, growth and nutrition, diseases, disorders
- Properties of the hair and scalp, basics of chemistry, basics of electricity
- Hair Care: Principles of hair design, scalp care, shampooing and conditioning, haircutting, hairstyling, braiding and braid extensions, wigs and hair additions, chemical texture services, hair coloring
- Skin Care: Hair removal, facials, facial makeup
- Nail Care: Manicures, pedicures, nail tips & wraps, monomer liquid & polymer powder nail enhancements, UV gels
- Business Skills: Seeking employment, On the Job, The Salon Business - State Law: Pennsylvania State Board of Cosmetology Law

### State or National Certifications Available at CMTHS:

- NOCTI Cosmetology Pennsylvania Skills Certificate
- Pennsylvania State Board of Cosmetology License

**Related Occupations:** Color Specialist, Cosmetology Teacher, Esthetician, Nail Technician, Spa Manager

**Equipment & Tools for CMTHS Cosmetology Program:** Level 1: Cosmetology Kit (Required by PA State Board of Cosmetology); Level 2/3: Two new mannequins each year (2<sup>nd</sup> & 3<sup>rd</sup> year students); School supplies: three ring binder, notebook tabs & paper, flash drive, pencils, highlighters, index cards

## CULINARY ARTS & RESTAURANT PRACTICES

**Course Description:** The Culinary Arts and Restaurant Practices program offers a cutting edge curriculum for all students interested in culinary arts, baking, restaurant management, safety, sanitation, and nutrition. Our kitchen and classrooms are updated and are state of the art. The program has student operated catering services and restaurants.

**Course Content:** Students participate in a special classroom management system validated by the American Culinary Federation. Students get hands-on experience in:

- Cooking techniques
- Pastries and baking
- Breakfast cookery
- Nutrition
- Guest services and dining
- Production controls and food costing
- Inventories and ordering
- Menu planning and presentation, including buffet presentation

### **State or National Certifications Available at CMTHS:**

- NOCTI Skills Certification
- ServSafe® Sanitation Certificate

**Articulation Agreement:** Institutional Food Worker - CIP Code: 12.0508 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Chefs & Head Cooks, Dieticians & Nutritionists, Food Prep Supervisor, Food Science Technicians, Waiters/Waitresses

**Equipment & Tools for CMTHS Culinary Arts Program:** The following items are required for this class: includes chef coat and pants, apron and hat. Uniforms are available at [www.cmths.org](http://www.cmths.org).

## EARLY CHILDHOOD EDUCATION

**Course Description:** The Early Childhood Education program is designed for 10th, 11th and 12th grade students who have a sincere desire to teach and care for young children. It prepares students for either an entry-level position in the child-care industry or to pursue a college degree in early childhood education or elementary education. Students observe and interact in a variety of early childhood settings including elementary schools, childcare centers, and early intervention programs, as well as our own on-site preschool, "Little Hands."

**Course Content:** Along with classroom instruction, students will learn skills by preparing and presenting both individual and team projects appropriate for children ages infant through young school-age. Topics of study include:

- Principles of child development
- Health, safety and nutrition
- Observation and teaching skills
- Communication skills & team building skills
- Child care center management and organization
- PA State Licensing Laws-Office of Child Development and Early Learning
- Dual-Enrollment College Credits

### **State or National Certifications Available at CMTHS:**

- Pennsylvania & NOCTI Skills Certificate • Child Development Associate (CDA Ready) • First Aid & CPR
- Emergency Management Institute (EMI) Certificate for Children in Disasters

**Articulation Agreements:** See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements. Childcare & Support Services Management CIP Code: 19.0708

**Related Occupations:** Childcare Center Director, Childcare Worker, Elementary Teacher, Preschool Teacher, Teacher's Assistant

**Equipment & Tools for CMTHS Early Childhood Education Program:** Burgundy smock/jacket, order at [www.cmths.org](http://www.cmths.org). Physical Exam & 1-Step Mantoux (Tuberculosis) Test required.

## HEALTH CARE SCIENCES

**Course Description:** The Health Care Sciences course offers a core academic curriculum and skill-based competency tasks linked to careers in the healthcare industry. This program provides the knowledge base for careers in health care by preparing the student to enter the health care system along with continuing their education. Clinical experience is offered through local medical organizations.

**Course Content:** The curriculum consists of the communication, cognitive, social-emotional and developmental skills necessary to obtain an entry level position in the healthcare field. Continuing education on the post-secondary level is re-enforced through the learning process. Topics of study include:

- Communication; medical terminology; safety and infection control
- Healthcare provider skills
- Anatomy and physiology
- Nutrition; and CPR and First Aid

### **State or National Certifications Available at CMTHS:**

- Pennsylvania & NOCTI Skills Certificate
- AMCA EKG Technician
- BLS for Healthcare Provider
- AMCA Medical Assisting
- AMCA Nurse Assisting

**Articulation Agreement:** Health/Medical Assisting Services - CIP Code: 51.0899 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) or program specific articulations agreements.

**Related Occupations:** Medical Assistants, Occupational Therapist Assistants, Pharmacists, Physician Assistants, Physician, Radiological Technologists, Radiologists, Registered Nurses, Respiratory Therapists, Surgical Assistants

**Equipment & Tools for CMTHS Networking program:** Hospital Scrubs, white leather shoes, Watch w/second hand, Background Checks, Physical, & Immunizations are required

## LANDSCAPE DESIGN & CONSTRUCTION

**Course Description:** The Landscape Design & Construction Program offers hands-on learning and will prepare students in all phases of landscape / hardscape design and installation, horticulture, nursery operations, and turf management. With an emphasis on residential home installation, students will learn the proper use of hand and power tools, skid loaders, construction materials, measuring and estimating, blueprint and plan reading, and jobsite safety.

**Course Content:** Practical experience is gained through school landscape plantings, planting and maintenance of a vegetable garden, and plant growing. Topics of study include:

- Plant Identification
- Plant & Soil Science
- Pesticide Management
- Greenhouse/Nursery Production
- Arboriculture & floriculture
- Hardscape Design & Construction
- Bobcat Skid Steer Loader Operator Training Course certification

### **State or National Certifications Available at CMTHS:**

- NOCTI Skills Certificate
- ISA Certified Tree Worker/Climber Specialist,
- International Society of Arboriculture
- PA Certified Horticulturist,
- PA Landscape & Nursery Certification
- PA Pesticide Applicator Certification, PA Dept. of Agriculture

**Articulation Agreement:** Applied Horticulture / Horticulture Operations, General - CIP Code: 01.0601. See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulations agreements.

**Related Occupations:** Landscapers & Grounds, Supervisors-Landscapers, Landscape Architects, Nursery Workers, Nursery/Greenhouse Manager

**Equipment & Tools for CMTHS Landscape Design & Construction Program:** Dark green CMTHS shirt, optional sweatshirt, jeans or work pants, and leather work boots are required [www.cmths.org](http://www.cmths.org).

## NETWORKING TECHNOLOGY

**Course Description:** The Networking Technology program at CMTHS is designed to introduce the student to basic computer software and hardware concepts in addition to networking and cabling skills. Connecting and protecting computers on the Internet is a core skill learned and practiced in this program. Students are prepared to earn several highly regarded industry certifications. With an education in infrastructure-level networking, students are highly sought after by employers in all areas of business, education, and healthcare.

**Course Content:** Students learn basic copper cable termination through C-Tech Associates curriculum and cabling kits. The Cisco IT Essentials curriculum (CompTIA A+ Certification Prep) introduces the computer hardware and software skills needed to help meet the growing demand for entry-level IT Helpdesk professionals. Topics of study include:

- Introduction to computers and networking fundamentals
- Routing and switching essentials
- Scaling networks
- Connecting diverse networks
- IT Security
- NDG Linux+

### State or National Certifications Available at CMTHS:

- Pennsylvania and NOCTI Skills Certificate
- Cisco Certified Network Associate Certificate (CCNA)
- Cisco Certified Entry-level Network Technician (CCENT) CompTIA Network+ Certificate
- CompTIA A+ Certificate
- Fiber & Copper Cert

**Articulation Agreement:** Computer Systems Networking & Telecommunications—CIP Code: 11.0901 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulations agreements.

**Related Occupations:** Network Architect, Network Administrator, Network Support Specialist, Computer User Support Specialist, PC Support Specialist, Telecommunication Installer

**Equipment & Tools for CMTHS Public Safety Program:** Students are required to wear a CMTHS black polo shirt with long pants [www.cmths.org](http://www.cmths.org).

## PUBLIC SAFETY

**Course Description:** The Public Safety Program is designed to prepare students to enter careers related to Law Enforcement, Emergency Medical Services, Fire Sciences, and Industrial Safety.

**Course Content:** Public Safety prepares individuals to apply technical knowledge and skills that relate to performing entry-level duties as a patrolman, corrections officer, juvenile officer, security officer and probation officer. This program will also prepare students for entry level positions in the emergency medical field. Students receive training in firefighting and may sit for certification exams that enable them to participate with local fire companies. Topics of study include:

- Perform CPR and use an AED, and administer first aid at an advanced level
- Operate a fire truck pump, deploy hose lines and assist in fire suppression and vehicle rescue
- Respond to a mass casualty situation (CERT)
- Understand the U. S. Constitution, apply the various laws and make a legal arrest and prepare appropriate forms and affidavits
- Perform vehicle rescues as part of a team
- Effectively perform various self-defense techniques

**State or National Certifications Available at CMTHS:**

- NOCTI Skills Certificate
- First Aid & CPR
- Law Enforcement Responder
- Defensive Tactics

**Articulation Agreement:** Criminal Justice / Police Science—CIP Code: 43.0107 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Corrections Officer, Dispatcher, Emergency Medical Tech, Firefighter, Police Patrol Officer

**Equipment & Tools for CMTHS Public Safety Program:** Students are required to wear a standard police style shirt with black dress trousers and specific shoes designated by the teacher [www.cmths.org](http://www.cmths.org).

## TEACHER ACADEMY

(Senior Only)

**Course Description:** High school seniors aspiring to become educators develop skills to be 21<sup>st</sup> century ready in this college preparatory Teacher Academy program. This course consists of 7.5 hours/week divided between classroom instruction, dual-enrollment college instruction, and 95+ hours of field experience. The field experience is with certified teachers at all grade levels. This is a one-year, senior only program.

**Course Content:** Students learn special education and response to instruction and intervention, integration of technology in the classroom, cultural/linguistic awareness, the Standards-Aligned System Approach to Instruction, and primary, middle and secondary teaching experiences. The benefits of the Teacher Academy program are:

- Internships: 95+ hours in local schools
- High School to College Transition Program
- Dual-enrollment college credits available
- Learn how to write for college
- Development of a digital portfolio
- Learn, practice, & teach research-based strategies for teaching and learning
- Research based arts-integrated approach to learning
- Professional trainings
- Service learning
- Comprehensive portfolio
- Mock interview with current/former school administrators

### Admission Criteria:

- Must have applied or intend to apply to a two or four-year college with the goal of earning a degree in education
- All required clearances must be attainable
- Must be in good academic standing to graduate
- Must complete the Teacher Academy (CMTHS) application
- Must have a counselor recommendation specifically to enter this program
- Must complete a preliminary interview screening with CMTHS staff
- Recommended to have own transportation available or must be willing to ride share with other students or find alternate transportation to attend internship rotations

**Related Occupations:** Certified High School, Middle School or Elementary School Teacher, Math or Reading Specialist, Paraeducator, School Counselor, School Psychologist, Special Education Teacher or Supervisor, School Principal or Assistant Principal, Social Worker, and English-Language Teacher.

**Books and Uniforms Needed:** Books are determined by dual-enrollment courses & TA curriculum. Student uniforms should be purchased at [www.cmths.org](http://www.cmths.org).

## VIDEO, SOUND, AND MUSIC PRODUCTION

**Course Description:** The Visual Communications program emphasizes drawing and illustration. All new students are placed in the Foundation program, in which they are introduced to the proper use of various art tools and fundamental art and design concepts. Students are also introduced to photography and video using the most current technology. The Digital Media curriculum encompasses graphic design, digital imaging and web site design. A sequence of courses, beginning with Foundations of Digital Design, will provide students with a structure that will serve to support personal and professional goals for enrichment and development. Third year students complete a portfolio consistent with their career plans and continuing education plans. Most of the students completing this program continue their education at the post-secondary level.

**Course Content:** The program includes studies of traditional concepts such as script and storyboarding development as well as digital technologies that include cameras, camcorders, computers, and industry software (Adobe Suite). Topics of study include:

- Concept and idea development
- Computer software including: Adobe Premiere and After Effects
- Adobe Photoshop, iMovie, Garage Band, and Final Cut Pro
- Photography and Video equipment use
- Studio setup and Lighting techniques
- Digital editing and publishing

**State or National Certifications Available at CMTHS:**

- Pennsylvania and NOCTI Skills Certificate
- Adobe Certifications

**Articulation Agreement:** Communications Technologies/Technicians & Support Services — CIP Code: 10.999 See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Audio and Video Equipment Technicians, Multimedia Artists, Film and Video Editors, Camera Operators, Television, Video, and Motion Picture, Sound and Music Engineering Technicians.

**Equipment & Tools for CMTHS Visual Communications Program:** Students are required to purchase a supply kit at an additional cost (provided by the school) consisting of sketchbook, pencils, markers, brushes, toolbox, portfolio book, paint trays, USB flash drive, and black work shirt.

## VISUAL COMMUNICATIONS

**Course Description:** The Visual Communications program emphasizes drawing and illustration. All new students are placed in the Foundation program, in which they are introduced to the proper use of various art tools and fundamental art and design concepts. Students are also introduced to photography and video using the most current technology. The Digital Media curriculum encompasses graphic design, digital imaging and web site design. A sequence of courses, beginning with Foundations of Digital Design, will provide students with a structure that will serve to support personal and professional goals for enrichment and development. Third year students complete a portfolio consistent with their career plans and continuing education plans. Most of the students completing this program continue their education at the post-secondary level.

**Course Content:** The program includes studies of traditional media such as watercolor, pencil drawing, pen and ink, and air brush as well as digital technologies that include cameras, camcorders, computers, and industry software (Adobe Suite).

**Topics of study include:**

- Advanced color theory and design
- Computer software as Adobe Illustrator, Adobe Photoshop, Adobe InDesign
- Photography and video equipment use
- Studio setup and lighting techniques
- Internet design and social media marketing

**State or National Certifications Available at CMTHS:**

- Pennsylvania and NOCTI Skills Certificate
- Adobe Certifications

**Articulation Agreement:** Commercial & Advertising Art— CIP Code: 50.0402. See [www.pacollege-transfer.com](http://www.pacollege-transfer.com) for program specific articulation agreements.

**Related Occupations:** Web Developer, Graphic Designer, Illustrator, Multimedia Artists, Interior Designer, Set & Exhibit Designer, Photographer, Marketing

**Equipment & Tools for CMTHS Visual Communications Program:** Students are required to purchase a supply kit at an additional cost (provided by the school) consisting of sketchbook, pencils, markers, brushes, toolbox, portfolio book, paint trays, USB flash drive, and black work shirt.