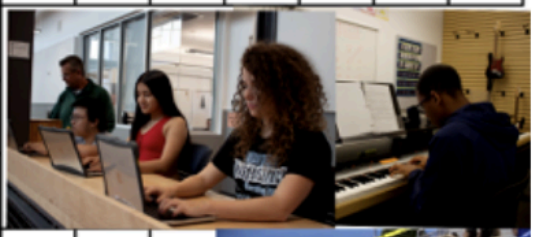
Upper Merion Area High School

Program of Studies

2026/2027

















Across:

1.Being considerate of staff and peers

3.Our main values

4. Being friendly to others

5. Cheering positively

Down:

2. Helping others in need

3. Speaking the truth

Cover Designed by Yasemin Ozdemir (UMAHS Class of '26)

UPPER MERION AREA SCHOOL DISTRICT

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Dr. Andrew Kuhn……..……Director of Curriculum and Instruction-Humanities
Dr. Brian Reilly……...……...Director of Curriculum and Instruction-STEM
Dr. Gina Ross……...……..……Director of Student Services
Mrs. Staci Futrick……...……Supervisor of Special Education
Dr. Treena Sadler……Supervisor of Special Education

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Principal

Dr. Ross Hamilton
Assistant Principal

Mrs. Jill Murray
Assistant Principal

Mr. Randy Taylor
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 deepened 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
2026-2027 Faculty

Computers/Business
Denise Jowett*
Rachel Albright
Rebecca Brown
Jennifer Stilwell

English
Jennifer Weaver Rieger*
Rachel Darnell
Joan Durland
Alex DelGiudice
Hollis Gelber
Erica Imhoff
Candice Stinson
Rebecca McDonnell
Katie Davidson
Kim Oren
Thomas Schurtz
Daryl Schumacher
Jordyn Skidds
Sarah Taub

Foreign Language
Jennifer Sharp*
Philippe David
Brian Diehl
Andrea Jaggers Brown
Isabel Ocampo
Nelly Olea-Trujillo
Jeffrey Skonier
Neena Swartz

Counselors
Nicole Miller*
Whitney Howard
Jason Krauth
Allison Pymer
Latisha Mejias
Amanda Staehle

Library
Kelly Bontempo

Viking Channel
Brian Reagan

Instructional Coach
Laura Ebersole
Megan Dreyfus

Mathematics
Katherine Schaible*
James Baxter, III
Joy Berton
Jeffrey Bowlby
Matthew Collins
Garrett Crouse
Lisa Haney
Joseph Heinz
Hilary Mapson
Katherine Pidhirsky
Danielle Sabato

Science
Dr.Peter Vreeland*
Sarah Bearoff
Kelly Cross
Justin Damm
Michelle Franko
Dawn Hallquist
Laura Himler
Daniel Kratz
Jeff Kushner
Ashley McDermott
Andrew Restad
Thomas Sephakis
Danielle Staley
Annelise Wanner
Dr.Michael Werner

Health Services
Lauren Washington

Family & Consumer Sciences
Carrie Hasson*
Erin Mcilwain

Art
Megan Barner*
Michael Moore

Technology Education
Nicholas Carullo*

School Community Engagement
Ashia Philippe

Youth Aid Panel
Dan Taylor-Storm

Social Studies
Stephen Kozol*
Michael Barash
Treci Butler
Stephanie Dell'Elmo
Melanie Gogarty
Michael Griffith
Ryan Larkin
Matthew Mitchell
Matthew Reid
Maria Savini
Melissa Toto
Krysta Zadroga

Special Education
Cheryl Bacchi*
Colleen Buchinsky
Joseph Camac
Ashley Cook
Nicole Darley
Melissa Farrow
Rocco Gambone
Gregory Kane
Eileen Kenny
Rachelle Lehman
Michael Linahan
Joshua Nevells
Jennifer Pierce
Kelly Pruessner
Jake Vogel
Gail Ward
Matthew Wattenmaker
Kristine Wynant

Music
Diana Helmetag*
Brian Horoho
Timothy Spangler

Health/Physical Ed
Angie Yanocha*
Corey Besz
Robert Devers
Joseph Heffernan
Randall Meehl

***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 2026-2027

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.

Class of 2027 and 2029 Counseling Team:
Jason Krauth 610-205-3840
Allison Pymer 610-205-3841
Latisha Mejias 610-205-3995

Class of 2028 and 2030 Counseling Team:
Whitney Howard 610-205-3870
Nicole Miller 610-205-3873
Latisha Mejias 610-205-3995

College & Career Counselor
Amanda Staehle 610-205-3839

Guidance Technician
Elaine Bermman 610-205-3821

Guidance Clerk
Jennifer Cybart 610-205-3899

THE COUNSELING CENTER

Parents and students are urged to take full advantage of the resources in the high school counseling center. Current information is available through the guidance tab at www.umasd.org/domain/497. Students are encouraged to utilize their Naviance accounts for post secondary planning, as well as other resources found in the Schoology Counseling folder and in the Counseling Center.

SCOIR

The college counseling team at UMAHS utilizes Scoir to help students navigate the college selection and application process. Students and families can use Scoir to search for and start building a list of colleges that interest you. You will be required to use Scoir to request letters of recommendation from faculty and to request the sending of academic transcripts.

Parents/guardians will also have access to Scoir to assist students in the college selection process and to gain more insight into the cost of attendance at different colleges. The counseling office will be using Scoir to communicate with students during your college planning process and to electronically deliver application materials to colleges.

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 online 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

4 YEAR ACADEMIC PLANNING

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: Building the Foundation

- Start thinking about possible career interests, and talk to your counselor about any classes related to your goals
- Become familiar with the importance of your high school transcript
- Keep your grades up! Your 9th grade year is the foundation for building your cumulative GPA.

- Decide if you will attend Central Montco Technical High School during your 10th grade year.
- Develop strong study skills and time management practices. These habits will be crucial for success in future advanced courses.
- Join clubs, sports, or volunteer. This is a great time to explore different activities to discover what you enjoy and start building a resume.

Sophomore Year: Building on Skills and Interests

- Continue to take challenging high school courses. Find electives that interest you. If you're studying a language, keep going - most colleges prefer 2-3 years of the same language.
- Take the PSAT which is given to every sophomore. Review your PSAT scores by creating a College Board Account. Connect to Khan Academy for personalized SAT preparation.
- Start college research in SCOIR. Begin attending campus visits and college rep visits when they visit UMAHS in the fall.
- Consider job shadowing or speaking with professionals in a field that interests you.
- Stay involved and, if possible, take on leadership roles or volunteer opportunities. Continue exploring interests and building skills outside of academics.

Junior Year: College and Career Preparation

- Choose electives that align with your academic and career interests. Continue advanced courses in any subject areas that align with your future goals.
- Take the PSAT again in October.
- Register for the SAT and/or ACT in the winter and spring.
- Meet with your school counselor for a Junior Conference to go over credits, discuss senior year courses, and explore career plans and post-secondary options
- Visit colleges. Prepare a list of questions to ask when you visit. Take notes of characteristics you like and dislike to begin narrowing down your list of schools to which you plan to apply.
- Continue involvement, and deepen your commitment in key areas that interest you. This could mean becoming a club president, sports captain, or leading a volunteer project.
- Get a part-time job, internship, or job shadow in a profession that interests you.
- Attend college fairs.
- Ask for letters of recommendation.
- Keep your grades up! Junior year is an important year to the colleges considering your application.

Senior Year: Final Preparations

- Choose electives that support your future goals or interests. Senior year is often a time to take advanced or capstone courses.
- Schedule your senior meeting to review your credits and transcript.
- Finalize college applications in the fall. Complete all necessary forms and write your application essays.
- Keep track of application deadlines and submit your applications and transcript requests on time.

- Look for scholarships, and apply for financial aid using the FAFSA. Complete the CSS Profile financial aid form if the school requires you to do so.
- If you're planning a career directly after high school, explore job opportunities, apprenticeships, or certification programs.
- Wrap up with a strong commitment to your activities. Colleges and employers look for dedication and leadership, so continue participating actively.

College Representative Visits

These visits are held throughout the year, but primarily in the fall, so that students can meet with admissions representatives to get information about a specific college, their academic programs, campus life, and admission policies. All students are encouraged to attend these programs regardless of grade level, although they are designed primarily for juniors and seniors. Students are able to view the schedule of visits and sign up for a college visit in Scoir.

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.

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.

Graduation Requirements for the Class of 2027 and 2028 (11th and 12th grade students in the 2026-2027 School Year)

English	4.0	Computers	0.5
Social Studies	3.5	Health I	0.5
Mathematics	3.0	Health II	0.5
Science	3.0	Arts & Humanities	2.0
Physical Education	1.0	Electives	5.5
		TOTAL: 23.5	

Graduation Requirements starting with the Class of 2029 and after (9th and 10th grade students in the 2026-2027 School Year)

English	4.0	Personal Finance	0.5
Social Studies	3.5	Health I	0.5
Mathematics	3.0	Health II	0.5
Science	3.0	Arts & Humanities	2.0
Physical Education	1.0	Electives	5.5
		TOTAL: 23.5	

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

Grade 10 – 5 credits Grade 11 – 11 credits Grade 12 – 17 credits

Students in the 10th, 11th, and 12th grades have the option of taking courses a half day at Upper Merion High School and a half day of courses at Central Montco Technical High School (CMTHS). The courses taken at CMTHS are considered elective courses. Students will complete their major courses (English, Social Studies, Math, and Science) at Upper Merion High School.

All 10th-grade students taking classes at CMTHS must take their major courses in the morning at Upper Merion Area High School and their CMTHS in the afternoon to ensure they are on track to satisfy their graduation requirements. Students in 11th and 12th grades may request morning or afternoon sessions at CMTHS. However, there is no guarantee you will receive the session you prefer. Seat availability in the programs at CMTHS and scheduling constraints at UMAHS determines whether or not students get scheduled for the morning or afternoon programs.

Students that attend CMTHS for a minimum of two years will also be required to complete 23.5 credits. Students that attend CMTHS for only one year must fulfill the graduation requirements listed above to earn an Upper Merion Area High School diploma.

Listed below are the minimum number of credits required for students that attend CMTHS for a minimum of two years and wish to earn an Upper Merion Area School District Diploma.

Graduation Requirements for the Class of 2027 and 2028 (11th and 12th grade students in the 2026-2027 School Year)

English	4.0	Computers	0.5
Social Studies	3.0	Health I	0.5
Mathematics	3.0	Arts & Humanities	2.0
Science	3.0	CMTHS/Electives	7.1
Physical Education	0.4		
		TOTAL: 23.5	

Graduation Requirements starting with the Class of 2029 and after (9th and 10th grade students in the 2026-2027 School Year)

English	4.0	Personal Finance	0.5
Social Studies	3.0	Health I	0.5
Mathematics	3.0	Arts & Humanities	2.0
Science	3.0	CMTHS/Electives	7.1
Physical Education	0.4		
		TOTAL: 23.5	

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? You should aim high in setting your college and career goals.

If college is the immediate goal, be aware that requirements differ significantly among schools. The best way to plan for college is to research admissions requirements.

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. 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. 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. During the month of February, students will meet with counselors to select courses through the Community Web Portal in Sapphire, at which time they will receive a verification sheet. Students will be able to meet with counselors through the end of school to make course adjustments. Please note that requested electives, including CMTHS program or session, are NOT guaranteed.

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. The last day to move up to an Honors/AP course will be the end of the first 6 day cycle. The final date for requesting course level changes to move down, without penalty, will be the last day of the first (1st) marking period. After this date, approved level changes to move down 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.

	9th grade	10th Grade	11th Grade	12th Grade
English	English 9 H English 9 CP	English 10 H English 10 CP	AP Lang & Comp English 11 CP	AP Lit. & Comp. English 12 CP
Social Studies	World Cultures H World Cultures CP	AP World History World History CP	AP US History American Cultures CP	AP US Govt & Politics AP Psychology AP African American Studies Economics H Government CP Economics CP Psychology Women's Studies African American Studies
Mathematics	Geometry H Algebra II H Algebra II CP Algebra IB CP	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
Science	Science & Tech H Science & Tech CP Biology H	Biology H Chemistry H Biology CP	Chemistry H Physics H Chemistry CP AP Chemistry AP Biology	Physics H AP Biology AP Chemistry AP Physics C Mech Physics CP
World Language	German I CP German II CP French I CP French II CP Spanish I CP Spanish II CP Spanish for Heritage Speakers A	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.

GRADE POINT AVERAGE

Course Weighting: 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 Advanced 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 schoolk 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

VIRTUAL HIGH SCHOOL (VHS)

VHS Learning is a nonprofit organization that for over 25 years has provided high quality online high school courses instructed by expert teachers. These online courses not only offer students the opportunity to take a diverse array of electives, but also help students develop important 21st century skills such as self advocacy, time management, and prioritization.

Purpose:

1)Students may take courses we do NOT offer at Upper Merion. These courses 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.
2) Under special circumstances, counselors may work with students to resolve scheduling conflicts by allowing students to take a VHS course we do offer in our building.
Note: These courses count as elective credit unless prior approval from your counselor and building administrator.

Student Expectations:
These courses are rigorous and asynchronous, requiring strong time management and self- advocacy. Students will be assigned to the VHS Room in the high school for a class period each day, and will be expected to work on their courses during this time. The VHS Site Coordinator will monitor student's performance providing mentoring help, and interacting with the student's VHS instructor and parents as deemed necessary. The time commitment is as follows:

- A standard (college preparatory) level class will require the student to be actively engaged in my coursework for approximately 6 hours per week.
- An honors level class will require the student to be actively engaged in my coursework for approximately 8 hours per week.
- An AP® level class will require the student to be actively engaged in my coursework for approximately 10 hours per week.

Scheduling priority is given as follows:
1. Graduation year (seniors having course registration priority).
2. Scheduling conflicts.
3.Specially designed instruction in individual education plans (IEP and GIEP).
Note: students may take one VHS course per semester, or one VHS course per year unless prior approval from counselor, building administrator, and site coordinator.

What do I do if I'm Interested?

1. Review the VHS course offerings for courses NOT offered at UMAHS

2. Talk to your counselor, the VHS Site Coordinator, and/or your principal for more information.
3. Print out and complete in full the VHS Contract acquiring all required signatures, and drop off in room B204.

These courses fill up quickly so submit as soon as possible.

VHS Course Offerings

ART			
		Level	**Duration**
1	AP Art History	Advanced Placement	36 weeks
2	Art in World Cultures	High School Standard	15 weeks
MUSIC			
		Level	**Duration**
3	Music: Composition and Songwriting	High School Honors	15 weeks
4	Music Production	High School Standard	15 weeks
BCIT			
		Level	**Duration**
5	Business Communications 1A: Introduction	High School Standard	15 weeks
6	Business Math	High School Standard	15 weeks
7	Hospitality and Tourism: Traveling the Globe	High School Standard	15 weeks
8	Principles of Investing	High School Standard	15 weeks
9	Sports and Entertainment Marketing 1A: Introduction	High School Standard	15 weeks
10	Sports and Entertainment Marketing 1B: Promoting the Main Event	High School Standard	15 weeks
11	Architectural CAD	High School Standard	15 weeks
12	Artificial Intelligence	High School Standard	15 weeks
13	Cybersecurity	High School Standard	15 weeks
14	Java Programming	High School Standard	15 weeks
15	Mobile App Development	High School Standard	15 weeks

16	Python Programming	High School Standard	15 weeks
17	Video Game Design	High School Standard	15 weeks
ENGINEERING & TECHNOLOGY			
		Level	**Duration**
18	Renewable Technologies: Introduction	High School Standard	15 weeks
LANGUAGE ARTS			
		Level	**Duration**
19	101 Ways to Write a Story	High School Standard	15 weeks
20	Essay Writing	High School Standard	15 weeks
21	Fantasy and Science Fiction Short Stories	High School Standard	15 weeks
22	Film and Literature	High School Standard	15 weeks
23	Ghosts and Haunting in Literature	High School Standard	15 weeks
24	Graphic Novels	High School Standard	15 weeks
25	Horror Writers	High School Standard	15 weeks
26	Mythology	High School Standard	15 weeks
27	Poetry Writing	High School Honors	15 weeks
28	Screenwriting	High School Standard	15 weeks
29	Women in Literature and Media	High School Honors	15 weeks
LIFE SKILLS / HEALTH			
		Level	**Duration**
30	Career Readiness	High School Standard	15 weeks
31	Health	High School Standard	15 weeks
32	Who Do I Want to Be When I Grow Up?	High School Standard	15 weeks
MATHEMATICS			
		Level	**Duration**

33	Discrete Math	High School Standard	15 weeks
SCIENCE			
		Level	**Duration**
34	Anatomy and Physiology	High School Honors	15 weeks
35	Animal Behavior and Zoology	High School Honors	15 weeks
36	AP Environmental Science	Advanced Placement	36 weeks
37	Astronomy	High School Honors	15 weeks
38	Biochemistry	High School Honors	15 weeks
39	Bioethics	High School Honors	15 weeks
40	Biotechnology	High School Standard	15 weeks
41	Environmental Science: Conservation and Sustainable Solutions	High School Standard	15 weeks
432	Environmental Science: Ecosystem Balance and the Human Impact	High School Standard	15 weeks
43	Epidemics	High School Honors	15 weeks
44	Forensic Science	High School Standard	15 weeks
45	Genes and Disease	High School Honors	15 weeks
46	Meteorology	High School Standard	15 weeks
47	Oceanography	High School Honors	15 weeks
48	The Human Body	High School Standard	15 weeks
49	Veterinary Medicine	High School Honors	15 weeks
SOCIAL STUDIES			
		Level	**Duration**
50	AP Economics	Advanced Placement	36 weeks
51	AP European History	Advanced Placement	36 weeks
52	AP Human Geography	Advanced Placement	35 weeks
53	Constitutional Law	High School Honors	15 weeks
54	Criminology	High School Honors	15 weeks

55	National Security: US Diplomacy, Intelligence, Defense	High School Standard	15 weeks
56	Philosophy	High School Standard	15 weeks
57	Psychology of Crime	High School Honors	15 weeks
58	Sports and Society	High School Standard	15 weeks
WORLD LANGUAGES			
		Level	**Duration**
59	American Sign Language 1 (ASL)	High School Standard	36 weeks
60	American Sign Language 2A: Communicating	High School STandard	15 weeks
61	American Sign Language 2B: Advancine Communication Skills	High School STandard	15 weeks
62	American Sign Language 3A: Community and Culture	High School Standard	15 weeks
63	American Sign Language 3B: Conversations and Culture	High School STandard	15 weeks
64	American Sign Language and Culture	High School Standard	15 weeks
65	AP Chinese Language and Culture	Advanced Placement	36 weeks
66	AP Latin	Advanced Placement	36 weeks
67	Chinese 1	High School Honors	36 weeks
68	Chinese 2	High School Honors	36 weeks
69	Chinese 3	High School Honors	36 weeks
70	Latin 1	High School Standard	36 weeks
71	Latin 2	High School Standard	36 weeks
72	Latin 3	High School Standard	36 weeks
73	Portuguese 1	High School Standard	36 weeks
74	Portuguese 2	High School Standard	36 weeks

DUAL ENROLLMENT

Upper Merion partners with both Harrisburg University (HU) and 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 either HU or 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 either HU or MCCC. Students will receive the grade assigned by the teacher on both their high school transcript and either their HU or 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. Students who are interested in enrolling in dual enrollment courses must sign up during Upper Merion's course selection during the month of February. Those students who sign up for dual enrollment courses will be notified about the registration process for either HU or MCCC when their enrollment opens for the fall semester. The following courses will be eligible for dual enrollment and college credit:

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

HU

UMAHS Course	HU Course	Credits Possible
360 AP Calculus AB	MATH 220	3 credits
365 AP Statistics	MATH 280	3 credits
440 AP Biology	BIOL 102 BIOL 103 (Lab)	4 credits
450 AP Chemistry	CHEM 151 CHEM 152 (Lab)	4 credits
455 AP Physics	PHYS 121 PHYS 122 (Lab)	4 credits
635 AP Computer Science Principles	ISIT 103	4 credits
636 AP Computer Science A	CISC 120	4 credits

MCCC

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, HIS 205	6 credits
222 American Cultures CP	HIS 203, HIS 205	6 credits
231 AP Government and Politics	POL 124	3 credits
504 German IV H	GER 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
643 Entrepreneurship	ETP 110	3 credits

ENGLISH

	9th Grade	10th Grade	11th Grade	12th Grade
Honors/AP	English 9 Honors	English 10 Honors	AP Language & Composition	AP Literature & Composition
College Prep	English 9 CP	English 10 CP	English 11 CP	English 12 CP

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

101 ENGLISH 9 (Year-Daily) HONORS Credit 1.0

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 written by diverse authors. Literature units are organized thematically. The course offers a variety of book clubs providing students choice through reading levels and diverse authors. Classroom libraries offer year-long individual student choice in reading materials. 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.

102 ENGLISH 9 (Year-Daily) COLLEGE PREP Credit 1.0

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 written by diverse authors. Literature units are organized thematically. The course offers a variety of book clubs providing students choice through reading levels and diverse authors. Classroom libraries offer year-long individual student choice in reading

materials. 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 analyze and present readings from a variety of scholarly works of literature. 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 grade 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 an 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 a 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 hone-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.

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 that 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.

168 ELEMENTS OF THEATRICAL PRODUCTION (Semester-Daily) Credit 0.5

This course takes students through the foundations of all aspects of technical theater, from set design and construction to sound and lights. Students will read and analyze scripts from varying genres and time periods in order to assess the technical requirements and interpret the author's intent in combination with their own creative visions. This course combines textual study, computer modeling, and hands-on experience that will allow students to gain practical skills in both design and execution.

169 SPORTS LITERATURE (Semester-Daily) Credit 0.5

Sports Literature explores the role of athletics in society through various genres, including novels, short stories, poetry, and journalism. Students will examine how authors use sports as a lens to explore themes of personal growth, community identity, moral choice, and social issues. The course emphasizes analytical reading, critical thinking, class discussion, and both creative and analytical writing.

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.

173 MEDIA STUDIES (Semester-Daily) Credit 0.5

This course is designed for a workshop approach that will allow students the opportunity to prepare and complete a series of multi-media productions across an array of digital platforms. In addition, the course will explore the various business and career opportunities that exist in a modern digital world. Students will research and explore a variety of careers in web development, graphic design, broadcast, audio and video production, and other forms of online media.

174 ADVANCED MEDIA STUDIES (Semester-Daily) Credit 0.5

The course's prerequisite is that the student complete "Media Studies." This course is designed as a guided independent study of how to create multi-media productions across an array of digital platforms, with the goal of producing and creating products that can be pushed out on various media platforms for the community. The course will explore the various career opportunities that exist in a modern digital world and look to hone a digital portfolio.

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

Students in the early stages of English 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 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 (Year-Varies) Credit (Varies)

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

903S Reading Foundations (Year-Daily) Credit 2.0

This is a class for students who have difficulty reading accurately and fluently. It is designed for students who read without understanding; the comprehension program helps develop functional vocabulary, information, and comprehension strategies needed for independent living. It focuses on using reading strategies in real-life situations and applying it to their everyday life. Students will receive 1 English and 1 Social Studies credit toward their graduation requirement. Prerequisite: PASA eligibility and Individualized Education Plan (IEP)

This course does not currently meet NCAA eligibility standards for English credit.
Prerequisite: Individualized Education Plan (IEP).

904S Integrated Literacy Intervention (Semester) Credit 0.5 or (Year) Credit 1.0

This course is based on students' needs as outlined in their Individual Education Plans (IEPs) and is designed to support the development of decoding, fluency, and comprehension skills. Targeted interventions incorporate resources aligned with research-based instructional methods, along with supplementary materials to improve vocabulary, build writing skills, and strengthen overall comprehension. In addition, students will engage with a variety of literary texts—adapted to meet their instructional levels—to enhance reading comprehension, promote critical thinking, and develop an appreciation for literature. Through guided reading, discussion, and written response, students will apply literacy strategies within meaningful literary contexts to deepen understanding and support transferable reading and writing skills.

This course does not currently meet NCAA eligibility standards for English credit.
Prerequisite: Individualized Education Plan (IEP).

905S English 9 & 10 (Year-Daily) **Credit 1.0**

English 9 & 10 is a replacement course for the regular education English class, designed for students in 9th and 10th grade. In this course, students will work in mixed-grade level groups with students of similar learning needs in order to strengthen written expression, vocabulary development, and comprehension. Students will be exposed to grade-level concepts, as well as a continuation of fundamental literacy skills. Given both fiction and nonfiction texts, students will focus on reading, writing, speaking, and listening skills. Students work primarily towards independently applying learned comprehension skills through grade level content.

Prerequisite: Individualized Education Plan (IEP).

906S English 11(Year-Daily) **Credit 1.0**

English 11 is a replacement course for the regular education English class, designed for students in 11th grade. This is a mixed grade-level course for students with similar learning needs who require a modified curriculum. This course continues to build upon the reading, writing, speaking, and listening skills taught in the ninth and tenth-grade English courses. The goal of this course, in addition to strengthening their basic literacy skills, is for students to become reflective thinkers. Students read and analyze a wide variety of literature to support reading across the curriculum and express themselves through varied formal and informal writing assessments.

Prerequisite: Individualized Education Plan (IEP).

VHS English Courses
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SOCIAL STUDIES

Honors/AP	Honors World Cultures	AP World History	AP United States History	AP US Gov't & Politics or Honors Economics or AP Psychology or AP African American Studies
College Prep	World Cultures CP	World History CP	American Cultures CP	Government or Economics or Psychology or Women's Studies or African American Studies

The Social Studies Program strives to improve students' awareness of his/her culture, history, and world around them, as well as to develop students' 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 WORLD CULTURES (Year-Daily) HONORS Credit 1.0
This course equips first-year high school students with knowledge and skills to consider what it means to be human based on themes common to all humans. The honors level World Cultures course examines the historical and contemporary issues of seven, largely non-Western, cultures through four themes: Geography, History, Culture and Current Events. 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 World Cultures course helps prepare students for Advanced Placement World History and government courses in later grades.

202 WORLD CULTURES (Year-Daily) COLLEGE PREP Credit 1.0
This course equips first-year high school students with knowledge and skills to consider what it means to be human based on themes common to all humans. The college prep level World Cultures course examines the historical and contemporary issues of seven, largely non-Western, cultures through four themes: Geography, History, Culture and Current Events. 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 themes of the course.

GRADE-10

Each tenth grade student must take one of the following:
215 AP WORLD HISTORY: MODERN (Year-Daily) HONORS Credit 1.0

AP World 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.

216 WORLD HISTORY: MODERN CP (Year-Daily) COLLEGE PREP Credit 1.0

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 various groups 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. Additionally, students may choose to pursue college credit by exercising the Dual Enrollment Option, offered in partnership with Montgomery County Community College.

Prerequisite: Department and/or counselor recommendation suggested.

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 on Pennsylvania, Montgomery Country, 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, technology, and creative projects.

241 AP PSYCHOLOGY (Year-Daily) HONORS Credit 1.0

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.

252 WOMEN'S STUDIES (Semester-Daily) Credit 0.5

This elective course offers an introduction to Women's Studies, an interdisciplinary academic field that explores critical questions regarding the meaning of gender in society. The primary goal of this course is to familiarize students with key issues, questions and debates inherent to Women's Studies both historical and contemporary. We will examine topics related to gendered performance, perception and power through the lens of women in American society. Throughout the semester, we will focus upon the following big ideas: Why has gender been a primary organizing principle of society? How do "gendered scripts" for dress, appearance and behavior emerge among different social groups and historical periods? How do we explain the sexual division of labor and the unequal social status of women/girls and those activities and roles deemed "feminine" in society? In what ways does gender intersect with race, ethnicity and sexuality? How do gendered structures of power and authority operate? What factors contribute to the formation and success of movements for and against gender equality? Students will leave this course better prepared to participate in and contribute effectively to the larger public conversation about the role of gender in society.

253 AFRICAN AMERICAN STUDIES (Semester-Daily) Credit 0.5

Students in this course will explore historical and contemporary moments, people, and concepts related to the African American experience. Students will complete biographical research on an influential African American figure and read short stories and other texts related to contemporary Black experiences. Further, students will complete a civic engagement project to connect to people and organizations beyond the classroom.

254 AP AFRICAN AMERICAN STUDIES (Year-Daily) HONORS Credit 1.0

AP African American studies is an interdisciplinary course that examines the diversity of African American experiences through direct encounters with authentic and varied sources. Students explore key topics that extend from early African kingdoms to the ongoing challenges and achievements of the contemporary movement. Given the interdisciplinary character of African American studies, students in the course will develop skills across multiple fields, with an emphasis on developing historical, literary, visual, and data

analysis skills. This course foregrounds a study of the diversity of Black communities in the United States within the broader context of Africa and the African diaspora. (*From College Board*). Comprehensive preparation and guided practice for the AP African American Studies Exam is also provided.

ELECTIVES

232 ANTHROPOLOGY (Semester-Daily) Credit 0.5

This course guides students through the development of human beings and the cultural evolution of humanity over time. Students will learn about the geographical, physiological, economical, and cultural differences that separate humans and differentiate the human experience while also endeavoring to find commonality in the human condition. Topics will range from physical and material culture to biology, climate, and language. Students will be guided through a semester-long research project tailored to their interests, which will culminate in a final presentation.

243 SOCIOLOGY (Semester-Daily) Credit 0.5

This course guides students through the causes and consequences of human activity and studies the way in which societies develop over time. Students will endeavor to learn why humans behave, react, engage, build, destroy, and restore the world in which they live, and they will take a deep dive into the existential realm of society and humanity. Students will study topics ranging from social norms and deviance to cultural expectations and social stratification in an effort to explore the social nature of humans and define the rules by which we choose to live. Students will select a topic of their interest (from a list of curated options) for a semester-long project employing sociological research methods that will culminate in a final paper.

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

919S Concepts of World Cultures (Year-Daily) Credit 1.0

In Concepts of World Cultures, students will investigate significant events, individuals, developments, cultures, and processes from the dawn of early civilizations 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 examines seven different geographic regions to help students gain a deeper understanding of how individuals and societies evolve. Regions of study include: Sub-Saharan Africa, West Asia / Middle East, South Asia, Europe, East Asia, Latin America, Southeast Asia / Oceania. Each region will be broken down by geography. History, culture, and current events. This course is aligned to the CP World cultures course, but delivered at a modified pace.

Students in this course will have access to small group instruction, project-based learning, and individualized support. Students will have opportunities to connect their historical learning to current events and enhance their understanding of global geography. Students have access to instruction that supports their personal growth towards IEP goals and objectives.

VHS Social Studies Courses

MATHEMATICS

HONORS/AP

Algebra II H Geometry H	Geometry H Pre-Calculus H	Pre-Calculus H Calculus & Application H AP Calculus AB	AP Calculus BC AP Statistics

COLLEGE PREP

Algebra IB CP	Algebra II CP	Geometry CP	Pre-Calculus CP Stat & Math Modeling CP

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 (Year-Daily) COLLEGE PREP Credit 1.0

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.

VHS Mathematics Courses

SPECIAL EDUCATION 9 - 12

934S ALGEBRA 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.

This course does not currently meet NCAA eligibility standards for Math credit.
Prerequisite: Individualized Education Plan (IEP)

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
Honors 2nd Year Focus	Honors Biology	Honors Chemistry	Honors Physics	Second Year Science*
Honors	Honors Science & Tech	Honors Biology	Honors Chemistry	Honors Physics
College Prep	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 eighth 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) ADVANCED 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) ADVANCED 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) ADVANCED 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.

VHS Science Courses

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.
This course does not currently meet NCAA eligibility standards for Science credit.
Prerequisite: Individualized Education Plan (IEP)

WORLD 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 Interpretive Communication as well as cultural similarities and differences between the German and American cultures.

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. 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**

Students continue in proficiency based activities. 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. 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 Honors. Emphasis is placed on oral and written proficiency. Students will also engage in interpretation of more complex authentic resources. 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. Students read, listen to and respond to a variety of authentic sources from diverse origins. 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 Interpretive Communication as well as cultural similarities and differences between various French-speaking and American cultures.

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. 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**

Students continue in proficiency based activities. 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. Assessments for the Honors level will target the deeper proficiency levels needed to prepare for the French 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 Honors. Emphasis is placed on oral and written proficiency. Students will also engage in interpretation of more complex authentic resources. 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. Students read, listen to and respond to a variety of authentic sources from diverse origins. Class activities and assignments 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 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.

520 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 Interpretive Communication as well as cultural similarities and differences between various Spanish-speaking and American cultures.

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. 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

Students continue in proficiency based activities. 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. Assessments for the Honors level will target the deeper proficiency levels needed to prepare for the Spanish 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 Honors. Emphasis is placed on oral and written proficiency. Students will also engage in interpretation of more complex authentic resources. 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. Students read, listen to and respond to a variety of authentic sources from diverse origins. Class activities and assignments are designed to prepare students for the AP Spanish 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.

526B Spanish for Heritage Speakers B HONORS Credit 1.0

This course is designed for native and heritage language speakers of Spanish who possess an elevated level of oral proficiency and internalized grammatical concepts. Through a combination of language practice, literature studies, and interactive cultural activities, students will explore the cultures of Hispanic/Latinx communities, including their own, fostering a sense of pride and connection to their Hispanic/Latinx roots. By the end of the course, students will have a broader perspective of the Spanish-speaking world and a deeper appreciation for the

diversity and beauty of Hispanic culture in the 21st Century. This course is offered as an A/B course on a rotating year cycle. The courses are not sequential and can be taken in either order.

Prerequisite: Primary language spoken at home is Spanish. A placement test will be used to determine the student's proficiency level and appropriate placement.

VHS World Language Courses

Business & Computer Science Education

BUSINESS COURSES

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

COMPUTER/INFORMATION TECHNOLOGY COURSES

INTEGRATED TECHNOLOGY*
WEB DEVELOPMENT & DESIGN I *
GRAPHIC DESIGN *
3D MODELING & ANIMATION *
INTRO TO COMPUTER SCIENCE*
AP COMPUTER SCIENCE PRINCIPLES
AP COMPUTER SCIENCE A

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 21st century workplace.

The Board of School Directors and The Pennsylvania Department of Education recognize the growing importance of personal finance as a graduation requirement. Beginning with the Class of 2029, Personal Finance is a required course for graduation. Therefore, all graduates of our high school are required to complete at least .5 credits with a personal finance class. This can be taken in the 10th, 11th or 12th grade years.

Here is a suggested list of courses for the department:

COMPUTER/INFORMATION TECHNOLOGY COURSES

607 WEB DEVELOPMENT & DESIGN I (Semester-Daily) Credit 0.5

This is a programming and project-based course. Students will learn the programming languages HTML and CSS. The course starts off exploring how the internet works and how websites are developed and designed. Students will then take a deep dive into how to create websites by programming, from scratch, using HTML and CSS. Students will come away knowing ways to enhance web pages with the use of page layout techniques, text formatting, graphics, and images. Towards the end of this course students will explore web design standards and why they are important. The course progresses from introductory work to a culminating project in which students create a website. No experience needed to succeed in this programming but a desire to learn programming is encouraged.

608 GRAPHIC DESIGN (Semester-Daily) Credit 0.5

Discover the world of visual communication through this hands-on, project-based introduction to graphic design. In this course, students will learn how to think and create like professional designers—exploring the principles of design, color theory, and typography while gaining practical experience with Canva, Adobe Photoshop, Illustrator, and InDesign. No prior experience is required; students will develop their creativity and technical skills through a series of independent projects that combine art and technology.

617 3D MODELING & COMPUTER ANIMATION (Semester-Daily) Credit 0.5 (Meets Grad Requirement)

In this class you will learn how to make 2D and 3D designs as well as create 3D objects. This class is ideal for students who may be interested in computer science, art, graphic design, engineering and/or animation. While it can be a challenging class, it is a fun and project based environment where you build your skillset everyday. The class will utilize animation tools and 3D modeling software such as, but not limited to Animate and Blender. We will also complete a full review of the history of animation and CGI graphics in everyday use. While no experience needed to succeed in this course, an interest and strength in using your computer is Essential.

634 INTRO TO COMPUTER SCIENCE (Semester-Daily) Credit 0.5 (Meets Grad Requirement)

This is a programming and project-based course. Designed as an introductory computer science and programming course, this course provides students with a solid foundation of what computer science is and prepares them for other computer science courses at the high school. Students learn how to make simple apps using JavaScript. They will continue this programming journey with Python, which they will apply to Finch robots. Other topics include the history and influencers that shaped computer science, computer hardware and software, operating systems and AI. A natural progression from this course is

for students to take AP Computer Science Principles (Python) and/or AP Computer Science Principles A (Java). No experience needed to succeed in this programming but a desire to learn programming is encouraged.

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

Dive into the world of computer science with this introductory, college-level course! Students will focus on programming with Python while exploring five Big Ideas: Programming, Creative Development, Data, Computer Systems, and the Impact of Computing. Through hands-on projects and real-world challenges, students will build their problem-solving and coding skills while preparing for the AP Computer Science Principles exam. No prior experience is needed—just bring your curiosity and a desire to learn! This course is available for Dual Enrollment through Harrisburg University.

636 AP COMPUTER SCIENCE A (Year-Daily) Credit 1.0

AP Computer Science A is equivalent to a first-semester, college-level course in computer science. AP Computer Science A introduces students to computer science through programming. Fundamental topics in this course include the design of solutions to problems, the use of data structures to organize large sets of data, the development and implementation of algorithms to process data and discover new information, the analysis of potential solutions, and the ethical and social implications of computing systems. The course emphasizes object-oriented programming and design using the Java programming language. Class activities and assignments are designed to prepare students for the AP Computer Science A exam. This course is available for Dual Enrollment through Harrisburg University.

Prerequisite: Passing grade in Intro to Computer Science, AP Computer Science Principles or teacher recommendation

BUSINESS

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, how they are structured, and what influences them. Concepts students will explore include (but are not limited to): Economics, Management, Marketing, Finance/Accounting, Communications, Law, and Global Business. Students will develop skills that can be applied to any future field of study. Whether planning for a business major in college or a career in the Business world, this course is the perfect start toward a successful future. **This course is a prerequisite for all Business Classes except Personal Finance

621 ACCOUNTING I (Semester-Daily) Credit 0.5

This course is offered for students who have an interest in pursuing a business career, or those who 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.

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

624 PERSONAL FINANCE (Semester-Daily) 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. Career & college planning,budgeting, managing credit, banking, insurance, purchasing a car, investments and the stock market is explored in this course. Community resources will enhance students' understanding of content. This course can be taken in grades 10, 11, or 12. Successful completion of this course will satisfy the Personal Finance graduation requirement.

Prerequisite: None

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, consumer protection, employment law, and more. 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

Students will expand on their knowledge of Marketing principles acquired through the Intro to Business course and take a deeper dive into the concepts of marketing strategy and development. This course will include in depth exploration and practice in market research, identifying a target market, and developing a marketing mix. Students will also analyze the social, cultural, and environmental influences on consumer behavior in buying decisions. Through this course, students will explore the challenges and opportunities that exist for marketing professionals and the impact they bring to a business organization as a whole.

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

643 ENTREPRENEURSHIP (Semester-Daily) Credit 0.5

This course will acquaint students with the private enterprise system from the perspective of a business start up. Students will explore the processes associated with planning, starting, and running a business by studying the roles and responsibilities of an entrepreneur in business formation, marketing, management, finance/accounting, and more. Students will use the knowledge learned in class, and data they've acquired through guided research, to create and present a professional business plan for a proposed business venture. This course is available for Dual Enrollment through Montgomery County Community College.

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

644 INTERNATIONAL BUSINESS (Semester-Daily) Credit 0.5

There is an ever-expanding global marketplace and this International Business course will introduce students to the similarities and differences that exist between 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) 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 is explored in this course. Community resources will enhance students' understanding of content. Best when taken as a Junior or Senior.
Prerequisite: None

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

Do you have a job and want to use that job to get school credit? Then join our co-op course and community. The Co-Op experience is a semester course that provides juniors and 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. It is highly recommended that students already have a job before applying for this course. Transportation for Co-Op students is not provided by the school district. This course can be taken for 1 class period (.5 credit per semester and work 8 hours minimum per week) or 2 class periods(1 credit per semester and work 15 hours minimum per week).

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

646M OCCUPATIONAL SEMINAR AND WORK EXPERIENCE MODIFIED Credit 1.0 to 2.0
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.

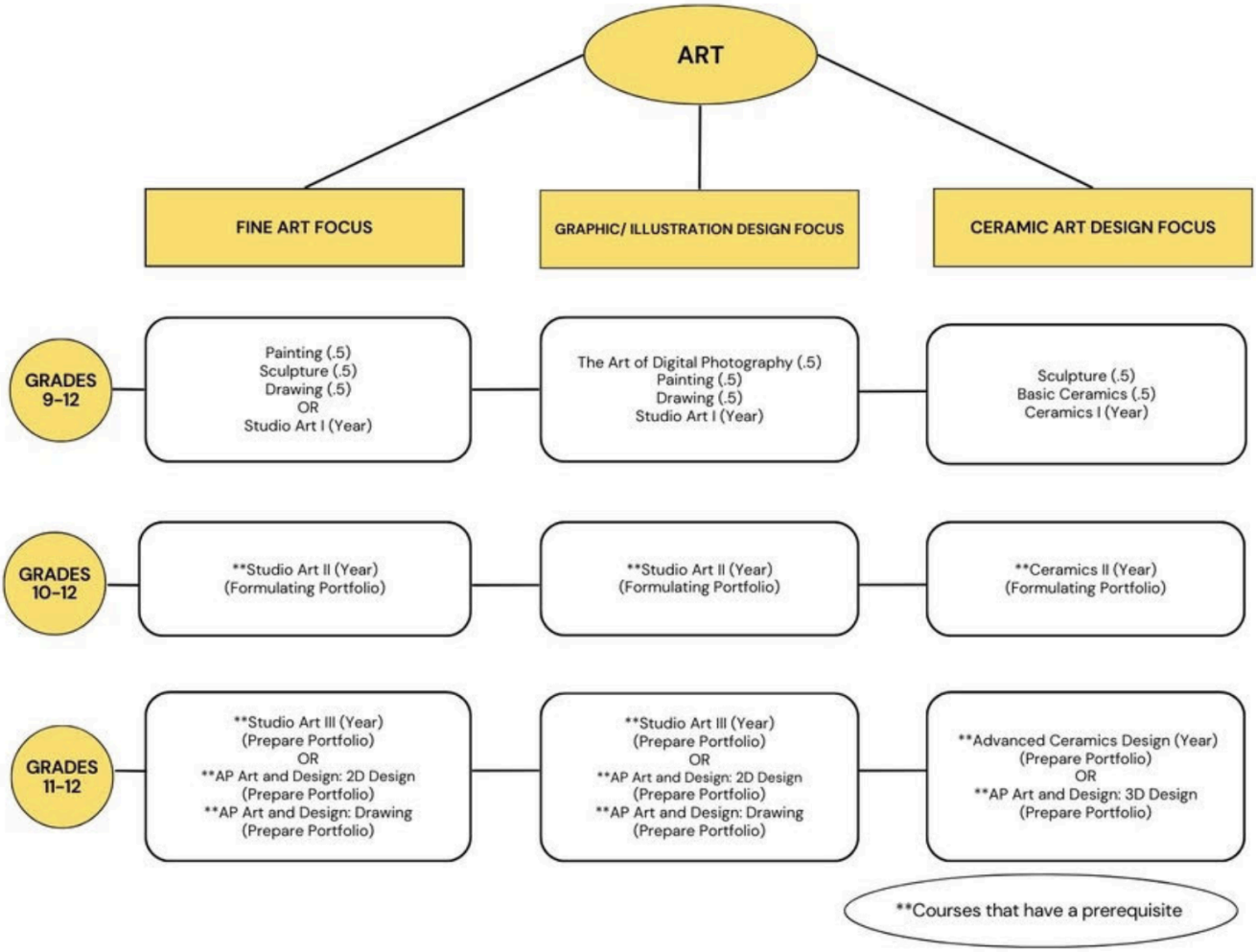
Prerequisite: Individualized Education Program (I.E.P.)

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

VHS Business and Computer Science Courses

ART

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



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 art elements and design principles. It is an excellent foundation course for students looking to progress into any art major.

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 while maintaining a studio space with focus and independence. It is designed for serious students who aspire to major in art after high school. Students' focus will be to express their creativity in all art forms with increasing autonomy. A greater emphasis will be placed on portfolio preparation, evaluation and critique sessions. Students will receive quarterly sketchbook assignments.

Prerequisite: Drawing and Sculpture completed with **both** B average, Studio Art I completed with a B average, or teacher recommendation.

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 with increased autonomy while maintaining a studio space with focus and independence. 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.

Prerequisite: Completion of Studio Art II with a B average or teacher recommendation.

AP Art and Design

Each AP Art and Design course is designed for students who are seriously interested in the practical experience of art. AP Art and Design is not based on a traditional exam; instead, students submit portfolios and artist statements (Written evidence) to the College Board for evaluation during a designated submission time (usually May) at the end of the school year. The AP Art and Design Program consists of three portfolio options: **2-D Design (664), Drawing (665), and 3-D Design (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 Art and Design 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
Summer work required.

664 AP Art and Design: 2D 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. Students create a body of work that demonstrates practice, experimentation, and revision of visual ideas.

665 AP Art and Design: 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. Students demonstrate advanced drawing skills and visual relationships among their ideas, materials, and processes.

667 AP Art and Design: 3D 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. Students focus on communicating ideas through occupied and unoccupied space.

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 foundation course focused on hand building techniques in the media of clay. This course teaches the principles of art through a variety of ceramic construction methods that include pinch, coiling, and slab methods. Students will also learn the science of the ceramic process through recycling clay, various stages of clay and glaze reactions in the kiln. Wheel instruction (potter's wheel) is **NOT** included in this class, please see Ceramics I for the potter's wheel.

671 CERAMICS I (Year-Daily) Credit 1.0

This ceramics course is designed to develop skill in construction methods with an emphasis on hand building and a variety of glaze applications . Wheel throwing (potter's wheel) is introduced to create traditional functional forms such as mugs, bowls, plates and vases. Students will be required to use methods to complete projects and will be encouraged to explore texture and glazing techniques to enhance their artwork. Students will also learn how to recycle clay and maintain their studio with focus and independence.

672 CERAMICS II (Year-Daily) Credit 1.0

This course is designed to enhance and build on prior knowledge from either the Basic Ceramics OR Ceramics I. Students will improve proficiency in wheel throwing (potter's wheel), hand-building and glazing techniques through all stages/steps of the ceramics process. This course emphasizes functional, sculptural and decorative pottery techniques while maintaining a studio space with focus and independence. Experimentation with basic techniques will lead to more freedom and individual creativity. Students will be required to assemble multiple clay methods to complete projects and are encouraged to explore texture and glaze applications to emphasize and enhance their artwork/skills.

Prerequisite: B or better in Ceramics I or teacher recommendation

673 ADVANCED CERAMICS DESIGN (Year-Daily) Credit 1.0

The Advanced Ceramics course gives students an opportunity to continue developing technical skills while being challenged by more complex concepts incorporating deeper artistic perceptions. This class is designed to allow advanced students to work on formulating personal expression through clay while maintaining a studio space with focus and independence. Each student will develop their own direction in the production of their projects with guidance and objectives set by the teacher. Students use creative expression, historical/cultural context and aesthetic valuing, while executing their ceramic designs. Studio work will develop and reinforce student understandings of the elements and principles of art, which is an integral part of a strong portfolio.

Prerequisite: B or better in Ceramics II or teacher recommendation

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 with a Canon Rebel camera and use the computer as a tool to enhance the art elements and compositional criteria of a photograph or digital image. Students will be responsible for their camera. Students may either provide their own DSLR or mirrorless camera, and SD card; or sign out a camera bundle with the district.

VHS Art Courses

MUSIC

Band	Orchestra	Choir	Guitar Class
Advanced Band	Advanced Orchestra	Advanced Choir	Piano Class 1
Music Theory 1	Music Theory 2	AP Music Theory	Piano Class 2

Band, Orchestra and Choir 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.

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

Choir Class 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 at an intermediate level.

703A MUSIC THEORY I (Semester-Daily) Credit 0.5

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.

703B MUSIC THEORY II (Semester-Daily) Credit 0.5

Music Theory II is a continuation of Music Theory I. Students will study more complex music notation including part-writing and inversions, score analysis, listening and dictation, and music composition. This course will prepare students for AP Music Theory.

Prerequisite: Students must have successfully completed Music Theory 1.

704 AP MUSIC THEORY (Year-Daily) HONORS Credit 1.0

This course will continue the musical concepts covered in Music Theory I and II. 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.

Prerequisite: Students must have successfully completed Music Theory I and II.

706	**Advanced Choir (Year-6 times/cycle)**	**Credit 1.0**
706A	**Advanced Choir (Year-5 times/cycle)**	**Credit 0.9**
706B	**Advanced Choir (Year-4 times/cycle)**	**Credit 0.8**
706C	**Advanced Choir (Year-3 times/cycle)**	**Credit 0.5**
706D	**Advanced Choir (Year-2 times/cycle)**	**Credit 0.4**

This advanced vocal group will meet during Learn on days 1, 3, 4, 6 and before school, 7:00 - 7:30 am, for sectional rehearsals. 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 Choir Class or approval by the choral director.

708 GUITAR (Year-Three times/cycle) **Credit 0.5**

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.

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

Band Class is open to all students who play a woodwind, brass, or percussion instrument. Band Class will meet during the school day and 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.

711	**Advanced Band (Year-6 times/cycle)**	**Credit 1.0**
711 A	**Advanced Band (Year-5 times/cycle)**	**Credit 0.9**
711 B	**Advanced Band (Year-4 times/cycle)**	**Credit 0.8**
711 C	**Advanced Band (Year-3 times/cycle)**	**Credit 0.5**
711 D	**Advanced Band (Year-2 times/cycle)**	**Credit 0.4**

Advanced Band Ensemble 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 rehearse during Learn on days 1, 3, 4, 6 and before school, 7:00-7:30 am, for sectional rehearsals. 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.

716 ORCHESTRA (Year-6 times/cycle) Credit 1.0
716 B ORCHESTRA (Year-4 times/cycle) Credit 0.8
716 D ORCHESTRA (Year-2 times/cycle) Credit 0.4

The Orchestra lesson class 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 and Spring Concerts. Members of the orchestra may also audition for the UMAHS 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. Students must be able to read music and play an orchestral string instrument.

717 ADVANCED ORCHESTRA (Year-6 times/cycle) Credit 1.0
717B ADVANCED ORCHESTRA (Year-4 times/cycle) Credit 0.8
717D ADVANCED ORCHESTRA (Year-2 times/cycle) Credit 0.4

Advanced Orchestra Ensemble 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 and Spring Concerts. More advanced string literature, techniques and ensemble playing may also be studied and performed. This advanced instrumental group will rehearse during Learn on days 1, 3, 4, 6 and occasionally before school, 7:00-7:30 am, for sectional rehearsals. 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: B or better in Orchestra Class or by audition.

719A Piano Class I (Semester-Daily) Credit 0.5

This class will meet every day for a semester. If you are a beginner piano player or have been playing for years, this class will help you achieve the next level of your playing ability. We will merge learning styles and approaches to cover topics like playing by ear, reading music, finger/playing technique, and music theory. You will grow as a musician as well as a piano player and you'll have fun along the way.

719B Piano Class II (Semester-Daily) Credit 0.5

Piano Class II is a continuation of Piano Class I and will help you achieve the next level of your playing ability. Students will learn more challenging music, continue playing by ear and reading music, and study more advanced piano technique. You will grow as a musician as well as a piano player and have fun along the way.

Prerequisite: Students must have successfully completed Piano Class 1.

VHS Music Courses

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

Bring STEM to life through hands-on projects and problem-solving! In this course, you'll explore how technology and engineering are used to tackle real-world challenges while getting comfortable in the shop. You'll work with tools, machinery, 3D printers, and a laser cutter to design, build, and test your own creations.

From case studies to design challenges, you'll see how today's technologies were developed and imagine what's next. This class is all about creativity, innovation, and turning ideas into reality!

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

Ready to design, build, and create? In this course, you'll take on real-world design challenges and bring your ideas to life through fabrication. Learn your way around shop tools, machinery, 3D printers, and a laser cutter as you prototype and test projects of your own. Instead of just learning about structures and systems, you'll actually build them—sketching technical drawings, experimenting with materials, and constructing solutions to engineering challenges. If you like to work with your hands and see your designs come alive, this is the class for you!

733 Introduction to Engineering (Semester-Daily) Credit 0.5

Curious about what engineers really do? This course introduces you to the wide world of engineering—from aerospace to biomedical, civil to mechanical—and shows how engineers use problem-solving to shape our future.

You'll start with the core principles all engineers share, then dive into what makes each field unique. Along the way, you'll take on design challenges, create technical drawings, and use digital tools to bring your ideas to life. This is the perfect mix of learning and doing—ideal for anyone who loves solving problems and creating new things!

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

Take your engineering skills to the next level! This course is designed for students who have completed Introduction to Engineering and want to see how different engineering fields work together to tackle larger, more complex projects.

You'll apply a systems approach to real-world challenges, designing and building projects that require multiple components to work together—like underwater ROVs, multi-part machines, or integrated structures. Through hands-on design challenges, testing, and presentations, you'll learn how engineers collaborate to solve big problems and bring complex ideas to life. This class is all about teamwork, problem-solving, and thinking like an engineer on a larger scale.

Prerequisite: Introduction to Engineering

742 Advanced topics in Engineering (Semester-Daily) **Credit 0.5**

Take full control of your engineering journey! This course is for students who have completed Introduction to Engineering and Engineering Systems and want to pursue broader and more collaborative hands-on projects.

You'll plan, design, and build a semester-long project that combines multiple smaller builds into a larger, complex system—like custom robots, automated devices, or other innovative engineering solutions. This is your chance to explore your passions, tackle challenging problems, and create something unique from start to finish. You'll research, prototype, test, and present your work, applying

Prerequisite: Engineering Systems

VHS Engineering and Technology Courses

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 teacher 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.

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 to 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 a minimum of 1.0 credit of Physical Education as a graduation requirement. It is recommended that students take advantage of the opportunity to earn more Physical Education credits after achieving the graduation requirement.

Students can reach the 1.0 credit requirement by taking either Physical Education or Fitness.

810 PHYSICAL EDUCATION (Semester- 2 times/cycle) Credit 0.2

This course offers students the opportunity to participate in a variety of physical activities including team sports, creative games and lifetime activities. Some examples of games played during Physical Education include- soccer, volleyball, flag football, basketball, floor hockey, ultimate frisbee, capture the flag, badminton, pickleball and backyard games.

813 FITNESS (Semester- 2 times/cycle) Credit 0.2

This course takes place in the Fitness Center and the focus is on personal fitness, utilizing the five components of fitness- cardiovascular endurance, muscular strength, muscular endurance, flexibility and body composition. Students will have the opportunity to create a self-paced, personalized fitness plan to work toward their individual fitness goals.

ELECTIVES

814B AQUATIC / LIFEGUARD TRAINING (Semester- 4 times/cycle) Credit 0.4

This course gives students the opportunity to gain lifeguard training and certification through the American Red Cross. In order to be officially certified, students must complete mastery in first aid skills, CPR and rescue techniques. Lifeguard certification will not be issued to anyone who cannot satisfactorily demonstrate mastery in all required skills. There will be a nominal financial charge to meet American Red Cross certification and course costs.

Prerequisite:

1. Age requirement- A student must be at least 15 years of age by the time the course is completed.
2. The student has to be able to swim 200 yards continuously.
3. The student must be able to tread water with legs only for 2 minutes.
4. The student must be able to retrieve a 10-pound brick from the deepest part of the pool (7-10 feet) and bring it back to the surface.

827S ADAPTIVE PHYS. ED. (Year – Daily) Credit 1.0

This course is designed to meet the needs of individuals who are unable to participate in Physical Education 810 or 813 because of a physical handicap, disability or other special need.

Prerequisite: Individualized Education Plan (IEP), recommendation or physician's Note.

HEALTH

All students are required to successfully complete 1.0 credit of Health as a graduation requirement. Two courses are offered at the high school including Health I and Health II. Health I is typically taken in grade 9 and Health II is encouraged during grades 11-12.

801 HEALTH I (Semester- Daily) Credit 0.5

The content of this course includes a wide variety of topics that fall under the Health umbrella of physical, mental and social health. Some topics include nutrition, drug and alcohol education, body systems, self-esteem, stress, depression, cyberbullying and relationships. Throughout the course students are encouraged to think about good decision making as it applies to their everyday lives.

802 HEALTH II (Semester- Daily) Credit 0.5

This course is a continuation of the study of health topics and challenges students to analyze their own health and wellness as it relates to the present and their future health. The main topics include lifestyle related diseases, fitness, nutrition, mental health and relationships.
VHS Health Courses

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.

946S 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 juniors 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 (Semester-Varies) 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 (Year-Varies) 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 (Year) 1.0 Credits

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.

Upper Merion Area High School
S.A.I.L. Transition Program (students who are 18-22 years old)

Students **A**chieving **I**ndependent **L**iving (S.A.I.L.)

Program Mission Statement

The S.A.I.L. Transition Program strives to provide experiences and learning opportunities that will strengthen the foundation of each student, harness their unique interests and strengths and support individual goals as they prepare for meaningful and fulfilling adult lives as individuals,

family members, employees and involved citizens of their community.

What we Offer

We offer an individualized, person-centered transition program for students age 18-22. The S.A.I.L. Program offers students an opportunity to extend their functional academic learning along with developing job readiness skills and various work experiences within the community. Community based instruction provides opportunities for our young adults to experience restaurants, shopping, public transportation, exercise, volunteer and recreational activities. Students will also create a professional portfolio including resume, cover letter, recommendation letters, academic transcript and much more building their passport to other adult transitions. We help connect families to various community resources and agencies such as the Office of Developmental Disabilities and Office of Vocational Rehabilitation.

Program Description

The program offers a functional and vocational curriculum with a focus on the acquisition of skills to promote increased independence in the community and a successful transition from high school to adult life.

Program components include:

- Community based vocational instruction
- Functional classroom instruction
- Hands-on learning opportunities
- Home living experiences
- Employment experiences including jobs and job training
- Recreation and leisure activities
- Social skills training and support
- Additional resources available for individual needs, growth and increased independence

Highlights of the Program

- **Functional Academics:** The young adults will continue to develop their functional academics in both reading and math.

- **Community Connections Course:** This course is taught twice a week by the speech therapist. The course focuses on communication skills throughout the community, adult life and job sites.

- **Leisure / Fitness:** Young adults participate in a variety of leisure activities, including a fitness program at the Upper Merion Community Center. It is a biweekly program designed by the physical therapist in collaboration with the team to help maximize the students' individual functional and vocational skills.

- **Travel Training:** Young adults are given the opportunity to participate in a SEPTA course and Rambler trips around the community.

- **Community Based Vocational Instruction (CBVI):** Working together with community businesses to provide the young adults hands-on employment experiences and develop job skills.

- **Community Based Wednesday:** The young adults participate in a community outing comprised of 4 categories - community service, leisure activity, dining out, and a community location visit such as library, laundromat, post office, etc.

- **Cooking:** Students work together in pairs to choose meals, menu prep, shop and prepare breakfast and lunch once a week for the class.

SPECIAL EDUCATION COURSES

102M CO-TAUGHT ENGLISH 9 CP……..……22

112M CO-TAUGHT ENGLISH 10 CP……..23

122M CO-TAUGHT ENGLISH 11 CP……..23

133M CO-TAUGHT ENGLISH 12 ……24

202M CO-TAUGHT WORLD CULTURES CP…….……..30

216M CO-TAUGHT WORLD HISTORY:MODERN…… 30

325M CO-TAUGHT ALGEBRA IB CP…….……36

332M CO-TAUGHT GEOMETRY CP……..36

342M CO-TAUGHT ALGEBRA II CP……...37

402M CO-TAUGHT SCIENCE AND TECHNOLOGY CP……39

412M CO-TAUGHT BIOLOGY CP……...40

422M CO-TAUGHT CHEMISTRY CP……..…….....40

827S ADAPTIVE PHYSICAL EDUCATION……..….64

903S READING FOUNDATIONS…….28

904S INTEGRATED LITERACY INTERVENTION……27

905S ENGLISH 9-10……..…...29

906S ENGLISH 11 ……..……..29

919S CONCEPTS OF WORLD CULTURES ……...35

934S ALGEBRA CONCEPTS…….38

938S REAL-LIFE MATH……..…….38

935S SCIENCE CONCEPTS……..…...43

939S REAL LIFE SCIENCE……..……..43

946 PRE-VOCATIONAL SKILLS……..66

646M CO-TAUGHT OCC SEM & WORK EXPERIENCE……52

951S SOCIAL SKILLS……....66

948-950 STUDY SKILLS……..……...66

953 STUDY SKILLS II……....66

CENTRAL MONTCO
TECHNICAL HIGH SCHOOL
FOR THE ARTS, SCIENCES AND TECHNOLOGY

2026-2027 GUIDE TO CMTHS CAREER & TECHNICAL PROGRAMS

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 dedicated to supporting the local business and industry sector by offering programs that align with local, state, and national workforce needs. Our caring and professionally certified staff, all of whom have prior industry experience, mentor students by sharing their

skills and providing individualized support. Instructors play a crucial role in preparing students for the future while fostering enthusiasm. Students can acquire various state and nationally recognized certifications and professional licenses. For detailed information on each program, please refer to the CMTHS Online Course Selection Guide at www.cmths.org. A CIP Code stands for Classification of Instructional Program.

Central Montco Technical High School Admissions Process

Central Montco Technical High School (CMTHS) does not discriminate in accepting students based on sex, color, national origin, race, sexual orientation, disability, age, religion, ancestry, political opinions or affiliations, or lawful activity in any employee organization.

Interested students are responsible for applying to CMTHS through the EnrollTrack portal by registering for an account and providing basic demographic information. (https://centralmontco.enrolltrack.com) All applications will be reviewed by the sending school prior to final submission to CMTHS. The sending school must provide the educational plans or agreements for students requiring accommodations while attending CMTHS. Returning students in good standing are not required to submit a new application each year. Returning students wanting to change programs should submit a new application.

Enrollment at CMTHS is limited. Therefore, each applicant is evaluated based on the information provided in the application. Only completed applications will be reviewed, and admission will be granted until all openings in that program are filled. The remaining applicants are then placed on a waiting list for potential placement as openings occur in those programs. The team will review all completed applications with the intent to schedule students into their 1st choice program when possible. If the student's 1st program of choice is not available, the CMTHS Admissions Team will attempt to schedule the student into their 2nd choice program. If neither are available, students will be on the waitlist for an available seat. To review the CMTHS Admissions Procedures visit www.CMTHS.org.

CMTHS CAREER & TECHNICAL PROGRAMS
(10th, 11th, & 12th, unless stated)

Architecture & Construction
CIP: 46.0401 Building Trades
CIP: 01.0601 Landscaping, Design, & Construction

Arts, A/V Technology & Communications
CIP: 10.9999 Video, Sound, & Music
CIP: 50.0402 Visual Communications

Education & Training
CIP: 19.0708 Early Childhood Education
Secondary Education Academy (formerly Teacher Academy, 11th & 12th)

Health Sciences
Allied Health Technology (12th only)

CIP: 51.2604 Exercise Sciences
CIP: 51.0899 Healthcare Sciences

Hospitality & Tourism
CIP: 12.0501 Baking & Pastry Arts
CIP: 12.0508 Culinary Arts

Human Services
CIP: 12.0402 Barbering
CIP: 12.0401 Cosmetology

Information Technology
CIP: 11.0901 Networking Technology

Law, Public Safety, Corrections & Security
CIP: 43.0107 Public Safety

Transportation
CIP: 47.0604 Auto Technology
CIP: 47.0603 Collision Repair Technology

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 for 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.pacollegetransfer.com for more information on articulations.

STUDENT SUCCESS SERVICES

Student Support Services
- School Counseling – Career, Academic, and Social & Emotional
- Special Education services
- English Language services
- School Nurse

Work-based Studies

• Job Shadowing: An opportunity for students to observe or 'shadow' someone is their chosen career in the actual place of work.

• Internships: Paid and non-paid work-based experiences for a specified length of time. • Clinical & Field Experiences: Non-paid, work-based experiences in hospitals, long term care facilities, day care centers, restaurants, and corporate parks.

• 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. The students' progress is monitored and evaluated by the school and the employer on a continual basis.

STUDENT ORGANIZATIONS

SkillsUSA and 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 may participate. SkillsUSA is a national partnership of students, teachers, and industry working together to ensure America has a skilled work force through leadership training and student governments.

The National Technical Honor Society (NTHS):

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

Architecture & Construction

CIP: 46.0401 BUILDING TRADES

Course Description: This is an instructional program that prepares individuals to apply technical knowledge and skills in the maintenance and repair of residential and commercial buildings. Instruction includes the basics of carpentry, electrical, millwork, plumbing, painting, minor sheet metal, masonry, tile setting, heating, and OSHA safety standards. The Building Trades Program is an excellent option for students interested in a career related to residential and commercial construction.

Course Content:

• Safety
• Building & Property Maintenance
• Carpentry & Repairs
• Portable Power Tools

• Tools and Machine Maintenance
• Structures: Roofs, Floors, Stairs, Doors, Windows, Walls
• Masonry: Concrete, Floor and Wall Tile
• Residential Electrical Circuits
• Residential Plumbing
• Finishing Materials
• Environmental Control Systems

Potential State or National Certifications Available at CMTHS:
• NOCTI Building/Property Maintenance of PA
• OSHA 10-hour Certification
• Gastite Certification
• TracPipe Certification
• NCCER Credentials (various trades)
• Ladder Safety Certification

Articulation Agreement: Building/Property Maintenance & Manager-CIP Code: 46.0401 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Carpenter, Cement Mason, Construction Manager, Electrician, HVAC Technician, Plumber, General Contractor, Architect, Construction Engineer, Job Site Supervisor.

Required Uniform and Materials: Building Trades T-shirt /Sweatshirt are available at www.cmths.org. Student must wear leather work boots, hard hat, and safety glasses. Students must have a tool bag, tool belt, and tools. (A list will be provided by the instructor)

CIP: 01.0601 LANDSCAPING

Course Description: This is an instructional program having a combination of organized subject matter and practical experiences that generally prepares individuals to produce, process and market plants, shrubs and trees used principally for ornamental, recreational and aesthetic purposes and to establish, maintain and manage horticultural enterprises. Instruction emphasizes knowledge, understanding and application important to establishing, maintaining and managing horticultural enterprises such as arboriculture, floriculture, greenhouse operation and management, landscaping, nursery operation and management, and turf management.

The Landscape Design & Construction Program offers hands on learning that prepares students in all phases of landscape/hardscape design and 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 job site safety.

Course Content:
• Safety
• Safe and Proper Plant Healthcare Practices
• Basic Botany
• Horticulture Business Operations
• Soils and Fertilizer
• Sustainable Horticulture
• Horticulture Technology
• History and Current Status of Horticulture
• Plant Identification
• Horticultural Careers, Opportunities, and Pathway

Potential State or National Certifications Available at CMTHS:
• NOCTI Landscaping PA
• Bobcat Skid-Steer Loader Operator Training Course Certificate
• Applied Horticulture PA
• OSHA Certification - Agriculture
• Pennsylvania Pesticide Applicator Certification

Articulation Agreement: Applied Horticulture/Horticulture Operations, General-CIP Code:01.0601. See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Landscaper, Groundskeeper, Landscape Architect, Supervisor of Landscaping, Soil and Water Conservationist, Nursery Worker, Nursery/Greenhouse Manager and Sales, Independent Contractor, Construction Manager.

Required Uniform and Materials: Dark green CMTHS shirt, optional CMTHS sweatshirt, jeans or work pants, and leather work boots. Uniforms are available at www.cmths.org.

Arts, A/V Technology & Communications

CIP: 10.9999 VIDEO, SOUND & MUSIC PRODUCTION

Course Description: This program prepares individuals to apply knowledge and skills in the field of multimedia technology. Multimedia technology specialists provide services in a variety of areas associated with typography, web and graphic design, video, audio, television production, animation, and photography.

The Video, Sound, and Music Production Program is a hands-on course where students acquire skills in video and audio production through the operation of state-of-the-art digital video and audio studio production equipment.

Students will be able to combine their artistic creativity with technological knowledge to

produce original video and audio productions such as newscasts, music videos, short films, music recording projects, and audio/video post-production projects.

In this field students will work in exciting environments and work settings that include television and radio stations, sporting events, concerts, film sets, recording studios, and theaters.

This program prepares students to apply technical knowledge and skills to the production of sound recordings as either finished products or as components of traditional or emerging music productions, film and video productions, live sound productions, broadcasts, video game productions, or mixed media productions.

Course Content:
• Graphic Design
• Media Composition
• Photography
• Web Media
• Video, Cinematography, and Audio Production
• Professional Practices
• Operating sound and mixing boards
• Recording, mixing, and reproducing sound effects, music, and voices
• Synchronize voices and sounds for movies and television programs
• Edit live recordings with industry technology
• Set up, operate, maintain, and repair broadcast gear
• Monitor and adjust equipment to ensure visual quality
• Troubleshoot equipment
• Edit video recordings with industry technology

Potential State or National Certifications Available at CMTHS:
• NOCTI Communication Technologies PA
• OSHA Certification

Articulation Agreement: Communications Technologies/Technicians & Support Services — CIP Code: 10.999 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Video Producer, Audio Producer, Broadcast Technician, Sound Engineer, Foley Artist, Recording Engineers, Sound Mixers, Field Technicians, Camera Operators, Cinematographer, Videographer, Sound and Video Editor

Required Uniform and Materials: Button up work shirt. Two terabyte (2TB) External Hard Drive, over the ear headphones (no earbuds).

CIP: 50.0402 VISUAL COMMUNICATIONS

Course Description: This is a program in the applied visual arts that focuses on the general

principles and techniques for effectively communicating ideas and information, and packaging products, in digital and other formats to business and consumer audiences, and that may prepare individuals in any of the applied art media.

Students in the Visual Communications program pursue studies in traditional media such as watercolor, pencil drawing, pen and ink, and air brush with an emphasis on illustration. Work is also done in advanced color theory and design theory.

As reflected in the trend in the graphic design field, there is an ever-increasing emphasis on computer generated art. Students work with Macintosh computers using such programs as Illustrator, Photoshop, InDesign, and 3D Software.

Course Content:
• Orientation
• Safety
• Drawing and Illustration
• Color Theory and Application
• Digital Imaging
• Design, Layout, and Production
• Typography
• Digital Photography
• Professional Practices

Potential State or National Certifications Available at CMTHS:

• NOCTI Commercial and Advertising Art PA
• OSHA Certification

Articulation Agreement: Commercial & Advertising Art-CIP Code: 50.0402
See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Digital Designer, Multimedia Designer, Print Designer, App and Digital Platform Designer, Web Design and SECO, Social Media Design, Online Producer, Internet Marketing Consultant, Photography and Video, Traditional Arts, Fine Artist, Illustrator, Fashion Designer.

Required Uniform and Materials: Students are required to purchase a supply kit through CMTHS at an additional cost consisting of sketchbook, pencils, markers, brushes, toolbox, portfolio book, paint trays, 5GB USB flash drive, and white work shirt.

Education & Training

CIP: 19:0708 EARLY CHILDHOOD EDUCATION

Course Description: This program prepares individuals for a variety of occupations in childcare and guidance often under the supervision of professional personnel in child or day care centers. This program includes instruction in growth and development; nutrition; program planning and management; safety; behavior guidance; play activities; child abuse and neglect; parent, child personal relationships; learning experiences for children; and laws, regulations and policies relating to childcare services.

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 childcare 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, Head Start programs, and early intervention programs as well as our own onsite preschool, "Little Hands."

Course Content:
• Orientation and Safety
• Professionalism
• Health and Safety
• Learning Environment (Physical Space)
• Child Development (Emotional, Social, Physical, Intellectual, Language)
• Classroom Management and Positive Guidance
• Standards, Curriculum, and Assessment
• Curriculum Development
• Learning Activities and Experiences
• Program Partnerships
• Clinical Experience

Potential State or National Certifications Available at CMTHS:
• NOCTI Commercial and Advertising Art PA
• Mandated Reporter Training
• Health and Safety Training (Through Better Kid Care)
• First Aid/CPR
• CDA Ready Certification (see Steps sheet for Explanation)
• FEMA IS:366.A-Planning for the Needs of Children in Disasters

Articulation Agreements: Childcare & Support Services Management
CIP Code: 19.0708 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Teacher's Assistant, Childcare Assistant, Nanny, Assistant Group Supervisor, Family Home Childcare Provider, Early Childhood Teacher, Elementary School Teacher.

Required Uniform and Materials: Burgundy smock/jacket that can be ordered at

www.cmths.org. **Additional Requirements:** Clearances (3), Physical Exam, and

1-Step Mantoux (Tuberculosis) Test

SECONDARY EDUCATION ACADEMY

(11th & 12th grade only)

Course Description: High school seniors aspiring to be educators develop the skills to be 21st century ready in the college preparatory Teacher Academy program. The course consists of 7.5 hours/week divided between classroom instruction and internship experience with certified teachers at all grade levels, which results in approximately 180 hours of instruction and 90 hours of internship experience. The field experiences are with certified teachers at all grade levels. This is a one-year program.

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

Course Content: The Secondary Education Academy is a program for high school seniors interested in pursuing a career in the field of education. In addition to earning 2 high school credits for the program, students have the option to potentially enroll in a dual enrollment and earn college credits. The Academy provides an introduction to the knowledge and skills required to work in the teaching profession in the 21st Century. The Secondary Education Academy program addresses instruction in all subjects on all grade levels with particular attention devoted to:

- History and philosophy of education
- Legal and ethical issues in education
- Effective teachers and classrooms
- Meeting the needs of exceptional learners
- Integration of technology in the classroom
- Student diversity
- Teacher preparation and entering the profession
- Developing a theory of practice

The course consists of 7.5 hours/week divided between classroom instruction and internships with certified, tenured teachers at all grade levels, resulting in approximately **160 hours of instruction and 95 hours of internship** (field site) experience. Instruction is both teacher and student led; active individual and group participation are expected of each student. In addition, several guest speakers from the educational field will present throughout the year. Students will also participate in relevant field trips. As a culminating project, students complete a portfolio based on current college format and participate in an interview conducted by current and former administrators and human resources staff.

Articulation Agreement:
See https://www.collegetransfer.net/Search for program specific articulation agreements

Related Occupations: Early Childhood Teacher, Elementary School Teacher, High School Teacher, Math Specialist, Reading Specialist, Paraeducator, School Counselor, School psychologist, Special Education Teacher or Supervisor, School Principal or Assistant Principal, Teacher's Assistant.

Required Uniform and Materials: at CMTHS: Blue Secondary Education Academy tee shirt or polo. On internship assignments: professional attire should be worn to all internship assignments. Navy, grey, or black blazer, dress pants, skirts, button down shirts, blouses (no T-shirts), tie (men), dress shoes (no sneakers or open sandals)

Health Sciences

ALLIED HEALTH TECHNOLOGY

(12th grade only)

Course Description: Allied Health Technology is an Honors College Prep course designed for academic students who wish to pursue a career in the healthcare/medical professions. This program is open to 12th grade students who meet the required prerequisites.

This is a program with a combination of subject matter and experiences designed to prepare individuals for entry level employment in a minimum of three related health occupations under the supervision of a licensed health care professional. Instruction consists of core course content with clinical experiences in many health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications, and clinical rotations in a hospital or medical setting as required by the curriculum.

Course Content:
• Safety
• Professionalism, Legal, & Ethical Issues
• Communication Skills
• Infection Control
• Emergency Care and Disaster Preparedness
• Human Needs and Development
• Healthcare Provider Skills
• Nutrition & Hydration
• Structures & Functions of the Human Body
• Basic Diseases
• Death & Dying
• Medical Terminology

Admission Criteria:
• Specific GPA
• Specific Math and Science Courses
• Excellent Attendance
• Excellent Behavior

Potential State or National Certifications available at CMTHS:
• ASHI (American Safety & Health Institute) CPR Pro and First Aid
• DPW (Department of Public Welfare) Certificate for Patient Care Assistant
• Medical Assisting
• Nurse Assisting and EKG Technician from AMCA (American Medical Certification Association) • CareerSafe OSHA Certification for Healthcare workers

Related Occupations: Physician, Pharmacist, Physician Assistant, Radiologist, Physical Therapist, EKG Technician, Nurse Practitioner, Medical Lab Technician, Surgical Technician

Required Uniform and Materials: Gray hospital scrubs, white leather shoes or sneakers, watch with a second hand, stethoscope recommended.

Additional Requirements: Background Checks, Physical Exam, Updated Immunizations, Panel Drug Screening, Students must have a valid driver's license and their own vehicle to attend Allied Health Technology at clinical locations.

CIP: 51.2604 SPORTS MEDICINE AND REHABILITATION THERAPY

Course Description: The Sports Medicine and Rehabilitation Therapy program is a 3-year program for students and designed for a number of technical fields related to kinesiology. Students will learn to design safe and effective exercise prescriptions, conduct individual exercise programs, and fitness testing. Students with an eager aptitude for the sciences, specifically Biology, will thrive in this program.

Instruction includes theory and applications related to strength training and high intensity training, weight management, nutrition, resistance training, exercise programming, exercise physiology, mental health and wellness, pathophysiology, athletic training, injury recognition and management, rehabilitation and restorative care, medical terminology.

Students will prepare for employment in a wide variety of settings that includes assisted care living facilities, fitness clubs, hospitals, corporate wellness programs, strength and conditioning, and clinical rehabilitation programs. In addition, the program serves as a strong foundation for students wishing to pursue advanced degrees in the field of exercise science or enter professional disciplines such as physical or occupational therapy. Specific healthcare certifications, and dual-enrollment college credit and clinical opportunities are included in the program.

Course Content:

• Anatomy and Physiology
• First Aid and CPR
• Evaluation and Assessment of Injuries
• Taping and Bracing
• Therapeutic Exercise and Restorative Care
• Nutrition and Weight Management
• Strength and Conditioning
• Medical Terminology and Documentation
• Exercise Physiology

Potential State or National Certifications Available at CMTHS:
• Personal Training Certification (ACSM)
• CareerSafe OSHA Certification for Healthcare workers
• Emergency Care and Safety Institute (ECSI) Certifications for the following:
- First Aid
- Healthcare Provider CPR
- Sports First Aid and Injury Prevention
- Standard First Aid, CPR, and AED

Related Occupations: Physical Therapist, Physical Therapy Assistant, Occupational Therapist, Athletic Trainer, Personal Trainer, Nutritionist, Strength and Conditioning Coach, Speech Language Pathologist, Physical Therapy Aide

Required Uniform and Materials: Exercise Science polo, jacket. athletic sneakers, appropriate athletic pants, watch with a second hand or stopwatch.
Additional Requirements: Background Checks, Physical Exam, and Immunization

CIP: 51.0899 HEALTHCARE SCIENCES

Course Description: This is a program with a combination of subject matter and experiences designed to prepare individuals for entry level employment in a minimum of three related health occupations under the supervision of a licensed health care professional. Instruction consists of core course content with clinical experiences in one or two health related occupations. The core curriculum consists of planned courses for introduction of health careers, basic anatomy and physiology, medical terminology, legal and ethical aspects of health care and communications, and at least three planned courses for the knowledge and skills for the occupational area such as medical assisting, ward clerk, nursing assisting, etc.

The Healthcare Sciences Program offers a core academic curriculum and skill-based competency tasks linked to careers in the health care industry. This program provides the knowledge base for Health Occupations careers, as well as preparing the student to enter the health care system as a competent assistant to the health professional.
The clinical experience the students receive is an integral part of the program; providing the students with the laboratory setting to perfect their procedures and hands-on experience in local health care agencies as well as helping them to develop communication skills that are

essential in today's job market

Course Content:
• Safety, Professionalism, Legal, & Ethical Issues
• Communication Skills
• Infection Control
• Emergency Care and Disaster Preparedness
• Human Needs and Development
• Healthcare Provider Skills
• Nutrition & Hydration
• Structures & Functions of the Human Body
• Basic Diseases
• Death & Dying
• Medical Terminology

Potential State or National Certifications Available at CMTHS:
• AHA (American Heart Association) Healthcare Provider BLS CPR
• DPW (Department of Public Welfare) Certificate for Patient Care Assistant
• Medical Assisting
• Nurse Assisting and EKG Technician from AMCA (American Medical Certification Association) • CareerSafe OSHA Certification for Healthcare workers

Articulation Agreement: Health/Medical Assisting Services - CIP Code: 51.0899 See https://www.collegetransfer.net/Search for program specific articulations agreements.

Related Occupations: Physical Therapist, Radiological technologist, Surgical Technician, Physical Therapy Assistant, Occupational Therapist, Home Health Aide, Certified Nurse Aide, Respiratory Therapist, Pharmacy Technician, Veterinary Assistant, Registered Nurse, Nurse Practitioner, Licensed Practical Nurse, Physician Assistant, Physician.
Required Uniform and Materials: Turquoise scrub top, black scrub pants, white or black leather shoes/sneakers, watch with a second hand.
Additional Requirements: Background Checks, Physical Exam, and Immunizations.

Hospitality & Tourism

CIP: 12.0501 BAKING & PASTRY ARTS

Course Description: This is an instructional program with specialized classroom and practical work experiences associated with the preparation of breads, crackers, cakes, pies, pastries and other bakery products for retail distribution, consumption in a commercial food service establishment or special functions. Instruction includes making, freezing, and handling of baking products, decorating and displaying of baking items at a retail counter display, and packaging of merchandise. This is a comprehensive program designed to prepare individuals for employment in a variety of occupations in the baking

industry.

The Baking and Pastry Arts Program is a continuation of the 1st year Culinary Arts/Baking Program which offers a cutting-edge curriculum for all students interested in culinary arts, baking, service management and related fields to study in our state-of-the-art kitchen and restaurant. Students can demonstrate skills at our in house restaurant and catering program while providing services to residents of the local community. We also offer a full-service bakery run entirely by our students.

Course Content:
• Introduction to the Hospitality & Baking Industry
• Sanitation & Safety
• Business & Math Skills
• Baking Preparation
• Baking Fundamentals
• Purchasing, Receiving, Inventory & Storage
• Nutrition
• Baking Planning
• Human Relations Skills

Potential State or National Certifications Available at CMTHS:
• NOCTI Retail Commercial Baking
• ServSafe Food Handler Certification
• ServSafe Manager Food Safety Certification

Articulation Agreement: Baking & Pastry Arts/Baker/Pastry Chef - CIP 12.050.
See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Pastry Chef, Line Cook, Bakery Manager/Owner, Banquet Chef, Caterer, Baker, Bread Maker, Food Stylist.
Required Uniform and Materials: Chef coat and pants, apron, and hat. Uniforms are available at www.cmths.org.

CIP: 12.0508 CULINARY ARTS

Course Description: This is an instructional program that prepares students for employment related to institutional, commercial, or self-owned food establishments or other food industry occupations. Instruction and specialized learning experiences include theory, laboratory and work experience related to planning, selecting, preparing, and serving of quantity food and food products; nutritive values; use and care of commercial equipment; safety; and sanitation precautions. Instructional skills are provided to individuals desiring to become employed in all areas of the food service industry at entry level.
The Culinary Arts Program offers a cutting-edge curriculum for all students interested in culinary arts, baking, service management and related fields to study in our state-of-the-art kitchen and restaurant. Students have the opportunity to demonstrate skills at our in-house

restaurant and catering program while providing services to residents of the local community.

Course Content:
• Safety and Sanitation
• The Food Industry
• Purchasing, Receiving, and Storage
• Cold Food Preparation (Garde Manger)
• Knife Skills
• Food Service Tools and Equipment
• Standardized Recipes and Measurement
• Nutrition
• Breakfast Foods
• Vegetables & Fruits/ Pasta, Grains, and Potatoes
• Seasoning and Flavoring
• Stocks, Soups, and Sauces
• Meats, Poultry, and Seafood
• Baking and Pastry Skills
• Menus
• Back of the House Operations and Front of the House Operations
• Food Service Information Technology
• Hot Foods Preparation

Potential State or National Certifications Available at CMTHS:
• NOCTI Culinary Arts Level 2 Cook
• Heartsaver CPR
• Heartsaver First Aid
• ServSafe Food Handler Certification

Articulation Agreement: Institutional Food Worker - CIP Code: 12.0508 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Executive Chef, Line Cook, Restaurant Manager/Owner, Banquet Chef, Caterer, Dietician, Television Chef, Food Wholesaler, Food Stylist, Culinary Arts Educator, Server/Hospitality.

Required Uniform and Materials: Black chef coat and pants, apron, hat, and black work shoes. Uniforms are available at www.cmths.org.

Human Services

CIP: 12.0402 BARBERING

Course Description: The Barbering program prepares individuals to cut, trim, and style hair,

facial; massage the head and prepare for practice as licensed barbers in a professional setting. Includes instruction in hair cutting, blending, fading, and style, utilizing clippers, scissors, and razors, shop management, sanitation and safety, customer service, and applicable professional and labor laws and regulations.

Course Content: The basic course requires 1250 hours of study and takes three years to complete where students learn the theory of anatomy of the head and face, chemicals, coloring, sterilization, sanitation, and safety precautions in the field. Students are also trained in the art of customer service.

The Barbering program teaches the most scientific approach with a focus on precision and technique. Students are trained in specializations such as texturizing, layering, fading, blending, color, straight razor shaving, beard and mustache shaping, hot towel treatment, and facial massage. Students may participate in our internship program, which consists of spending several days a week working with community clients during school hours. Students can demonstrate skills while working towards their goals for licensing requirements in the state of Pennsylvania.

Potential State or National Certifications Available at CMTHS:
• NOCTI Barber PA
• Barber PA License
• Barbicide Certification
• Barber Teacher
• 650 Hours towards Barber License after completion of PA Cosmetology License

Articulation Agreement: Barber/Barbering - CIP Code: 12.0402 See https://www.collegetransfer.net/Search for program specific articulation agreements.
Related Occupations: Hairstylist, Master Barber, Barbershop Owner/Operator/Manager, Hair Colorist, Cosmetologist, Beard Grooming Specialist, Esthetician, Barber Instructor/Trainer, Mobile Barber, and Barber Supply Sales Representative.

Required Uniform and Materials: Black professional smock, closed toe shoes with rubber soles. Instructor will provide more details on required materials.

CIP: 12.0401 COSMETOLOGY

Course Description: The Cosmetology program prepares individuals to cut, trim, and style scalp, facial, and body hair; apply cosmetic preparations; perform manicures and pedicures; massage the head and extremities and prepare for practice as licensed cosmetologists in specialized or full-service salons. Includes instruction in hair cutting and styling, manicuring, pedicuring, facial treatments, shampooing, chemical applications, esthetics, shop management, sanitation and safety, customer service, and applicable professional and labor laws and regulations.

Course Content: The basic course requires 1250 hours of study and takes three years to complete where students learn the theory of anatomy of the head, face, hands and feet,

chemicals, coloring, sterilization, sanitation, and safety precautions in the field. Students are also trained in the art of customer service.

The Cosmetology program teaches the most scientific approach in hair designing, manicuring and esthetics today. Students are trained in specializations such as nail sculpturing, skin care, hair cutting, coloring, styling, permanent waving, and ethnic styling. Students may participate in our internship program, which consists of spending several days a week in our own salon during school hours. Students can demonstrate skills while working towards their goals for licensing requirements in the state of Pennsylvania.

Potential State or National Certifications Available at CMTHS:
• NOCTI Cosmetology/Cosmetologist PA
• Cosmetologist PA License
• Barbicide Certification
• Cosmetology Teacher
• Nail Technician
• Esthetic Certification
• Milady RISE Infection Control Certification
• 650 Hours towards Barber License after completion of PA Cosmetology License

Related Occupations: Hairstylist, Esthetician, Manicurist, Cosmetologist, Shampoo Technician, Stylist Assistant, Color Specialist, Make Up Artist, Retail Specialist, Salon Owner, Salon Manager. **Required Uniform and Materials:** black professional smock, closed toe shoes with rubber soles. Students will need to order a cosmetology kit – see instructor for details.

Information Technology

CIP: 11.0901 NETWORKING TECHNOLOGY

Course Description: This is an instructional program that focuses on the design, implementation, and

management of linked systems of computers, peripherals and associated software and prepares individuals with the technical skills required to support networks and network users. This program includes instruction in networks technologies and standards: system design, architecture, operating systems, security, communications protocols, client support, messaging services, network management, troubleshooting and server optimization.

The Networking Technology program at Central Montco Technical High School is intended to meet the needs of the technology industry both now and in the future. With the Internet growing continually, there are many opportunities available to Networking Technology students. With and education in infrastructure level networking, students are highly sought after by employers.

Course Content:
• Personal and Environmental Safety
• Computer Hardware

• Troubleshooting, Repair, and Maintenance
• Operating Systems and Software
• Network Technologies
• Network Media and Topologies
• Network Devices
• Network Management
• Network Tools and Troubleshooting
• Security Fundamentals
• Communication and Professionalism

Potential State or National Certifications Available at CMTHS:
• NOCTI Computer Systems Networking PA
• TestOut Ethical Hacker Pro, Server Pro 2016, Client Pro, PC Pro, Network Pro, Security Pro, Cyber Defense Pro
• Fortinet Network Security Expert (NSE)
• Cisco CCENT (Certified Cisco Entry Network Technician)
• Cisco CCNA (Certified Cisco Network Associate)
• CompTIA A+ (Prep)
• CompTia Network+ (Prep)
• C-Tech Copper, Fiber and Smart Home- Home Entertainment certifications
• OSHA Certification

Articulation Agreement: Computer Systems Networking & Telecommunications—CIP Code: 11.0901 See https://www.collegetransfer.net/Search for program specific articulations agreements.

Related Occupations: Desktop Support Specialist, IT Support Specialist/Analyst, Helpdesk Technician, Network Administrator, Security Specialist, IT Systems Administrator, Ethical Hacker, Information Security Analyst, IT Security Consultant, Information Security Manager, Penetration Tester, Systems Engineer.

Required Uniform and Materials: Students are required to wear a CMTHS black polo shirt with long pants. Uniforms are available at www.cmths.org.

Law, Public Safety, Corrections & Security

CIP: 43.0107 PUBLIC SAFETY

Course Description: This is a program that prepares individuals to perform the duties of police and public security officers, including patrol and investigative activities, traffic control, crowd control and public relations, witness interviewing, evidence collection and management, basic crime prevention methods, weapon and equipment operation and maintenance, report preparation and other routine law enforcement responsibilities.

Course Content:
• Crime Scene Management
• Use of Force
• Criminal Law and Procedures Health Issues
• Police Concepts and Skills
• Corrections Concepts and Skills
• Court Systems
• Communications
• Security: National, International, and Local
• Special Populations

Potential State or National Certifications Available at CMTHS:
• NOCTI Criminal Justice
• First Aid
• CPR and AED
• Protective Safety Systems
• Defensive Tactics
• Fire Extinguisher Certificate
• FEMA: Introduction to Incident Command System
• Ladder Safety Training Certification

Articulation Agreement: Criminal Justice / Police Science—CIP Code: 43.0107 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Police Officer, Municipal or State Police Officer, Security Officer, Corrections Officer, Waterways Patrol Officer, Game Protector, Safety Supervisor, Code Enforcement Officer, Safety Inspector, Industrial Hygienist, Environmental Protection Officer.

Required Uniform and Materials: Royal collared shirt, Royal blue pocket tee shirt, black dress pants/trousers, plain black belt, black shoes or boots, gray shorts or sweatpants, running shoes, (for physical training). Uniforms are available at www.cmths.org.

Transportation

CIP: 47.0604 Auto Technology
CIP: 47.0603 Collision Repair Technology

CIP: 47.0604 AUTO TECHNOLOGY

Course Description: This is an instructional program that prepares individuals to apply technical knowledge and skills to engage in the servicing and maintenance of all types of automobiles and light trucks. This program includes instruction in the diagnosis and testing,

including computer analysis, of malfunctions in and repair of engines, fuel, electrical, cooling and brake systems, drive trains and suspension systems. Instruction is also given in the adjustment and repair of individual components and systems such as fuel system components and air conditioning and includes the use of technical repair information and the procedures for state inspection.

Course Content:
• Orientation and Safety
• Tools/Fasteners
• Suspension and Steering
• Brakes
• Electrical and Electronics Systems
• Engine Repair
• Engine Performance
• Vehicle Maintenance and Reconditioning
• Heating and Air Conditioning

Potential State or National Certifications Available at CMTHS:
• NOCTI Automotive Technology PA
• SP/2: Mechanical Safety, Mechanical Pollution Prevention, Hazardous Training
• NAPA E-learning Course
• Valvoline Engine Oil & Chemicals Certification
• Automotive Service Excellence (ASE) Student Certification
• EPA609 Certification

Articulation Agreement: Automobile / Automotive Mechanic Technology / Technician CIP Code: 47.0604 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Auto Technician, Auto Parts Sales, State Emissions Inspector, General Line Technician, Service Writer, Transportation Inspector.

Required Uniform and Materials: a uniform consisting of Dark blue Dickies® pants, leather work boots, and T-shirt are required and available from www.cmths.org. Toolbox, lock, and tools (required tool list provided by the instructor.)

CIP: 47.0603 COLLISION REPAIR TECHNOLOGY

Course Description: This is an instructional program that prepares individuals to apply technical knowledge and skills to repair damaged automotive vehicles such as automobiles and light trucks. Students learn to examine damaged vehicles and estimate cost of repairs; remove, repair and replace upholstery, accessories, electrical and hydraulic window and seat operating equipment and trim to gain access to vehicle body and fenders; remove and replace glass; repair dented areas; replace excessively damaged fenders, panels and grills; straighten bent frames or unibody structures using hydraulic jacks and pulling devices; and file, grind and sand repaired surfaces using power tools and hand tools. Students refinish surfaces by painting with

primer and a finish coat.

Collision Repair 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.

Course Content
• Vehicle Design & Construction
• Panel Replacement & Alignment, Trim and Hardware
• Metal Finishing
• Body Fillers
• Glass & Hardware
• Structural Component Repair & Damage Analysis
• Structural Straightening
• Corrosion Protection
• Welding
• Cutting Processes
• Surface Preparation
• Refinishing, and Equipment
• Automotive Finishes, Surface Preparation
• Refinishing Equipment and Operations
• Detailing
• Estimating Damage Analysis
• Plastic Repair
• Restraint Systems

Potential State or National Certifications Available at CMTHS:
• NOCTI Collision Repair and Refinishing Technology
• Hazardous Material Storage and Disposal
• S/P2 Safety and Pollution Prevention
• I-CAR Certification(s)
• PPG Online Training - Refinishing Sheet Metal and Finishing Sheet Metal

Articulation Agreement: Autobody/Collision & Repair Technology Technician - CIP Code: 47.0603 See https://www.collegetransfer.net/Search for program specific articulation agreements.

Related Occupations: Frame Equipment Specialist, Repair Technician, Glass Specialist, Insurance Estimator, Customizing Specialist, Auto Body Technician, Industrial Spray Painter, Sales/Auto Body/Parts, Car Detail Specialist, Auto Refinisher Technician.

Required Uniform and Materials: Collision Repair printed T-shirt, blue or tan work pants, and leather work boots are required. Charcoal Filter Spray Respirator (see instructor). Uniforms are available at www.cmths.org.