## 

## HIGH SCHOOL

## PROGRAM PLANNING GUIDE 2022-2023

Harriton
Lower Merion
Lower Merion School District

## Table of Contents

Program Planning Guide Letter. ..... 3
Mission Statement ..... 4
Vision. ..... 4
Lower Merion School District's Strategic Pathways ..... 5
Strategic Pathway 1: Redefining Success ..... 5
Strategic Pathway 2: Transformative Curriculum ..... 5
Strategic Pathway 3: Commitment to Professional Learning ..... 5
Strategic Pathway 4: Student Driven Schools ..... 5
Strategic Pathway 5: Spirit of Community ..... 5
Minimum Graduation Requirements ..... 6
ENGLISH ..... 6
SOCIAL STUDIES (Recommended Sequence) ..... 6
MATHEMATICS ..... 6
SCIENCE ..... 6
ELECTIVES - 4.5 credits ..... 6
HEALTH AND PHYSICAL EDUCATION ..... 6
SENIOR PROJECT ..... 6
Keystone Exams ..... 7
Resources and Support ..... 8
Distinguished Scholars Program of Studies ..... 9
Procedural Guidelines ..... 9
Guidelines for Obtaining a High School Diploma in Under Four Years ..... 10
Commonwealth Secondary School Diploma ..... 10
Course Selection Process ..... 11
Requests for Schedule or Course Level Changes ..... 11
Academic Deadlines for 2022-2023 ..... 11
Auditing Courses ..... 12
Credit Earned as a Result of Receiving Tutoring ..... 12
Lower Merion School District Summer School Program ..... 13
Educational Experience/Coursework Outside the Lower Merion School District ..... 13
Online Offerings During the Academic Year ..... 14
NCAA Academic Eligibility Requirements ..... 15
Test Scores ..... 20
Course Levels ..... 21
College Preparatory ..... 22
Honors (H) ..... 22
Advanced Placement (AP) ..... 22
International Baccalaureate (IB) ..... 22
International Baccalaureate Diploma Program (IB) ..... 23
Key features of the IB experience include: ..... 23
Dual Enrollment Courses ..... 25
Central Montco Technical High School (CMTHS) ..... 27
Courses of Study ..... 30
Art ..... 30
International Baccalaureate Visual Arts Classes ..... 39
Business, Computer, and Information Technology ..... 41
Community Based Learning ..... 44
English ..... 47
English Language Development. ..... 58
Family and Consumer Science ..... 59
Health and Physical Education ..... 61
Mathematics ..... 65
Math Support Courses ..... 68
Advanced Mathematics Courses ..... 68
Computer Science ..... 72
Music. ..... 75
Science, Technology, and Engineering ..... 80
Biology Courses. ..... 80
Chemistry Courses ..... 83
Physics Courses ..... 84
Environmental and Earth/Space Science Courses ..... 86
Technology and Engineering ..... 91
Social Studies ..... 95
World Languages. ..... 103
Additional Course Offerings ..... 121
Gifted Education Support and Services ..... 122
Special Education Support and Services ..... 123
Autism Support and Services ..... 126
Work Experience ..... 131

## Lower Merion

301 East Montgomery Ave.


Ardmore, PA 19003-3399
Phone: 610-645-1800 • Fax: 610-645-0703 • www.lmsd.org
Khalid N. Mumin, Ed.D. • Superintendent of Schools

Dear Students and Parents/Guardians/Caregivers,

The staff at Harriton High School and Lower Merion High School are committed to providing a program of studies that will prepare all students to succeed in achieving their post high school goals.

This Program Planning Guide describes the high school program of studies available to both Harriton and Lower Merion students. It also contains current policies and other information that could influence the selection of courses. Please read the Guide carefully and do not hesitate to seek assistance from counselors, teachers and administrators in selecting the best distribution of courses.

Experience has shown that most students' educational needs are best satisfied by selecting a comprehensive and challenging array of courses each year. To assist students and parents in making the most appropriate selections, the following items are recommended for careful consideration:

- Students' educational goals and interests
- Past scholastic record
- Achievement in current courses
- Teacher recommendations
- Prerequisites for certain courses
- Total course load anticipated for next year
- Range of anticipated activities - curricular and extra-curricular

Educationally yours,

Mr. Scott Weinstein, Principal
Mr. Mike Johnson, Assistant Principal
Ms. Lauren Marcuson, Assistant Principal
Mr. Patrick Hogan, Assistant Principal
Mr. Shawn Albert, Athletic/Activities Director

Dr. James Scanlon, Interim Principal
Ms. Karen deFranco, Assistant Principal
Mr. Jon Fadely, Assistant Principal
Mr. Tyrone Ross, Assistant Principal
Mr. G. Scott Kilpatrick, Assistant Principal
Mr. Jason Stroup, Athletic/Activities Director

## Mission Statement

Committed to excellence and continuous improvement, the Lower Merion School District strives to ensure that all students achieve their highest level of critical thinking and creativity, that they value themselves and the diversity of others, and that they are knowledgeable, contributing citizens capable of excelling in a rapidly changing world. This is accomplished by individuals engaging in innovative, active experiences tailored to myriad ways of learning and in partnership with our community.

## Vision

Students are our reason for being. We create environments designed to fulfill the individual learning needs and aspirations of each student. Lower Merion School District develops active partnerships at all levels of our learning community and values the individual contributions of each member. We view learning as a dynamic, innovative collaboration. Individuals learn best when their hearts, minds, and spirits are intimately engaged in the learning process. Enter to learn. Go forth to serve.

## Lower Merion School District's Strategic Pathways

## Strategic Pathway 1: Redefining Success

LMSD's definition of success incorporates creativity, critical thinking, love of learning, and innovation for each and every child to encourage globally aware and engaged students. We reach beyond standardized test scores, embracing and celebrating the many ways in which students demonstrate individual growth.

## Strategic Pathway 2: Transformative Curriculum

LMSD offers a transformative interdisciplinary curriculum that is student-driven and fosters innovation and positive risk-taking. It transcends Standards, is inquiry-based, and connects the classroom to the world. Our curriculum encompasses diverse perspectives, promotes global awareness, and makes use of culturally responsive teaching and learning practices. This dynamic, adaptable curriculum provides vertically and horizontally aligned curricular experiences, ensuring every student learns from the connections across subject areas and receives a comprehensive and balanced education. Subject material is relevant to the world our children will enter in college and as adults. Innovation is the rule and not the exception.

## Strategic Pathway 3: Commitment to Professional Learning

LMSD is a community that values educators and the critical role they play in ensuring our students' success. We trust our professionals and seek to support their growth and development through collaborative professional learning opportunities rooted in self-reflection and inquiry. We believe in providing resources to staff that encourage a culture of engagement, innovation, and exploration.

## Strategic Pathway 4: Student Driven Schools

LMSD students engage in navigating their own learning and growth in close partnership with our professionals. We create an environment where students value self-reflection and inquiry and play a central role in identifying their passions and achieving their goals. We nurture and celebrate the individual strengths of our students and help them to develop competencies that ensure their success beyond the LMSD experience.

## Strategic Pathway 5: Spirit of Community

LMSD takes pride in being a central part of the community. We value the diverse, dynamic talents of every member of our community and their enduring support for public education. We honor this spirit through consistent outreach and the creation of meaningful relationships to promote experiential learning, ongoing service, and engagement that will strengthen and support the student experience during the LMSD years and beyond.

## Minimum Graduation Requirements

Students are urged to make the best use of their time by enrolling in courses at appropriate levels of challenge that will offer them a rigorous program of studies throughout their four years. This generally means that students should earn more than the minimum number of credits required for graduation. A total of 21 credits are required for graduation and a diploma from Lower Merion School District. All students are required to take the minimum of 5.25 credits each year. NOTE: these graduation requirements are governed by Lower Merion School Board Policy.
These credits are in the following areas:

## ENGLISH

Four Courses Minimum
English 1 $\qquad$ 1.0 credit

English 2 $\qquad$ 1.0 credit

Grade 11 Full-year English Course 1.0 credit Grade 12 Full-year English Course 1.0 credit

SOCIAL STUDIES (Recommended Sequence)
Four Courses Minimum
Global Studies 1 (Grade 9)___ 1.0 credit
Global Studies 2 (Grade 10)___ 1.0 credit
US History (Grade 11)__ 1.0 credit
US Government (Required Grade 12) 1.0 credit

## MATHEMATICS

Three Courses Minimum
Mathematics Courses $\qquad$ 3.0 credits

ELECTIVES - 4.5 credits
Any course beyond what is required is an elective.

## HEALTH AND PHYSICAL EDUCATION

Eight semesters (two semesters per year-one per semester) of PE plus one year of Health
PE $9 \ldots 0.33$ credits
PE $10 \_0.33$ credits
Health (Grade 10) _ 0.667 credits
PE $11 \_0.33$ credits
PE $12 \ldots 0.33$ credits
SENIOR PROJECT
Seniors, as a condition of graduation, complete a culminating Senior Experience.
Senior Project 0.5 credits

## SCIENCE

Three Courses Minimum
Science Courses $\qquad$ 3.0 credits

## Keystone Exams

Keystone Exams are state-developed, end-of-course assessments in designated content areas. The Keystone Exams are high school accountability assessments for federal and state purposes. All public school districts in the State of Pennsylvania are held accountable for participation and performance of all students in Algebra I, Biology, and Literature Exams.

The Algebra I and Literature Keystone Exams include items written to the Assessment Anchors/Eligible Content aligned to the Pennsylvania Common Core Standards in Mathematics and English Language Arts. The Biology Keystone Exam includes items written to the Assessment Anchor/Eligible Content aligned to the enhanced Pennsylvania Academic Standards for Science. Each exam consists of two modules that include multiple-choice questions and constructed response, or open-ended questions. A student will receive a score on each module and must have an overall average proficiency score on an exam.

If a student does not demonstrate proficiency on a Keystone Exam, he/she may receive school-based supplemental instruction. Students who do not demonstrate proficiency will be scheduled to retake the exam.

If a student has been unsuccessful in attaining proficiency on all three Keystone Exams, the school team will work with the student and his/her family to satisfy state graduation requirements through alternate means.

## Resources and Support

There are a variety of resources available for Lower Merion School District students at the high school level.

- Lunch and Learn: The Lunch and Learn period is one hour each day in which students and teachers have a 30 minute lunch and 30 minutes for teacher office hours, student collaboration, exercise, quiet study, or downtime.
- Learning Center: The Learning Centers are open at both high schools throughout the school day. They are staffed with teachers from various major subject areas. Students may meet with a teacher to have specific questions answered regarding a variety of academic concerns.
- Writing Center: Writing Centers are open at both high schools during Lunch and Learn. Students may meet with Peer Writing Fellows to brainstorm essay ideas, to refine writing techniques, and/or to solicit writing advice from an upper-class student who had already taken a particular course, among other writing needs.
- National Honor Society (NHS) tutors: Students may request to meet with an NHS tutor in a specific subject. This peer tutoring occurs during a free period, Lunch and Learn, or study hall. Students may see their counselors for more information.
- Academic Enrichment: Students may be recommended by a teacher or self-select to attend Academic Enrichment after school. Students work individually or in small groups to hone their skills in Math/Science or History/English.
- College Access Counselor: The College Access Counselors are available at both high schools to provide one-on-one support regarding the college search process. It is recommended that the student first meet with a school counselor and then follow up with the College Access Counselor.
- School Counselor and Transition Experience (SCATE): SCATE involves group guidance sessions that are tailored to each grade level and occur throughout the school year.
- Transition from $8^{\text {th }}$ to $9^{\text {th }}$ Grade: School communities offer a series of formal and informal programs to introduce students to high school and to ensure all students feel supported and successful.
- Professional Learning Communities (PLCs): PLCs meet regularly to identify essential and valued student learning, develop common formative assessments, analyze current levels of achievement, set achievement goals, and then share and create lessons to improve upon those levels. The result is a more familiar learning environment for new high school students who feel valued and supported by their teams of teachers.


## Distinguished Scholars Program of Studies

The Distinguished Scholars Program of Studies encourages students to pursue a broad liberal arts program of studies that exceeds the minimum high school graduation requirements.

Students complete the Distinguished Scholars Program of Studies if they exceed the minimum graduation requirements by earning at least three additional credits along with these additional subject requirements:

Ten credits in these three academic disciplines: Mathematics, Science, and World Language (minimally four credits in two disciplines and three in the other two disciplines).

While three credits in Mathematics and Science and four credits in English and Social Studies are required for graduation, World Language is not required for graduation but a minimum of two years is recommended.

In addition to the required credits, students must attain a GPA of 4.0 with no failing grades. Only those courses graded A through F are used.

## Procedural Guidelines

1. School Counselors verify a student's eligibility for the Distinguished Scholars Program when they review transcripts at the beginning of the student's 12th grade.
2. Those students enrolled in the Distinguished Scholars Program have their grades reviewed at the conclusion of the third quarter of their senior year to determine continued eligibility for the Program.

## Guidelines for Obtaining a High School Diploma in Under Four Years

A high school diploma can be awarded by the Lower Merion Board of School Directors in under four years if a students completes all requirements for graduation.

In order to qualify for a diploma as specified above, a student must:

1. Meet with their school counselor to discuss why they want to graduate early and to devise a plan to allow them to complete their requirements. This plan may require "doubling up" on classes and/or attending summer school.
2. They must submit a letter addressed to the principal and their counselor indicating reasons for early graduation and their plan. This must be signed by the student and parent/guardian/caregiver.
3. The principal then approves the request in writing.

## Commonwealth Secondary School Diploma

Students who leave high school without earning sufficient credits to graduate are encouraged to take the General Educational Development (GED) exam in order to receive a Commonwealth Secondary School Diploma (CSSD). In order to receive your CSSD, students must be 18 years old or their class must have graduated, in addition to having passed the GED exam.

Students may convert their CSSD to a Lower Merion School District Diploma if they earned 16 LMSD credits while attending either Harriton or Lower Merion High Schools.

## Course Selection Process

At the time of course selection, students should make a careful choice of courses in cooperation with parents/guardians/caregivers, teachers, and a school counselor. During this process, teachers assist a student by making a recommendation based on the student's demonstrated abilities and prerequisites for various courses. School counselors then meet with each student to determine courses that are appropriate for long-term goals.

Students should choose courses and levels (honors, college preparatory, AP, IB, dual enrollment) that are appropriate to their individual needs, abilities, and the competitive realities of college admissions and employment opportunities.

No level changes will be made after the last school day in September for full-year or first semester courses (or at the end of February for second semester courses). Rare exceptions will be made only in consultation with a student's parents/guardians/caregivers, teacher, department chair, assistant principal, and school counselor.

## Requests for Schedule or Course Level Changes

Requests for schedule changes must be made using the online form available through the website no later than June 17, 2022. Students must state specific reasons for requests. A parent/guardian must approve of any change. Students must attend all scheduled classes until change requests are completed. Failure to do so will result in a cut for the missed class(es).

## Academic Deadlines for 2022-2023

June 17, 2022 Last student day and last day to request a course and/or level change for all courses for the 2022-2023 school year.

September 30, 2022 Final day to withdraw from a first semester or year-long course without appearing on a student's transcript.

October 28, 2022 Final day to withdraw from a first semester course with a "WP" or "WF." Final day to withdraw from a year long course with a "WP." After this date, the grade on the transcript will be an "F."

February 17, 2023 Final day to withdraw from a second semester course without having it appear on the student's transcript.

March 10, 2023 Final day to withdraw from a second semester course with a "WP" or "WF"

## Auditing Courses

Students may audit courses offered at Harriton High School or Lower Merion High School on a spaceavailable basis. Auditing courses can provide students with an opportunity to explore an area of interest. The student must submit a written request and obtain written approval from the counselor, assistant principal, and course teacher prior to beginning the course. AP and IB courses cannot be audited.

## Credit Earned as a Result of Receiving Tutoring

The Lower Merion School District does not award credit for study under the direction of private tutors. However, students receiving homebound instruction by District-approved programs may earn credit for such instruction with the approval of the Superintendent.

## Lower Merion School District Summer School Program

Each summer, Lower Merion School District offers a summer school experience that provides two opportunities for students in select courses:

1. Credit Recovery
2. Advanced Credit

During the spring semester of the regular school year, online and face-to-face summer school offerings are published and made known to students. Summer school will run from June 27, 2022 through August 5, 2022. All face-to-face courses must have a minimum enrollment of 15 students by the last day of registration in order to run.

Additional information about summer school is available from a student's school counselor. Please see the summer school brochure for course offerings and tuition costs.

## Educational Experience/Coursework Outside the Lower Merion School District

Students often engage in educational experiences or coursework outside the District's program. While these experiences may enrich and enhance a student's learning, such courses will not be documented on an LMSD transcript nor be awarded District credit. Enrollment in these experiences is a decision made by a family or student, thus the District will not offer opinion or guidance for participation.

Students are welcome to pursue outside courses on their own. Upon request, the District will evaluate placement into the next best course in the curriculum sequence for students who choose to do so; however, credit will not be awarded towards graduation for outside courses. In addition, Lower Merion does not recognize courses taken outside the District for acceleration purposes when those courses are associated with a Keystone Exam.

The District does not administer or provide Advanced Placement exams for course offerings outside our high school program.

## Online Offerings During the Academic Year

The Lower Merion School District offers a range of online courses, including some at the Advanced Placement level, that are not offered on site at Lower Merion or Harriton High Schools. These courses are fully accredited and taught by certified teachers across the country. Online courses require that a student possess independent learning skills and offer the flexibility of engaging in coursework at any location that has an internet connection. Online courses are for enrichment purposes. District-offered online courses are reflected on the student's transcript, but do not count towards Harriton or Lower Merion High School departmental requirements, graduation requirements, GPA, or satisfy any other credit requirements for LMSD. These courses are identified on a student's transcript as online courses. Please note that AP exams in these courses will not be administered at Lower Merion or Harriton High Schools. Students interested in taking an online course must have or make equivalent room in their schedule for the course. Online courses will not be added to an already full student schedule. Interested students should contact their school counselor to see a list of available courses and to register.
*Note: online offerings through Lower Merion Virtual Academy (LMVA) and course credit requirements were modified during the 2021-2022 academic year due to the pandemic. As of this printing, online offerings available through LMVA for the 2022-2023 academic year have not yet been determined.

## NCAA Academic Eligibility Requirements

This section is taken from: http://www.ncaa.org/.

College-bound student-athletes who want to compete at a NCAA Division I or II school need to meet certain divisionwide academic and amateurism standards. Students who plan to attend a Division III school need to meet the admission standards of the school they plan to attend.

## Division I Initial Eligibility

Division I schools require students to meet academic standards for NCAA-approved core courses, core- course GPA and test scores. To be eligible to practice, compete and receive athletics scholarships in their first full-time year at a Division I school, students must graduate from high school and meet ALL of the following requirements:

1. Complete a total of 16 core courses in the following areas:


Note: See the core-course progression requirements.
2. Complete 10 out of their 16 core courses, including seven in English, math or natural/physical science, before the start of the seventh semester. Once a student begins their seventh semester, they must have more than 10 core courses completed to be able to repeat or replace any of the 10 courses used to meet the 10/7 requirement. Students whose academic credentials are solely international (including Canada) are not required to meet the 10/7 requirement.
3. Complete the 16 NCAA-approved core courses in eight academic semesters or four consecutive academic years from the start of ninth grade. If students graduate from high school early, they still must meet core-course requirements.
4. Earn an SAT combined score or ACT sum score that matches their core-course GPA (minimum 2.300) on the Division I sliding scale. SAT scores earned on or after March 2016 will be evaluated based on concordance tables established by the College Board.

How to plan your high school courses

to

meet the

16 NCAA core courses

Qualifier
Students may practice, compete and receive an athletics scholarship during their first year of enrollment at an NCAA Division I school.

## Academic Redshirt

Students may receive an athletics scholarship during their first year of enrollment and may practice during their first regular academic term, but may NOT compete during their first year of enrollment. Students must pass either eight quarter or nine semester hours to practice in the next term.

## Nonqualifier

Students will not be able to practice, receive an athletics scholarship or compete during their first year of enrollment at a Division I school.

| DIVISION I <br> FULL QUALIFIER SLIDING SCALE |  |  | DIVISION I <br> FULL QUALIFIER SLIDING SCALE |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core GPA | SAT* | ACT Sum* | Core GPA | SAT* | ACT Sum* |
| 3.550 | 400 | 37 | 2.750 | 810 | 59 |
| 3.525 | 410 | 38 | 2.725 | 820 | 60 |
| 3.500 | 430 | 39 | 2.700 | 830 | 61 |
| 3.475 | 440 | 40 | 2.675 | 840 | 61 |
| 3.450 | 460 | 41 | 2.650 | 850 | 62 |
| 3.425 | 470 | 41 | 2.625 | 860 | 63 |
| 3.400 | 490 | 42 | 2.600 | 860 | 64 |
| 3.375 | 500 | 42 | 2.575 | 870 | 65 |
| 3.350 | 520 | 43 | 2.550 | 880 | 66 |
| 3.325 | 530 | 44 | 2.525 | 890 | 67 |
| 3.300 | 550 | 44 | 2.500 | 900 | 68 |
| 3.275 | 560 | 45 | 2.475 | 910 | 69 |
| 3.250 | 580 | 46 | 2.450 | 920 | 70 |
| 3.225 | 590 | 46 | 2.425 | 930 | 70 |
| 3.200 | 600 | 47 | 2.400 | 940 | 71 |
| 3.175 | 620 | 47 | 2.375 | 950 | 72 |
| 3.150 | 630 | 48 | 2.350 | 960 | 73 |
| 3.125 | 650 | 49 | 2.325 | 970 | 74 |
| 3.100 | 660 | 49 | 2.300 | 980 | 75 |
| 3.075 | 680 | 50 | 2.299 | 990 | 76 |
| 3.050 | 690 | 50 | 2.275 | 990 | 76 |
| 3.025 | 710 | 51 | 2.250 | 1000 | 77 |
| 3.000 | 720 | 52 | 2.225 | 1010 | 78 |
| 2.975 | 730 | 52 | 2.200 | 1020 | 79 |
| 2.950 | 740 | 53 | 2.175 | 1030 | 80 |
| 2.925 | 750 | 53 | 2.150 | 1040 | 81 |
| 2.900 | 750 | 54 | 2.125 | 1050 | 82 |
| 2.875 | 760 | 55 | 2.100 | 1060 | 83 |
| 2.850 | 770 | 56 | 2.075 | 1070 | 84 |
| 2.825 | 780 | 56 | 2.050 | 1080 | 85 |
| 2.800 | 790 | 57 | 2.025 | 1090 | 86 |
| 2.775 | 800 | 58 | 2.000 | 1100 | 86 |

*Full sliding scale research between the new SAT and ACT is ongoing.

Division II schools require college-bound student-athletes to meet academic standards for NCAA core courses, core-course GPA and test scores.

To be eligible to practice, compete and receive an athletics scholarship in their first full-time year at a Division II school, students must graduate from high school and meet ALL of the following requirements:

1. Complete 16 core courses in the following areas:

2. Earn an SAT combined score* or ACT sum score that matches the student's core-course GPA (minimum 2.200) on the Division II sliding scale.

## Qualifier

Students may practice, compete and receive an athletics scholarship during their first year of fulltime enrollment at an NCAA Division II school.

## Partial Qualifier

Students may receive an athletics scholarship during their first year of enrollment and may practice during their first year of enrollment, but may NOT compete.

## Nonqualifier

Students will not be able to practice, receive an athletics scholarship or compete during their first year of full-time enrollment at a Division II school.

| DIVISION II <br> FULL QUALIFIER SLIDING SCALE |  |  | $\begin{gathered} \text { DIVISION II } \\ \text { PARTIAL QUALIFIER SLIDING SCALE } \end{gathered}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Core GPA | SAT* | ACT Sum* | Core GPA | SAT* | ACT Sum* |
| 3.300 \& above | 400 | 37 | 3.050 \& above | 400 | 37 |
| 3.275 | 410 | 38 | 3.025 | 410 | 38 |
| 3.25 | 430 | 39 | 3 | 430 | 39 |
| 3.225 | 440 | 40 | 2.975 | 440 | 40 |
| 3.2 | 460 | 41 | 2.95 | 460 | 41 |
| 3.175 | 470 | 41 | 2.925 | 470 | 41 |
| 3.15 | 490 | 42 | 2.9 | 490 | 42 |
| 3.125 | 500 | 42 | 2.875 | 500 | 42 |
| 3.1 | 520 | 43 | 2.85 | 520 | 43 |
| 3.075 | 530 | 44 | 2.825 | 530 | 44 |
| 3.05 | 550 | 44 | 2.8 | 550 | 44 |
| 3.025 | 560 | 45 | 2.775 | 560 | 45 |
| 3 | 580 | 46 | 2.75 | 580 | 46 |
| 2.975 | 590 | 46 | 2.725 | 590 | 46 |
| 2.95 | 600 | 47 | 2.7 | 600 | 47 |
| 2.925 | 620 | 47 | 2.675 | 620 | 47 |
| 2.9 | 630 | 48 | 2.65 | 630 | 48 |
| 2.875 | 650 | 49 | 2.625 | 650 | 49 |
| 2.85 | 660 | 49 | 2.6 | 660 | 49 |
| 2.825 | 680 | 50 | 2.575 | 680 | 50 |
| 2.8 | 690 | 50 | 2.55 | 690 | 50 |
| 2.775 | 710 | 51 | 2.525 | 710 | 51 |
| 2.75 | 720 | 52 | 2.5 | 720 | 52 |
| 2.725 | 730 | 52 | 2.475 | 730 | 52 |
| 2.7 | 740 | 53 | 2.45 | 740 | 53 |
| 2.675 | 750 | 53 | 2.425 | 750 | 53 |
| 2.65 | 750 | 54 | 2.4 | 750 | 54 |
| 2.625 | 760 | 55 | 2.375 | 760 | 55 |
| 2.6 | 770 | 56 | 2.35 | 770 | 56 |
| 2.575 | 780 | 56 | 2.325 | 780 | 56 |
| 2.55 | 790 | 57 | 2.3 | 790 | 57 |
| 2.525 | 800 | 58 | 2.275 | 800 | 58 |
| 2.5 | 810 | 59 | 2.25 | 810 | 59 |
| 2.475 | 820 | 60 | 2.225 | 820 | 60 |
| 2.45 | 830 | 61 | 2.2 | 830 | 61 |
| 2.425 | 840 | 61 | 2.175 | 840 | 61 |
| 2.4 | 850 | 62 | 2.15 | 850 | 62 |
| 2.375 | 860 | 63 | 2.125 | 860 | 63 |
| 2.35 | 860 | 64 | 2.1 | 860 | 64 |
| 2.325 | 870 | 65 | 2.075 | 870 | 65 |
| 2.3 | 800 | 66 | 2.05 | 880 | 66 |
| 2.275 | 890 | 67 | 2.025 | 890 | 67 |
| 2.25 | 900 | 68 | 2 | 900 | 68 \& above |
| 2.225 | 910 | 69 |  |  |  |
| 2.2 | 920 | 70 \& above |  |  |  |

[^0]
## Test Scores

Divisions I and II both require students to have an SAT or ACT score for their certification. When students register for the SAT or ACT, they can use the NCAA Eligibility Center code 9999 to send their scores directly to the NCAA Eligibility Center from the testing agency. Test scores on transcripts will NOT be used in their academic certification.

A combined SAT score is calculated by adding reading and math subscores. An ACT sum score is calculated by adding English, math, reading and science subscores. Students may take the SAT or ACT an unlimited number of times before they enroll full time in college. If students take either test more than once, the best subscores from different tests are used to meet initial-eligibility requirements.

## Course Levels

Most courses in the Lower Merion School District Program Planning Guide are taught at more than one level of difficulty to provide an appropriate challenge for students. The designations below are used throughout the Program Planning Guide.

## Course Designation

College Preparatory
Honors (H)
Advanced Placement (AP)
International Baccalaureate (IB)
Grade Point Average (GPA) is calculated at the end of each school year using only final grades in the five major academic areas: English, Mathematics, Science, Social Studies, and World Languages.

Honors, AP, and IB level courses are calculated on a weighted 5.0 scale, and College Preparatory courses are calculated on a 4.0 scale. GPA is reported on a weighted 5.0 scale.

|  | Course Levels |  |
| :---: | ---: | ---: |
| Grade | Unweighted <br> College Prep | Weighted <br> AP/IB/Honors |
| A+ | 4.00 | 5.00 |
| A | 4.00 | 5.00 |
| A- | 3.70 | 4.70 |
| B+ | 3.30 | 4.30 |
| B | 3.00 | 4.00 |
| B- | 2.70 | 3.70 |
| C+ | 2.30 | 3.30 |
| C | 2.00 | 3.00 |
| C- | 1.70 | 2.70 |
| D+ | 1.30 | 2.30 |
| D | 1.00 | 2.00 |
| D- | 0.70 | 1.70 |
| F | 0.00 | 0.00 |

## College Preparatory

Courses designated college preparatory level are designed to meet the needs of students as they prepare for success in post-secondary life, both college and career. This is the LMSD standard, default course level. Expectations for achievement are maintained at a challenging level for the typical academic student. Grades in College Preparatory level courses are not weighted.

## Honors (H)

Courses designated honors level offer faster-paced instruction and expectations that are maintained at a highly rigorous level. Honors level courses often require a high degree of independent work and prepare students for challenges associated with AP and IB courses of study. Grades in honors level courses are weighted.

## Advanced Placement (AP)

Courses designated Advanced Placement follow specific curriculum guidelines of the College Board's Advanced Placement Program. Advanced Placement serves students who wish to pursue college-level studies while still in high school.

Students who elect AP courses must be dedicated to increased work that is equivalent to college courses. Students are expected to take the College Board's Advanced Placement Exam at the end of an Advanced Placement course. Grades in AP level courses are weighted.

## International Baccalaureate (IB)

The IB Diploma Program (DP) is a two-year curriculum that leads to an internationally recognized high school diploma that is highly respected by universities throughout the world. Additional information about the program is available on the following pages. Students who opt not to pursue the full Diploma Program are invited to enroll in IB elective courses, designated in this guide as "IB." IB classes are rigorous, focusing on the development of critical thinking skills within the content areas. All students enrolled in an IB class are expected to complete all IB assessments.

## International Baccalaureate Diploma Program (IB)

The IB Diploma Program is a district-wide offering available only at Harriton High School.
Designed initially for students who are internationally mobile, the IB Diploma offers access to universities throughout the world. Universities, including in the United States, regard the IB Diploma curriculum as outstanding preparation for college-level work. Students determine in their sophomore year if they wish to participate in IB, and they complete the program's requirements during junior and senior years.

Unlike AP courses, which are selected on an a-la-carte basis, IB courses are studied in the context of a unified, comprehensive diploma experience. Because the IB is a diploma program, students take courses in all disciplines: a literature course in their first language; a language acquisition course; a history course; an experimental science course; a mathematics course; and an elective chosen from Visual Arts, Music, Psychology, Economics, Theatre, or a second science. IB students seek a balanced education: a humanities-oriented student can craft an IB schedule that is rooted in the humanities, but he/she must still study math and sciences; likewise, a student deeply rooted in STEM subjects can craft a schedule that is very heavy in quantitative studies, but he/she must still study the humanities.

In addition to these six courses, students complete three "core elements" of the Diploma Program:

- CAS (creativity, activity, service), a student-designed suite of activities that engages students in endeavors that are creative, action-oriented, and provide service;
- Extended Essay, a 4,000 word essay in original research;
- Theory of Knowledge, a metacognitive course that engages the students in the evaluation of the nature of knowledge and how we come to understand the world around us.

The six subjects and the core are unified philosophically by the fundamental understanding that acquiring knowledge is a critical step toward the greater goal of critical thinking. IB teachers foster an environment conducive to the development of deep analytical skills, including long-term projects, active engagement of the students in seminar-type lessons, research tasks, and writing assignments.

## Key features of the IB experience include:

- a rigorous curriculum taught in 150 countries;
- an interdisciplinary study in which inter-curricular links are natural;
- an emphasis on internationalism;
- a cohort experience in which a common group of students studies a common set of subjects, fostering close ties among each other and their teachers;
- an international flavor, as the program attracts students from throughout the world who seek an IB diploma to facilitate their university studies either back in their homeland or a future destination.


## The Benefits of AP and IB courses

By taking college-level Advanced Placement (AP) or International Baccalaureate (IB) classes, you enter a world of knowledge and a learning environment that you might not otherwise experience in high school. By taking AP or IB exams, you have the opportunity to earn credit or advanced standing at many of the nation's colleges and universities.

The greatest benefit of AP and IB is the experience of taking academic courses in an enriched environment with classmates who are seeking intellectual challenge, are motivated to learn, and are committed to excellence. The courses offer students opportunities to delve more deeply into content, research in a scholarly fashion, and learn in a college-like inquiry-based manner.

Advanced Placement courses are college-level courses taught in high school. Most four-year colleges in the United States and colleges in more than 60 other countries give students credit, advanced placement, or both on the basis of AP Exam scores. International Baccalaureate courses are designed to be high school courses by an international standard, though universities throughout the United States consider them to be college-level courses by a US standard and therefore offer advanced placement and/or credit for scores earned on IB assessments. By entering college with AP or IB credits, students have time to move into upper level courses, pursue a double-major, or study abroad. Students must take the AP or IB assessments in order to be eligible for college credit.

Additional information about AP is available from Student Services, the AP Coordinator (Ms. Misty Whelan at Harriton, whelanm@lmsd.org; Ms. Becky Bowlby at Lower Merion, bowlbyb@lmsd.org), or the College Board's website (https://apstudents.collegeboard.org/).

Additional information about IB is available from Student Services, the IB Coordinator (Mr. Thomas O'Brien, obrient@lmsd.org), The International Baccalaureate website: (https://www.ibo.org/programmes/diploma-programme/), or LMSD's IB documentation online: (https://www.lmsd.org/academics/high/ib).

## Dual Enrollment Courses

Lower Merion School District partners with the local universities to provide juniors and seniors with opportunities for successful transition from high school to college. The Dual Enrollment Program is offered to Harriton and Lower Merion High School juniors and seniors. The Program allows students to take up to four college courses and earn up to twelve college credits upon successful completion of these four courses. The courses are designated as honors courses for LMSD. A member of the LMSD staff will meet with students interested in enrolling in the program to provide additional information and complete the application process. New students admitted into the LMSD Dual Enrollment Program will complete Semester 1 in the fall of 2022 and Semester 2 in the winter/spring of 2023.

Exceptions to course sequence will be considered on a case by case basis. All courses are offered at both high schools during the regular school day.

Students are required to pay all tuition and course fees once admitted in order to be scheduled for the course(s).

```
Semester 1
Accounting (3 College Credits) (projected tuition $400)
    Length/credit: 1 semester - 0.5 credit
    Grade(s): 11,12
    Course Number: }1809020
```

This course focuses on detailed analysis of the structure and systems of accounting followed by use of accounting information through financial statements, working capital, cash flow analysis, and the complete accounting cycle.

Introduction to Business Seminar (3 College Credits) (projected tuition \$400)

Length/credit:
Grade(s):
Course Number:
1 semester - 0.5 credit
11, 12
18090103
This course explores the nature and scope of business, examines its component parts, and describes how business is organized and managed. It provides an integrated and balanced coverage of the internal and external forces that comprise our business and economic system.

Semester 2
Introduction to Marketing Management (3 College Credits) (projected tuition \$400)
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 11, 12
Course Number: 18090303
This course offers an introduction to the basic principles of marketing, including the Four P's, segmentation, targeting, positioning and messaging. The class will focus on consumer marketing as well as pharmaceutical marketing.

Principles of Management (3 College Credits) (projected \$400)
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s):
11, 12
Course Number: 18090403
This introductory course addresses the methods by which management can influence organization. Topics include planning, problem solving and decision making, organizational structure, delegation, leading, motivation, interpersonal relationships, communications, quality management, and negotiation.

## Central Montco Technical High School (CMTHS)

This section is taken in part from: https://www.cmths.org/
The Lower Merion School District participates in programs that offer vocational-technical courses at the Central Montgomery County Vocational Technical School. Courses are scheduled for a half-dayLMSD participates in the AM and PM programs. Students attend regular classes one-half day at Harriton High School or Lower Merion High School and one-half day at the Central Montgomery County Vocational Technical School.

How to Apply:

1. Obtain a pre-enrollment application and a student information card from the Student Services Office.
2. Complete the application and the information card and return them to your Student Services Office. Be sure to indicate your residence as LMSD.
3. Your application will be reviewed and your requested course evaluated by the Student Services Office.
4. Your school counselor will inform you of further admission procedures. Descriptions of the courses are available from the Student Services Office.

## The Learning Environment and the Faculty

From the first day's orientation to graduation, students learn a broad-based technical curriculum in a relaxed and supportive environment. Having just completed a 20 million dollar renovation, Central Montco Technical High School is a first-rate facility with state-of-the-art equipment and technology.

At CMTHS, a caring and highly qualified professional staff share their skills while challenging and encouraging their students. Many of the instructors have established high profiles in their fields of expertise prior to becoming teachers. Students not only get to know their teachers, but the teachers get to know them and respond to their individual needs as they extend their support and enthusiasm while preparing students for the future. The students are able to obtain a variety of state and nationally recognized certifications and licenses.

## Philosophy

Central Montco Technical High School provides educational programs in cooperation with each member school district that will prepare students to pursue post-secondary career studies and/ or obtain employment in a global economy. The educational programs are designed to provide students with the necessary knowledge, skills, and attitudes that will enable them to become contributing members of society in an ever-changing workforce.

## Mission Statement

Shaping Today's Students for Tomorrow's Careers.

## Scholarships

In order to address our philosophy of encouraging all students to be prepared for "lifelong learning," the Central Montco Technical High School has allocated in excess of \$800,000 in financial aid to graduating seniors. Through this competitive privately funded program, seniors have been able to
attend a wide variety of post-secondary schools. Preparation for a scholarship commences on the first day at CMTHS and culminates with the formal application for a scholarship, made in January of the senior year.

## Work-Based Studies

At Central Montco Technical High School, Work-Based Studies (WBS) connects classroom learning with work-based experience and teams employers, educators, community leaders, students, and parents. The Work-Based Studies Experiences at CMTHS include:

- Clinical Experiences: Non-paid, work-based experiences in hospitals, long-term care facilities and daycare centers.
- Internships: Paid and non-paid work-based experiences for a specified length of time.
- Cooperative Education: Program related placements that are paid, on-the-job training positions and are considered an extension of the classroom. The timeline for placement is individualized and based on student need. Students are trained under the direct supervision of the employer and are assigned a mentor. Students' progress is monitored and evaluated by the school and the employer on a continual basis.


## Student Assistance Center

The purpose of the Student Assistance Center is to enhance student achievement by providing a variety of support services. These services are available to any student who is experiencing some difficulty or impediment to learning.

## Support Services

CMTHS provides supplementary assistance to our students who are enrolled in an approved technical program. Career evaluation, instructional counseling, and placement are provided. These evaluation services are designed to provide the student with the necessary information to make a more informed career choice. An assessment counselor is also present to interpret the career interest and aptitude information about the student and help them maximize the educational value of their chosen career or technical program. Career related math and reading instruction are also provided through Perkins funding. The academic instructional staff includes a certified math teacher and reading specialist. The math and reading programs are designed to address the needs of students in their chosen technical area and provide assistance with home and school assignments.

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. The school's mission statement is, Shaping Today's Students for Tomorrow's Careers.

## Programs Offered

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

| Technical Program of Study | Grade Level Eligibility |
| :--- | :---: |
| Allied Health (Honors Program) | 12 |
| Automotive Repair Technology | $10 / 11 / 12$ |
| Baking \& Pastry Arts | $10 / 11 / 12$ |
| Building Trades (Construction) | $10 / 11 / 12$ |
| Collision Repair / Auto Refinishing | $10 / 11 / 12$ |
| Cosmetology | $10 / 11 / 12$ |
| Culinary Arts \& Restaurant Management | $10 / 11 / 12$ |
| Early Childhood Education | $10 / 11 / 12$ |
| Health Care Sciences | $10 / 11 / 12$ |
| Landscape Design \& Construction | $10 / 11 / 12$ |
| Networking Technology | $10 / 11 / 12$ |
| Public Safety (Fire, Police, EMS) | $10 / 11 / 12$ |
| Teacher Academy | 12 |
| Video, Sound, and Music Production (Art \& Media) | $10 / 11 / 12$ |
| Visual Communications (Art \& Media) | $10 / 11 / 12$ |

## Courses of Study

Art
All introductory art courses (i.e., all semester art courses) will be offered at the college preparatory level only.

9th Grade Art H

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade: | 9 |

Course Number: 06010903
This year-long, rigorous Honors course introduces ninth-graders to a variety of materials used in both two-dimensional and three-dimensional pieces. Over the course of the year, students draw, paint, sculpt, and utilize digital technologies to begin developing their portfolios. Successful completion of this course will prepare students for additional years of Art Honors course work.

Art 1 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 10, 11, 12
Course Number: 06010303
Students in Art 1H develop an art portfolio, learning to draw realistically, design and work with various media and techniques, including drawing, painting, mixed media, and digital media. Personal expression and conceptual thought are introduced and developed throughout the course. Students work in class and at home in a variety of media. All students keep a personal sketchbook/research journal.

Art 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 11,12$
Prerequisite: It is recommended that interested students successfully complete Art 1 H .
Course Number: 06010503
In Art 2 H , students build on skill and studies introduced in Art 1 H . Color theory and composition continue to develop through a variety of media including painting, printmaking, pastels, sculpture, collage and digital media. Personal expression and conceptual thought are emphasized throughout the course. All students keep a personal sketchbook/research journal.

Art 3 H
Length/credit: $\quad 1$ year -1.0 credit

Grade: 12
Prerequisite: It is recommended that interested students successfully complete Art 2 H .
Course Number: 06010713
Art 3 H focuses on conceptual thinking and technical mastery through portfolio development and completion. The course begins with a concentration in oil painting, but students use various mixed media, including drawing, painting, painting and portfolio completion. The course also encompasses printmaking, bookbinding, sculpture, mixed media and digital media. In the second semester, students make a proposal that outlines an independent theme of art production. All students keep a personal sketchbook/research journal.

## Art History

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 06040100 |

The history of our world is chronicled by the art and crafts of past cultures. They are the concrete evidence of the life and societies of the past. This course is designed to enlighten students about the arts of past and present cultures and how these cultures impact us today. Students will study images, artists, materials, aesthetics and criticism. They will take field trips, view films and do research. While this is mostly an academic course, there will also be hands-on activities.

## Art and Modern Culture

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $10,11,12$ |
| Course Number: | 06050100 |

This one semester elective dealing with our cultural identity as Americans. TV, movies, fashion, video games, magazines, billboards, web pages, catalogs are all part of the visual culture around us. In this class, students will explore and investigate cultural identifiers using visual images and have the opportunity to produce graphic artwork. No art background is necessary for this course.

## Art 1 Studio

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 06010200
In this introductory art course, students draw, paint, learn color theory, sculpt and discover 2-D and 3-D design. Develop the right side of your brain, through studying artists, both present and past, engaging in fun exercises, and gaining the confidence to create art. The purchase of a sketchbook is recommended for this course.
Length/credit: $\quad 1$ year -1.0 credit

Grade(s): $\quad 10,11,12$
Prerequisite: It is recommended that interested students successfully complete Art Studio 1.
Course Number: 06010400
Art 2 Studio is intended for students who wish to further develop and expand their creative talents. Students enjoy the opportunity to pursue areas of interest. All media are available for students' creative expression.

## Art 3 Studio

Length/credit: $\quad 1$ year -1.0 credit
Grade: $\quad 11,12$
Prerequisite: It is recommended that interested students successfully complete Art Studio 2.
Course Number: 06010600
As a culmination of the work begun in Art 1 Studio and Art 2 Studio, this course presents students with the opportunity to explore areas of artistic interest, develop ideas independently, and experiment in various media or specialize in the medium of their choice.

## Ceramics 1

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 06030100
In this course, students work with clay to create functional and sculptural pieces. Hand-building techniques including pinch, coil, and slab are taught. Students design, decorate, glaze and fire their work for permanency.

## Ceramics 2

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: It is recommended that interested students successfully complete Ceramics 1.
Course Number: 06030202
In Ceramics 2, students gain experience in using the potter's wheel and create more advanced handbuilt projects. Students also gain a greater understanding of aesthetic qualities in ceramics and an appreciation of contemporary and historical ceramics.

Grade(s):
Prerequisite
$10,11,12$
It is recommended that interested students successfully complete Ceramics 2.
06030503

Course Number:
In Advanced Ceramics 3 H , students design and create complicated clay works. Students have the opportunity to concentrate on potter's wheel techniques, advanced conceptual hand building assignments, or explore both. In addition, students gain a greater understanding of aesthetic qualities in ceramics, an appreciation of contemporary and historical ceramics and kiln loading and firing procedures.

## Advanced Ceramics 4 H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11, 12
Prerequisite: It is recommended that interested students successfully complete Advanced Ceramics 3.
Course Number: 06030703
In this advanced course, students continue to develop and advance their ceramic skills within their chosen concentrations while developing a portfolio of ceramic work.

## Advanced Ceramics 5 H

Length/credit:
1 year - 1.0 credit
Grade:
Prerequisite:
Course Number:

In this course, students continue to develop and advance their ceramic skills within their chosen concentrations while developing a portfolio of advanced ceramic work.

## Communication Design 1

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 9,10,11,12
Course Number: 06100500
Communication Design supports students who are interested in learning graphic design, illustration, motion graphics, and interactive design. Students develop conceptual problem-solving and technical skills in order to create authentic and impactful images, messages, designs, artifacts, and experiences across various digital platforms. Students use Photoshop and various other software from Industry Standard Software, such as the Adobe Creative Cloud. Students learn to use a combination of logical reasoning, critical thinking, problem solving, and artistic creativity. No prior experience with digital platforms is needed but students should be open to working on the computer daily.

## Communication Design 2

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 06100600 |

Students continue their study within Communication Design with a focus on Composition and Design. An emphasis on the Principles of Design and their impact on the communication of ideas across various digital platforms is explored.

## Communication Design 3 H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 10, 11, 12
Course Number: 06100303
Students continue their study within Communication Design with a focus on Artistic Voice. Students develop a style and technique across various different digital platforms for communication. A strong foundation in Elements and Principles allows students to create dynamic compositions that develop conceptual ideas and a portfolio of work.

```
Communication Design 4/5 H
    Length/credit: 1 year - 1.0 credit
    Grade(s): 10,11,12
    Course Number: 06100403
```

Students continue their study within Communication Design with a focus on artistic practice. Students should have a strong technical and conceptual foundation that will help define a body of work. Students develop and refine their work through a sequence of unique critique-centric and technical seminars while benefitting from the mentorship of a faculty advisor. Student-driven projects create a unique point of view and highly individualized portfolios.

## Film-Photography 1

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 06060100
This course introduces students to seeing and capturing their world through the art of film and photography. Students will develop creative thinking skills while learning to design artwork, produce digital photographs and films, and respond reflectively to their artmaking experiences. Leveraging the current technology used by practicing artists, students will capture imagery using a variety of camera types, including mobile phones, and edit using the Adobe CC software and apps.
Length/credit: $\quad 1$ semester -0.5 credit

Grade(s): $\quad 9,10,11,12$
Prerequisite: It is recommended that interested students successfully complete Film-Photography 1.
Course Number: 06060200
In this course, students continue to develop and advance their filmmaking and photography skills. Photoshop and other Adobe software are further explored as integral parts of furthering student work and portfolio development.

Advanced Film-Photography 3 H
Length/credit:
1 year - 1.0 credit
Grade(s):
Prerequisite: It is recommended that interested students successfully complete Film-Photography 2 H.
Course Number: 06060303
In this course, students expand their understanding of the technical and aesthetic investigations of film or photography through an advanced curriculum that includes: photographic/film production, visual presentations, digital literacy, writing assignments, discussions and critiques through photographic/film and writing assignments. Photoshop and other Adobe software are explored as integral parts of furthering students' work and portfolio development. By the end of the course, students will have developed a portfolio of photographs or films and an artist's statement.

## Advanced Film-Photography 4 H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 10,11,12$
Prerequisite: It is recommended that interested students successfully complete Film-Photography 3 H.
Course Number: 06060403
In this course, students discover the varied ways in which photographers/ filmmakers can approach and interpret their own ideas, messages and stories through photographic/film imagery through photographic/film and writing assignments. Students entering the Advanced Program should have a strong technical and conceptual foundation and will define a body of work on which they plan to focus. Students work in digital software programs including the Adobe Suite. Students develop and refine their work through a sequence of unique critique-centric and technical seminars while benefitting from the mentorship of a faculty advisor; studio workshops focused on digital literacy aid students in more advanced editing and digital manipulation. The Advanced Program emphasizes the role of critique in the creative process; students are actively pushed to challenge and expand their established relationship with photography.

## Advanced Film-Photography 5 H

Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite

Course Number:
$10,11,12$
It is recommended that interested students successfully complete Film-Photography 4 H.
06060503

In this course, students discover the varied ways in which the photographer/filmmaker can approach and interpret their own ideas, messages and stories through photographic/film imagery through photographic/film and writing assignments. Students entering the Advanced Program should have a strong technical and conceptual foundation and define a body of work on which they plan to focus. Students develop and refine their work through a sequence of unique critique-centric and technical seminars while benefitting from the mentorship of a faculty advisor; studio workshops focused on digital literacy will aid students in more advanced editing and digital manipulation. The Advanced Program emphasizes the role of critique in the creative process; students are actively pushed to challenge and expand their established relationship with photography with the simultaneous support of the community. The program culminates in a student exhibition.

## Metal Arts 1

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 9,10, 11, 12
Course Number: 06020100
Basic metalworking and jewelry-making techniques are covered in this introductory course. Working with a variety of metals including copper, silver and brass, students learn how to craft small metal objects and wearable art. Possibilities range from containers and mobiles to bracelets, neckpieces, earrings, rings and anklets. Techniques introduced are sawing, soldering, riveting, stone setting and inlay. This course emphasizes design and also focuses on adornment from different cultures.

## Metal Arts 2

Length/credit: 1 semester -0.5 credit
Grade(s):
Prerequisite

Course Number:
This course is a continuation of skill building from Metal Arts 1. In this course, students improve their basic metalworking and jewelry-making techniques by working with a variety of metals including copper, silver, and brass to craft small metal objects and wearable art. Possibilities range from containers and mobiles to bracelets, neckpieces, earrings, rings, and anklets. Techniques include sawing, independent torchwork and soldering, riveting, stone setting and inlay. This course emphasizes design and also focuses on adornment from different cultures.

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite
Course Number:
06020703
This course teaches advanced Metal Arts skills. Chasing, embossing, forging, appliqué, marriage of metals, chain mail, casting, and the construction of hollow forms are introduced. Projects are assigned that involve more complicated soldering techniques and more advanced design approaches. In addition to metal, the exploration of alternative materials is encouraged, i.e., wood, plastic, glass. At this level, students will work more conceptually.

## Advanced Metal Arts 4 H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite: It is recommended that interested students successfully complete Advanced Metal Arts 3.
Course Number: 06020903
At this level, students continue to develop and advance their skills within their chosen Metals concentrations while developing a portfolio of Metal Arts work. Students are expected to produce work of high quality and quantity. Additionally, homework and research are expected.

## Advanced Metal Arts 5 H

Length/credit: $\quad 1$ year -1.0 credit
Grade: 12
Prerequisite: It is recommended that interested students successfully complete Advanced Metal Arts 4.
Course Number: 06021103
At this level students continue to develop and advance their skills within their chosen metals concentrations while developing a portfolio of advanced metal arts work. Students are expected to produce work of high-level quality and quantity. Additionally, homework and research are expected.
Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisites:

11, 12
It is recommended that interested students have successful completion of any LMSD art course and recommendation of the Department Chair. 06011004

Course Number:
The AP 2-D Art and Design course is an inquiry-based approach to learning about and making art. Students create a 2-D Art portfolio that demonstrates investigation of individually chosen ideas and concepts. Portfolios include works of art, process documentation, and written information about the work presented. Based on the body of artwork they create throughout the year, students choose to submit their work for evaluation in May as either an AP 2-D Art and Design portfolio (drawings, paintings, graphic designs, photography, collages, printmaking, etc.)-OR- an AP Drawing portfolio (drawings and paintings primarily focused on mark making). All students submitting portfolios for evaluation have the potential to earn college credit.

AP 3-D Art and Design
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
11, 12
Prerequisites:
It is recommended that interested students have successful completion of any LMSD art course and recommendation of the Department Chair.
Course Number: 06011104
The AP 3-D Art and Design course is an inquiry-based approach to learning about and making art and design. Students create a three-dimensional portfolio (such as metal arts, ceramics, sculpture, etc.) that demonstrates investigation of individually chosen ideas and concepts. Portfolios include works of art, process documentation, and written information about the work presented. In May, students submit portfolios for evaluation that allow students to earn college credit.

## International Baccalaureate Visual Arts Classes

International Baccalaureate Visual Arts Class Sequence:<br>IB Visual Arts SL-or- IB Visual<br>Arts HL Part 1 (Year 1) IB<br>Visual Art HL Part 2 (Year 2)<br>*It is not necessary to be a member of the IB Program to take the IB art classes.

| IB Visual Arts-SL | (offered at Harriton High School only) |
| :---: | :--- |
| Length/Credit: | 1 year -1.0 credit |
| Grade(s): | 11,12 |
| Course Number: | 06080105 |

This single-year course consists of $70 \%$ studio work and $30 \%$ homework in a research workbook. This course is designed to meet the needs of students who, as part of their studies, wish to further their understanding of the arts and how they impact on their lives and their futures. IB Visual Arts is also for more advanced students who wish to continue developing a portfolio with the intention of attending art school or another institution of higher learning with an art major. This course provides all students with the opportunity to develop aesthetic, imaginative, and creative facilities; enables students to discover and enjoy means of creative visual expression; encourages the pursuit of quality; and provides an atmosphere conducive to individual experimentation. The students develop a portfolio of studio work as well as personal research workbooks and personal responses for assessment by an outside examiner. This course may also be taken by non-IB students. All students enrolled in this class are required to complete all International Baccalaureate assessments.

## IB Visual Arts-HL (Part 1) (offered at Harriton High School only) <br> Length/Credit: $\quad 1$ year -1.0 credit <br> Grade(s): 11, 12 <br> Course Number: 06080205

This course is the first half of the two-year Higher Level IB Visual Arts course and consists of 70\% studio work and $30 \%$ homework in a research workbook. This course is designed to meet the needs of students who, as part of their studies, wish to further their understanding of the arts and how they impact on their lives and their futures. IB Visual Arts is also for more advanced students who wish to continue developing a portfolio with the intention of attending art school or another institution of higher learning with an art major. This course provides all students with the opportunity to develop aesthetic, imaginative, and creative facilities; enables students to discover and enjoy means of creative visual expression; encourages the pursuit of quality; and provides an atmosphere conducive to individual experimentation. The students develop a portfolio of studio work as well as personal research workbooks and personal responses for assessment by an outside examiner. This course may also be taken by non-IB students. Please note that taking Part 1 does not guarantee that Part 2 will fit into your schedule. All students enrolled in this class are required to complete all International Baccalaureate assessments.

| IB Visual Arts-HL (Part 2) (offered at Harriton High School only) |  |
| :--- | :--- |
| Length/Credit: | 1 year - 1.0 credit |
| Grade(s): | 12 |
| Course Number: | 06080305 |
| This course is the second half of the two-year Higher Level IB Visual Arts course and consists of |  |
| $70 \%$ studio work and $30 \%$ homework in a research workbook. This course is designed to meet the |  |
| needs of students who, as part of their studies, wish to further their understanding of the arts and how |  |
| they impact on their lives and their futures. IB Visual Arts is also for more advanced students who |  |
| wish to continue developing a portfolio with the intention of attending art school or another |  |
| institution of higher learning with an art major. This course provides all students with the opportunity |  |
| to develop aesthetic, imaginative, and creative facilities; enables students to discover and enjoy |  |
| means of creative visual expression; encourages the pursuit of quality; and provides an atmosphere |  |
| conducive to individual experimentation. The students develop a portfolio of studio work as well as |  |
| personal research. All students enrolled in this class are required to complete all International |  |
| Baccalaureate assessments. |  |

## Business, Computer, and Information Technology

## Foundations of Business

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 09010100
Foundations of Business introduces students to the world of business, including the concepts, functions, and skills required to be successful in a twenty-first century business. Students will engage with a variety of topics including: business management, entrepreneurship and business ownership, marketing fundamentals, accounting, business ethics and law and human resources. The course will allow students to develop business vocabulary while gaining a complete understanding and appreciation of how these fundamental aspects work together in business.

## Entrepreneurship

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 09010200
The Entrepreneurship class helps students understand what it is like to be an entrepreneur and the risks involved in starting and operating a business enterprise. Active learning strategies are utilized in this course to provide students experience in applying their knowledge in the context of real life business scenarios. This course allows students the latitude to explore their individual business interests by applying the content taught to develop a comprehensive business plan which includes description of business, marketing, management and finance sections for an innovative product or service of their choice. The course is a prerequisite and prepares students to implement a business plan in Advanced Entrepreneurship.

## Advanced Entrepreneurship

| Length/Credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Prerequisite: | Entrepreneurship |
| Course Number: | 09010600 |

The Advanced Entrepreneurship class provides students with the opportunity to implement a business plan and challenges them to start an entrepreneur venture while still in high school. The creative and problem-solving skills taught in the Advanced Entrepreneurship course enhances the knowledge gained in the other business courses. Students have the opportunity to develop practical skill sets (i.e. marketing and advertising, communication, accounting, finance, and management) that will foster success in current and future ventures.

## Sport and Entertainment Marketing

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 09100400 |

Sport and Entertainment Marketing takes students on a step-by-step journey through the world of marketing. Students encounter and learn about the key functions of marketing and how those functions are applied to sports and entertainment. Students develop a thorough understanding of the marketing concepts and theories that apply to sports and events. The course content is based on business and marketing topics including communication skills, distribution, marketing-information management, pricing, product/service management, promotion, selling, operations, strategic management, and human resource management. This course includes a business simulation directly related to sports and entertainment marketing.

Video Production
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 09020400
Students develop skills, knowledge, and an appreciation of video production. Students view films in class with an eye on proper shot composition and camera angles. Students incorporate what they have learned in their own work and complete hands-on video production and post-production editing with Adobe Premiere Rush. Students are involved in activities such as planning, storyboarding, set design, filming, and editing to produce a variety of products including video montage, music videos, commercials, movie trailers, interviews and highlight films.

## Advanced Video Production

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: Video Production
Course Number: 09020500
Advanced Video Production provides students with the opportunity to build upon the skills \& knowledge gained throughout the video production course. This course allows students to develop advanced skills using Adobe Premiere Pro and Adobe After Effects as well as studio level equipment. Students incorporate these new skills, such as CGI, to create more advanced video projects. Students identify a particular area of interest i.e., documentary, short film, music video, and pursue it in greater detail.

Television Broadcasting
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
10, 11, 12
Advanced Video Production or by permission. 09020600
Course Number
Television Broadcasting is a year-long course building upon the skills acquired in previous video production classes. Students enrolled in this course work collaboratively as members of production teams on numerous projects which will air on the Lower Merion School District's educational channel LMSDtv. These projects will focus on sports, student life, and entertainment. Students rotate assignments as camera operators, directors, talent, writers, and video editors. This course requires substantial responsibility on the part of the student.

## Multimedia and Web Design

Length/credit: 1 semester -0.5 credit
Grade(s): 9,10,11, 12
Course Number: 09020200
Students learn how to design and create spectacular web pages and web sites using web design software. Students learn basic HTML, and explore Adobe Dreamweaver to learn how to add content, structure, style, images, video and social media to a webpage. Students are able to build effective and creative web pages while developing skills that are essential to achieve academic, business, and personal objectives.

## Community Based Learning

Community Based Learning is a form of instruction that takes place in the "real world" and where a student learns by doing. This means that students can earn credit exploring careers and interests, working in a paid position, or doing community service. The student's individual experience serves as the primary content for Educational Field Experience, Cooperative Work Program, and Community Service Learning. All of the Community Based Learning programs are excellent preparation and assistance for the senior project, as well as for future college and work opportunities. Students secure a service placement, internship, or a work position at a site with a supervisor. The program coordinator must approve any summer hours that the student might have an opportunity to complete, and that approval must be made in the spring prior to beginning the course.

## Work Experience

Length: 1 year
1 credit (requires 120 hours of work)
0.5 credit (requires 60 hours of work)

Grade(s):
10, 11, 12
Course Number:
15110200
This course is designed for students who want to use their jobs as a learning experience for academic credit. Major topics include forming healthy work relationships, personal integrity, ethics in the workplace, networking, interviewing, understanding your work environment, and career exploration. Students must also attend scheduled seminar meetings. The work program helps with college and career direction as well as contacts for your senior project. No summer hours are offered.

## IMPORTANT FACTS:

- Work hours can be done during or after school time.
- Students must be actively on the job for most of each quarter in order to receive credit for that quarter.

Legal Provisions
Students in the Cooperative Work Program are required to comply with the regulations established by the Commonwealth of Pennsylvania regarding employment. The rules are shown on the Application for Work Permit (PDE-4565).

Grade(s): $\quad 10,11,12$
Course Number: 12020110
This program offers an internship in the "real world" for academic credit. An internship (non-paid) is an opportunity to explore a career interest and have a unique and individualized high school experience. Non-paid internships are attractive to many professional settings, and they benefit the student by allowing the possibility of securing "hard to get" experiences. Completing an internship makes you more competitive in the college and job market. Students must also attend scheduled seminar meetings. This program often leads to contacts for your senior project.
IMPORTANT FACTS:

- Students may complete up to half of the required hours for the coming school year during the summer.
- Placements must be pre-approved in the spring for summer hours to count.
- During the school year hours can be done during or after school and/on weekends.


## Educational Field Experience

Length/credit:
Grade(s):
Course Number:
12020100
This program offers an internship in the "real world" for academic credit. An internship is an opportunity for a student to explore a career interest and have a unique and individualized high school experience. Doing an internship makes a student more competitive in the college and job market. Students are required to participate in online academic activities as part of this course and must also attend scheduled seminar meetings. Seminar dates are posted on the student's academic schedule. This program often leads to contacts for the senior project.
IMPORTANT FACTS:

- Students may complete up to half of the required hours for the coming school year during the summer.
- Placements must be pre-approved in the spring for summer hours to count.
- During the school year hours can be done during or after school time and on weekends.
- Students must meet with the coordinator either in seminars or individually.
- Attendance at seminars or individually scheduled meetings is mandatory.
- Job shadowing days are offered for hours.


## Community Service Learning

| Length/credit: | 1 year -1.0 credit ( 120 hours) |
| :--- | :--- |
|  | 1 semester -0.5 credit ( 60 hours) |
| Grade(s): | $10,11,12$ |
| Course Number: | 12010110,12010100 |

How can one person make a difference in the world? How can a person learn more about the world outside of school? How can a student get involved in a service project? By signing up for the Community Service course, students have the opportunity to answer these and many other important questions while participating in a service project of choice. Students are required to participate in online academic activities as part of this course and must also attend scheduled seminar meetings. Seminar dates are posted on the student's academic schedule. Students use reflection, individual conferencing, and group discussions to facilitate learning. The program coordinator must approve all sites. This course may be taken twice for a total of one credit. It is offered Pass/Fail only.

## COMPONENTS OF PROGRAMS:

- hours accumulated
- seminar attendance
- individual conferences
- completion of assignments
- evaluation of site supervisor
- guest speaker opportunities

Senior Project
Length/credit: $\quad 1$ semester -0.5 credit
Grade: 12
Course Number: 12040100
A Lower Merion School District Senior Project is completed by every graduate. The project is a selfdirected, investigative exploration of a topic of interest to the individual student. Each senior meets with a faculty advisor from January through April. During these meetings, students develop a research proposal, plan the experimental learning phase (ELP), and complete a reflective paper to be submitted the first week of May. An extended period of independent time is used by each student for intense focus on the ELP and preparation of a presentation. Seniors earn 0.5 of credit for the Senior Project. Each senior earns a grade of "P" or "F" for each of the following: third quarter, fourth quarter, and the final presentation. The student must pass at least two of these grading periods to earn an overall passing grade of "P" for the Senior Project.

## English

## English Requirements

English is a required course in each year of high school: English 1 is required in the freshman year. English 2 is required in the sophomore year. Junior and senior students have a choice of different courses among the following full-year English course options: Film and Literature; Heroes and Monsters: Classic British Literature; Modern and Contemporary Literature; Reading and Writing Non-Fiction; Voices in African-American Literature; Sport in Literature and Non-Fiction; AP Language and Composition; or AP Literature and Composition. All courses include work in vocabulary, reading, grammar, writing, speaking, and listening. The completion of multiple guaranteed writing experiences, one of which is a research paper, is a requirement of each full-year course. A minimum of one credit of English is required each year.

The English Department faculty recommends that students consider the differences between honors level and college preparatory level courses before final course selection. Courses designated honors level require students to hone their reading and writing skills with a higher degree of independence and with increasingly complex texts and tasks. In honors level courses, students read one or two additional texts, as compared to college preparatory level courses. The texts and essay assignments are also typically more challenging and expected to be completed with a higher degree of independence.

All full-year literature courses include a required summer reading component because the Department believes:

- Reading should be a part of every student's daily life.
- Reading improves writing, deepens comprehension, builds background knowledge, and expands vocabulary.
- Summer provides time for students to enjoy uninterrupted reading.
- Summer reading allows students to thoughtfully digest the literary texts they will discuss during the opening weeks of school.
Students should be prepared both to write about summer reading selections and to discuss these texts in class during the opening weeks of school.


## English 1

Length/credit: $\quad 1$ year -1.0 credit
Grade: 9
Course Number: 01010202
This course explores how story and language are impacted by social, cultural, and historic context and highlights a responsibility to advocate for oneself and for others. While students' experiences are balanced between reading and writing, writing as an act of thinking is a core tenet of the course, with students developing independence in writing by articulating their ideas in a variety of modes. A course aim is for students to improve their writing, reading, and thinking rather than merely completing assignments. The class provides an exposure to a variety of genres-in the process sometimes challenging genre definitions. In addition, the texts offer varied authorial and cultural experiences, which enable students to gain insight into their role and responsibilities within "a community" in local and global contexts. Students examine how stories-through a variety of interpretations-reflect and shape communities. Additionally, the course encourages students to impact the societies in which they live through writing, reading, speaking, listening, and reflecting.

## English 1 H

Length/credit: $\quad 1$ year -1.0 credit
Grade:
Course Number:
9
This course explores how story and language are impacted by social, cultural, and historic context and highlights a responsibility to advocate for oneself and for others. While students' experiences are balanced between reading and writing, writing as an act of thinking is a core tenet of the course, with students developing independence in writing by articulating their ideas in a variety of modes. A course aim is for students to improve their writing, reading, and thinking rather than merely completing assignments. The class provides an exposure to a variety of genres-in the process sometimes challenging genre definitions. In addition, the texts offer varied authorial and cultural experiences, which enable students to gain insight into their role and responsibilities within "a community" in local and global contexts. Students examine how stories-through a variety of interpretations-reflect and shape communities. Additionally, the course encourages students to impact the societies in which they live through writing, reading, speaking, listening, and reflecting. At the honors level, a high degree of inferencing is required. Due to the demands of reading and writing independently, students should have strong motivation, highly developed organization and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level.

## English 2

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade: | 10 |
| Course Number: | 01020202 |

This course focuses on the study of canonical and contemporary American literature and the rhetorical analysis of non-fiction texts by American authors. The course is guided by three central questions: What is American literature? How does American literature reflect and challenge ideas about American identity? How does American literature reflect and challenge evolving definitions of the American Dream? As is the case in English 1, writing as an act of thinking is a core tenet of the course and learners are expected to hone their writing, reading, and thinking rather than merely completing assignments.
**The Keystone Literature Exam is given every May. Students enrolled in English 2 or English 2 Honors take the Keystone Literature Exam at that time.

## English 2 H

Length/credit: $\quad 1$ year -1.0 credit
Grade: 10
Course Number: 01020302
This course focuses on the study of canonical and contemporary American literature and the rhetorical analysis of non-fiction texts by American authors. The course is guided by three central questions: What is American literature? How does American literature reflect and challenge ideas about American identity? How does American literature reflect and challenge evolving definitions of the American Dream? As is the case in English 1, writing as an act of thinking is a core tenet of the course and learners are expected to hone their writing, reading, and thinking rather than merely completing assignments. Students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level. Students should be prepared for in-depth study, both independently and cooperatively.
**The Keystone Literature Exam is given every May. Students enrolled in English 2 or English 2 Honors take the Keystone Literature Exam at that time.

## Film and Literature or

Film and Literature H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11, 12

Prerequisite for Honors: It is recommended that interested students have grades of "A" or "B" in the previous year's Honors English course or an "A" in the previous year's College Preparatory English course.
Course Number: 01071002
Course Number H: 010710003
This course is centered between the study of film and the study of literature. This course focuses on developing understanding of and appreciation for film technique as well as honing close reading skills for analyzing an author's craft in literature. Students analyze multiple versions of a story, evaluating how a film version interprets a literary text. Students also consider various conventions, genre expectations and historical/cultural contexts for both the films and literature studied in the course. Students who take this course at the honors level are expected to demonstrate exceptional performance in written and oral expression, critical thinking, and inferencing skills. Additionally, students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level as well as the ability to engage with challenging texts independently and critically.

## Heroes and Monsters: Classic British Literature or

Heroes and Monsters: Classic British Literature H
Length/credit:
1 year - 1.0 credit
Grade:
11, 12
Prerequisite for Honors: It is recommended that interested students have grades of "A" or "B" in the previous year's Honors English course or an "A" in the previous year's College Preparatory English course.
Course Number: 01049102
Course Number H: 01049103
This course explores British literature's most profound, timeless, and engaging texts. Students analyze and discuss how heroes experience both courage and weakness when tested by external and internal "monsters." Students also examine cultural and historical influences on authors as well as trace the development of the English language over time. The journey begins in the 11th century and ends in contemporary times. The course challenges students to read and write critically and to pursue their personal curiosity through inquiry. Students who take this course at the honors level are expected to demonstrate exceptional performance in written and oral expression, critical thinking, and inferencing skills. Additionally, students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level as well as the ability to engage with challenging texts independently and critically.

## Modern and Contemporary Literature or

## Modern and Contemporary Literature H

Length/credit:
Grade:
1 year - 1.0 credit
11, 12
Prerequisite for Honors: It is recommended that interested students have grades of "A" or "B" in the previous year's Honors English course or an "A" in the previous year's College Preparatory English course.
Course Number: 01040222
Course Number H: 01040223

This course examines modern, worldwide literary texts drawn from a culturally and ethnically diverse collection of texts to gain insight into the role of literature as an expression of a society's values or as a challenge to the status quo. In addition to the major works covered, the course includes units on poetry, the short story, and independent reading. The teaching of writing is incorporated into the content. Students who take this course at the honors level are expected to demonstrate exceptional performance in written and oral expression, critical thinking, and inferencing skills. Additionally, students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level as well as the ability to engage with challenging texts independently and critically.

## Reading and Writing Non-Fiction or <br> Reading and Writing Non-Fiction H

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade: | 11,12 |

Prerequisite for Honors: It is recommended that interested students have grades of "A" or "B" in the previous year's Honors English course or an " $A$ " in the previous year's College Preparatory English course.
Course Number: 01040232
Course Number H: 01040233
Students in this course read and carefully analyze a challenging range of nonfiction prose selections, as well as digital and visual texts, to deepen their awareness of rhetoric, argument, and linguistics. Specific genres studied include memoir, literary nonfiction, social commentary and extended argument, and audiovisual documentaries. Through close reading and writing in diverse modes, including a research project, students develop their ability to understand texts with a greater awareness of audience, purpose, and strategy, while strengthening their own composition skills. Students learn to apply these strategies to visual and digital texts. In light of the documentary unit included in this course, it is recommended, although not required, that students consider taking a one-semester Art elective in either Film/Photography or Communication Design. Both courses support the creation of more sophisticated documentaries, which is one of the major assignments in this course. Students who take this course at the honors level are expected to demonstrate exceptional performance in written and oral expression, critical thinking, and inferencing skills. Additionally, students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level as well as the ability to engage with challenging texts independently and critically.

```
Sport in Literature and Non-Fiction or
Sport in Literature and Non-Fiction H
    Length/credit: 1 year - 1.0 credit
    Grade(s): 11,12
    Prerequisite for Honors: It is recommended that interested students have grades of "A" or "B"
    in the previous year's Honors English course or an "A" in the
    previous year's College Preparatory English course.
    Course Number: 01070802
    Course Number H: 01070803
This literature-based and inquiry-focused course explores the ways that sports shape culture as well as how culture shapes the perception and reality of sports. Students explore works of literature as well as non-fiction pieces focused on high interest, self-selected and teacher-selected topics. Students are encouraged to make interdisciplinary connections in response to the literary texts and literature they study. Students who take this course at the honors level are expected to demonstrate exceptional performance in written and oral expression, critical thinking, and inferencing skills. Additionally, students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level as well as the ability to engage with challenging texts independently and critically.
```


## Voices in African-American Literature or <br> Voices in African-American Literature H <br> Length/credit: $\quad 1$ year -1.0 credit <br> Grade(s): 11,12

```
Prerequisite for Honors: It is recommended that interested students have grades of "A" or "B" in the previous year's Honors English course or an " \(A\) " in the previous year's College Preparatory English course.
Course Number: 01070902
Course Number H: 01070903
Students in this course study works by African-American authors through the lens of contemporary issues related to race, culture, and identity in literature. This includes topics such as how literary characters and themes in African-American literary works are shaped by gender, race, and/or class experiences and expectations. It also includes opportunities for students to consider how their lived experiences impact the reading of course text as well as how the lived experiences of AfricanAmerican authors influence the writing of text. Students who take this course at the honors level are expected to demonstrate exceptional performance in written and oral expression, critical thinking, and inferencing skills. Additionally, students should have strong motivation, highly developed organizational and study skills, and the maturity to discuss literature on an abstract, figurative, and critical level as well as the ability to engage with challenging texts independently and critically.
```


## AP English Language and Composition

Length/credit: $\quad 1$ year -1.0 credit
Grade: $\quad 11,12$
Prerequisite: It is recommended that interested students have grades of "A" or "B" previous English Honors courses and the recommendation of 10th grade teacher.
Course Number: 01030404
Advanced Placement Language and Composition uses close analysis of language, rhetorical strategy, and literary method to elevate reading and writing to a level expected in many first-year college courses. The curriculum examines prose from diverse periods and contexts and helps students grow in their understanding of the interplay between audience, purpose, and the resources of language and argument. The reading focuses mostly on non-fiction prose but does include analysis of literary and visual texts. Students write for diverse purposes, with increased attention to the role of research and synthesis in composing arguments. Timed in-class writing is a prominent but not a controlling aspect of the class. Students must be highly motivated and self-directed learners who are able to navigate complexity and to infer meaning with independence. Finally, the course assumes that students have control of standard written grammar, usage, and stylistic norms; this foundation is necessary for the advanced study of language that can help students progress towards stylistic maturity in their prose.

## AP English Literature and Composition

Length/credit: $\quad 1$ year -1.0 credit
Grade: 11, 12
Prerequisite: It is recommended that interested students have grades of "A" or "B" in all previous 9th, 10th, 11th grade English Honors or a grade of "A" or "B" in previous AP courses and a recommendation from the sending teacher.
Course Number: 01040404
Advanced Placement English Literature and Composition engages students in the careful, deliberate reading and critical analysis of imaginative literature. Through the close reading of selected texts, students deepen their understanding of the ways fiction writers and poets use language to provide both meaning and stylistic appreciation. Students examine style, structure, and themes as well as the use of figurative language and inferences leading to interpretive conclusions about a work's meaning and value. Writing is an integral part of the course, and students focus on the critical analysis of literature including expository, analytical, and argumentative essays. The goal of writing in AP Literature is to increase a student's ability to explain clearly, cogently, even elegantly, what they understand about literary works and why they interpret them as they do. This course is taught at the college level and is designed to give students a critical and scholarly perspective in the analysis of challenging literature. Advanced Placement English Literature examines concurrent themes in a selection of American, British, and European literature as determined by the AP canon. Timed inclass writing is a prominent but not controlling aspect of the class.

## English Electives

Students may select from the following elective English courses in addition to required English courses.

## Creative Writing or Creative Writing H

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 10,11,12$
Prerequisite: It is recommended that interested students for H only have a grade of "A" or "B" in previous Honors English courses, an "A" in previous College Preparatory English courses and current teacher recommendation.
Course Number: 01050102
Course Number H: 01050203
Creative writing explores various creative literary forms including the short story, poem, essay, and one-act play, stressing the development of a student's individual style. Students study various authors' methods and examine such techniques as plot progression, theme development, and creation of mood and atmosphere. Students explore the rich legacy of writers before them as they develop or increase their awareness of image, voice, character, setting, and story. Students read extensively from other writers as they apply that awareness in writing in a variety of forms within the genre of essay, fiction, nonfiction, poetry and drama. Students work closely in a workshop atmosphere, exchanging and critiquing the work of all group members. This course can be taken for college preparatory or honors credit. Assessments are designed accordingly. Decisions regarding credit level must be made when signing up for the course and may not be changed.

Journalism or Journalism H
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 10, 11, 12
Course Number: 01050302
Course Number H: 01050403
Students learn writing styles and skills required in journalism. Classroom activities and assignments focus on writing for news, sports, feature opinion/editorial, and arts and entertainment pages. Along with learning the skills required to research and report news, students also study the history of the media and journalistic ethics. Students learn about the commercial and economic dynamics of the news media. The course examines the continual growth of electronic media and how technology affects the content and delivery of information. This course can be taken for college preparatory or honors credit. Assessments will be designed accordingly. Decisions regarding credit level must be made when signing up for the course and may not be changed.

| IB Theatre SL | (offered at Harriton High School only) |
| :--- | :--- |
| Length/credit: | 3 periods per cycle, 1 year -1.0 credit |
| Grade(s): | 11,12 |
| Course Number: | 01061005 |

This IB Theatre course consists of a multifaceted curriculum that engages students in the processes of creating, researching, presenting, and critically reflecting on theatre as participants and audience members. Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices and their processes. The course promotes international mindedness and enables students to discover and engage with different forms of theatre across time, place and culture. The theatre core syllabus for IB Theatre HL and IB Theatre SL consist of three interrelated areas: Theatre in Context, which explores the various contexts of theatre and how they inform practice; Theatre Processes, in which students engage in the processes of transforming ideas into action; and Presenting Theatre, where students develop and apply theatre production, presentation and performance skills, working both independently and collaboratively. Assessment pieces include examining a play text, creating original theatre, and exploring performance practices from around the world. This course may also be taken by non-IB students. All students enrolled in this class are required to complete all International Baccalaureate assessments.

IB Theatre HL (Part 1) (offered at Harriton High School only)
Length/credit: $\quad 3$ periods per cycle, 1 year -1.0 credit
Grade(s): 11,12
Course Number: 01061105
This is the first year of the two-year IB Theatre HL course. The IB Theatre course consists of a multifaceted curriculum that engages students in the processes of creating, researching, presenting, and critically reflecting on theatre as participants and audience members. Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices and their processes. The course promotes international mindedness and enables students to discover and engage with different forms of theatre across time, place, and culture. The theatre core syllabus for IB Theatre HL and IB Theatre SL consists of three interrelated areas: Theatre in Context, which explores the various contexts of theatre and how they inform practice; Theatre Processes, in which students engage in the processes of transforming ideas into Action; and Presenting Theatre, where students develop and apply theatre production, presentation, and performance skills, working both independently and collaboratively. Assessment pieces include examining a play text, creating original theatre, and exploring performance practices from around the world. This course may also be taken by non-IB students. All students enrolled in this class are required to complete all International Baccalaureate assessments.

IB Theatre HL (Part 2)
Length/credit:
Grade(s):
Prerequisite:
Course Number:
(offered at Harriton High School only)
3 periods per cycle, 1 year - 1.0 credit
11, 12
Theatre HL (Part 1)
01061205

This is the second year of the two-year IB Theatre HL course. The IB Theatre HL course consists of a multifaceted curriculum that engages students in the processes of creating, researching, presenting, and critically reflecting on theatre as participants and audience members. Through the study of theatre, students become aware of their own personal and cultural perspectives, developing an appreciation of the diversity of theatre practices and their processes. The course promotes international mindedness and enables students to discover and engage with different forms of theatre across time, place, and culture. The theatre core syllabus for IB Theatre HL and IB Theatre SL consist of three interrelated areas: Theatre in Context, which explores the various contexts of theatre and how they inform practice; Theatre Processes, in which students engage in the processes of transforming ideas into action; and Presenting Theatre, where students develop and apply theatre production, presentation and performance skills, working both independently and collaboratively. Assessment pieces include examining a play text, creating original theatre, and exploring performance practices from around the world. This course may also be taken by non-IB students. All students enrolled in this class are required to complete all International Baccalaureate assessments.

## Literacy Support Courses

This reading curriculum is designed for students who benefit from additional support in their comprehension and analysis of text. This curriculum includes services that support the development of students' literacy practices within and across academic contexts, providing them the support they need to develop as readers and writers. These courses are taken concurrently with the student's English course.

## Literacy Lab

Length/credit:
Grade(s):
1 year ( 1 or 2 times per cycle) 0.33 credit
Course Number:
9, 10, 11, 12
14070100
This course provides a small group setting in which students gain enrichment and reinforcement in analytical reading and writing skills to assist them in meeting literacy expectations across the curriculum. Students are recommended based on performance data (including but not limited to PSSA, Keystone, DRP) and teacher recommendation.

## Literature Lab

Length/credit: $\quad 1$ year ( 1 time per cycle) 0.33 credit
Grade:
10
Course Number: 14070200
This course provides a small group setting in which students gain enrichment and reinforcement in analytical reading and writing skills for mastery of common core literacy standards and success on the Keystone Literature Exam. Students are recommended based on performance data (including but not limited to PSSA, Keystone, DRP) and teacher recommendation.

Keystone Literature Lab
Length/credit: $\quad 1$ year ( 1 time per cycle) 0.33 credit
Grade:
11
Course Number: 14070300
This course is designed to support students who may benefit from extra, individualized support to achieve or surpass literacy standards. Students engage in skill remediation as they prepare to retake the Keystone Literature Exam.

## English Language Development

The ELD program is offered to non-native English speaking students with Limited English Proficiency (LEP). The ELD curriculum is flexible and based on the needs of the learners in the program and focuses on developing reading, writing, speaking, and listening skills. The course is designed to provide students with language experiences and familiarity with the structure of English, including: phonology, morphology, syntax, semantics, and pragmatics. Students exit the ELD program upon meeting the Pennsylvania State mandated criteria.

English Language Development 1 (ELD 1)
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: ELD assessment and staff recommendation.
Course Number: 13010100
ELD 1 is offered for up to two sets for secondary students with Limited English Proficiency. ELD 1 focuses on developing oral and written communication skills while building general and academic vocabulary.

English Language Development 2 (ELD 2)
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: ELD 1 and/or staff recommendation and an ELD assessment.
Course Number: 13010200
ELD 2 students understand and speak conversational English, but continue to require support to meet grade level expectations for content courses. The ELD 2 curriculum is based on the learners' needs with a focus on developing academic language and skills. Vocabulary, syntax, and grammar necessary for understanding content class materials are presented and practiced in context.

English Language Development 3 (ELD 3)
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: ELD 2 and/or staff recommendation and an ELD assessment.
Course Number: 13010400
ELD 3 students are nearing proficiency in the four domains of English language development: reading, writing, listening, and speaking. The ELD curriculum focuses on mastering academic language as well as honing academic skills that are needed to be successful beyond the ELD classroom. Literary analysis, writing conventions, and vocabulary development are the primary focal areas of the course.

## Family and Consumer Science

## Foods and Nutrition 1

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 11020100
This course focuses on students making food choices that ensure good nutrition according to the "MyPlate" food guide. Students will learn safe and sanitary food handling practices, proper storage, and cooking techniques while preparing food from the five parts of the plate: grains, vegetables, fruits, dairy, and meats/protein. Students learn the fundamentals of baking, including proper measuring and the function of ingredients. This course is focused on a hands on approach in the food lab.

## Foods and Nutrition 2

Length/credit: $\quad 1$ semester -0.5 credit
Grades: $\quad 9,10,11,12$
Prerequisite: $\quad$ Foods and Nutrition 1
Course Number: 11020300
This course builds on the foundation from Foods and Nutrition 1. Students prepare a variety of recipes including appetizers, soups, stocks, salads, entrees, and desserts to further explore food preparation techniques. Students experiment with altering recipes in cooking and baking to enhance the nutrient profile of the dish. Students also explore current food trends and the impact of food in our rapidly changing world.

## Baking and Confections

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 11020400
This course is intended for students who wish to further their exploration of baking and candy making techniques. Students are given the opportunity to examine the science behind various baking methods to learn that baking is as much a science as an art. Baking and Confections encourages students to use their artistic and imaginative skills to individualize food products through decorating, plating, and garnishing. Recipes include selections from: quick and yeast breads, cakes/cupcakes, icings, candy and chocolate, pies and tarts, cookies, custards, fruit desserts, frozen desserts, and dessert sauces. Lecture, assignments, student cooking labs, streaming tutorials, and teacher demonstrations provide for an introduction to the pastry kitchen.

## Global Foods

Length/credit:
Grade(s):
Prerequisite:
Course Number:
11020200
This course is primarily a study of regional and international cuisine. Students learn safe and sanitary food handling practices, proper storage, and cooking techniques while preparing dishes from around the world. This course is focused on a hands on approach in the food lab.

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 11040100 |

Students develop an understanding of the characteristics of fibers and fabrics. Students will construct and alter textile products and apparel. Projects are selected based on student's preferences and levels of proficiency.

## Advanced Textiles and Clothing

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: Textiles and Clothing
Course Number: 11040200
In this course, students further develop skills from the Textiles and Clothing course by creating custom designed projects. They develop an understanding of the basic components of fashion merchandising and retailing.

## Personal Finance/Consumer Education

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 11010100
This course prepares students to analyze choices and develop tools to make wise decisions in future financial planning. Students use a variety of on-line and print resources to develop knowledge and skills relative to managing individual resources, consumer rights and responsibilities, consumer advocacy and technology available for consumers. Careers, paychecks, budgets, housing, insurance, purchasing a car, investments and the stock market are explored in this course. Community resources will enhance students' understanding of content.

## Child Development

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 11030100
In this course students experience a comprehensive study of children from birth to age 5. Emphasis is placed on the physical, social, emotional and cognitive development of children in a local day care. A major emphasis is placed on brain development, learning environments, health concerns and positive interaction with children. Students visit an off-campus nursery school each week, develop projects for class and the day care center plus participate in class discussions.

## Health and Physical Education

## Health

Length/credit: $\quad 1$ year -0.667 credit
Grade(s): 10, 11, 12
Course Number: 08050200
In this required course for all students in 10th grade, emphasis is placed on conceptual learning in the areas of personal health and wellness. The areas of study are: an introduction to health, personality development, human development, effects of narcotics/alcohol/tobacco, addictions, AIDS, sexually transmitted diseases, nutrition, human sexuality, mental and emotional health, and values/decision making. The purpose of the course is to help students recognize the mental, social, and physical health issues they face during life and to promote strong, positive attitudes toward self and others and good health decisions.

Sports Medicine
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 10, 11, 12
Course Number: 08100102
Students learn to assess injuries and apply injury management techniques to assist the healing of body tissues. Some of the class time will be spent in the athletic training room to explore different rehabilitation modalities and treatments.

## Physical Education Courses

## 9th Grade Physical Education

Length/credit:

Grade:
Course Numbers: 08110100, 08110200

This course is designed for students in 9th grade as an overview of the activities that are offered in the upper levels. It focuses on both individual and team games and sports. Students receive instruction in basic skills and strategies. In addition, this course focuses on teaching personal and social responsibility by emphasizing sportsmanship, leadership, and teamwork.

6 semesters (2 semesters per year-one per semester)
$0.167-0.33$ credit (must take for three years)

Grades: $10,11,12$ select from the activities below.

The purpose of physical education is to develop motor fitness, skill experiences, and knowledge that assist in improving and prolonging students' physical health. Students have the opportunity to participate in strength training, conditioning exercises as well as numerous team and individual activities. The fundamental goals are to help students improve their physical condition, to develop life-long habits of participation in physical activity, and to learn principles of physical conditioning. All students are required to schedule Physical Education each year.

## Physical Education Activities Available at Harriton and Lower Merion High Schools

Grades 10, 11, 12

## FIRST AID AND C.P.R.

Course Number: Fall Session: 08010280
Course Number: Spring Session: 08010380
This course is open to any student who is interested in a complete first aid course, which includes cardiopulmonary resuscitation. American Red Cross certification is granted to those who complete the course successfully. A nominal fee may be collected from each student to offset the cost of materials.

## Pilates

Course Number: Fall Session: 08010260
Course Number: Spring Session: 08010360
Designed to introduce students to the basic postures, breathing techniques, and relaxation methods of yoga and Pilates. Students begin to practice and experience the benefits of stretching, movement, and breath in an effort to practice these skills and learn to relax, relieve stress and improve their personal fitness.

## RACQUET SPORTS

Course Number: Fall Session: 08010270
Course Number: Spring Session: 08010370
Designed for students to learn and participate in skills and activities used for paddle and racquet games. Students begin by learning the basic skills needed to strike an object using paddles and racquets. As the students become more skilled, they begin incorporating the skills and strategies into team play to accomplish goals set by themselves and the teacher at the beginning of the course. The skills learned in this course are skills that can be incorporated in activities throughout their lifetime. Games such as tennis, racquetball, badminton, pickleball, and table tennis are all games that require the skills and strategies that are taught throughout this course.

## Self Defense

Course Number: Fall Session: 08010230
Course Number: Spring Session: 08010330
You may only take this course one time during your four years. Designed to make you more aware, prepared, and ready for any situation that you may need to protect yourself. Students learn selfprotection, evading and escaping techniques. This course is designed to teach empowerment, so each of the students has the confidence to protect and to defend him/herself. The nature of self-defense should be calming and reassuring.

## Strength Training

Course Number: Fall Session: 08010240
Course Number: Spring Session: 08010340
Weight training or resistance training is an exercise that utilizes progressive resistance movements, typically with free weights or weight machines, to build strength or muscle endurance. Body weight, resistance band, kettlebell exercises are also taught throughout the semester. Students assess their individual fitness level and use the results to develop a goal-oriented fitness program to follow throughout the semester.

## TEAM SPORTS

Course Number: Fall Session: 08010250
Course Number: Spring Session: 08010350
Designed for students who wish to participate in an advanced physical education experience that will focus specifically on team games and sports. Students receive instruction in advanced skills and strategies to participate in invasion games, such as flag-football, basketball, tchoukball, ultimate frisbee, and floor hockey, and striking games, such as whiffle ball, and soccer. In addition, this course will focus on teaching personal and social responsibility by emphasizing sportsmanship, leadership and teamwork.
Fall Semester - Football, Basketball, and Tchoukball.
Spring Semester - Ultimate Frisbee, Soccer, Floor Hockey, Wiffleball/Harriton Ball and 4-way.

## Partners in Adaptive Physical Education

Length/credit 2 semesters per year -0.167 credit per semester
Grade(s): 10, 11, 12
Course Numbers: $\quad 08090500,08090600,08090700,08090510,08090610,08090710$
The purpose of this course is to allow students the opportunity to serve as peer trainers, peer coaches, peer leaders, and most importantly "peer partners" to our special needs population. As classmates and teammates, students without disabilities can take a leadership role and support students who need assistance with skills as mentors, but in a non-hierarchical environment of equality where they know that they can learn from those students as well. Students have the opportunity to adapt physical education activities/skills and develop excellent interpersonal communication skills, while working closely with a Physical Education Teacher. If you enjoy the Best Buddies program, you will love this class. Expect to learn patience, develop friendships, and care for others.

## Aquatics Courses at Lower Merion High School

Swimming Instruction (offered at Lower Merion High School only)
Length/credit: 1 semester -0.125 credit
Grade(s): 9,10, 11, 12
Course Number: 08070110
Open to any students who want to learn to swim or who desire to improve their present swimming ability.

| Lifeguard Training | (offered at Lower Merion High School only) |
| :--- | :--- |
| Length/credit: | 1 semester -0.125 credit |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 08080110 |

The student must be capable of swimming 500 yards continuously using the front crawl stroke, breaststroke and sidestroke for at least 100 yards each and then using a stroke of their choice for the remaining 200 yards. C.P.R. and first aid certification are included in the course. The American Red Cross Lifeguard Training Certification will be granted to those who successfully complete the course and are 15 years of age on or before the course completion date.

## Mathematics

## Course Sequences in Mathematics

While three credits of math at the high school level are required for graduation, students are recommended to enroll in math courses during all four years of high school as part of a well-rounded education in preparation for college and careers. A variety of math courses at the College Prep, Honors, AP, and IB level are offered to students. In addition, a number of support courses are offered to provide students with intervention and/or remediation in mathematics.

Courses labeled H (Honors) require that students be able to operate in an environment where both high degrees of independence and thoughtful collaboration are necessary. A prior demonstration of advanced mathematical reasoning and insight through a variety of measures and a record of high levels of achievement are indicators that a student is sufficiently prepared for the rigors of Honors level work. Appropriate formal mathematical and scientific language are used extensively.

## Calculator Philosophy

The mathematics department is committed to using graphing calculators and other forms of technology to enhance and facilitate student learning. Calculator usage is incorporated into the curriculum when such usage is appropriate and supportive of mathematical concept and/or skill development. Graphing calculators are used to compare and contrast the symbolic, numeric, and graphic nature of mathematical concepts and to solve more complex problems. Courses where calculators are used more frequently are clearly indicated in the course descriptions. Students enrolled in these courses will need a graphing calculator. The TI-84 is strongly recommended.

## Integrated Math 1 <br> Length/credit: $\quad 1$ year -1.0 credit <br> Grade(s): $\quad 9,10,11,12$ <br> Course Number: 03150102

This course is the first in a series of three integrated math courses and is designed to combine some of the basic principles of Algebra, Geometry, and Statistics. Students deepen and extend their understanding of linear relationships and are introduced to exponential functions, modeled through data. Students use properties and theorems involving congruent figures to expand and broaden understanding of geometric knowledge. Students experience mathematics as a coherent, useful, and logical subject that draws on their ability to make sense of problem situations, and develop the ability to explore and solve mathematical problems, think critically, work cooperatively with other students, and communicate mathematical ideas clearly.
Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite:
Course Number:
$9,10,11,12$
Successful completion of Integrated Math 1.
03150202

This course is the second in a series of three integrated math courses and is designed to develop an intermediate understanding of the principles of Algebra, Geometry, and Statistics. Students connect and extend topics from Integrated Math 1 and are introduced to Quadratic Functions, Similarity and Congruence, Circles, Basic Trigonometric Functions and Probability. Students experience mathematics as a coherent, useful, and logical subject that draws on their ability to make sense of problem situations, and further develop the ability to explore and solve mathematical problems, think critically, work cooperatively with other students, and communicate mathematical ideas clearly.
**The Keystone Algebra exam will be given every May. Students enrolled in Integrated Math 2 will take the Keystone exam at that time.

Integrated Math 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: Recommended "A" or "B" on assessments in Integrated Math 1.
Course Number: 03150403
This course is a faster-paced version of the second in a series of three integrated math courses and is designed to develop an intermediate understanding of the principles of Algebra, Geometry, and Statistics. Students connect and extend topics from Integrated Math 1 and are introduced to Quadratic Functions, Similarity and Congruence, Circles, Basic Trigonometric Functions and Probability. This version of the course will delve significantly deeper into the various topics and includes additional extension topics that are not part of the college preparatory version of Integrated Math 2. Students experience mathematics as a coherent, useful, and logical subject that draws on their ability to make sense of problem situations, and further develop the ability to explore and solve mathematical problems, think critically, work cooperatively with other students, and communicate mathematical ideas clearly.
**The Keystone Algebra exam will be given every May. Students enrolled in Integrated Math 2 will take the Keystone exam at that time.

## Integrated Math 3

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: $\quad$ Successful completion of Integrated Math 1 and 2.
Course Number: 03150302
This course completes the three-course series of integrated mathematics and is designed to extend and apply the principles of Algebra, Geometry, and Statistics learned in the previous two courses to more complex mathematical scenarios. Students expand earlier knowledge of linear, exponential, and quadratic functions to polynomials, rational functions, and trigonometric functions. Students also extend their previous work with circles to other conic sections, their understanding of trigonometry to all triangles, and experiences with data as they solve more sophisticated problems. Students experience mathematics as a coherent, useful, and logical subject that draws on their ability to make sense of problem situations, and further develop the ability to explore and solve mathematical problems, think critically, work cooperatively with other students, and communicate mathematical ideas clearly.

## Integrated Math 3 H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
$9,10,11,12$
Recommended "A" on assessments in Integrated Math 2 or " B " on assessments in Integrated Math 2 H .
Course Number: 03150503
This course is a faster-paced version of the final course in the three-course series of integrated mathematics and is designed to extend and apply the principles of Algebra, Geometry, and Statistics learned in the previous two courses to more complex mathematical scenarios. Students expand earlier knowledge of linear, exponential, and quadratic functions to polynomials, rational functions, and trigonometric functions. Students also extend their previous work with circles to other conic sections, their understanding of trigonometry to all triangles, and experiences with data as they solve more sophisticated problems. This version of the course will delve significantly deeper into the various topics and includes additional extension topics that are not part of the college preparatory version of Integrated Math 3. Students experience mathematics as a coherent, useful, and logical subject that draws on their ability to make sense of problem situations, and further develop the ability to explore and solve mathematical problems, think critically, work cooperatively with other students, and communicate mathematical ideas clearly.

## Math Support Courses

| Algebra Lab |  |
| :--- | :--- |
| Length/credit: | 1 year (1 time per cycle) 0.33 elective credit |
| Grade(s): | $9,10,11,12$ |
|  | Pass/Fail |
| Course Number: | 03010000 |

The purpose of this course is to provide once a cycle support to students in their study of mathematics as an intervention and preventative measure. It is a supplement to their regular Integrated Math class. Students are enrolled in Algebra Lab based on a variety of measures, including their most recent math PSSA results, benchmark assessment results, Keystone Algebra Exam results, overall grades in recent math courses, and teacher input/recommendation.

## Advanced Mathematics Courses

## Algebra 3-Trigonometry

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 11,12$
Prerequisite: $\quad$ Successful completion of Integrated Math 3.
Course Number: 03010602
This course is for students who need additional work with algebraic skills and who want to study the concepts of trigonometry. It cannot be taken after completing any course that includes trigonometry. The course will include the topics of linear and quadratic functions, polynomial functions, rational and irrational functions, and exponential and logarithmic functions. The trigonometry portion will include basic concepts, graphing of trigonometric functions, identities, triangle trigonometry including Law of Sines and Law of Cosines, and solving trigonometric functions. Concepts will be explored graphically, numerically, and symbolically. A TI-84 graphing calculator is required.

## Pre-Calculus

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
10, 11, 12
Prerequisite: Successful completion of Algebra 3-Trigonometry, Integrated Math 3 or Integrated Math 3 H .
Course Number: 03030102
This course includes extensive work with polynomial, rational, exponential, inverse, and logarithmic functions. Fundamental ideas of trigonometric functions (triangular and circular), trigonometric identities and formulas are developed. The processes involved in interpreting and evaluating functions are explored algebraically, graphically and with technology. Connections are made between functions and their practical applications throughout the course. A TI-84 graphing calculator is required.

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
10, 11, 12
It is recommended that students have a grade of "A" or " B " on assessments in Integrated Math 3 H .
Course Number: 03030203
This course includes extensive work in mathematical induction, trigonometry, circular, exponential, logarithmic and inverse functions, series, combinatorics, limits and derivatives. Calculus concepts are developed theoretically and include applications. Modeling is used extensively throughout the course. The algebraic, numeric, and graphic nature of topics are compared and contrasted to enhance and broaden comprehension. Group collaboration outside of the class is an essential part of the course. Successful completion of this course prepares students for Advanced Placement Calculus ( BC or AB ). A TI-84 graphing calculator is required. With some additional, independent work outside of the course, students can be prepared to take the Mathematics Level 2 SAT Subject Test in the spring.

## Financial Algebra

Length/credit:
Prerequisite:
Grade(s):
Course Number: 03140102
In Financial Algebra, students refine mathematical skills developed in previous courses in the context of financial topics. Mathematical skills include linear and quadratic equations, systems of equations, exponential and logarithmic functions, piecewise functions, descriptive statistics, probability, regression, and correlation. These mathematical skills are modeled through such topics as stock market, business applications, banking services, retirement planning, preparing a budget, and consumer credit. A TI-84 graphing calculator is required.

## Statistics

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11, 12
Prerequisite: $\quad$ Successful completion of Integrated Math 2 or Integrated Math 2 H.
Course Number:
03050102
This is a first course in statistics with an emphasis on both descriptive and inferential statistics, counting techniques, and probability. Experimental design along with correlation/regression techniques are also studied. Please note that this course may be taken concurrently with other advanced math courses following the successful completion of Integrated Math 2 or Integrated Math 2 H . A TI-84 graphing calculator is required.

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
10, 11, 12
It is recommended that students have a grade of "A" or "B" on assessments in Integrated Math 3 H or grade of "A" on assessments in Integrated Math 3.
Course Number: 03050204
This course is designed to prepare the student for the College Board's AP Statistics exam. Major themes include: exploratory data analysis, planning a study, probability, and statistical inference. Students should have an independent approach to learning with minimal need for guidance and assistance. Please note that this course may be taken concurrently with other advanced math courses, following the successful completion of Integrated Math 2 or Integrated Math 2 H with the recommended grade. A TI-84 graphing calculator is required.

## Calculus

Length/credit:
Grade(s):
Prerequisite:
Course Number:

This course is designed as a college preparatory course in the calculus of one variable. It begins with a review of functions and their graphs and continues with the study of limits, derivatives and their applications, Riemann sums, integration and applications of the definite integral. A TI-84 graphing calculator is required.

## AP Calculus AB

Length/credit:
1 year - 1.0 credit
Grade(s):
11, 12
Prerequisite:
It is recommended that students have a grade of "A" or "B" on assessments in Pre-Calculus H.
Course Number:
03060204
This course is the equivalent of a first semester college calculus course and prepares students to take the AP Calculus AB exam. Students who enroll in this class should be prepared for high levels of independent work and group collaboration outside of class. This course includes theory of limits, derivatives, the Fundamental Theorem of Calculus, definite and indefinite integrals and their applications. A TI-84 or higher graphing calculator is required.

## AP Calculus BC

Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite:

11, 12
It is recommended that students have a grade of "A" on assessments only in Pre-Calculus H or have successfully completed AP Calculus AB.
Course Number: 03060304
This course is planned for students who wish to complete a rigorous calculus course equivalent to that of the most competitive university level courses. Students who enroll in AP Calculus BC should have mastery of skills developed in Pre-Calculus H; an independent approach to learning, and a healthy appetite and intellectual curiosity for exploring rigorous college level math in high school. Topics include theory and applications of differential and integral calculus, infinite series, and differential equations as related to science, history, the arts, and the natural world. A TI-84 or higher graphing calculator is required.

Mathematics Seminar H - Post AP Calculus BC
Length/credit: $\quad 1$ year -1.0 credit
Grade: 11,12
Prerequisite: It is recommended that students have a grade of "A" or " B " in
AP Calculus BC.
Course Number: 03080103
This course is designed for exceptionally capable students of mathematics who have completed the AP Calculus BC course. Some of the great theorems and ideas of mathematics will be studied. Additional topics will be selected from among the following: formal logic, math history, statistics theory, differential equations, linear algebra, complex numbers, as well as others. While some time will be spent in formal instruction, a significant portion of time will include student independent study and research. Students will explore topics and report their findings.

## Advanced Topics in Linear Algebra \& Discrete Mathematics H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11,12
Prerequisite: Students must have successfully completed Calculus or AP Calculus AB.
Course Number: 03130103
Topics include: linear algebra, combinatorics, probability and expected value, logic and critical argument. Students complete a mathematical exploration fusing current and past mathematical content resulting in an opportunity for independent research.

## Computer Science

All computer science courses are offered at the Honors and AP level.

## Computer Science 1 H

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: Integrated Math 1.
Course Number: 03070103
Computer Science 1 H is an introduction to the principles of computer science. Students use the Java programming language to study foundational topics including declaring and using variables, input and output, type conversion, control statements and repetition statements. The course places a heavy emphasis on problem solving and abstract thinking as students develop skills that will provide direct benefits across curriculums.

## Computer Science 2 H

Length/credit: $\quad 1$ semester -0.5 credit (offered Spring Semester only)
Grade(s): $\quad 9,10,11,12$
Prerequisite: Computer Science 1 H.
Course Number: 03070203
Students build upon the understanding of the Java programming language that was developed in Computer Science 1 H and further explore the foundational concepts introduced in that course. Content includes user-defined methods, arrays, reading from and writing to files, designing classes and graphics. Emphasis is placed on the student's ability to run, debug, and troubleshoot a program.

## AP Computer Science Principles

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 03070804
This course introduces students to programming and coding along with various computer science applications including a multi-disciplinary approach to teaching the underlying principles of computation. The course introduces students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for self-expression and problem solving.

## AP Computer Science A

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
$10,11,12$
It is recommended that students have a grade of " A " or " B " in Computer Science 2 H or AP Computer Science Principles.
Course Number: 03070304
AP Computer Science A prepares students to take the Advanced Placement examination in computer science. In the class, students learn object-oriented programming using Java. The topics include program design and definition, data types, algorithm development, modularization, methods, arrays, sorting and searching, classes, abstractions, and the AP Computer Science Case Study. Emphasis will be placed on problem solving, algorithm methodology, and the ability to debug and troubleshoot.

## Artificial Intelligence and Machine Learning H

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $10,11,12$ |
| Prerequisite: | Successful completion of AP Computer Science A. |
| Course Number: | 03070603 |

This one semester elective course fosters students' creativity and innovation by presenting opportunities to design, implement and present meaningful programs such as machine learning. This course provides a broad introduction to machine learning, datamining, and statistical pattern recognition. The course draws from numerous case studies and applications, so students learn how to apply learning algorithms to text understanding (web search, anti-spam), computer image detection, audio, datamining, and other areas. Students collaborate with one another, mentors from the community, and their instructor to solve the problems presented in the course.

## Cybersecurity H

Length/credit:
Grade(s):
Prerequisite:
Course Number:

This one semester elective course provides learners with principles of data and technology that frame and define cybersecurity. Learners gain insight into the importance of cybersecurity and the integral role of cybersecurity professionals. The course provides a dynamic learning experience where users explore foundational cybersecurity principles, cryptography, security architecture, risk management, attacks, incidents and emerging IT and IS technologies as well as explore and correct computer security vulnerabilities.
Length/credit: $\quad 1$ year -1.0 credit

Grade(s): $\quad 10,11,12$
Prerequisite: Successful completion of AP Computer Science A.
Course Number: 03070503
Students study advanced programming concepts including data structures such as stacks, hash tables and trees, application development using the Swift programming language, database design, and implementation of Graphical User Interfaces. Students are also given the opportunity to work collaboratively to explore other programming concepts that are of interest. This course fosters student creativity and innovation by presenting opportunities to design, implement, and present meaningful programs. Students collaborate with one another and their instructor to solve the problems presented throughout the course. Through data analysis, students identify task requirements and use computer science concepts to access, analyze, and evaluate information needed to solve problems. Students learn digital citizenship by researching current laws and regulations and by practicing integrity and respect.

## Music

All students have the opportunity to continue to develop their music skills in an array of music courses designed for students at all levels of talent and ability. All Instrumental and Vocal music courses are major subjects for which students receive a full credit. By individual arrangement, music students at all levels may arrange individual and/or small group practice periods during their frees or study halls. Please see your music teacher and counselor to schedule individually.

## Concert Choir H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: It is recommended that interested students obtain the signature of the high school instructor.
Course Number: 07010203
This is an advanced course designed for the student who wishes to further develop vocal and music skills and to deepen understanding through the study and performance of choral music of various historical periods and genres. Through class rehearsals and performances, students will acquire technical proficiency in vocal technique; tonal and rhythm skills; elements of basic musicianship; and understanding of how all of these relate to style. Students must attend all dress rehearsals and all public performances of the group. Concert choir students may audition for PMEA District 11. Independent Study is not possible for a group performance class.

## Concert Band H

Length/credit:
Grade(s):
Prerequisite:
Course Number:
This course is a performance course for students who play woodwind, brass, and percussion instruments. Students will study and perform various genres of band repertoire by many different composers. Daily class rehearsals and culminating performances will allow students to continue the development of technique and ability on their respective instrument; tonal and rhythm skills; elements of basic musicianship; and an understanding of how all of these relate to style. Students are expected to attend all dress rehearsals and all public concert performances, including school functions and community events. The course is open to all students who want to pursue a collaborative high school band experience. Students are evaluated based on the PMEA (Pennsylvania Music Educators Association) District 11 Band/Orchestra audition material. Independent Study is not possible for a group performance class.
Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite:
$9,10,11,12$
It is recommended that interested students obtain the signature of the high school instructor. An audition is required (LMHS only). 07030203

Course Number:
In this class, students study and perform orchestral repertoire of various historical periods and genres. Daily class rehearsals allow students to continue the development of technique and ability on their respective instrument; tonal and rhythm skills; elements of basic musicianship; and an understanding of how all of these relate to style. This course is open to students who want to pursue a collaborative high school orchestra experience. Students are expected to attend all dress rehearsals and all public concert performances and perform for selected school functions and local community events. Students are evaluated based on the PMEA (Pennsylvania Music Educators Association) District 11 Band/Orchestra audition material. Independent Study is not possible for a group performance class. Harriton only: this course is for string players only.

Music and Modern Culture
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 07040100
This one semester course offers students opportunities from musical trends from Ragtime to Rap and their impact on the development of modern American culture. The course will study the main ideas that form the movements and the major musicians who have contributed to our current aesthetics. The course will also look at the influence musicians have had on other musicians. No musical training is necessary for this course.

## Electronic Piano Lab

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 07070200
While this course is designed for beginning students with limited or no musical background, intermediate and advanced pianists may also take this course to further their piano technique and musical approach. Treble and bass clef note reading, chord realization and proper hand positions will be covered and individually monitored. Full-sized electronic keyboards (with headsets) and computer stations are provided for each student.

## Music Technology and Production

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 07070100 |

Music Technology \& Production seeks to give students a basic understanding of concepts in music technology. The course covers musical topics such as song form, piano skills, rhythm, melody, chord progressions, and provides ample opportunity for students to compose. From a technological standpoint, the class starts at the basics of functioning in a Digital Audio Workstation (DAW) and progresses through audio manipulation, quantization, microphone usage and technique, automation, and synthesizers. Students will put themselves in the roles of mixing engineers, film score composers, and recording artists throughout the course of the class in simulated experiences in the music technology field.

## Music Major H

Length/credit:
Grade(s):
Prerequisite:

Course Number: 07050113

1 year - 1.0 credit
10, 11, 12
It is recommended that interested students have the basic knowledge of elementary music principles through at least one year of high school instrumental or vocal training. Signature of the instructor is required.

This course is designed for the student who wishes to engage in an intensive study of the fundamentals of music. It is especially recommended for students who plan to pursue music, either vocationally or recreationally. The course includes theory, ear-training, sight-singing, composition, analysis, and historical perspective. Access to a keyboard instrument or willingness to schedule personal time on school pianos is required.

## AP Music Theory

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 11,12$
Prerequisite: It is recommended that interested students obtain the signature of the instructor.
Course Number: 07050204
This course offers the serious student an opportunity to study music in a course that is accepted by many colleges for credit. The course content follows the syllabus for the College Board Advanced Placement Program. Students are expected to develop advanced skills in aural theory, sight singing, composition and analysis. These areas are developed through listening, performance, writing, as well as creative and analytical exercises.

| IB Music-SL | (offered at Harriton High School only) |
| :--- | :--- |
| Length/credit: | 1 year -1.0 credit |
| Grade(s): | 11,12 |
| Course Number: | 07060105 |

The Standard Level IB Music course is designed for those with a strong interest in music. The students' passion for music is fostered through four main areas of inquiry: 1) Music for sociocultural and political expression, 2) Music for listening and performance, 3) Music for dramatic impact, movement and entertainment, 4) Music technology in the electronic and digital age. Flexibility is given for students to pursue their own musical path while exploring the different elements of what it is to be a researcher, creator and performer (a well-rounded musician). Students access their musical experiences from personal, local, and global contexts. Digital uploads of selected portfolio segments are required as evidence of student coursework, based on International Baccalaureate guidelines. This course is also available to non-IB students. All students enrolled for the course are required to complete all IB assessments.

## IB Music-HL (Part 1) (offered at Harriton High School only) <br> Length/credit: <br> 1 year - 1.0 credit <br> Grade(s): <br> 11 <br> Course Number: 07060205

This course is the first year of the two-year Higher Level IB Music course. Designed for those with a strong interest in music, the students' passion for music is fostered through four main areas of inquiry: 1) Music for sociocultural and political expression, 2) Music for listening and performance, 3) Music for dramatic impact, movement and entertainment, 4) Music technology in the electronic and digital age. Flexibility is given for students to pursue their own musical path while exploring the different elements of what it is to be a researcher, creator and performer (a well-rounded musician). Students access their musical experiences from personal, local, and global contexts, while gathering and maintaining evidence of their coursework through an electronic portfolio. This course is also available to non-IB students. All students enrolled for the course are required to complete all IB assessments.

IB Music-HL (Part 2)
Length/Credit:
Grade(s):
Prerequisite:
Course Number:
(offered at Harriton High School only)
1 year - 1.0 credit
12
IB Music HL (Part 1). 07060305

This course is the continuation of IB Music-HL (Part 1), fostering a greater awareness and understanding of both the power and variety of musical experiences. The focus of the course continues to tap into the students' passion for music through four main areas of inquiry (see HL Music Part 1). Existing electronic portfolios continue to be developed, maintained and refined. The final outcome is a collaborative project, inspired by real life practices in contemporary musicmaking. Combining the roles and skills of researcher, creator and performer, students will design, develop, and implement a modern music experience, documented in a 15 -minute multimedia summary presentation. Digital uploads of selected portfolio segments as well as The Contemporary Music Maker project are required as evidence of student coursework, based on International Baccalaureate guidelines. This course is also available to non-IB students. All students enrolled for the course are required to complete all IB assessments.

## Science, Technology, and Engineering

## Courses in Science, Technology, and Engineering

While three credits of science at the high school level are required for graduation, students are recommended to enroll in science, technology, and engineering courses during all four years of high school as part of a well-rounded education in preparation for college and careers. A variety of science, technology, and engineering courses at the college prep, honors, and AP level are offered to students. It is recommended that all students planning to attend college (including technical, 2 year, or 4 year programs) take Biology, Chemistry, and Physics as a foundation; as well as any other science, technology, or engineering course of interest.

## Biology Courses

(Including AP and Biology Electives)

## Biology <br> Length/credit: $\quad 1$ year -1.0 credit <br> Grade: 9 <br> Course Number: 04010202

The course stresses basic biological facts and principles, and strives to broaden the students' experience in biology. Major topics are the chemistry of life, evolution of populations, cell biology, genetics, DNA technology, and ecology. Other cellular topics will include protein synthesis, mitosis, meiosis, and DNA replication. Discussions, lectures, projects and laboratory work are used extensively throughout the course. Students enrolled in this course are required to take the Biology Keystone Exam at the end of the year.
**The Keystone Biology exam will be given every May. Students enrolled in Biology will take the Keystone exam at that time.

## Biology H

Length/credit: $\quad 1$ year -1.0 credit
Grade:
Prerequisite:
9
It is recommended that students have a grade of " $A$ " or " $B$ " in 8 th grade Science.

## Course Number: 04010303

The course is designed to provide the students with opportunities for strategic and extended thinking with regard to the major biological principles, concepts, and ideas. Major topics are the chemistry of life, evolution of populations, cell biology, genetics, DNA technology, and ecology. Other cellular topics will include protein synthesis, mitosis, meiosis, and DNA replication. Discussions, lectures, projects and laboratory work are used extensively throughout the course. Students enrolled in this course are required to take the Biology Keystone Exam at the end of the year.
**The Keystone Biology exam will be given every May. Students enrolled in Biology will take the Keystone exam at that time.

```
AP Biology
```

    Length/credit: \(\quad 1\) year -1.0 credit
    Grade(s):
Prerequisite

1 year - 1.0 credit
11, 12
It is recommended that students have a grade of " A " or " B " in Biology and Chemistry. 04010404 or

Course Number:
The Advanced Placement Biology course is designed to prepare the student for both the AP Biology Examination as well as future courses in the biological sciences at the college level. Students are encouraged to take the AP exam. Over the course of the year, the students are exposed to a wide variety of topics which include, but are not limited to, cell and molecular biology, classical and molecular genetics, evolution, anatomy and physiology, basic aspects of organic and biochemistry, and ecology. These topics will be studied through lecture, discussion, and laboratory activities, and the analysis of assigned readings. Please be advised that the depth and rate at which material is studied in this course requires the student to be highly motivated and willing to devote additional time out of the classroom in order to prepare for regular assessments such as weekly quizzes and multi- chapter examinations. The assessments are designed to challenge the student to apply his or her knowledge to tasks such as data interpretation and critical analysis.

Human Anatomy and Physiology
Length/credit:
1 year - 1.0 credit
Grade(s):
10, 11, 12
Prerequisite:
Successful completion of Biology and Chemistry.
Course Number:
04010802
Human Anatomy and Physiology is a full-year course that introduces students to the anatomy and function of the human body. Topics that will be covered include: Introduction to the Human Body, Basic Chemistry, Cells and Tissues, Skin and Body Membranes, The Skeleton, Nervous System, Senses, Blood and Cardiovascular System, Defense against Disease, Respiratory System, Digestion and Metabolism, Urinary and Reproductive Systems. The course will also discuss significant fields related to human health, such as disease and epidemics and bioethical issues. NOTE: This course contains a strong lab component, which will include dissections of mammalian specimens. Anatomy and Physiology course is targeted for students with a wide range of interests, abilities, and backgrounds who are interested in learning about the human body either out of curiosity or to pursue certain types of health-related careers.

Human Anatomy and Physiology H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 10,11,12$
Prerequisite: It is recommended that students have a grade of " A " or " B " in Biology and Chemistry.
Course Number: 04010803
Human Anatomy and Physiology is a full-year course concerned with a detailed study of the anatomical structure and function of the human body from the cell level up to the interdependence and coordination of all body systems. Topics that are covered include: Levels of Organization, Support and Movement, Control and Regulation, Fluids and Transport, Exchange of Materials, and Continuity of Life. The course will also discuss significant fields related to human health, such as recent history of modern medicine, disease and epidemics, genetic disorders, recent developments in medicine/biosciences and bioethical issues. NOTE: This course contains a strong lab component, which will include dissections of mammalian specimens. The Honors level course is aimed at students currently taking Honors or AP sciences and who are interested in an intensive study of the human anatomy and its physiology, possibly to prepare for a pre-med college program or a career in the health sciences.

## Genetics H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite: It is recommended that students have an "A" or "B" in Biology and Chemistry.
Course Number: 04011003
This elective course has been designed to provide the student with a more in-depth understanding of how the many classical discoveries of the past have served to define both our present understanding of genetics as well as the direction of future research in this discipline. The topics covered during this year-long course will include, but not be limited to, the molecular attributes of the cell, the classical aspects of inheritance, the Chromosomal Theory of Inheritance, the biochemical attributes of gene expression, the molecular basis of disease, gene therapies, the molecular aspects of bacterial and viral genetics, cloning and genetic engineering, and the theory of evolution. This course is being offered in the large group lecture format (two meetings per cycle) so as to replicate the learning environment being employed at some universities. The material presented in these lectures are reinforced during separate recitation sections (one meeting per cycle). This course also features a laboratory component that allows the students to explore genetics by utilizing some of the same techniques employed in the more classical areas of genetics (e.g. fruit fly crosses, blood group simulations, etc.) as well as those molecular techniques often associated with such fields as the forensic sciences (e.g. gel electrophoresis, DNA extraction, etc.). Computer simulations, lectures, assigned readings from popular texts (e.g. The Beak of the Finch), assigned readings from primary sources, and classroom discussions are all employed in order to help reinforce classroom concepts.

## Chemistry Courses

(Including AP and Chemistry Electives)
Chemistry
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 10, 11, 12
Course Number: 04020202
This course covers the core of topics and activities necessary to give students a solid foundation in understanding chemistry concepts. Topics include measurement, matter and energy, elements, compounds, nomenclature, chemical reactions and their balancing, chemical quantities and their composition, and the composition of the atom. Students regularly engage in investigations that reflect the topic studied.

## Chemistry H

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade(s): | $10,11,12$ |
| Prerequisite: | It is recommended that students have a grade of "A" or "B" in |
|  | Biology and Integrated Math 1. |
| Course Number: | 04020303 |

This course is designed to engage students with a conceptually challenging presentation of chemistry topics that require a strong understanding of prerequisite math skills. Content is supported with rigorous mathematical applications including unit conversions, solving for unknown variables, graphing data, and identifying mathematical relationships in data. Topics studied include states of matter, atomic structure, periodicity, chemical bonding, kinetics, chemical reactions, nomenclature, acid-base theory, stoichiometry, electrochemistry solutions, thermochemistry, and equilibrium. Each student performs and writes formal reports for laboratory activities each quarter which reflect the topic studied. Student involvement through "hands-on" experiences, teacher demonstrations, and classroom discussion will enable him/her to gain a thorough understanding of the concepts presented.

## AP Chemistry

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11, 12
Prerequisite: It is recommended that students have a grade of "A" or "B" in Chemistry H or Chemistry and Mathematics through Integrated Math 3 with a grade of "A" or "B." 04020504
Course Number:
The Advanced Placement Chemistry course has been designed to prepare the student for both the AP Chemistry Examination as well as future chemistry courses at the college level. The core of the program covers structures of the atom, periodicity, molecular structure, solution, acid-base, kinetics, equilibrium, solubility, thermodynamics, and redox. The lab stresses both quantitative and qualitative analysis and each student will perform and write formal reports for multiple laboratory activities each quarter.

Organic Chemistry H
Length/credit:
Grade(s):
Prerequisite:

Course Number: 04020403

## (Saturdays 8:00 a.m. to 12:00 p.m.)

1 year - 1.0 credit
11, 12
It is recommended that students have a grade of " A " or " B " in Chemistry or Chemistry H.

This is a lab-oriented course with emphasis placed on the role of the organic chemist in society. Technique is stressed in both laboratory situations and practical applications. Students are introduced to the course by performing routine purifications and separations. Later they perform experiments in which they gain experience with sequential synthesis. Students keep a log of their experiments and report their findings to the instructor for evaluation. Note: This course is scheduled on Saturday from 8:00 a.m. - 12:00 p.m. Students schedule it as an extra course with the approval of the instructor.

## Physics Courses

(Including AP and Physics Electives)
Physics
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
10, 11, 12
It is recommended that students have successfully completed Integrated Math 2.
Course Number:
04030202
This course is designed to provide students with a broad-based knowledge of physical phenomena with an emphasis on application of principles learned in class through experimentation and real-life samples. It is intended mainly for students whose major interests lie in fields other than science or mathematics, but it will give an adequate foundation for those who wish to explore the possibility of future study in science. Topics studied include most of those in the Physics H course but are presented in a less mathematical manner. Electricity and magnetism are presented only if time permits.

## Physics H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
$10,11,12$
It is recommended that students have a grade of " A " or " B " in Integrated Math 2 H .
Course Number: 04030303
Topics studied include kinematics, Newton's Laws, momentum, energy, gravitation, optics, waves, electricity and magnetism. Students are encouraged to develop their ability to ask as well as answer questions, to develop techniques of critical thinking, and employ the use of microcomputers. Students are expected to perform experiments and write formal lab reports. These reports are intended to develop the students' written communication skills.

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
10, 11, 12
It is recommended that students have completed Integrated Math 3 or Integrated Math 3 H .
Course Number: 04030414
AP Physics 1 is an algebra-based, introductory college-level physics course in which students explore principles of Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits. The course is based on six Big Ideas, which encompass core scientific principles, theories, and processes that cut across traditional boundaries and provide a broad way of thinking about the physical world. Students establish lines of evidence and use them to develop and refine testable explanations and predictions of natural phenomena. About twenty-five percent of instructional time will be devoted to hands-on laboratory work with an emphasis on inquiry-based investigations. Investigations require students to ask questions, make observations and predictions, design experiments, analyze data, and construct arguments in a collaborative setting, where they direct and monitor their progress.

## AP Physics C: Mechanics

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
11, 12
Must be enrolled in or previously completed a Pre-Calculus or Calculus course.
Course Number: 04030504
AP Physics Mechanics is a calculus based course for students who have a high interest in science along with a strong mathematical background. Topics include kinematics, Newton's Laws, momentum, energy, rotational kinematics and dynamics, and simple harmonic motion. Students will be expected to perform experiments and write formal lab reports. These reports are intended to develop the students' written communication skills. This class is designed for students who wish to be prepared for further study of science or science related disciplines. Completion of the course prepares students for the Advanced Placement Physics C - Mechanics Examination.

```
AP Physics C: Electricity and Magnetism
```

Length/credit: $\quad 1$ year -1.0 credit

Grade(s): 12
Prerequisite: It is recommended that students have a grade of "A" or " B " in AP Physics 1, or AP Physics C: Mechanics, and " A " or " B " in AP Calculus AB or BC .
Course Number: 04030604
AP Physics C: Electricity and Magnetism a calculus based course designed to provide the students with an understanding of the principles of electricity and magnetism and their interaction. It is generally considered to be a follow-up course to AP Physics Mechanics. Students apply advanced techniques of calculus, including surface integrals and path integrals. Lab activities are also an important part of the course, including the writing of formal lab reports. There are experiments which all students perform, plus there may be independent labs which are individually selected and performed by students. This class is designed for students who wish to be prepared for further study of science or science related disciplines. Completion of the course prepares students for the Advanced Placement Physics C: Electricity and Magnetism examination.

## Environmental and Earth/Space Science Courses

| Astronomy | (offered 2023-2024) |
| :--- | :--- |
| Length/credit: | 1 semester -0.5 credit |
| Grade(s): | 11,12 |
| Prerequisite: | Completion of one year of math and two years of science. |
| Course Number: | 04040102 |

This course explores our understanding of the basic features in the observable universe. Topics include the development of modern astronomy, basic telescope design, the celestial sphere, human spaceflight, the solar system, properties of stars, and galaxy structure. Occasional short projects, sky simulation programs, current events in astronomy, and home-based observations are used throughout the course. When feasible, voluntary evening observations at school are conducted. Basic calculations using sky angles are necessary throughout the course.

Astronomy H (offered 2023-2024)
Length/credit:
1 semester - 0.5 credit
Grade(s):
Prerequisite: Completion of two years of math and two years of science.
Course Number: 04040203
This course explores our understanding of the features in the observable universe. Topics include historical astronomers and the development of modern astronomical thought, modern telescopes design and operation, celestial coordinates, human spaceflight and technology, the solar system, electromagnetic radiation, star evolution, galaxy evolution, and cosmology. Several short projects, sky simulation programs, real-time data, current events in astronomy, and home-based observations are used throughout the course. When feasible, voluntary evening observations at school are conducted. Calculations in navigation, sky angles, planet motion, and star distances are used in various parts of the course.

Environmental Science

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 04040912 |

Environmental science is the study of the natural sciences in an interdisciplinary context that always includes consideration of humans and how they influenced the various systems around us. This yearlong introductory course is for students who wish to study topics relating to the environment, its resources, and quality and ethical issues. This course is further designed to provide a deeper and more focused exploration of ecological topics that were initially investigated in Biology and/or Life Science. Specific emphasis is placed on the impact of humankind on the environment and ecosystems of the world.

Geology
Length/credit:
Grade(s):
Prerequisite:
Course Number:
(offered 2023-2024)
1 semester - 0.5 credit
11, 12
Completion of one year of math and two years of science.
04040302

This course studies the earth as a dynamic system in which numerous forces are at work both internally and on the surface of the planet. Topics include the basic composition and structure of the earth, geologic history, reading topographic maps, rock and mineral identification, destructive/constructive processes, and plate tectonics. Projects and presentations are used in parts of the course. Opportunities to pursue topics of individual interest are available. When possible, an all day field trip allows students to directly study the geology of our region. Basic knowledge of solid geometry is needed for parts of this course.

Geology H
Length/credit:
Grade(s):
Prerequisite:
Course Number:
(offered 2023-2024)
1 semester - 0.5 credit
11, 12
Completion of two years of math and two years of science. 04040403

This course studies the earth as a dynamic system in which numerous forces are at work both internally and on the surface of the planet. Topics include the composition and structure of the earth, geologic history, paleontology, topographic map interpretation and design, geologic map interpretation, rock and mineral identification, destructive/constructive processes, and plate tectonics. When possible, an all day field trip allows students to directly study the geology of our region. Knowledge of solid geometry, angular measurement, and unit conversion are needed for parts of the course.

## Meteorology

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 11,12$
Prerequisite: Completion of one year of math and two years of science. Course Number: 04040702
Topics studied include basic weather map analysis, atmospheric structure, heat transfer, the water cycle, cloud identification, severe weather, and global warming. Daily weather summaries or presentations, readings, working with basic online data, short projects, and various experiments are all part of the course. Working with numbers, interpreting graphs and maps, and basic arithmetic are necessary components of this course.

## Meteorology H

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 11, 12
Prerequisite: Completion of two years of math and two years of science. Course Number: 04040803
This course is designed for those interested in gaining in-depth knowledge about the atmosphere in which we live. Topics studied include detailed weather map analysis, atmospheric structure, heat transfer and applied calculations, moisture measurements and calculations, cloud dynamics, jetstream analysis, basic forecasting models, severe weather, and global warming. Daily weather summaries or presentations, readings, online data collection and analysis, short projects, and various experiments are all part of this course. Interpretation of data tables, charts, graphs, maps, and various applied calculations are necessary components of this course.

## Oceanography

Length/credit:
1 semester - 0.5 credit
Grade(s):
Prerequisite: Completion of one year of math and two years of science.
Course Number:
04040502
This course is designed for those interested in learning more about the physical, chemical, and biological components of the world's oceans. Topics studied include the history of ocean exploration and deep-diving technology, basic nautical chart interpretation, barrier island ecology, beach sand composition, basic water temperature patterns, large-scale water motion, ocean pollution, and marine life in various life zones. Online data sources, nautical charts, readings, and short projects, are included in this course. Basic map and graph interpretation, basic knowledge of biology and chemistry, and working with numbers are necessary for parts of this course.

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | 11,12 |
| Prerequisite: | Completion of two years of math and two years of science. |
| Course Number: | 04040603 |

This course is designed for those interested in a more detailed understanding about the physical, chemical, and biological components of the world's oceans. Topics studied include the history of ocean exploration and deep- diving technology, nautical chart interpretation, barrier island ecology, beach sand analysis and composition, temperature and salinity patterns, remote sensing technology, large-scale water motion analysis, ocean pollution, and marine life in various life zones. Online data sources, nautical charts, online maps, readings, and short projects are included in this course. Map and graph interpretation, knowledge of biology and chemistry, and working with numbers are necessary for parts of this course.

Landscape Architecture/Horticulture (offered at Harriton High School only)
Length/credit: 1 year -1.0 credit
Grade(s):
10, 11, 12
Prerequisite: Successful completion of Biology.
Course Number: 04041002
Landscape Architecture is the art of planning the appropriate use of land and designing the built environment based on an understanding of natural and cultural site characteristics, human need, and sound artistic and technical competence. Horticulture deals with the creation, production, distribution and use of fruit, vegetable, ornamental, greenhouse, turf and specialty crops. Students studying Landscape Architecture/Horticulture concentrates on two major themes: (1) identification of trees, shrubs, evergreens, and groundcovers, propagation and culture of ornamental nursery stock, planting and establishment of aesthetically pleasing landscapes, management and care of urban landscape trees and shrubs, diagnosis and treatment of pests and diseases affecting landscape plants, and site design, land use, and urban planning. Students utilize the greenhouse for "hands on" lab activities as well as complete garden designs with detailed plant lists.

Landscape Architecture/Horticulture H (offered at Harriton High School only)
Length/credit:
1 year - 1.0 credit
Grade(s):
Prerequisite:
Course Number:
In Landscape Architecture students plan the appropriate use of land and designing the built environment based on an understanding of natural and cultural site characteristics, human need, and sound aesthetic and technical competence. Horticulture deals with the creation, production, distribution and use of specialty crops. Students studying Landscape Architecture/Horticulture concentrate on two major themes: (1) botany and soil science, and (2) site design, land use, and residential planning. The greenhouse will be the laboratory setting for students' investigations and projects. Projects are developed to align to the District's emphasis on sustainability. Students are required to do independent research while completing total property designs with plant lists and detailed bids/proposals.

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:

Course Number:

The goal of the Advanced Placement Program is to prepare students to successfully complete an AP exam. This course is designed to be the equivalent of a one-semester introductory college-level course in environmental science. It utilizes an interdisciplinary approach, combining elements of earth sciences, biology, and chemistry, to understand the interrelationships within the natural world. Students use scientific and quantitative methodologies to analyze and identify naturally occurring and man-made environmental problems, evaluate environmental and health risks, and explore solutions to minimize or prevent such risks. This rigorous course includes assigned readings, classroom lectures and discussions, a laboratory and field component, and outside research.

## Technology and Engineering

## Foundations of Engineering \& Design

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 10010110 |

Foundations of Engineering \& Design involves the application of knowledge, resources, materials, tools, and information in designing, producing, and using products, structures and systems. It incorporates students' skills in Science, Technology, Engineering, and Mathematics. Students are given the opportunity to design, build, and evaluate a variety of projects such as mechanical powered vehicle, robotic system, and a Rube Goldberg device. They are also given the opportunity to explore and use electronics, pneumatics, computer numeric control, computer aided drafting, and rapid prototyping. This course is highly encouraged for those students who enjoy hands-on problem solving and/or considering a degree in engineering, design, or related fields.

Foundations of Engineering \& Design H
Length/credit: 1 semester -0.5 credit
Grade(s): 9,10,11,12
Course Number: 10010113
Foundations of Engineering \& Design involves the application of knowledge, resources, materials, tools, and information in designing, producing, and using products, structures and systems. It incorporates students' skills in Science, Technology, Engineering, and Mathematics. Students are given the opportunity to design, build, and evaluate a variety of projects such as mechanical powered vehicles, robotic systems, computer aided drafting, and rapid prototyping. This course is highly encouraged for those students who enjoy hands-on problem solving and/or considering a degree in engineering, design, or related field. Students research, design and construct a solution to an openended engineering problem and prepare design challenge proposals under the consultation of the instructor. Options include, but are not limited to the TSA (Technology Student Association) competitive events guide, state, national, university sponsored STEM challenges, and commercially available kits. Engineering solutions are presented in the form of a digital portfolio along with an artifact. Research, development, and STEM analysis must be evident in the digital portfolio presentation, which will take place at the end of the semester. In addition, students are given the opportunity to investigate university engineering programs as well as engineering disciplines and functions.

## Advanced Engineering \& Design 1 H

Length/credit: 1 semester -0.5 credit
Grade(s): 9, 10, 11, 12
Prerequisite: $\quad$ Successful completion of Foundations of Engineering \& Design or Foundations of Engineering \& Design H.
Course Number: 10020123
This course is a continuation of Foundations of Engineering \& Design. In this course, students advance their understanding and application of the Technological Design and Problem Solving Process. Students will be given the opportunity to design, build, and evaluate an independent project with a focus on research and development.

## Computer Aided Drafting \& Design (CADD)

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 10040100 |

CADD is an introductory course in the application of technical communications, drawing, and computer aided design as part of the design and problem solving process. Students apply Science, Technology, Engineering, and Mathematics skills, to a variety of projects covering fields of study such as Architecture, Product Design, Computer Modeling and Prototyping. Created to give students a hand-on, introductory experience in design, CADD allows students to use a variety of tools and processes to study how their products work under real-world conditions. This course is highly encouraged for those students who enjoy hands-on problem solving and/or considering a degree in engineering, design, or related fields.

## Computer Aided Drafting \& Design (CADD) H <br> Length/credit: $\quad 1$ semester -0.5 credit <br> Grade(s): $\quad 9,10,11,12$ <br> Course Number: 10040233

Students design and construct a solution to an open-ended engineering problem through the use of state- of-the-art three dimensional drafting software and rapid prototyping technology and prepare design challenge proposals under the consultation of the instructor. Options include, but are not limited to the TSA (Technology Student Association) competitive events guide, state, national, and industry sponsored design challenges. Engineering solutions are presented in the form of a digital portfolio along with a rapid prototyped artifact. Research, development, and STEM analysis must be evident in the digital portfolio presentation, which takes place at the end of the semester. In addition, students are given the opportunity to investigate university design and engineering programs as well as design and engineering disciplines and functions.

## Architectural Design

Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): $\quad 9,10,11,12$
Course Number: 10040210
The Architectural Design class is an introductory study of the theory, history, principles, and practice of architecture. It includes the roles and responsibilities of design professions, architects, and engineers. Major topics include interior design, frame construction, vocabulary, landscape architecture, green construction and how they relate to each other. This course also introduces students to 2-D and 3-D communication and presentation techniques as used in architecture, and covers basic model building and the use of drawing as a problem abstraction and diagramming technique. Students learn to interpret construction drawings for residential, commercial and industrial structures. Major projects include 3-D drawings and scale models of a residential structure.

## Architectural Design H

| Length/credit: | 1 semester -0.5 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Number: | 10040223 |

Architectural Design is an introductory study of the theory, history, principles and practice of architecture. It includes exploration of the roles and responsibilities of design professions, architects, and engineers. Major topics are: interior design, frame construction, landscape architecture, green construction and how they relate to each other. Students are introduced to 2-D and 3-D communication and presentation techniques that are widely used in architecture. Application of basic model building and the use of drawing as a problem abstraction and diagramming technique are also included in instruction. Additionally, students learn to interpret construction drawings for residential, commercial and industrial structures. Major hands-on projects include the rendering of 3-D drawings and the construction of a scale-model residential structure. In addition to the standard instruction and assignments, students electing the Honors level option of Architectural Design are also expected to learn and apply the use of advanced software techniques and model creation; as well as, complete an architecture research project or job-shadowing experience.

```
Innovation & Invention - Robotics
    Length/credit: 1 semester - 0.5 credit
    Grade(s): 9,10,11,12
    Prerequisite: Completed Technology Engineering Course or Instructor approval.
    Course Number: }1003011
```

    Innovation \& Invention is a capstone course that utilizes the VEX Robotics Design System at its
    core. Students build, design, compete, and cooperate with robots to solve societal problems while
    learning and applying engineering and physics concepts, formulas, and practices. The course offers
    many of the exact same kinds of experiences to students that are offered in the highly publicized
    2.007 Engineering course at MIT. Two major design challenges invite students to apply knowledge
    of speed, power, torque, DC motors, gear ratio and reduction, friction, traction, and drive
    train/manipulator design. This course is highly encouraged for those students who enjoy hands-on
    design challenges and problem solving and/or considering a degree in engineering, design, robotics,
    or a related dynamic field of study.
    Innovation \& Invention - Robotics H
Length/credit: 1 semester -0.5 credit
Grade(s):
Prerequisite:
$9,10,11,12$

Course Number:
Completed Technology Engineering Course or Instructor approval. 10030123
Invention \& Innovation - Robotics is a capstone course that utilizes the VEX Robotics Design System at its primary instructional resource. Students design, build, compete, and cooperate with robots to solve societal problems while learning and applying engineering and physics concepts, formulas, and practices. Two major design challenges invite students to apply knowledge of speed, power, torque, DC motors, gear ratio and reduction, friction, traction, and drive train/manipulator design. This course is highly encouraged for those students who enjoy hands-on design challenges and problem solving and/or considering a degree in engineering, design, robotics, or a related STEM field of study. In addition to the standard instruction and assignments, students electing the Honors level option of Innovation \& Invention-Robotics learn and apply the use of sensor technology in design challenges, and complete a robotics research project or advanced robotics applications challenge.

## Social Studies

The Social Studies Curriculum is designed to prepare students for the career, academic and citizenship demands of the 21 st century. To this end, all social studies courses invite students to investigate historical questions by employing discipline-specific reading strategies such as sourcing, contextualizing, corroborating, and close reading. All LMSD Social Studies courses require students to read and analyze complex primary and secondary source materials, acquire increasingly sophisticated vocabulary, research purposefully from a variety of sources, write expository essays that successfully inform, analyze, explain, and argue, make cogent, insightful presentations, and listen purposefully.

Graduation requirements include four credits in Social Studies. To meet these requirements students typically take the following courses in sequence:

9th grade - Global Studies 1
10th grade - Global Studies 2
11th grade - United States History
12th grade - United States Government
The completion of a research paper is a requirement of each of these year-long courses.
The Lower Merion School District requires all students to take a full-year U. S. Government course. Students enrolled in Honors and College Preparatory courses typically take U. S. Government as a 12th grade course. Students in the International Baccalaureate (IB) Program at Harriton often take U.S. Government in Summer School (if offered), concurrent with 11th and 12th grade IB Social Studies courses, or in 10th grade. If IB Students take U. S. Government in their sophomore year, they are strongly encouraged to request Global Studies 2 in 10th, 11th, or 12th grade as an additional course, subject to availability.

## Global Studies 1 or

Global Studies 1 H
Length/credit: $\quad 1$ year -1.0 credit
Grade: 9
Prerequisite: It is strongly recommended that students who opt for the Honors level have earned a grade of "A" or "B" in 8th grade Social Studies.
Course Number: 02010402
Course Number H: 02010413
The goal of the two-year Global Studies Program is to understand the complexities of our 21st century world through multiple lenses. In Global Studies 1, students delve into the world's history, cultures, human and physical geography, economic, and political structures from 900-1750 through an inquiry process of learning. Honors level students have increased rigor in their study and application of learning.

Global Studies 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade:
10
Prerequisite: It is strongly recommended that students who opt for the Honors level obtain a grade of "A" or "B" in Global Studies 1.
Course Number:
02020422
Course Number H:
02020423
Global Studies 2 is the second half of a two-year study begun in 9th grade. For 10th grade, Global Studies 2 continues an investigation into the complexities of our 21st century world through multiple lenses such as examining the world's history, cultures, human and physical geography, and economic and political structures. With an opening unit that recalls lessons from the 17th and early 18th century to help students recognize this continuity, Global Studies 2 concentrates on the past 300 years, from 1750 to the modern era. Like Global 1, this course uses an inquiry-based framework. Honors level students have increased rigor in their study and application of learning.

## United States History or

United States History H
Length/credit: $\quad 1$ year -1.0 credit
Grade: 11
Prerequisite: It is recommended that students who opt for the Honors level obtain the grade of "A" in Global Studies 2.
Course Number: 02030202
Course Number H: 02030303
This course surveys the historical growth of the United States socially, economically, and politically from 1920s to modern day. Through an interdisciplinary approach, the course traces movements and events that led to progressive reform, social and political conflict, cultural trends, the emergence of the United States as a world power, and the resulting issues thereby created. Honors level students have increased rigor in their study and application of learning.

## AP United States History

Length/credit: $\quad 1$ year -1.0 credit

Grade:
Prerequisite:

11
Students must have completed the course of studies in Global Studies 2 prior to taking AP U. S. History; it is recommended that interested students have grades of "A" or "B" in Global Studies 2 H.
Course Number: 02030404
This course is taught at the college level and is designed to give students the opportunity to explore the scope of American history through the analysis of primary documents and the critical evaluation of various forms of historical evidence. The curriculum is prescribed by the College Board and covers the American experience from colonial times through the twentieth century. Social, political, and economic trends as well as major movements, conflicts, and events require considerable reading before and during the course and refined skills in research and writing are expected and practiced. One of the goals of this course is to prepare students to successfully complete the AP examination in United States History.

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade: | 12 and pre-IB students in grade 10 |
| Course Number: | 02040222 |
| Course Number H: | 02040323 |

Students acquire an understanding of the institutions and processes of the three branches of government in the American political system including the Presidency, the Congress, the Judicial System, Interest Groups, and Lobbying and Political Parties. This course also places an emphasis on Civics with an experiential civics component focusing on local, regional, or state governmental issues. Politics and policy are examined from a historical perspective, and students apply this knowledge to current issues to develop in-depth understandings of the forces at work in our democracy. Students are expected to deepen reading and writing skills. Honors level students have increased rigor in their study and application of learning. Students taking this course complete a District-created Act 35 Assessment of Civics Knowledge.

## AP United States Government \& Politics

Length/credit: $\quad 1$ year -1.0 credit
Grade: $\quad 12$ and pre-IB students in grade 10
Prerequisite: It is recommended that interested students have grades of "A" or "B" in the current honors or AP level Social Studies core course and recommendation from a member of the Social Studies Department.
Course Number: 02040424
This course is taught at the college level and is designed to give students a critical perspective on government and politics in the United States. This course involves both the study of the Constitutional underpinnings of the American system and the processes within our democracy including political parties, interest groups, voter participation and behavior, and civil liberties and civil rights. The student undertakes considerable reading at an advanced level. One of the goals of this course is to prepare students to successfully complete an AP examination in United States Government and Politics. This course satisfies the United States Government graduation requirement. Students taking this course complete a District-created Act 35 Assessment of Civics Knowledge.

## Social Studies Electives

Students may select from the following Social Studies electives in addition to the core Social Studies courses.

```
Black Excellence: The Politics, Economics, and Culture of an American People or
Black Excellence: The Politics, Economics, and Culture of an American People H
    Length/credit: 1 semester - 0.5 credit
    Grade(s): 10, 11,12
    Course Number: 02130102
    Course Number H: 02130203
```

This course studies the Black experience in America, both the effect of society on Black Americans and as well as Black Americans' influence on society. It examines the history, culture, and politics of Black people within America and centers the experiences, voices, and accomplishments of Black Americans as a challenge to traditional narratives. Through the lens of Black Excellence, this course examines Politics, Business, Education, Culture, and Legacies. It embeds a discussion of culture throughout and includes a culminating project where students focus on legacies of excellence in the past, in the future, and in their own lives.

## Economics or

Economics H
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 10, 11, 12
Course Number: 02070102
Course Number H: 02070203
This one-semester course is an introduction to fundamental micro and macroeconomic concepts. Major topics include supply and demand, prices, market structures, financial markets, money and banking, monetary and fiscal policy, government regulations, and comparative economic systems. There is an emphasis on economic literacy, and a major goal is to develop an understanding of the vocabulary and analytical techniques used by economists. Honors level students have increased rigor in their study and application of learning as well as undertake considerable reading at an advanced level.

## AP Economics

Length/credit:
Grade (s):
Prerequisite:

1 year - 1.0 credit
11, 12
It is recommended that interested students have grades of "A" or "B" in the current honors or AP level Social Studies core course and recommendation from a member of the Social Studies Department. 02070604
Course Number:
introductions to both Microeconomics and Macroeconomics. Microeconomics is focused on helping students develop a thorough understanding of principles of economics that apply to the functions of both consumers and producers within the economic system. It places primary emphasis on the nature and functions of product markets and includes the study of factor markets and the role of government in promoting greater efficiency and equity in the economy. Macroeconomics gives students a thorough understanding of principles of economics that apply to economic systems as a whole. The course places particular emphasis on the study of national income and price-level determination and develops students’ familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. This course prepares students to take both the AP Microeconomics and AP Macroeconomics exams.

IB Economics-SL (offered at Harriton High School only)
Length/credit:
Grade (s):
Course Number:
1 year - 1.0 credit
11, 12
02070305
The Standard Level IB Economics class provides students a solid foundation in microeconomics and macroeconomics. Basic economic terminology is emphasized, and students become familiar with analyzing economic models, graphs, and data. While the course focuses on the central economic questions of "What?", "How?", and "For whom?" students apply economic theory to the real world issues of economic development, market structures, the environment, and the impact of technology. Students are required to prepare commentaries linking the material in the classroom to contemporary situations described in published news media. This course is offered depending on enrollment and may be taken by non-IB students. All students enrolled in this class are required to complete all International Baccalaureate assessments.

| IB Economics-HL (Part 1) | (offered at Harriton High School only) |
| :--- | :--- |
| Length/credit | 1 year -1.0 credit |
| Grade (s): | 11,12 |
| Course Number: | 02070405 |

This course is the first year of the two-year Higher Level IB Economics class and provides students with an in- depth study of microeconomics and macroeconomics. Basic economic terminology is emphasized, and students become familiar with analyzing economic models, graphs, and data. While the course focuses on the central economic questions of "What?", "How?", and "For whom?" students apply economic theory to the real world issues of economic development, market structures, the environment, and the impact of technology. Students are required to prepare commentaries linking the material in the classroom to contemporary situations described in published news media. This course is offered depending on enrollment and may be taken by non-IB students as well. Please note that taking Part 1 of this course does not guarantee that Part 2 will fit into your schedule the following year. All students enrolled in this class are required to complete all International Baccalaureate assessments.

```
IB Economics-HL (Part 2) (offered at Harriton High School only)
    Length/credit 1 year - 1.0 credit
    Grade (s): 12
    Prerequisite: IB Economics-HL (Part 2) HL.
    Course Number: 02070505
```

This course is the second year of the two-year Higher Level Economics class and will expand on the economic foundations covered in Part 1. There is a further analysis of such topics as cost theory, market structures, Veblen and Giffin goods, multipliers and accelerators, inflation measures, Philips curves, Laffer curves, Lorenz curves, comparative advantage, Marshall-Lerner conditions, and trade issues. This course is offered depending on enrollment and may be taken by non- IB students as well. All students enrolled in this class are required to complete all International Baccalaureate assessments.

## Global Citizenship or <br> Global Citizenship H <br> Length/credit <br> Grade (s): <br> Course Number: <br> Course Number H: <br> 1 semester - 0.5 credit <br> 9, 10, 11 <br> 02020512 <br> 02020503

This course invites learners to become positive forces as global citizens. This curriculum's studentcentered approach combines academic learning with experiential service experiences. Students study poverty, gender equity, income inequality, human and civil rights, environmental sustainability, globalization and interdependence, as well as cultural diversity. This course requires 30-40 hours of community service per semester. Because these service opportunities are informed by academic study, they increase intercultural competence and global awareness in both practical and scholarly ways.

## AP Human Geography

Length/credit: $\quad 1$ year -1.0 credit
Grade (s):
11, 12
Course Number:
02120104
This course enhances understanding of how humans interact with the world around them. The course focuses on the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface and the tools geographers use to study how humans interact with the earth and the consequences of those actions. During the course, students interpret maps and analyze geospatial data, understand and explain the implications of associations and networks among phenomena in places, recognize and interpret the relationships among patterns and processes at different scales of analysis, define regions and evaluate the regionalization process, and characterize and analyze changing interconnections among places. Essentially, students study "where stuff is and why it's there." This college-level course includes class discussions, geography activities, practice exams, essay exams, and geographic fieldwork. The course prepares students to take the AP Human Geography exam.

## Philosophy and Modern Culture or

Philosophy and Modern Culture H
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 11, 12
Course Number: 02080102
Course Number H: 02080103
This course is a study of philosophical questions and their application to modern life. Students study great thinkers and the ways in which their viewpoints are relevant to the modern world. Issues such as the role of science and technology, theories of knowledge, and moral philosophy are discussed. Contemporary readings and films are used for illustration. The honors course involves significantly more reading, writing, and research than the college preparatory level.

## Psychology or

Psychology H
Length/credit: $\quad 1$ semester -0.5 credit
Grade(s): 11, 12
Course Number: 02060102
Course Number H: 02060203
This course is an introduction to the field of psychology with special emphasis on applying course content to students' life experiences. The content spans a wide range of topics such as learning, development, the brain, personality, the senses, psychological testing, and psychiatry. The course seeks to help students develop healthy and realistic personal attitudes as they approach adulthood. Included in the course is a moderate amount of reading, writing, experimental projects, and class discussions. Honors level students have increased rigor in their study and application of learning.

## AP Psychology

Length/credit:
Grade(s):
Prerequisite:
1 year - 1.0 credit
11, 12
It is recommended that interested students have grades of "A" or "B" in the current honors or AP level Social Studies core course and recommendation from a member of the Social Studies Department.
Course Number: 02060304
This course is the secondary school equivalent to an introductory college-level course in psychology. The course is designed to introduce students to the scientific study of behavior and mental processes of human beings and other animals. Students are exposed to the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. They also learn about the ethics and methods psychologists use in their science and practice. This course prepares students to take the AP Psychology exam.

IB Psychology SL (offered at Harriton High School only)
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 11,12$
Course Number: 02060305
The IB Psychology-SL class provides students with a solid foundation in the historical background of psychology as a social science. Students are exposed to the study of the behavior of organisms, both animal and human. They study various methodologies and philosophical positions as they have developed in modern psychology. Students are exposed to the utilization of the scientific method in the social sciences and its importance in the growth of the psychological sciences. This course may be taken by non-IB students as well. All students enrolled in this class are required to complete all International Baccalaureate assessments.

| IB Psychology HL (Part 1) | (offered at Harriton High School only) |
| :--- | :--- |
| Length/credit: | 1 year -1.0 credit |
| Grade(s): | 11 |
| Course Number: | 02060405 |

The IB Psychology-HL (Part 1) class is the first year of the Higher Level Psychology class. The HL course expands on the foundational information covered in the SL course. In addition to the historical and theoretical background information, HL students produce an original research project following IB guidelines. This course is offered depending on enrollment and may be taken by non-IB students as well. All students enrolled in this class are required to complete all International Baccalaureate assessments.

IB Psychology HL (Part 2) (offered at Harriton High School only)
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 12
Course Number: 02060505
The IB Psychology HL (Part 2) class is the second year of the Higher Level IB Psychology class. This class continues to expand on foundational information begun in the first year of the class. In addition, students study an assigned area in depth. This is the year in which their experimental study is completed, requiring 25 hours, 1500-2000 words, and includes the use of inferential statistics as part of the analysis of data. All students enrolled in this class are required to complete all International Baccalaureate assessments.

## World Languages

The World Language Program focuses on communication within the cultural context of the language being studied. The major goals are as follows:

- Communicate in the target language through speaking, writing, listening, reading.
- Gain knowledge and understanding of other cultures.
- Connect with other disciplines to acquire a deeper insight into one's own language and culture.
- Participate in multilingual communities and global societies.

In World Language classes, reading, writing, listening, and speaking skills are seen through a communicative lens and within a larger context rather than in isolation. The three modes are: interpersonal (speaking/listening, reading/writing), interpretive (reading, listening) and presentational (speaking, writing). Instruction and assessment, to the greatest extent possible, reflect real world, authentic communication in the target language and use as many authentic materials as possible.

## French

French 1
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: No experience or no more than 1 year Middle School French experience.
Course Number: 05010302
This course introduces students to the French language and is intended for students who have never studied French or had no more than one year of Middle School French study. The class develops at a moderate pace to keep students' comfort level high as they communicate in a new language. French 1 students begin to read, write and develop a familiarity with French phonetic and spelling system. Students begin to learn about the culture of French speaking countries and to draw comparisons to their own culture. By the end of the course students are able to express themselves orally and in writing in familiar situations within the novice-low or even novice-mid ranges on the ACTFL Proficiency scale. Students in French 1 engage in role plays, dialogues, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based on skill assessments. This course is designed to prepare students for French 2.

French 1 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite
Course Number:
9, 10, 11, 12
No experience or no more than 1 year Middle School French experience. 05010403
This course introduces students to the French language and is intended for students who have never studied French or had no more than one year of Middle School French study. The class develops at an accelerated pace. French 1 H students develop a familiarity with the French phonetic and spelling system. The students begin to learn about the culture of French speaking countries and to draw comparisons to their own culture. By the end of the course students are able to express themselves orally and in writing in familiar situations within the late novice-low or novice-mid ranges on the ACTFL Proficiency scale. Students in French 1 Honors engage in role plays, dialogues, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based on skill assessments. This course is designed to prepare students for French 2 H .

## French 2

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: French 1 or Middle School French.
Course Number: 05010802
This course is a continuation of French 1 or Middle School French designed for students interested in further developing proficiency in the French language. Students' skills of reading, writing, listening, and speaking are enhanced through a wide range of activities and with the aid of multiple resources including video, music, technology and various text types. Students learn to express themselves in French with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. Various forms of exposure to new topics keep the students learning at a comfortable pace. Students continue to learn about the culture of French speaking countries and to draw comparisons to their own culture. By the end of the course, students are able to express themselves orally and in writing in familiar situations within the novice-low or novice-mid ranges on the ACTFL Proficiency scale. Students in French 2 engage in role plays, dialogues, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based on skill assessments. This course is designed to prepare students for French 3.

French 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
9, 10, 11, 12
FLES French through 8th grade with high proficiency, successful completion of Middle School French or French 1 H and teacher recommendation.
Course Number: 05010903
French 2 Honors is the first course in a series of courses that prepares students to take the AP French Language Exam. This course develops at an accelerated pace. The course is conducted primarily in French. Students learn more complex grammatical structures and continue to read, speak and write on a variety of topics. Students continue to engage in discussion in the present tense and expand to discussion in the past and future. By the end of the course, students are able to express themselves orally and in writing in familiar situations at the novice-high range on the ACTFL Proficiency scale. Students in French 2 H engage in role plays, dialogues, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for French 3 H .

## French 3

Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite:
Course Number:

10, 11, 12
French 2 and teacher recommendation.
05011102

This course is a continuation of French 2 for students working toward an intermediate level of proficiency. Students learn to express themselves in French with greater confidence and clarity as they expand their vocabulary and gain experience using more complex grammatical and linguistic structures. At this level, students are increasingly expected to interact with one another in French to simulate a wide range of everyday encounters with their peers in the target language. Students continue to learn about the culture of Francophone countries and to draw comparisons to their own culture. Students enhance reading, writing, listening and speaking skills through a wide range of activities and with the aid of multiple resources including video, music, computer software, audio recordings and multiple text types. By the end of the course, students are able to express themselves orally and in writing in familiar situations at the novice high range on the ACTFL Proficiency scale. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for French 4.

Length/credit:
Prerequisite:

1 year - 1.0 credit
Successful completion of French 2 H or French 3 and teacher recommendation.
05011203

Course Number:
French 3 Honors is an accelerated course that continues to prepare students for the Advanced Placement French program. Class continues to be conducted primarily in French as students work towards conversing with each other or with the teacher entirely in French. This course proceeds at an accelerated pace. Grammar and vocabulary from the previous year are reviewed as students incorporate more advanced grammatical structures and vocabulary. By the end of the course, students are able to express themselves at intermediate low scale on the ACTFL Proficiency scale. Students in French 3 H engage in role plays, debates, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Authentic materials and readings are utilized as much as possible. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for French 4 H .

## French 4

Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite:
Course Number:

This challenging intermediate level course is a continuation of French 3. Students learn to express themselves in French with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. At this level, students are expected to interact with one another in French to simulate a wide range of encounters in the target language. Students continue to learn about the culture of Francophone countries and to draw comparisons to their own culture. Students enhance reading, writing, listening and speaking skills through a wide range of activities and with the aid of multiple resources including video, music, computer software, audio recordings and multiple text types. By the end of the course, students are able to express themselves orally and in writing in familiar situations in the intermediate low range on the ACTFL Proficiency scale. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for French 5.

Length/credit:
Prerequisite: Course Number: 05011403
French 4 H is an accelerated continuation of French 3 H that continues to prepare students for Advanced Placement French study. Class is conducted in French and students converse with each other and with the teacher in French. Grammar and vocabulary from the previous year are reviewed as students incorporate more advanced grammatical structures and vocabulary. By the end of the course students are able to express themselves at intermediate mid scale on the ACTFL Proficiency scale. Students in French 4 H engage in research, literary analysis, debates, projects, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Authentic materials and readings are utilized in French 4 H . Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for AP or French 5 H .

## French 5

Length/credit: $\quad 1$ year -1.0 credit
Grade:
Prerequisite:
Course Number:
Successful completion of French 4 or French 4 H and teacher recommendation.

This is a culminating course for students who have completed French 4 and are interested in exploring the culture and history of francophone countries. Students learn to express themselves in French with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. At this level, students are expected to interact with one another in French to simulate a wide range of encounters in the target language. Students enhance reading, writing, listening and speaking skills through a wide range of activities and with the aid of multiple resources including video, music, computer software, audio recordings and multiple text types. By the end of the course, students are able to express themselves orally and in writing in familiar situations in the intermediate mid range on the ACTFL Proficiency scale. Students read fiction, non-fiction, short stories and articles that focus on French history, literature, music, film and art. French 5 is conducted in French and involves daily review and practice at home. Students build vocabulary, advanced grammar skills and cultural knowledge. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments.

French 5 H
Length/credit: $\quad 1$ year -1.0 credit
Grade:
Prerequisite: Successful completion of French 4 H and teacher recommendation. Course Number: 05011603
This is a challenging, culminating course in which students continue to greatly expand and refine their speaking, listening, reading and writing skills in French. Students read fiction, non-fiction, short stories, plays and articles. This course focuses on francophone countries and integrates history, literature, music, and art into the study of language and culture. The French 5 H course includes an in-depth exploration of complex grammar. French 5 H involves daily review and practice at home. By the end of the course, students are able to express themselves orally and in writing in familiar situations in the intermediate-mid to intermediate-high range on the ACTFL Proficiency scale. French 5 H is conducted entirely in French. Expanded vocabulary and irregular structures are learned through readings, short stories, novels and plays by French authors. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments.

## AP French Language

Length/credit: $\quad 1$ year -1.0 credit
Grade: $\quad 10,11,12$
Prerequisite: Successful completion of French 4 H and teacher recommendation. Course Number: 05011704
This course is offered in a total immersion environment. The course is the equivalent of a universitylevel course and therefore places rigorous demands on students and proceeds at an accelerated pace. One of the goals of the Advanced Placement Program is to prepare students to successfully complete an AP exam. Advanced grammar is reviewed as necessary. Students further develop conversational skills and aural comprehension in French through discussions, debates, analysis of reading materials and oral presentations of original materials. Students listen to authentic French news sources and react to authentic French audio and visual materials. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. At the conclusion of the course, students are able to continue their language studies at the college level. Students are encouraged to take the AP exam offered by the College Board's Advanced Placement Program.

French 6 H French for Global Competence
Length/credit: $\quad 1$ year -1.0 credit
Grade: $\quad 11,12$
Prerequisite: Successful completion of French 5, 5H, 5 AP.
Course Number: 05011903
Students who have completed Levels $5 \mathrm{CP}, 5 \mathrm{H}$, or AP can continue their French studies with this course which looks at how francophone literature and film reflect and connect to the human experience across cultures. Students read a variety of literary genres, which may include novels, plays, and short stories from a range of time periods and French-speaking countries. The selected readings are accompanied by films and documentaries that further enhance students' appreciation and cultural understanding of the texts. Students explore culturally rich themes and make connections to current issues of modern society, such as social injustice and human relationships. Through independent and guided readings, students demonstrate their understanding of the texts by producing written and oral analyses and creative pieces. The course concludes with the independent study literary work of choice and encourages student choice. All activities are conducted exclusively in French.

## Japanese

Japanese 1 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 11,12$
Prerequisite: Success in prior language study, high overall academic achievement or second language proficiency.
Course Number: 05040403
This course, open to juniors and seniors only, is an introduction to the modern Japanese language. In the first year, students learn the sound system of Japanese, be able to pronounce correctly a sizeable vocabulary of words and expressions, to learn to understand and speak simple Japanese sentences and dialogues, and to become proficient in reading and writing using the two syllabaries of hiragana and katakana plus a few simple kanji. Japanese 1H also introduces students to various aspects of Japanese culture. By the end of the course, students are able to express themselves orally and in writing in familiar situations. Assessments are based on a variety of activities including oral presentations and skits, dialogues and writing samples as well as individual reports in Japanese.

Japanese 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 12
Prerequisite: Successful completion of Japanese 1 H and teacher recommendation. Course Number: 05040903
Japanese 2 H is a continuation of Japanese 1 H for students who want to increase their ability to understand, speak, read and write the modern Japanese language. In this course students continue to learn vocabulary and expressions, and they begin to use more complex Japanese grammar and verb structures. Students also study the various speech levels and styles that influence Japanese relationships. In addition to oral work, students study kanji in order to increase their ability to read and write Japanese. Students view films, sing songs and learn more about Japanese culture while becoming more proficient in the Japanese language.

Latin 1
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite: No prior study of Latin or no more than 1 year experience in Middle School Latin.
Course Number: 05030302
This course introduces students to Latin and is intended for students who have never studied Latin or had no more than one year of middle school Latin study. The course develops at a moderate pace to keep students' comfort level high as they learn this new language. Students learn about Roman life, Roman history, and Roman mythology. By learning Latin, students improve their English vocabulary, as Latin is the root of much of the English language. The primary goal of this course is to read and understand elementary Latin. Students learn through pronunciation and grammar drills, syntax exercises, pair or small group work, utilization of various technologies, projects and games. Assessments include written tests/quizzes, presentations of research, in class activities and skits. This course prepares students to enter Latin 2.

Latin 1 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: No prior study of Latin or no more than 1 yr. experience in Middle School Latin
Course Number: 05030403
This course introduces students to Latin and is intended for students who have never studied Latin or had no more than one year of middle school Latin study. The class develops at an accelerated pace in preparation for Latin 2 Honors. Latin 1 offers students the opportunity to have an increased awareness of English grammar and syntax, an understanding of ancient Roman culture, mythology and government, and a fundamental introduction to etymology, the study of word roots and origins. The primary goal of this course is to read and understand elementary Latin. Students learn through pronunciation and grammar drills, syntax exercises, pair or small group work, utilization of various technologies, projects and games. Assessments include written tests/quizzes, presentations of research, in class activities and skits. This course prepares students to enter Latin 2 or Latin 2 H .

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Prerequisite: | Two years of Middle School Latin, Latin 1 or Latin 1 H. |
| Course Number: | 05030802 |

This course is a continuation of Middle School Latin 7 and 8, Latin 1, or Latin 1 H. Students continue to expand their Latin vocabulary and, through the study of derivatives, expand their English vocabulary as well. Students learn increasingly sophisticated grammar. Cultural studies include mythology, daily life, Roman history and other topics. The course also includes a cultural component. Students learn through pronunciation and grammar drills, syntax exercises, pair or small group work, utilization of various technologies, projects and games. Assessments include written tests/quizzes, presentations of research, in class activities, and skits.

Latin 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 9,10,11, 12
Prerequisite: Two years of Middle School Latin or successful completion of Latin 1 H .
Course Number: 05030903
This course is a continuation of two years of Middle School Latin or Latin 1 H . Latin 2 H includes a comprehensive review of the principles and fundamentals of the first year course and the beginning of an advanced study of Latin grammar. Students continue to expand their Latin vocabulary and, through the study of derivatives, expand their English vocabulary as well. Students apply this knowledge as they strengthen their translation skills. Students read selections from a number of Roman prose authors. Cultural studies will include mythology, daily life, Roman history and other topics. The course also includes the celebrations of Roman festivals. Students learn through pronunciation and grammar drills, syntax exercises, pair or small group work, utilization of various technologies, projects and games. Assessments include written tests/quizzes, presentations of research, in class activities and skits. This course prepares students to enter Latin 3 H .

## Latin 3

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 10,11,12$
Prerequisite: Latin 2
Course Number: 05031102
This course is a continuation of Latin 2. Students continue to expand their Latin vocabulary and, through the study of derivatives, expand their English vocabulary as well. Students learn increasingly complex grammatical structures. Cultural studies build on previous studies about mythology, daily life, and Roman history. Students learn through pronunciation and grammar drills, syntax exercises, pair or small group work, utilization of various technologies, projects and games. Assessments include written tests/quizzes, presentations of research, in class activities, and skits.

Latin 3 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 10,11,12$
Prerequisite: Latin 2 H and teacher recommendation.
Course Number: 05031203
This rigorous course is a continuation of Latin 2 H . After a thorough review of Latin grammar, students will read a variety of prose authors including Pliny and Cicero. Students strive for accurate and contextually appropriate translations. Through close attention to the text, students learn to identify figures of speech and examine how these reinforce an author's message. Students develop skills in writing cogent and persuasive literary analysis. Assessments include written tests/quizzes, presentations of research, in class activities and skits. This course prepares students to enter Latin 4 H.

Latin 4 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11, 12
Prerequisite: Latin 3 H and teacher recommendation.
Course Number: 05031403
This rigorous course constitutes the first half of the AP Latin syllabus. In this course students read selections from the prose works of Julius Caesar and poetry from Ovid's Metamorphoses. Class work focuses on accurate translation informed by knowledge of grammar and syntax, figures of speech, scansion, mythology and the world of ancient Rome. Students also have extensive practice in sightreading Latin texts and in writing analytical essays about literature.

## AP Latin

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 11, 12
Prerequisite: Latin 4 H.
Course Number: 05031704
The AP syllabus features readings from Vergil's Aeneid, considered one of the greatest poems in western literature. Students continue to develop skills in translation and literary analysis. They learn more about the nuances of the Latin hexameter verse form and the way Vergil employs it along with figures of speech to heighten or adumbrate the meaning of the text. Students work on translations in class and further refine their ability to produce accurate, literary translations. Students also have extensive practice in sight-reading Latin texts and in writing analytical essays about the literature. At the completion of the course, students are prepared to take the Advanced Placement Examination.

Latin 6 Literature H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 12
Prerequisite: AP Latin
Course Number: 05031803
This course includes selected readings highlighting the following topics: Vergil's Aeneid; Caesar's De Bello Gallico; the love poetry of Catullus and Horace; social criticism of Horace and Martial; and villains portrayed by Vergil, Livy and Sallust. Students continue to refine their translation and literary analysis skills, in addition to increasing their facility in scansion and syntactical understanding. Students have extensive practice in sight-reading Latin texts and in writing analytical essays about the literature.

Spanish

Spanish for Spanish Speakers 1 H and 2 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: Written sample and oral interview to determine proficiency in Spanish.
Course Number 1 H: 05022003
Course Number 2 H: 05022103
These courses are designed for students who speak Spanish as their first language or are heritage speakers. They focus on four main areas:

- Maintaining proficiency in Spanish through the formal study of the language with a focus on; grammar, reading, writing, and vocabulary development;
- Expanding the bilingual range moving beyond developing initial expressive and receptive language abilities;
- Cultivating a much broader command of the language;
- Developing awareness about the differences between standard Spanish and other varieties, formal and informal Spanish, and literacy skills in Spanish.

Both courses use thematic units to address the four goals with varying levels of difficulty based on the students' needs. Depending on demand for the course, students may be individually placed into combined sections of upper level Spanish or Honors Spanish classes.

## Spanish 1

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite
$9,10,11,12$
No prior study of Spanish or no more than 1 year Middle School Spanish.
Course Number: 05020152
This course, which introduces students to the Spanish language, is intended for students who have never studied Spanish or had no more than one year of middle school Spanish study. The class develops at a moderate pace to keep the students' comfort level high as they communicate in a new language. Spanish 1 students begin to read, write and develop a familiarity with the Spanish phonetic and spelling system. The students begin to learn about the culture of Spanish speaking countries and to draw comparisons to their own culture. By the end of the course, students are able to express themselves orally and in writing in familiar situations at the novice-low to novice-mid ranges on the ACTFL Proficiency scale. Students in Spanish 1 engage in dialogues, projects, games, paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 2.

## Spanish 1 H

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
Course Number:
This course, which introduces students to the Spanish language, is intended for students who have never studied Spanish or had no more than one year of middle school Spanish study. This challenging class develops at a quick pace. Spanish 1 H students develop a familiarity with the Spanish phonetic and spelling system. The students begin to learn about the culture of Spanish speaking countries and to draw comparisons to their own culture. By the end of the course students are able to express themselves orally and in writing in familiar situations within the late novice-low or novice-mid ranges on the ACTFL Proficiency scale. Students in Spanish 1 H engage in role plays, dialogues, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 2 H .

## Intermediate Spanish

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite:
9, 10, 11, 12
Spanish 1, one year of Middle School study, or by teacher recommendation.
Course Number: 05020202
This course provides time and review of Spanish 1 themes and skills. It is intended for students who have had one year of middle school Spanish study, one year of high school Spanish, or who have been recommended to take this class in order to best prepare for success in Spanish 2. The class proceeds at a moderate pace and includes a review of Spanish 1 material. Students have more opportunities to read, write and develop a familiarity with the Spanish phonetic and spelling system. The students continue to learn about the culture of Spanish speaking countries and to draw comparisons to their own culture. By the end of the course, students are able to express themselves orally and in writing in familiar situations at the novice-low to novice-mid ranges on the ACTFL Proficiency scale. Students in Spanish Intermediate engage in dialogues, projects, games, paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 2.

## Spanish 2

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 9,10,11,12$
Prerequisite: Spanish 1 or Middle School Spanish and teacher recommendation.
Course Number: 05020802
This course is a continuation of Spanish 1 or Middle School Spanish designed for students interested in further developing proficiency in the Spanish language. Students' skills of reading, writing, listening, and speaking are enhanced through a wide range of activities and with the aid of multiple resources including video, music, technology and various texts. Students learn to express themselves in Spanish with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. At this level, students are expected to interact with one another in Spanish to simulate a wide range of everyday encounters with peers in the target language. Various forms of exposure to new topics keep the students learning at a comfortable pace. Students continue to learn about the culture of Spanish speaking countries and to draw comparisons to their own culture. By the end of the course, students are able to express themselves orally and in writing in familiar situations within the novice-mid ranges on the ACTFL Proficiency scale. Students in Spanish I engage in role plays, dialogues, projects, games, paired, group and whole class activities and are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 3.

Length/credit:
Grade(s):
Prerequisite:
Course Number:
903
Spanish 2 Honors is the first course in a series of courses that prepares students to take the AP Spanish Language Exam. This course develops at an accelerated pace. The course is conducted primarily in Spanish. Students learn more complex grammatical structures and continue to read, speak and write on a variety of topics. Students continue to engage in discussion in the present tense and expand to discussion in the past and immediate future. By the end of the course, students are able to express themselves orally and in writing in familiar situations at the novice- high range on the ACTFL Proficiency scale. Students in Spanish 2 H engage in role plays, dialogues, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 3 H.

## Spanish 3

Length/credit:
Grade(s):
Prerequisite:
Course Number:
This course is a continuation of Spanish 2. Students learn to express themselves in Spanish with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. At this level, students are increasingly expected to interact with one another in Spanish to simulate a wide range of everyday encounters with peers in the target language. Students continue to learn about the culture of Spanish speaking countries and to draw comparisons to their own culture. Students enhance reading, writing, listening, and speaking skills through a wide range of activities and with the aid of multiple resources including video, music, technology and multiple text types. By the end of the course, students are able to express themselves orally and in writing in familiar situations at the novice high range on the ACTFL Proficiency scale. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 4.

Spanish 3 H
Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Prerequisite
Course Number:
10, 11, 12
Successful completion of Spanish 2 H or Spanish 3 and teacher recommendation.

Spanish 3 H is an accelerated course that continues to prepare students for the Advanced Placement Spanish program. Class continues to be conducted primarily in Spanish as students work towards conversing with each other or with the teacher entirely in Spanish. This course proceeds at an accelerated pace. Grammar and vocabulary from the previous year are reviewed as students incorporate more advanced grammatical structures and vocabulary. By the end of the course, students are able to express themselves at intermediate low scale on the ACTFL Proficiency scale. Students in Spanish 3 H engage in role plays, debates, projects, games, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Authentic materials and readings are utilized as much as possible. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 4 H .

Spanish 4
Length/credit: $\quad 1$ year -1.0 credit
Grade(s): $\quad 11,12$
Prerequisite: Successful completion of Spanish 3 and teacher recommendation.
Course Number: 05021302
This challenging intermediate-level course is a continuation of Spanish 3. Students learn to express themselves in Spanish with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. At this level, students are expected to interact with one another in Spanish to simulate a wide range of encounters in the target language. Students continue to learn about the culture of Spanish speaking countries and to draw comparisons to their own culture. Students enhance reading, writing, listening and speaking skills through a wide range of activities and with the aid of multiple resources including video, music, computer software, audio recordings and multiple text types. By the end of the course, students are able to express themselves orally and in writing in familiar situations in the intermediate low range on the ACTFL Proficiency scale. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for Spanish 5.
Length/credit: $\quad 1$ year -1.0 credit

Grade(s):
Prerequisite: Course Number: 05021403
Spanish 4 H is an accelerated continuation of Spanish 3 H that continues to prepare students for Advanced Placement Spanish study. Class is conducted in Spanish and students converse with each other and with the teacher in Spanish. Grammar and vocabulary from the previous year are reviewed as students incorporate more advanced grammatical structures and vocabulary. By the end of the course, students are able to express themselves at intermediate mid scale on the ACTFL Proficiency scale. Students in Spanish 4 H engage in research, literary analysis, debates, projects, and paired, group and whole class activities. They are exposed to various text types as they practice reading, writing, listening and speaking within a cultural context. Authentic materials and readings are utilized in Spanish 4 H. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. This course is designed to prepare students for AP or Spanish 5 H .

## Spanish 5

Length/credit: $\quad 1$ year -1.0 credit
Grade(s): 12
Prerequisite:
Course Number:
Successful completion of Spanish 4 and teacher recommendation. 05021502

This is a culminating course for students who have completed Spanish 4 and are interested in exploring the culture and history of Spain and Latin America. Students learn to express themselves in Spanish with greater confidence and clarity as they expand their vocabulary and gain experience with more complex grammatical and linguistic structures. At this level, students are expected to interact with one another in Spanish to simulate a wide range of encounters in the target language. Students enhance reading, writing, listening and speaking skills through a wide range of activities and with the aid of multiple resources including video, music, technology, audio recordings and multiple text types. By the end of the course, students are able to express themselves orally and in writing in familiar situations in the intermediate mid range on the ACTFL Proficiency scale. Students read fiction, non-fiction, short stories and articles that focus on Spanish and Latin American history, literature, music, film and art. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments.

| Length/credit: | 1 year -1.0 credit |
| :--- | :--- |
| Grade(s): | 12 |

Prerequisite: Successful completion of Spanish 4 H and teacher recommendation. Course Number: 05021603
This is a challenging culminating course in which students continue to greatly expand and refine their speaking, listening, reading and writing skills in Spanish. Students read fiction, non-fiction, short stories, plays and articles. This course focuses on Spain and Latin America and integrates history, literature, music, and art into the study of language and culture. The Spanish 5 H course includes an in-depth exploration of complex grammar. By the end of the course, students are able to express themselves orally and in writing in familiar situations in the intermediate-mid to intermediate-high range on the ACTFL Proficiency scale. Spanish 5 H is conducted entirely in Spanish. Expanded vocabulary and irregular structures are learned through readings, short stories, novels and plays by Spanish and Latin American authors. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments.

AP Spanish Language
Length/credit: $\quad 1$ year -1.0 credit
Grade:
Prerequisite:
10, 11, 12
Successful completion of Spanish 4 H or Spanish for Spanish Speakers $1 \mathrm{H} / 2 \mathrm{H}$ and teacher recommendation.
Course Number: 05021704
This course is offered in a total immersion environment. The course is the equivalent of a universitylevel course and therefore places rigorous demands on students and proceeds at an accelerated pace. One of the goals of the Advanced Placement Program is to prepare students to successfully complete an AP exam. Students improve their language proficiency through a more in-depth study of Spanish grammar and through the analysis of Hispanic Literature and various media forms. Students are required to express their reactions in written and oral form displaying richness of vocabulary, use of idiomatic expressions and evidence of complex syntax. Assessments include interpersonal listening and speaking, presentational writing and speaking, interpretive listening and reading as well as grammar and vocabulary based skills assessments. At the conclusion of the course, students are able to continue their language studies at the college level. Students are encouraged to take the AP exam offered by the College Board‘s Advanced Placement Program.

Spanish 6 H for Global Competence
Length/credit: 1 year -1.0 credit

Grade:
Prerequisite:
Course Number:

11, 12
Successful completion of Spanish 5 H, AP.
05021803

Students who have completed Spanish 5 H , or AP continue their study of the Spanish language through an examination of majority and minority voice in literature, film, art, and music in the Spanish language. This study includes an application of those themes through service in the community. Through teacher guided and independent readings and films, students explore issues of social justice and deduce root causes, consider the needs of communities, and learn about past solutions and their consequences as well as potential growth moving forward. With a bank of organizations and resources from the community, students independently craft a service project that allows them to advocate for themselves and others through recognition of the perspectives and needs of the community, as well as the responsibility and sustainability of service moving forward. The course emphasizes strategic use of language in regards to audience, purpose, and command of language and will be conducted exclusively in Spanish.

## Additional Course Offerings

Becton Scholars Seminar (offered at Lower Merion High School only)
Length/Credit:
1 year (1 time per cycle) 0.33 credit
1 year ( 2 times per cycle) 0.667 credit
Grade(s):
$9,10,11,12$
Course Number:
14080100-14080700
Seminar is a course for students who participate in the Lower Merion High School Becton Scholars Program. Emphasis is placed on the learning and enhancement of effective goal setting, study skills, time management strategies, note-taking/making, close reading and critical thinking techniques for the purpose of ensuring access to a viable and challenging instructional experience that better prepares students for college and career. Students receive direct instruction in standardized test taking strategies and work collaboratively to generate, plan and execute service opportunities both within the Becton Scholars Program and the larger school community with the goal of developing leadership skills and becoming more productive and contributing citizens.

```
POWER Scholars Program (offered at Harriton High School only)
    Length/Credit: 1 year (1 time per cycle) 0.33 credit
    Grade(s): 9,10,11,12
    Course Number: }1409010
```

POWER Scholars is a course for students who participate in the Harriton High School POWER Scholars Program. Emphasis is placed on the learning and enhancement of effective goal setting, study skills, time management strategies, note-taking/making, close reading and critical thinking techniques for the purpose of ensuring access to a viable and challenging instructional experience that better prepares students for college and career. Students receive direct instruction in proven standardized test taking strategies and work collaboratively to generate, plan and execute service opportunities both within the POWER Scholars Program, as well as the larger school community. Within the class, students also learn about the contributions of people of color to civilization, social activism, and progress.

NOW Program (New Options Work) and Communications
Length/credit: 1 year ( 1 time per cycle) 0.33 credit
1 year ( 2 times per cycle) 0.667 credit
1 year ( 3 times per cycle) 1.0 credit
Grade(s): 9,10, 11, 12
Course Number: 14030100-14030300
The NOW Program is a general education support program. Students who currently participate in the NOW Program should register for Communications Lab during course selection. A description of the NOW Program is available to students and parents through the student's school counselor.

## Gifted Education Support and Services

Gifted education supports and services are provided when data indicate a need for specially designed instruction to meet the strengths of students identified as mentally gifted. These specially designed supports and services are identified annually in the Gifted Individualized Education Plan (GIEP) through collaboration by the GIEP team. These supports and services are provided as enrichment, acceleration or a combination of both, when determined appropriate by the GIEP team, to help students make meaningful progress towards annual academic goals that are aligned to Pennsylvania's Core Standards. Students receive specially designed instruction across the school day, both in Academic Seminar and in the general education classroom. Academic Seminar is one enrichment option available to students identified as mentally gifted when determined appropriate by GIEP teams. The curricula for Academic Seminar consist of more complex and in depth studies of significant ideas and key concepts, skills and thought processes explored in the general education curricula. The Academic Seminar curricula emphasize higher-level thinking, creativity and problem solving skills that help students to recognize complex relationships and arrive at sound generalizations.

## Academic Seminar

Length/credit $\quad 1$ year -up to 0.33 credit
Grade(s): $\quad 9,10,11,12$
Course Numbers:
Academic Seminar 9: 14040500
Academic Seminar 10: 14040600
Academic Seminar 11: 14040700
Academic Seminar 12: 14040800
Each student's Gifted Individualized Education Program (GIEP) team determines whether the student will participate in this course.

## Special Education Support and Services

Special Education supports and services are available to eligible students attending Lower Merion School District High Schools. Eligibility for special education supports and services is determined by a multidisciplinary team that includes the student's parent(s)/guardian(s) and the student, if appropriate, following receipt of signed permission to evaluate from the student's parent(s)/guardian(s). If the student is found to be eligible for Special Education supports and services, the team will next determine his or her need for specially designed instruction and create an Individualized Education Program (IEP) for the student. The student's parent(s)/guardian(s) are then provided with a Notice of Recommended Educational Placement (NOREP) that proposes the appropriate supports and services in the least restrictive environment. Special Education services will begin only when the District receives written consent from the parent(s)/guardian(s) in the form of an approved NOREP.

Subsequent to the creation and implementation of the initial IEP, the IEP team reconvenes on at least an annual basis to review the student's progress and to review and revise the IEP. The District provides a variety of Special Education supports and services for students based upon individual needs, including but not limited to speech/language therapy, physical therapy, occupational therapy, hearing therapy, and vision therapy, as appropriate.

## Special Education Courses

Each student must be recommended for these courses by his or her IEP team.

Instructional Support Lab (ISL)
Length/credit: $\quad 1$ year -0.33 to 1.0 credit
Grade(s): 9, 10, 11, 12
Course Number: Determined by IEP team.
Students may participate in an Instructional Support Lab (ISL) for a prescribed number of class periods per cycle depending upon the program described within their IEPs. Individualized skill remediation is provided as per each student's IEP targeting a student's individual needs. Students receive direct instruction and additional support to ensure meaningful progress, maximize their achievement and assist students in their transition to a variety of postsecondary opportunities, including attending college, technical or vocational schools, participating in career readiness programs or volunteering in the community. Students earn quarterly grades based on the appropriate work completed on their individualized goals. Participation is determined by a student's IEP team based on individual needs.

## Emotional Support Instructional Support Lab (ISL)

| Length/credit: | 1 year -0.33 to 1.0 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Numbers: | Determined by IEP team. |

Students may participate in an Emotional Support Instructional Support Lab (ISL) for a prescribed number of class periods per cycle depending upon the program described within their IEPs. Individualized skill remediation is provided as per each student's IEP targeting a student's individual needs. Students receive direct instruction and additional support to ensure meaningful progress, maximize their achievement and assist students in their transition to a variety of postsecondary opportunities, including attending college, technical or vocational schools, participating in career readiness programs or volunteering in the community. Students earn quarterly grades based on the appropriate work completed on their individualized goals. Participation is determined by a student's IEP team based on individual needs.

## Academic Literacy

Length/credit $\quad 1$ year $-0.33-1.0$ credit
Grade(s): $\quad 9,10,11,12$
Course Numbers: Determined by IEP team.
Academic Literacy 1: 15160100
Academic Literacy 2: 15160200
Academic Literacy 3: 15160300
Academic Literacy 4: 15160400
This course is designed for students who require significant additional content area instruction and support in the areas of vocabulary, comprehension, and higher order critical reading skills to negotiate various texts, particularly grade level content area textbooks. Participation is determined by a student's IEP team based on individual needs.

Math Literacy
Length/credit $\quad 1$ year -1.0 credit

Grade(s):
Course Numbers:
Math Literacy 1:
Math Literacy 2
Math Literacy 3:
Math Literacy 4:
$9,10,11,12$
Determined by IEP team.
15030500
15030700
15030800
15030900

This course is designed for students who require significant additional math instruction and support in the areas of computation, concepts, and applications to achieve standards for numbers and operations, algebraic concepts, geometry, and measurement, data, and probability addressed in Integrated Math 1, Integrated Math 2 and Integrated Math 3. Participation is determined by a student's IEP team based on individual needs.

## Reading

Length/credit $\quad 1$ year $-0.33-1.0$ credit
Grade(s): $\quad 9,10,11,12$
Course Numbers: Determined by IEP team.
Reading 1: $\quad 15060100$
Reading 2: $\quad 15060200$
Reading 3: $\quad 15060300$
Reading 4: $\quad 15060400$
Students are provided individualized reading programs determined by a student's IEP team based on individual needs.

Adaptive Physical Education
Length/credit: $\quad 1$ year -0.33 credit -1.0 credit
Grade(s): 9,10,11,12
Course Number: 15190100
Participation in this course is determined by a student's IEP team based on individual needs.

## Autism Support and Services

Eligible students may access supports and services in the Autism Support Program. Students may also participate in the general education curriculum, as determined by the student's IEP team. Many students that participate in the Autism Support Program take courses in four core academic areas: language arts/reading, mathematics, social studies, and science/health. Students may also participate in elective courses, work experience courses and programs, and vocational or technical education, as determined by the student's IEP team.

## Specialized Learning Support and Services

These courses emphasize the strengthening of fundamental academic skills and the skills needed to become a productive and responsible citizen. Many students in the Specialized Learning Support Program take courses in four core academic areas: language arts/reading, mathematics, social studies, and science/health. Students may also participate in the general education curriculum, as determined by the student's IEP team. Students may also participate in elective courses, work experience courses and programs, and vocational or technical education, as determined by the student's IEP team.

## Autism Support and Specialized Learning Support Courses

Instructional Support Lab (ISL)
Length/credit: $\quad 1$ year -0.33 to 1.0 credit
Grade(s): $\quad 9,10,11,12$
Course Number: Determined by IEP team
Students may participate in an Instructional Support Lab (ISL) for a prescribed number of class periods per cycle depending upon the program described within their IEPs. Individualized skill remediation is provided as per each student's IEP targeting a student's individual needs. Students receive direct instruction and additional support to ensure meaningful progress, maximize their achievement and assist the student in their transition to a variety of postsecondary opportunities, including attending college, technical or vocational schools, participating in career readiness programs or volunteering in the community. Students will earn quarterly grades based on the appropriate work completed on their individualized goals. Participation is determined by a student's IEP team based on individual needs.

| Social Language Lab |  |
| :--- | :--- |
| Length/credit | 1 year $-0.33,0.667$, or 1.0 credit |
| Grade(s): | $9,10,11,12$ |
| Course Numbers: | Determined by IEP team. |
| Social Language Lab 1: | 15180100 |
| Social Language Lab 2: | 15180200 |
| Social Language Lab 3: | 15180300 |
| Social Language Lab 4: | 15180400 |

This course is specifically designed with a hands-on curriculum to further develop linguistic, strategic, socio-relational, and sociolinguistic competencies. The curriculum focuses on: social interactions with a variety of communication partners; pragmatic language skills; problem-solving in school, vocational and community settings; theory of mind; and individual goals and objectives identified in each student's IEP. Students utilize a variety of strategies that include (but are not limited to) role-playing, video modeling, self-evaluation, and writing analysis to complete practical application assignments and activities and reflect upon their performances on these tasks. Participation is determined by a student's IEP team based on individual needs.

## Math Applications 1

Length/credit: $\quad 1$ year -1.0 credit
Course Number: 15080501
Math Applications 1 is a functional math course that is designed to provide students with an understanding and/or review of the essential mathematical concepts necessary for further advancement in mathematics. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Topics covered will include working with number systems, operations of whole numbers, decimals, fractions and percents, order of operations, factoring, variables, exponents, formulas and algebraic expressions. Technology, including calculators and computer software programs, will be incorporated to appropriately supplement instruction. Participation is determined by a student's IEP team based on individual needs.

## Math Applications 2

Length/credit: $\quad 1$ year -1.0 credit
Course Number: 15080601
Math Applications 2 is a functional math course that is designed for those students who wish to continue their study of Algebraic concepts. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Topics to be covered include exploration of algebraic equations, proportions, graphing in the coordinate plane and the use of variables. Technology, including calculators and computer software programs, will be incorporated to appropriately supplement instruction. Participation is determined by a student's IEP team based on individual needs.

## Math Applications 3

Length/credit: $\quad 1$ year -1.0 credit
Course Number: 15080701
Math Applications 3 is a functional math course that is designed for those students who wish to explore the computational aspects of geometry. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Topics may include points, lines, planes, graphing, angles, polygons, parallel and perpendicular lines, congruency and proofs. Technology, including calculators and computer software programs, is incorporated to appropriately supplement instruction.
Participation is determined by a student's IEP team based on individual needs.

## Math Applications 4

Length/credit: $\quad 1$ year -1.0 credit
Course Number: 15080801
Math Applications 4 is a functional math course that provides an emphasis on real-world uses of mathematics such as: money, credit/debit/loans, banking, housing, taxes, budgeting and travel/vacation. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Technology, including calculators and computer software programs, is incorporated to appropriately supplement instruction. Participation is determined by a student's IEP team based on individual needs.

## Basic Math

Length/credit $\quad 1$ year -1.0 credit
Grade(s):
Course Numbers: Determined by IEP team.
Math 1: 15080100
Math 2: 15080200
Math 3: 15080300
Math 4: 15080400
This functional, hands-on curriculum supports transition to postsecondary education/training, employment and independent living. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Individualized instruction using currency and debit materials helps students learn to access the community. Students learn skills and strategies to budget and purchase items during the school week. Community-based instructional experiences may be scheduled to help students generalize instruction and practice skills in authentic settings. Participation is determined by a student's IEP team based on individual needs.

## Practical English

Length/credit
Grade(s):
Course Numbers:
Practical English 1: 15070100
Practical English 2: 15070200
Practical English 3: 15070300
Practical English 4: 15070500
This practical, hands-on curriculum supports transition to postsecondary education/training, employment and independent living through individualized strategy and skills-based instruction in reading comprehension and written expression. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Community-based instructional experiences may be scheduled to help students generalize instruction and practice skills in authentic settings. Participation is determined by a student's IEP team based on individual needs.

## Real World Literacy

Length/credit: $\quad 1$ year -1.0 credit
Grade(s):
Course Number:
12
15070400
Real World Literacy is designed to teach students the functional literacy and math skills necessary to meet their transition goals in the areas of employment and independent living. The program utilizes a simulated apartment setting to address literacy and math skills the students will need to locate and secure apartments and jobs, open and maintain bank accounts, generate and maintain a budget, manage an apartment/home, etc. This course provides authentic practice for application of literacy and math skills to employment and independent living activities, including but not limited to use of realistic forms (e.g., bills, taxes, applications, etc.), resume writing, etc. Participation is determined by a student's IEP team based on individual needs.

| Fundamentals of History |  |
| :--- | :--- |
| Length/credit | 1 year -1.0 credit |
| Grade(s): | $9,10,11,12$ |
| Course Numbers: | Determined by IEP team. |
| Practical English 1: | 15090100 |
| Practical English 2: | 15090200 |
| Practical English 3: | 15090300 |
| Practical English 4: | 15090500 |

This practical, hands-on curriculum supports transition to postsecondary education/training, employment and independent living through individualized strategy and skills-based instruction in reading comprehension and written expression. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Community-based instructional experiences may be scheduled to help students generalize instruction and practice skills in authentic settings. Participation is determined by a student's IEP team based on individual needs.

Fundamentals of Science/Health

| Length/credit | 1 year -1.0 credit |
| :--- | :--- |
| Grade(s): | $9,10,11,12$ |
| Course Numbers: | Determined by IEP team. |
| Fundamentals of Science/Health 1: | 15100100 |
| Fundamentals of Science/Health 2: | 15100200 |
| Fundamentals of Science/Health 3: | 15100300 |
| Fundamentals of Science/Health $4:$ | 15100400 |

This functional, hands-on curriculum supports transition to postsecondary education/training, employment and independent living and may be linked to community-based instructional experiences. Instruction is based upon Alternate Eligible content aligned to the PA Core Standards. Course topics include basic hygiene practices, changes in the body, healthy eating behaviors, and when to seek medical attention. Vocabulary and reading comprehension instruction is embedded into instruction and classroom discussions. Participation is determined by a student's IEP team based on individual needs.

## Work Experience

Students that choose to participate in work experiences have the opportunity to: 1) develop job readiness behaviors, such as coping skills for working with fellow employees; 2) develop prevocational and vocational skills, such as problem-solving, decision-making, and following directions; and 3) participate in work experiences which include a variety of unpaid positions both inside Lower Merion School District and at community sites. Participation is determined by a student's IEP team based on individual needs.

## Introduction to Work Experience

This course is specifically designed as a foundation course to introduce transition skills to students in the Autism and Specialized Learning Support Programs. The curriculum focuses on four units: SelfEsteem and Social Skills, Problem-Solving in School, Job Awareness, and Work Attitudes. Students begin to assemble a Personal Futures Planning Portfolio including values, interests and aptitude surveys. Guest speakers and field trips supplement in-class work. Students learn and practice transition skills in a supported environment within the high school community. Participation is determined by a student's IEP team based on individual needs.

## Work Experience

This course is a hands-on curriculum designed for students in the Autism and Specialized Learning Support programs. Various types of jobs and post-secondary training options are explored. Students have multiple opportunities to practice employability skills in the classroom and on the high school campus. Job shadowing opportunities are also available. Work experience off-campus may be offered if deemed appropriate by the IEP team. Participation is determined by a student's IEP team based on individual need


# ENTER TO LEARN GO FORTH TO SERVE 

Harriton High School, 600 North Ithan Avenue, Rosemont, PA 19010 Lower Merion High School, 315 East Montgomery Avenue, Ardmore, PA 19003


[^0]:    *Full Sliding scale research between the new SAT and ACT is ongoing. NCAA is a trademark of the National Collegiate Athletic Association

