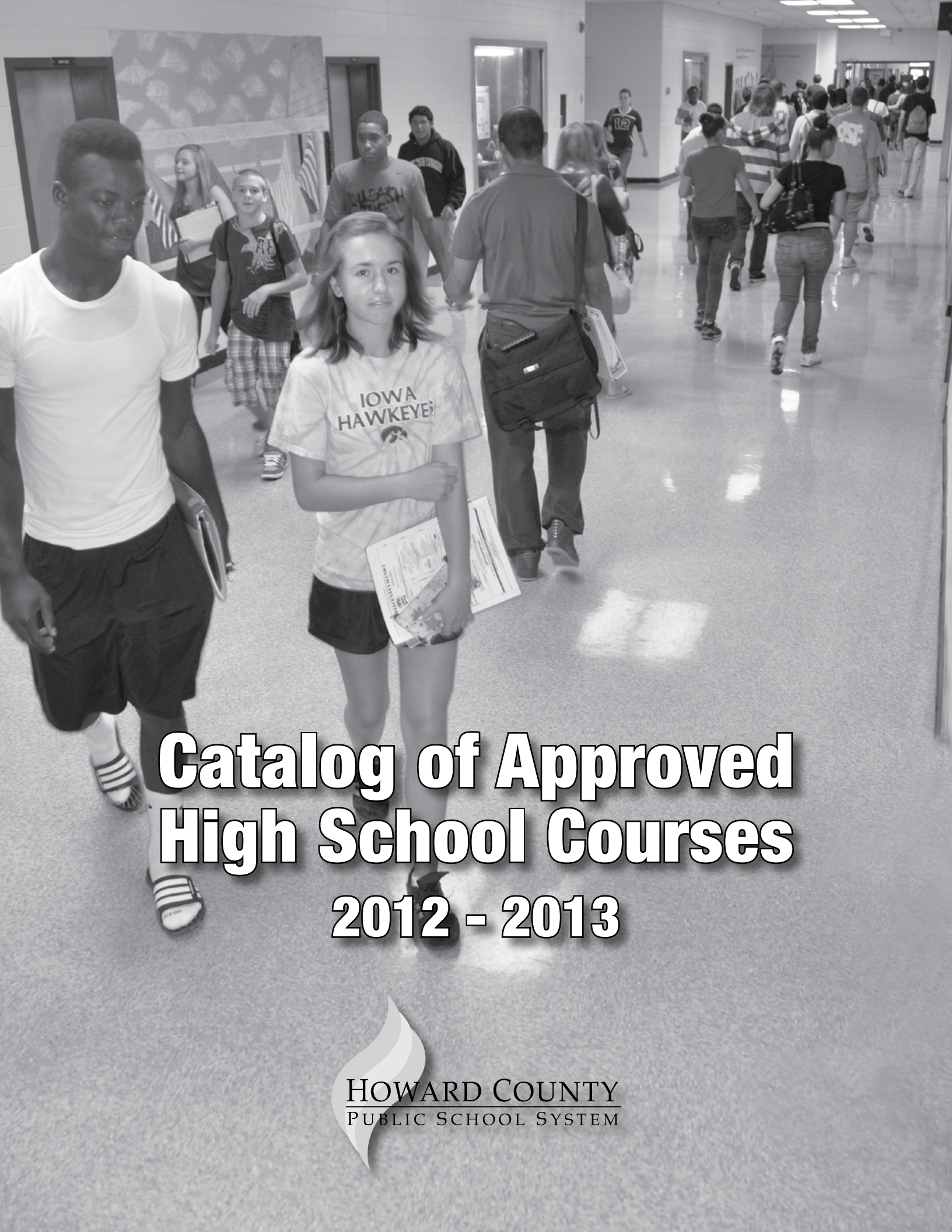

Catalog of Approved High School Courses

2012 - 2013

HOWARD COUNTY
PUBLIC SCHOOL SYSTEM

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Sydney L. Cousin
Superintendent of Schools

HOWARD COUNTY
PUBLIC SCHOOL SYSTEM

Dear Student:

The Howard County Public School system offers a wide variety of courses for high school students. The purpose of the Catalog of Approved High School Courses is to assist you and your parents in selecting the courses that are best for you. Selecting the courses for your high school program is an extremely important task and one that you should do thoughtfully with your parents. What courses are required for graduation? When will you take each required course? What are your interests and areas in which you wish to develop? What courses are best suited to your goals?

Teachers, school counselors and administrators are available to help you make wise choices. Take full advantage of the help and support they offer. Be sure to schedule an appointment with your school counselor to help you with the important task of developing your Four-Year High School Plan. Also, meet with your school counselor each year to review your plan and to select courses for the upcoming school year.

High school is an exciting time of life. You can design a program of studies that is uniquely suited to helping you grow and develop into the person you want to be. Plan your academic program to move you toward the future you want for yourself. On behalf of our entire school system, I wish you much success.

Sincerely,

S. L. Cousin

Sydney L. Cousin
Superintendent of Schools

10910 Route 108 • Ellicott City, Maryland 21042 • 410.313.6600 • www.hcpss.org

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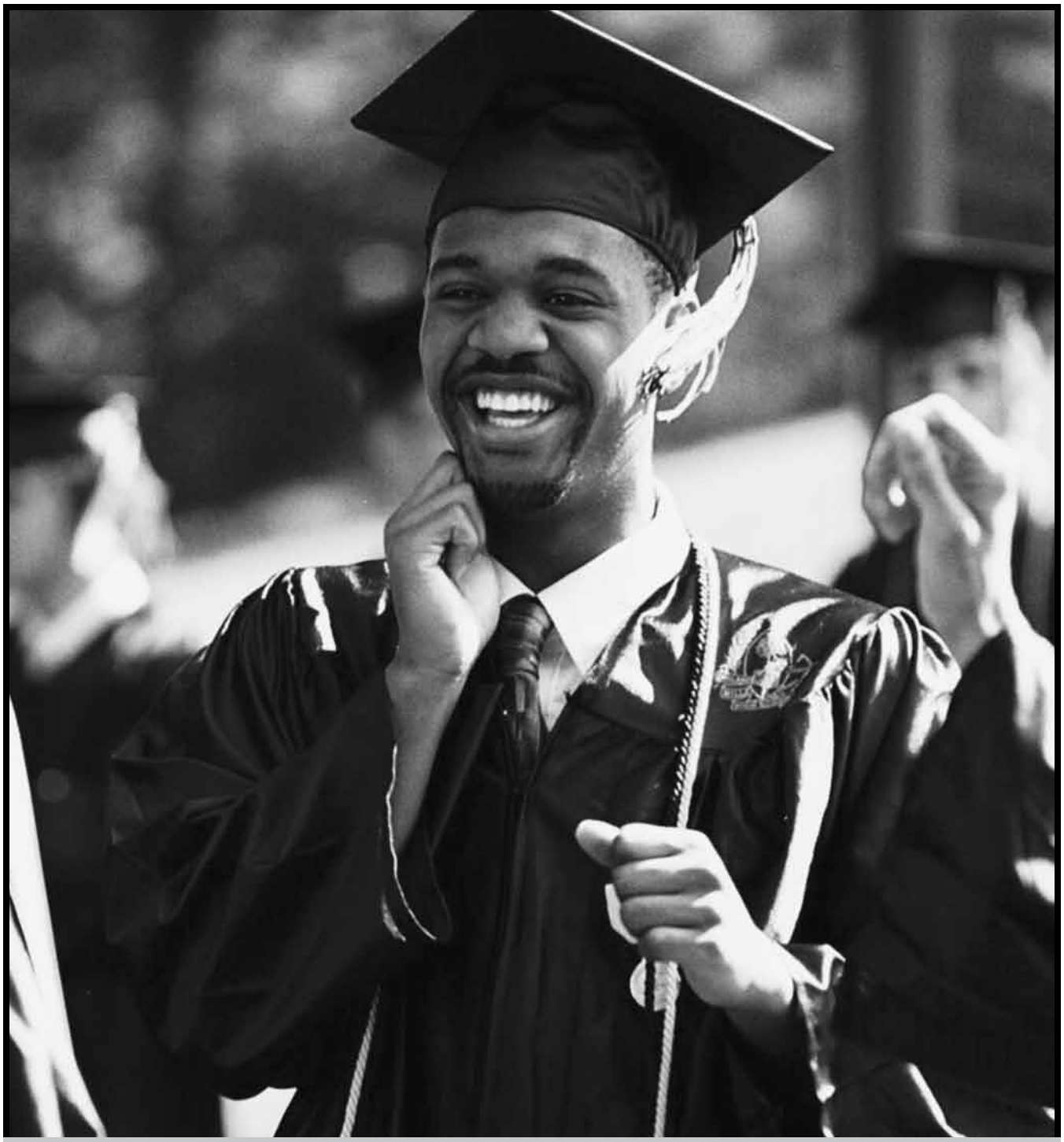


Graduation Requirements

Graduation Requirements

Credit and Assessment Requirements: Students must take the Maryland High School Assessments (HSA) for English, algebra/data analysis and biology. Students must achieve one of the following current criteria to meet that graduation requirement:

(1) A passing score on each test.
(2) A combined overall score of 1208.
(3) A specific score on an MSDE-approved comparable assessment(s).
(4) A passing score on the three HSAs by a combination of (1) and (3).

Students must earn a minimum of 21 credits to graduate. Credits can be earned in the following areas:

Credits	Subject	Requirements	High School Assessment
4	**English**	English 9, English 10, English 11, English 12	English 10
3	**Mathematics**	1 credit in Algebra I/Data Analysis* 1 credit in Geometry* 1 additional mathematics credit	Algebra/Data Analysis
3	**Science**	1 credit in Biology 2 credits that must include laboratory experience in any or all of the following areas: Earth Science, Life Science, Physical Science	Biology
3	**Social Studies**	1 credit in U.S. History 1 credit in American Government 1 credit in Modern World History	
1/2	**Physical Education**	1/2 credit in Lifetime Fitness	
1/2	**Health**	1/2 credit in Health Education or Current Health Issues	
1	**Fine Arts**	See Fine Arts course list on page 4	
1	**Technology Education**	See Technology Education course list on page 4	
2-4	**Program Choice**	2 credits in World Language** OR 2 credits in American Sign Language*** OR 2 credits in an approved Advanced Technology Program (see Program Choices on page 7) OR 4 credits in a Career Academy (State-approved Career and Technology Education Completer Program)	
1-3	**Electives**	Any courses beyond the above requirements	

*Students who successfully completed high school level mathematics in middle school still need to earn 3 credits in mathematics, preferably in higher level courses.

**Students who received credit for Spanish I or French I based on work in middle school still need to earn at least 2 credits in World Language for this program choice option.

***Students must complete both ASL I and II to meet the requirement. These courses may not meet all colleges' entrance requirements.

Graduation Requirements

Career Preparation Requirements*

The Howard County Public School System requires that all students be given the opportunity to complete the following three instructional activities in Career Preparation:

- Develop and update an individual career plan for at least two consecutive years.
- Participate in a job interview simulation.
- Complete a qualifications brief or résumé acceptable for seeking employment.

Career preparation activities in the junior year include an opportunity to participate in a junior interview clinic.

By the end of September of their senior year, students should have documentation on file in the Counseling Center that they have completed a career plan, a résumé, and an interview.

Student Service Requirements*

The Maryland State Board of Education stipulates that all students in Maryland public schools must complete student service requirements in order to earn a high school diploma. Most Howard County public school students or Maryland public school transfer students complete the service requirement at the middle school level. Those students who do not, or who transfer into Howard County Public Schools from out-of-state or nonpublic schools, will be required to perform service learning as follows:

Time of Student's Transfer	# of Hours
9th Grade (either semester)	75
10th Grade (either semester)	50
11th Grade (first semester)	40
11th Grade (second semester)	30
12th Grade (first semester)	15
12th Grade (second semester)	10

** See the school counselor for more information on how to fulfill these requirements.*

Courses Meeting the Fine Arts and Technology Education Requirements

Fine Arts Course List: Any of these courses meet the Fine Arts requirement for graduation.

Art -- Fine Art Courses
Art I: Foundations of Studio Art
Art II: Developing Ideas in Media
Art II: Developing Ideas in Media - G/T
Art III: Portfolio Development - AP
Art III: Portfolio Development - Honors
Art IV: Personal Directions in Art Studio - AP
Art IV: Personal Directions in Art Studio - Honors
New Forms in Art
Photography I, II, III

Dance -- Fine Art Courses
Dance I, II, III, IV, IV - G/T
Intermediate Dance
Advanced Dance
Junior Dance Company, Junior Dance Company - G/T
Dance Company, Dance Company - G/T

Family and Consumer Sciences -- Fine Art Courses
Foundations of Fashion and Interior Design

Media -- Fine Art Courses
Television

Music -- Fine Art Courses
Band - Symphonic/Marching
Band - Symphonic Winds/Marching
Band - Wind Ensemble/Marching
Band - Concert
Chorus
Piano I, II, III, IV
Chamber Choir
Concert Choir
Guitar I, II, III, IV
Instrumental Ensemble
Jazz Ensemble
Music and Society
Music Technology
Music Theory I, II
Percussion Ensemble
String Ensemble
String Orchestra
Vocal Ensemble

Theatre -- Fine Art Courses
Theatre I, II, III, III - G/T, IV, IV - G/T
Musical Theatre I, II, III
Stage Craft I, II, III

Technology Education Course List: Any of these courses meet the Technology Education requirement for graduation.

Computer Science I -- Designing Technology Solutions -- Honors
Engineering Design
Foundations of Technology
Principles of Engineering (For students in Pre-Engineering: Project Lead the Way (PLTW) Academy)

High School Assessments

Maryland High School Assessments

The HSAs are challenging tests that students must pass to earn a Maryland high school diploma. The tests ensure that graduates have mastered the basic skills they need to succeed in life after high school. The HSAs measure student achievement of the state's Core Learning Goals (CLG), which are identified by MSDE as the skills and knowledge necessary to show understanding of each course's content and which are embedded in the Howard County Public School System (HCPSS) essential curriculum. The three courses associated with the HSA are typically taken during freshman and sophomore years.

Maryland High School Diploma Requirements

To receive the Maryland High School Diploma, students will either:

- Take and pass all three HSAs (English, algebra/data analysis, and biology). A state-approved option allows a student to substitute one or more approved assessments, such as the Advanced Placement Test, in the same subjects.

OR

- Take all three HSAs and earn a combined score of 1208. Passing scores are as follows:

MD HS Assessment	Passing Score
Algebra/Data Analysis	412
Biology	400
English	396

Assessment Outcomes

- The following chart lists possible outcomes after taking the Maryland High School Assessment.

HSA Course	+	MD HS Assessment	=	Outcome
Pass		Pass		On track to receive Maryland High School Diploma
Pass		FAIL		Assistance and Re-take exam
FAIL		Pass		Re-take course
FAIL		FAIL		Re-take course and exam

Interventions and Retaking Assessments

- Howard County Policy 8030 states that a student may retake a test in order to increase a test score if the student participates in an approved assistance program to strengthen areas of weakness. Students who fail a High School Assessment must receive appropriate assistance before re-taking the exam. Howard County also offers a variety of interventions before and during the HSA Courses. In addition, the school system has several different options for students to receive appropriate assistance. The chart below summarizes the interventions that are available. Contact your school counselor for additional information.

Before Course	During Course	After Course (Appropriate Assistance)
Middle School Interventions	Co-taught Seminar Courses	Summer School
Summer School Prep Course	Academic Literacy Course	HSA Mastery Courses
	Tutorial classes for extra assistance and support	After school intervention programs and tutoring
	After-school intervention programs and tutoring	

High School Assessments

Maryland State Department of Education Online Assistance

- Students may prepare for the HSA by using the MSDE website. Go to www.marylandpublicschools.org - click on Testing/High School Assessment. Students can take full tests, access mini-tests, view individual items, or practice written-responses for six forms per subject, with answer keys provided.

AP Substitute Exams for the Maryland HSA

- To encourage more rigorous coursework and eliminate duplicate testing, MSDE accepts scores of 3, 4, and 5 on identified Advanced Placement (AP) exams (see below) in place of passing scores on the corresponding High School Assessments.

MD HSA	Advanced Placement exam (acceptable scores: 3, 4, 5)	Student Requirements
Algebra/Data Analysis	• Calculus AB • Calculus BC • Statistics	• Take AP course and test • Earn acceptable score • Substitute acceptable AP score for HSA passing score
Biology	• Biology	
English	• English Language • English Literature	

Bridge Plan for Academic Validation

- The Bridge Plan for Academic Validation provides eligible students an additional opportunity to meet the testing requirement that will lead to a Maryland High School Diploma. Students must demonstrate defined knowledge and skills to graduate, either through the traditional HSA testing program, which includes passing or earning a combined score of 1208, or the Bridge Plan program. An HCPSS student who thinks (s)he qualifies for this option is encouraged to explore the Bridge Plan for Academic Validation option with a school counselor.
- The Bridge Plan has been approved by the Maryland State Board of Education and is included in the Code of Maryland Regulations (COMAR).

Program Choices

Students must complete at least one of the following options:

Option 1: **World Language OR American Sign Language**

2 Credits in World Language OR

2 Credits in American Sign Language

Option 2: **Advanced Technology Education Sequence**

2 Credits in an approved Technology Education Sequence

Technology Education Credit (Prerequisite)	Advanced Technology Education Credit (Required)	Advanced Technology Education Credit (Required)
	Either course may be taken first.	
Computer Science I -- Designing Technology Solutions - Honors 450M	Advanced Technological Applications - 677M	Advanced Design Applications - 676M
Engineering Design - 684M	Advanced Technological Applications - 677M	Advanced Design Applications - 676M
Foundations of Technology - 6751	Advanced Technological Applications - 677M	Advanced Design Applications - 676M

Option 3: **Career and Technology Education (CTE) Completer**

4 Credits in a **CTE** Program OR

4 Credits in Career Research and Development (**CRD**)

Program Option 3
Career and Technology Education Completer

A. CTE -- Career and Technology Education

Career Academies encompass a range of careers based on essential economic activities, similar interests, common skills, and training required by those in the field. It is a way to organize teaching and learning to meet the specific needs and resources in broad career areas, grouping similar occupations.

Each academy meets all graduation requirements and prepares students either for post-secondary education and/or the world of work. Academy students may participate in special activities and events that provide greater awareness of the specific career area and opportunities within that area. Students will be part of a small group of students with similar interests completing courses together. The section of this Catalog of Approved High School Courses entitled Career Academies provides guidance regarding course selection, academy prerequisites, special requirements, and information needed to complete each Career Academy Program.

Career Academy Clusters	
Arts, Media and Communication Cluster • Visual Communications Academy with pathways in Graphic Design and Animation	**Human Resource Services Cluster** ¤ Child Development Academy ¤ Government, Law, and Public Administration Academy* • Homeland Security and Emergency Management Academy ¤ Teacher Academy of Maryland
Business, Management and Finance Cluster • Academy of Finance ¤ Accounting Academy ¤ Business Management Academy ¤ Marketing Academy	**Information Technology Cluster** ¤ Computer Programming Academy • Cybersecurity Networking Academy with pathways in Computer Networking and PC Systems
Construction and Development Cluster • Architectural Design Academy • Construction Management Academy	**Manufacturing, Engineering and Technology Cluster** ¤ Pre-engineering: Project Lead the Way (PLTW) Academy • Systems and Project Engineering Academy
Consumer Services, Hospitality and Tourism Cluster ¤ Culinary Science Academy • Hotel and Restaurant Management Academy	**Transportation Technologies Cluster** • Automotive Technology Academy
Health and Biosciences Cluster • Allied Health Academy • Biotechnology Academy • Certified Nursing Assistant Academy • Emergency Medical Technician Academy	

*This academy is not a completer program for graduation. See page 49 for more information.
• ARL-based for 11th and 12th grade academy courses. ¤ All courses are offered at the local high school.

B. CRD -- Career Research and Development

Career Research and Development empowers students to create a vision of their future through quality academic coursework, progressive career development and appropriate work opportunities. Students identify their interests, aptitudes and abilities, and apply that knowledge to investigate careers and higher education. Students participating in the Career Research and Development program focus on demonstrating competency in 21st century learning skills. Students who successfully complete the program demonstrate mastery of learning, thinking, communication, technology and interpersonal skills. Students will develop an individualized portfolio containing examples of completed assignments and/or special projects.

Career Research and Development I	Career Research and Development II	Site-Based Work Experience	Site-Based Work Experience

General Information

General Information

Note: Information in this section summarizes HCPSS policies. Although deemed accurate, this information does NOT supersede policy. See the Board of Education (BOE) section of the HCPSS website (www.hcpss.org) for access to full copies of Board of Education policies.

Attendance

All students are expected to attend school regularly in accordance with the Public School Laws of Maryland, Sections 7-301, 7-302, and 3-804 of the Courts and Judicial Proceedings Article, and may be excused from class or school only for reasons as specified in the Code of Maryland Regulations, 13A.08.01.02, 13A.08.01.03, 13A.08.01.06, and 13AA.10.01.04 (A-B).

Attending school regularly is the first step toward academic excellence!

Note: Any high school student with unlawful absences constituting 5% of a semester or yearlong course will have his or her name submitted to the principal via the teacher for consideration of denial of credit. A teacher also may submit the name of a student for whom lawful and/or unlawful absences constitute 5% of a semester or yearlong course if the student has not made up missed work or is not meeting expected levels of performance.

For more information on the Attendance Policies see the HCPSS High School Student Handbook.

Release Time: Qualifications and Procedures

Any senior who wishes to leave school early for employment should enroll in Career Research and Development I prior to the senior year. This course provides students the opportunity to experience career, interest, and aptitude inventories to assist them in making career and/or higher education choices. Students will also have the opportunity to earn a Passport to the Future certificate, which is recognized by the Howard County Chamber of Commerce as a valuable credential in the hiring of entry-level student employees. To qualify for Early Release Time, approval must be granted through the guidance counselor and/or an administrator. In addition, the following conditions apply:

- Applicants must complete a release-time form available from the counseling center. The school counselor and principal must indicate their approval on this form.
- If the conditions upon which approval was granted change (the student changes jobs, quits job, or drops class, etc.), it is the responsibility of the student to inform the school of this change.
- Students who are on Early Release Time must leave the school premises after their last class. Parents assume all responsibility for students during Early Release Time.
- In order to be eligible for release time, students must have passed all high school assessments, and they must have completed their student service hours and the Career Preparation requirements.
- Release time approval requires proof of employment during school hours or attendance at a local college.

Grading and Reporting

Reporting Student Progress

1. School staff shall communicate to students and parents on a regular basis the student's level of academic performance in the essential curriculum.
2. The interim/progress report reflects the progress of the student through the date of issuance and does not represent the marking period or final grade.
3. Report cards are issued to parents at the conclusion of each marking period.

General Information

Final Grades and Credits

Final grades are determined by following these procedures:

Year Courses

1. Compute the sum of quality point equivalents for each of four marking periods.
2. Add the averaged quality point value of the examination grades to the sum above, and divide by five.

Semester Courses

1. Multiply the quality point equivalent of each marking period by two and compute their sums.
2. Add the quality point value of the examination grade and divide by five.

Final Grades

Final grades are determined by translating the quality point equivalents derived from above to the traditional four-point scale in the following manner:

A = 3.50 - 4.00
B = 2.50 - 3.49
C = 1.50 - 2.49
D = 0.75 - 1.49
E = Below 0.75 (no credit)

Weighted Grade Point Average (GPA) and Class Rank

Weighted class rank/GPA may only be used for the purpose of college admission and/or scholarship applications. It will not be used for athletic eligibility, National Honor Society, honor roll, or for any other activity requiring the reporting of the grade point average. Both weighted and non-weighted class rank/ GPA will appear on the high school transcript.

Students receive weighted quality points if they earn a grade of "A" or "B" or "C" in Advanced Placement (AP), in Gifted and Talented (G/T), and in Honors courses. Weighted classes are designated in the catalog with the symbol ♥. Students earn 1.0 additional quality points for GT and AP courses and .5 additional quality point for Honors courses.

Weighted Quality Points			
Grade	**AP and G/T**	**Honors**	**Regular**
A	5.0	4.5	4.0
B	4.0	3.5	3.0
C	3.0	2.5	2.0
D	1.0	1.0	1.0
E	0	0	0

Promotion

To be promoted to grade 9 students must have:

- Passed all courses.
- Received a final grade of C or better in the core subjects.

Ninth Grade Intervention Courses

Any student performing below grade level in reading and/or mathematics at the end of 8th grade is **required** to participate in appropriate interventions (Policy 8010) in order to be promoted to Grade 9. Students and parents are encouraged to talk with middle school teachers, counselors, and administrators to understand how prescribed courses improve preparation for high school.

General Information

To be promoted to grade 10 students must have:

- Earned five credits including one English credit.
- One year of satisfactory high school attendance.

To be promoted to grade 11 students must have:

- Earned ten credits including two English credits.
- Two years of satisfactory high school attendance.

To be promoted to grade 12 students must have:

- Earned fourteen credits including two English credits.
- Three years of satisfactory high school attendance.

Withdrawal from Courses

Howard County Public School System Policy 8020-PR (High School Grading and Reporting) governs procedures related to students who withdraw from courses or change levels of a course. Any student who withdraws from any course more than seven school days after the published first quarter interim report will receive a **W** (withdrawal) on the report card and permanent record card. No credit shall be received by students who withdraw.

a. If a student transfers between levels of the same course, the grade the student earned will be transferred and averaged. A **W** code will not be assigned.
b. If a student withdraws from a course and transfers to a different course more than one week after the published first quarter interim report, no credit will be awarded unless a half-credit course option is available. The schedule change form will be placed in the student's cumulative record. A **W** code will be assigned.

Academic Eligibility

The following rules will govern academic eligibility for student participation in all voluntary extracurricular activities except student self-help groups. These types of student activities include athletic teams, cheerleading, school plays and musicals, school clubs, elective offices, non-required trips by performing groups, etc.

Earning Academic Eligibility

A full-time student earns academic eligibility for student participation in all voluntary activities by passing all authorized courses for the marking period which governs the student's specific activity and maintaining a 2.0 grade-point average for that grading period. If a student has a "W" code for a course, the grade at the time of withdrawal will be calculated into the term Grade Point Average (GPA) to determine eligibility. This provision does not apply to incoming ninth grade students.

Marking Period Criteria

Each voluntary extracurricular activity is governed by only one marking period. A student must have earned academic eligibility prior to the start of the activity (as determined by the last report card). Once academic eligibility has been earned for a particular activity, the student will remain academically eligible for the duration of that activity season.

Summer School

Students who have less than a 2.0 grade-point average or any failing grades for the final marking period may attend summer school to gain eligibility for fall extracurricular activities.

Special Education Students

The Academic Eligibility Policy governs Special Education students' eligibility for extracurricular activities unless the Individualized Education Program (IEP) team exempts the student. The IEP team can exempt a student when it determines that failure to meet eligibility requirements is a direct result of the student's educational disability.

General Information

National Collegiate Athletic Association (NCAA) Eligibility (★)

All students who intend to participate in interscholastic athletics in a Division I or Division II postsecondary institution must register with the NCAA Initial-Eligibility Clearinghouse. The purpose of this registration is to determine whether or not the student is a "qualifier" and can practice, compete, and receive athletic scholarships as a freshman. Part of that determination is based upon the student's completion of a required number of core courses as approved by the NCAA. The courses designated with ★ have been approved by the NCAA for Howard County Public Schools for the upcoming school year. Because the approved list of courses changes every spring, students must maintain contact with their school counselors to assure that courses selected during the winter registration process are still accepted by the NCAA for the subsequent school year. Students are also encouraged to see their counselors to receive more complete information on NCAA eligibility requirements, or go to their website - www.eligibilitycenter.org.

Keep your GPA high and take G/T and AP classes to be on the track for a HCPSS Certificate of Merit!

Diploma Endorsements: HCPSS Certificate of Merit

Diploma endorsements are granted by the Howard County Public School System to students who, while meeting graduation requirements, successfully complete a rigorous program of study as defined below:

1. The Howard County Public School System Certificate of Merit is granted to students who earn a minimum of 12 credits in merit courses and who achieve an un-weighted cumulative grade point average of at least 3.0 on a 4.0 scale.
2. The Howard County Public School System Certificate of Merit with Honors is granted to students who earn a minimum of 15 credits in merit courses, at least one of which is a GT or AP level course, and who achieve an un-weighted cumulative grade point average of at least 3.4 on a 4.0 scale.
3. The Howard County Public School System Certificate of Merit with Distinction is granted to students who earn a minimum of 15 credits in merit courses, at least three of which are GT or AP level course, and who achieve an un-weighted cumulative grade point average of at least a 3.75 on a 4.0 scale.

Note: Merit courses are designated with the letter M.

Maryland High School Certificate

The Maryland High School Certificate is awarded only to students with disabilities who have an Individualized Education Program (IEP) and who do not meet the requirements for a diploma but who meet one of the following standards:

- The student is enrolled in an education program for at least four years beyond grade eight or its age equivalent, and is determined by an Individualized Education Program (IEP) team to have developed appropriate skills for entering the world of work, acting responsibly as a citizen, and enjoying a fulfilling life. Career Preparation shall include (but not be limited to) gainful employment, work activity centers, sheltered workshops, and supported employment.
- The student has been enrolled in an education program for four years beyond grade eight or its age equivalent and has reached age 21.

Course Levels

As long as students meet the course prerequisites, they may enroll in any level of a course (regular, honors, or G/T) whether or not they were enrolled in that level the previous year.

Review Courses are designed to assist those students who are performing below grade level in reading and/or mathematics. Review-level classes may not be scheduled at all schools because some schools use tutorials, seminars, or small groups in a regular class to assist students performing below grade level in reading and/or mathematics. Both "regular" and "review" designate an instructional level, are not part of the course title, and will not appear on report cards or transcripts. The courses prepare students with the knowledge and skills required to meet state content standards.

General Information

Regular Courses are designed for students who have grade level skills. The courses prepare students with the knowledge and skills required to meet state content standards.

Honor Courses are designed for students who are capable of and interested in progressing through course material with more depth and rigor than the regular course. Honors courses meet the criteria specified for the Certificate of Merit. The courses prepare students with the knowledge and skills required to meet state content standards.

Gifted and Talented (G/T) Courses are offered for students with exceptional ability. Included in the Gifted and Talented course selections are all Advanced Placement courses. Gifted and Talented courses meet the criteria specified for the Certificate of Merit. The courses prepare students with the knowledge and skills required to meet state content standards.

Be sure to challenge yourself. Consider enrolling in appropriate honors, G/T and AP classes.

Advanced Placement (AP) Courses are taught at a college level with curriculum determined by The College Board. Students successfully completing AP courses should plan to take the Advanced Placement Tests in May. Students who score well on these tests may attain advanced standing or be awarded credit in many colleges and universities. Advanced Placement courses meet the criteria specified for the Certificate of Merit.

Special Education

Special Education services are designed to meet the needs of students with disabilities who have been found eligible for services through the Individualized Education Program (IEP) process. An IEP is developed through an IEP Team and reflects special education instruction, supports, related services, and least restrictive environment guidelines in accordance with the Individuals with Disabilities Education Act (IDEA-R). NOTE: All diploma seeking students, including students with IEPs and 504 plans, must complete graduation requirements.

504

Students become eligible for a 504 plan due to a documented disability that limits one or more major life functions. A multidisciplinary 504 team develops the 504 plan that reflects appropriate accommodations and modifications in accordance with Section 504 of the Rehabilitation Act. NOTE: All diploma seeking students, including students with IEPs and 504 plans, must complete graduation requirements.

Teen Parenting

Pregnant and parenting teens may enroll in the Teen Parenting Program, which may provide day care for infants, health care for babies and mothers, and an all-day instructional program. This program is located at Wilde Lake High School.

Students enrolled in this program retain their status in the comprehensive high school from which they will graduate. English, mathematics, social studies, and science are provided within the instructional program.

ESOL

All eligible students must be notified of these courses at registration. Names of recommended students should be submitted to the Curriculum Coordinator for ESOL. An evaluation of foreign transcripts and credits will be conducted to determine credits earned toward a Maryland High School Diploma. The ESOL program is located at the following **high schools**:

Atholton	Centennial	Hammond	Howard	Long Reach
Mt. Hebron	Oakland Mills	Reservoir	River Hill	Wilde Lake

JROTC

Army JROTC is only offered at Atholton and Howard High Schools. Air Force JROTC is only offered at Oakland Mills High School. Students may request a transfer to a school offering a JROTC program. Such transfers will be granted on condition that students provide their own transportation and remain enrolled in the program at all times. Students who do not remain enrolled must return to their district high school. Students retain full athletic eligibility.

General Information

Advanced Research Courses

The Advanced Research courses listed below can be used to meet elective credit requirements for graduation.

Intern/Mentor Program (G/T)

- Acceptance via application, intake interview, and teacher recommendation.
- Students demonstrate prerequisite knowledge or advanced-level skills in the mentor's area of work.
- Students must maintain a grade of B or above in the area of study.
- Students must have two "above average" recommendations from professionals who have taught or worked with them in the related area of study that demonstrate task commitment, responsibility, independence, and the ability to get along with adults.
- Students must commit to their academic mentorship experience as a priority in the year they elect to participate.

Internships, mentorships and research courses are great ways to explore careers and enhance your academic program!

Transportation: Students meet with their mentors at the mentor's place of work. Therefore, students must provide their own transportation to the work site.

Independent Research I, II (G/T) (Grades 9-12)

The eligibility criteria is as follows:

- Acceptance via application, intake interview, and teacher recommendation.

Mathematics, Science, and Technology Research I, II, III (G/T)

- Mathematical research Prerequisite: Pre-calculus G/T or equivalent; staff recommendation.
- Scientific research Prerequisite: Biology, Algebra II, completion of or concurrent enrollment in Chemistry I; staff recommendation.
- Prerequisite: Technology Research – prerequisite will determine which type of technology research a student may complete.

Alternative Sources of Credit

Besides attending regular school classes, students may earn extra credits in a number of ways. Many require prior authorization from the school principal.

Summer School

Howard County's summer school program offers courses on a tuition basis when twenty or more students register. Original credit classes, review credit classes, and other noncredit classes are offered. See the school counselor for more information.

Howard County Public Schools recognize summer school work completed at state-approved public institutions in or outside of Maryland. Students must secure the principal's authorization in advance before attending summer school for credit outside the county.

Tutoring for Credit

Extenuating circumstances may necessitate the assistance of tutors for certain students. However, tutoring will be considered for credit only after all the resources of the school system have been used fully and when it is determined that the best interests of the students are being served. If tutoring is recommended by the school and approved by the school system for credit to be applied toward minimum graduation requirements, then the tutor, the program of study, and the examination shall be financed by the local school system (COMAR 13A.03.02.03). This tutoring may be provided for a portion of the school year or for the entire year with a prescriptive program from the student's regular teacher. All tutoring programs must be approved in advance by the Assistant Superintendent. Approval is based on need, the principal's recommendation, the curriculum coordinator's review of the proposed syllabus, and the proposed tutor's credentials.

These tutoring procedures do not apply to the Home and Hospital Teaching Program or to the Home Instruction Program.

General Information

College Courses

Credit towards high school graduation may be given for approved courses taken at an accredited college, provided prior approval is obtained by the high school principal. One high school credit will be awarded for completion of each college course which is equivalent to (or beyond) a course in the *Catalog of Approved High School Courses*. The tuition for approved courses is the responsibility of the student. Those credits awarded toward high school graduation should be recorded as transfer credits on the transcript.

Articulated Credits

Students who successfully complete one of the Career Academies have the option of receiving credit in identified colleges. The number of credits range from 3 to 12, depending on the Academy and the College.

Credit by Examination

Only those courses so designated in the *Catalog of Approved High School Courses* are eligible for credit by examination: Software Applications I.

Students who have met all graduation requirements except for earning a credit in either Algebra II or English 12 (not both) may earn the credit for the course by taking a state-approved examination and achieving a passing score as defined by MSDE. Contact the school's counselor for more details.

Online Courses

Student may earn high school credit for the completion of an approved online course. The Maryland State Department of Education (MSDE) requires that the course be approved and completed through the Maryland Virtual Learning Opportunities Program (MVLO). A student requesting permission to take an online course should complete the following:

Taking college courses while in high school is another way to challenge yourself and prepare for a rigorous college experience.

1. A formal meeting with his/her school counselor to discuss the appropriateness of taking an online course and the appropriateness of the specific course to be taken.
2. A written request to the high school principal requesting permission to earn high school credit for the online course.
3. Registration and enrollment with the Maryland Virtual Learning Opportunities Program (http://mdk12online.org).
4. An official transcript from MVLO indicating satisfactory completion of the course sent to the high school for evaluation and addition to the high school transcript.

Contact your school counselor for information.

Alternatives to Four-Year Enrollment

Students are expected to enroll in a full schedule of courses each year that they are in attendance, unless they have special permission to do otherwise. A full schedule may include credits earned through employment as part of a career research and design program.

In recognition of the fact that four-year enrollment in a public high school may not serve the best interests of some students, these alternatives are made available:

- Early College Admission Program.
- Early Admission to Approved Vocational, Technical, or other Postsecondary School.
- Request for Early Graduation.

For all alternatives, students must meet the graduation requirements in addition to submitting a written request to their principal along with a portfolio that contains:

- A résumé.
- A written statement of career plans which includes how this option will enhance career plans.
- A written request from parents or guardians stating their agreement with the student's request.
- An academic package, which includes a transcript, test scores, and attendance records.

See the school's counselor for more details and forms.

General Information

Guidelines for Students Planning to Attend College or Technical School

This section includes general guidelines that may help students plan a high school program of studies to prepare for admission to postsecondary school. However, college admissions requirements, curriculum, and majors change from one year to the next; therefore, students are encouraged to make use of the more specific information on particular colleges available in the counseling center or on the college's web site.

Public Two-Year Colleges in Maryland

Maryland's public community colleges, such as Howard Community College, have an open door admission policy. This means that students who are graduates of accredited Maryland high schools are admitted to at least a general program of studies. Most of these schools also require the students to take a placement test as part of the admissions process, usually in English and mathematics. Results of these placement tests may require students to enroll in developmental noncredit courses until they meet basic proficiency levels.

Technical Schools, Private Junior Colleges and Out-of-State 2-Year Colleges

Many of these institutions, especially the technical schools, have an open door admission policy, which means that a student with a GED or a diploma from an accredited Maryland high school will be admitted. However, these admission standards do vary, and it is best to contact the individual school directly or check its web site for specific requirements.

Other Colleges and Universities

Admission requirements vary greatly depending on the academic standing of the school and/or a student's intended major. For most of these schools a student needs at least to meet the University System of Maryland requirements (see below). The higher the admissions standards, the more likely the school will have increased course requirements and would expect the student to take courses at the honors and/or GT level. The best way to plan a curriculum for these schools is to check current sources of information from the school's guidance office or from the college itself.

The University System of Maryland

The high school coursework requirements below are the minimum standards for students seeking admission to the following University System of Maryland institutions:

Bowie State University	Towson University	University of Maryland, College Park
Coppin State College	University of Baltimore	University of Maryland, Eastern Shore
Frostburg State University	University of Maryland, Baltimore	University of Maryland, University College
Salisbury University	University of Maryland, Baltimore County	

University System of Maryland Required Coursework	
Subject	**Number of Course Credits**
English	4
Lab Science	3
Mathematics (Algebra I, Geometry and Algebra II) Requirement for high school graduating class of 2015 and beyond	3 4
Social Studies	3
World Language or Advanced Technology Credit	2
Academic Electives	6

Information about additional requirements for individual campuses and/or programs may be obtained directly from each of the 11 institutions of the University System of Maryland or by consulting resources available in the counseling center.

General Information

SAT II Subject Tests

Many colleges use the SAT II Subject Tests for admission, for course placement, and to advise students about course selection. Some colleges specify the SAT II Subject Tests they require for admission or placement; others allow applicants to choose which tests to take. All SAT II Subject Tests are one hour, multiple-choice tests. However, some of these tests have unique formats. The tests are designed to measure students' knowledge and skills in particular subject areas, as well as their ability to apply that knowledge. Students take the SAT II Subject Tests to demonstrate to colleges their mastery of specific subjects. The tests are independent of any particular textbook or method of instruction. ***Students have found that they are more successful on the SAT II Subject Tests if they are taken after completion of the most closely related high school course.*** Use the following information to assist you in knowing the optimal time to take the test if you may attend a college that requires a SAT II Subject Test.

Name of SAT II Test	Information	Related High School Course
English Literature	The Literature subject test measures how well you have learned to read and interpret literature. There is no reading list for this test. The best way to prepare for the test is through close critical reading of English and American literature to become skilled in understanding and analyzing literary text.	Best taken after having completed English 11.
U.S History	The United States History subject test assesses your knowledge of and ability to use material commonly taught in U.S. History and social studies courses in high school.	Best taken after having completed U.S. History AP/GT in grade 11.
World History	The World History Subject Test uses the chronological designations B.C.E. (before Common Era) and C.E. (Common Era). These labels correspond to B.C. (before Christ and A.D. (anno Domini), which are used in some world history textbooks. Questions on the World History Subject Test may be presented as separate items or in sets based on quotes, maps, pictures, graphs or tables. Please note that this test reflects what is commonly taught in high school. Due to differences in high school classes, it's likely that most students will find questions on topics they're not familiar with. Many students do well despite not having studied every topic covered.	Best taken after having completed Modern World History in grade 11.
Mathematics Level 1	Mathematics Level 1 is a broad survey test intended for students who have taken three years of college preparatory mathematics, including ***two years of algebra and one year of geometry.***	Best taken after having completed Algebra II or Functions and Trigonometry or Precalculus.
Mathematics Level 2	Mathematics Level 2 is a broad survey test intended for students who have taken college preparatory mathematics for more than three years, including two years of algebra, one year of geometry, and pre-calculus and/ or trigonometry. It is recommended that if the student has had these courses and attained grade of B or better and knows when and how to use a scientific or graphing calculator, he or she should select Mathematics Level 2.	Best taken after having completed Functions and Trigonometry or Precalculus with a grade of B or better.

General Information

Name of SAT II Test	Information	Related High School Course
Biology	This test contains a common core of 60 general-knowledge multiple-choice questions, followed by 20 multiple-choice questions that emphasize either ecological (Biology E) or molecular (Biology M) subject matter. After completing the core questions, test takers choose the section for which they feel most prepared. Take Biology E if you are more comfortable answering questions pertaining to biological communities, populations and energy flow. Take Biology M if you are more comfortable answering questions pertaining to biochemistry, cellular structure and processes such as respiration and photosynthesis.	Best taken after having completed Biology or Anatomy and Physiology or Biology AP.
Chemistry	The chemistry test assesses the understanding of general chemistry at the college preparatory level. The one-hour test contains 85 multiple-choice questions with approximately five questions on equation balancing and/or predicting the product of a reaction interspersed throughout the test. Topics tested include: **Structure of Matter** – Atomic Structure, Molecular Structure, and Bonding **States of Matter** – Gases, Liquids and Solids, and Solutions **Reaction Types** – Acids and Bases, Oxidation-Reduction, and Precipitation **Stoichiometry** – Moles and Chemical Equation **Equilibrium and Reaction** – Equilibrium Systems and Rates of Reactions **Thermochemistry** **Laboratory Skills and Processes**	Best taken after having completed Chemistry.
Physics	The physics test assesses the understanding of physics at the college preparatory level. The one-hour test contains 75 multiple-choice questions with some problem solving using basic algebra. Calculator use is not permitted during the test. Topics tested include: **Mechanics** – Kinematics, Dynamics, Energy and Momentum, Circular Motion, Simple Harmonic Motion, and Gravity **Electricity and Magnetism** – Electric Fields, Forces, and Potentials, Capacitance, Circuit Elements and DC Circuits, and Magnetism **Waves and Optics** – General Wave Properties, Reflection and Refraction, Ray Optics, and Physical Optics **Heat and Thermodynamics** – Thermal Properties and Laws of Thermodynamics **Modern Physics** – Quantum Phenomena, Atomic, Nuclear and Particle Physics, and Relativity	Best taken after having completed Physics.

Information taken from the College Board (www.collegeboard.com) and compiled by the Office of School Counseling.

General Information

Name of SAT II Test	Information	Related High School Course
World Language Tests: French, German, Modern Hebrew, Italian, Japanese, Korean, Latin, Spanish and Chinese	These tests are intended for students who have studied the language for at least two years in high school. Generally, the more years of study the student has, the better his or her language test score is likely to be. In considering whether to take a reading test or a listening test in the language, there is no difference in difficulty between the two tests. However, the tests with listening can provide a more complete picture of a student's skills. For this reason, colleges may prefer the listening test to the reading only test for placement purposes. Native speaker scores are grouped with those students who have had less exposure to the language. This means that even students with high grades in language courses may not score as high as native speakers. College admission staffs take this into account when they review scores.	Best taken after having completed Level III or IV of the language.

Information taken from the College Board (www.collegeboard.com) and compiled by the Office of School Counseling.

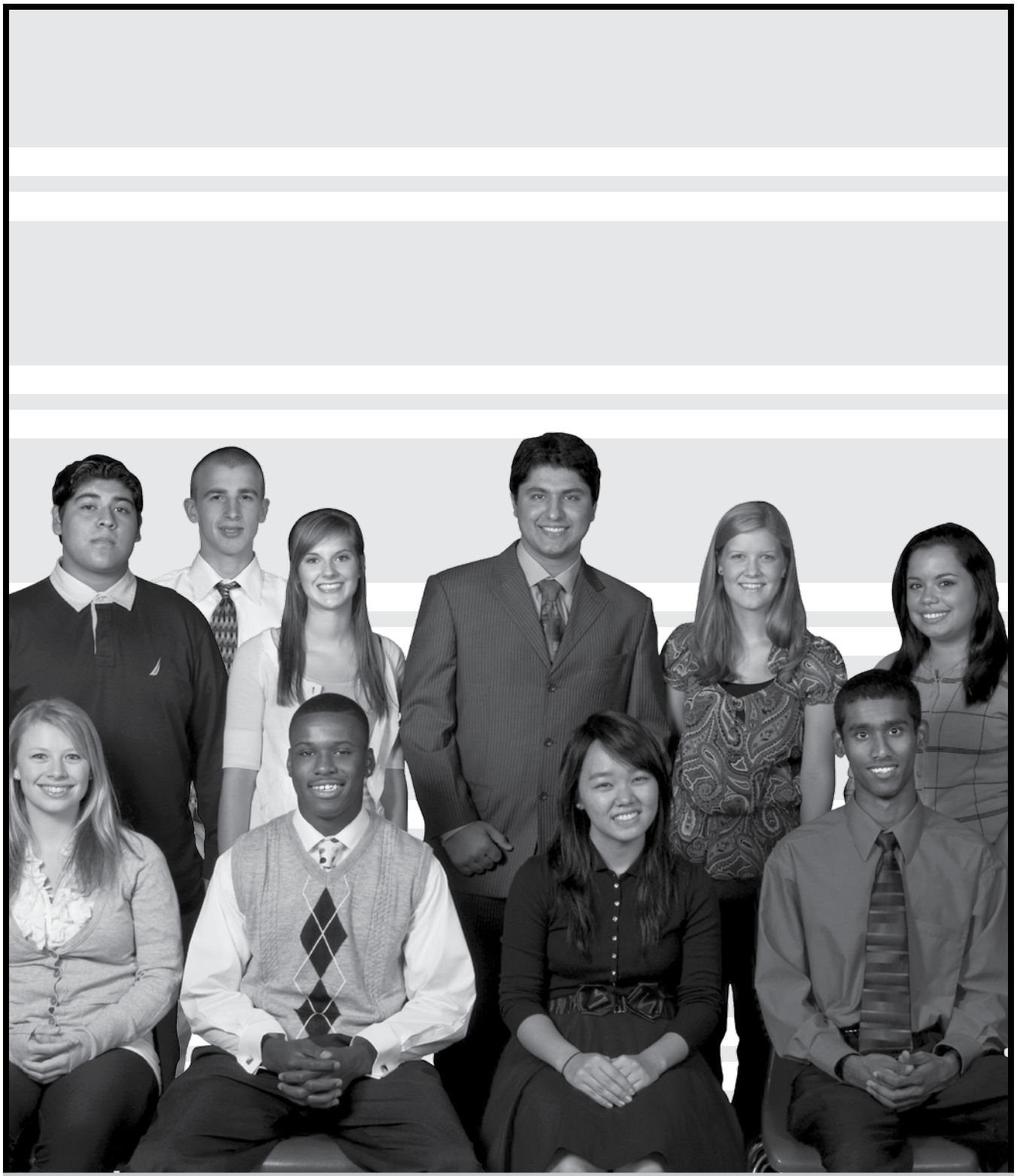
Fee Waivers

Participation in the Free and Reduced Meals Program qualifies students for:

- Reduced Tuition for HCPSS Summer School
- Free Registration for Advanced Placement Exams
- Free Registration for two SAT I and two SAT Subjects Tests
  http://sat.collegeboard.com/register/sat-fee-waivers
- Free Registration for two ACT Tests
  http://www.actstudent.org/faq/answers/feewaiver.html
- Four Free College Applications
  http://sat.collegeboard.com/register/sat-fee-waivers
- Qualification for the Guaranteed Access Grant (full tuition at a Maryland College)
  http://www.mhec.state.md.us/financialAid/ProgramDescriptions/prog_ga.asp
- Free Registration for the NCAA Clearinghouse for students considering Division I or Division II Athletics
  http://webI.ncaa.org/ECWR2/NCAA_EMS/NCAA.html

See the National School Lunch Program/School Breakfast Program Application for income eligibility guidelines. Applications can be mailed to the address on the back of the form or returned to school with your student.

See your school counselor to access any of the above resources.



Career Academies

Career Academies

General Information

Introduction

The Howard County Public School System offers a path for students interested in studying specific career areas while in high school. This section of the Catalog of Approved High School Courses will provide guidance regarding course selection, academy prerequisites, special requirements, and information needed to complete each Career Academy Program.

What is a Career Cluster?

Career Clusters encompass a range of careers based on essential economic activities, similar interests, common skills, and training required by those in the field. It is a way to organize teaching and learning to meet the specific needs and resources in broad career areas, grouping similar occupations. Essential knowledge and skills are taught to students in order to graduate fully prepared for further education and careers in the 21st-century global economy. For example, within the Health and Biosciences Cluster, you will find four different Career Pathways all centered around health careers.

What is a Career Academy?

A Career Academy provides an opportunity for a group of students to enroll in a specific set of courses associated with a designated career area. Each Career Academy has the following components:

- A recommended sequence of courses.
- A capstone project, a work site experience, a research project studying careers in the academy area, or some other experience in which students learn more about the career cluster with which the academy is affiliated.
- A demonstrated need for employees within the Career Cluster.
- An advisory board consisting of business leaders in the Career Cluster.
- Specific rules established by the school system.

What are the benefits of joining a Career Academy?

Students participating in a Career Academy have a clear path for graduation. Each academy meets all graduation requirements and prepares students for post-secondary education and/or the world of work. While in the academy, students have an opportunity to participate in special activities and events that provide greater awareness of the specific career area and opportunities within that area. Academy participants are part of a small group of students with similar interests completing courses together. An advisor and business mentor is provided to answer questions and help each student as they complete their high school experience. Students completing the requirements for the academy receive a certificate and student transcripts also identify the student as an academy completer.

How do I become a member of a Career Academy?

Any student may be part of a single Career Academy. To become a member of an academy, simply complete a declaration form available in all guidance offices. Students may join one academy up to the end of tenth grade, as long as all applicable prerequisites are met. After the form is submitted, the student will receive a welcome letter and have an appointment with a guidance counselor to develop or revise the student's four-year plan so that the student will be able to successfully complete all requirements listed in this catalog for the Career Academy.

Where are the Career Academies located?

As you read through the academy information, you will notice that some academies are located in each local high school, while others are located at the Applications and Research Lab (ARL). If the Career Academy is located at each high school, all coursework will be taught there. Students who participate in an academy located at the ARL will complete all academic and prerequisite coursework at their local high school and will complete the junior and senior level academy courses at the ARL. Bus transportation will be provided daily to and from the ARL.

Career Academies

General Information

Which academy is right for me?

Career Academies have been created to provide all high school students with a unique opportunity for in-depth exploration of an area of interest. If you are unsure if a Career Academy is right for you, you may want to enroll in Career Research and Development I (CRD I), where you will be able to learn more about your interests and aptitudes. You may also want to speak with your guidance counselor, the teacher at your school who teaches the academy courses, or the Career Academy Instructional Team Leader at your high school.

What is articulation and industry certification?

Many of the Career Academies are articulated with specific postsecondary institutions in the area. If you successfully complete a specific Career Academy, you may earn college credits and start your college education with advanced standing. In addition, many of the Career Academies prepare students to sit for industry certification examinations affiliated with the industry. By successfully passing these examinations, you will be better prepared to enter the world of work ready to succeed.

What do I do next?

If you are entering grades 9 or 10, you must make sure that the courses associated with your Career Academy of choice are part of your four-year high school plan and you must be sure to complete the required prerequisites by the end of grade 10. If you are entering grade 11, you must make sure that you have successfully completed the required prerequisites and that you are registered for the courses associated with the career academy of your choice. Contact your guidance counselor for a declaration form by the end of tenth grade.

Can I enroll in other elective classes, such as Band, and still be in a Career Academy?

Each Career Academy has space for students to sign up for other electives. There is room in every Academy suggested schedule for any student to take classes such as Band, Art or Music.

Whom do I contact if I have other questions?

Start with your guidance counselor. If you have other questions, call the Office of Career and Technology Education at **410-313-6629.**

"In my Career Research and Development classes I find ways to improve myself and get closer to my career path."

Morgan Brown
Oakland Mills High School

Career Research and Development

Career Research and Development

Location: All coursework is taught at the high school.

Summary

Career Research and Development is an approved Career and Technology Education program and will meet the CTE graduation requirement if taken in the sequence of CRD I, CRD II, and Site-Based Work Experience. Any interested student may take CRD I as a general elective. **NOTE: Students may enroll in CRD I in the sophomore year.**

Career Research and Development empowers students to create a vision of their future through quality academic coursework, progressive career development, and appropriate work opportunities. After a battery of interest, aptitude, and personality assessments, students identify their assets and strengths and apply that knowledge as they investigate Howard County Public School System academy programs, careers, and postsecondary options. Students participating in the Career Research and Development program focus on demonstrating competency in 21st century learning skills. Students who successfully complete the program demonstrate mastery of learning, thinking, communication, technology and interpersonal skills. Students will develop an individualized portfolio containing examples of completed assignments and/or special projects.

Recommended Electives

- Principles of Business
- Financial Management

Special Requirements

Students taking the CRD program sequence as a completer for graduation must work during their senior year. Students must concurrently enroll in Career Research and Development II while in Site-Based Work Experience.

College Articulation

Students who successfully complete the Career Research and Development program sequence, with a grade of B or higher in academy courses, may be eligible for up to 3 credits at Howard Community College.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Earth Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Technology Education	Elective	Elective	CRD II 6881
Lifetime Fitness/Health	Elective	Elective	Site-Based Work Experience 6885 -- 2 credits 6886 -- 3 credits 6887 -- 4 credits
Fine Arts	Elective	CRD I 6880	

* Some students may take Biology G/T as 9th graders.

Shaded areas designate completer coursework.

Industry Certification

The Howard County Chamber of Commerce offers students the opportunity to apply for a **Passport to the Future**, a countywide certificate which endorses students as workforce ready. Students who earn the Passport may have access to career incentive programs, scholarships, and entrance to higher education and certification programs.

Sample Assessments/Inventories

Myers-Briggs Personality Inventory
Holland Self-Directed Search
Multiple Intelligences
Armed Services Vocational Assessment Battery
Bridges/CX online
Accuplacer

"I would like to combine my interests in visual communication and education to create educational tools for classroom use."

Jessica Weedlun
Mt. Hebron High School

Arts, Media & Communication Cluster

Visual Communications Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

Students will be actively involved in the elements of design and techniques related to the field of visual communications. Emphasis will be on graphic and digital art design and techniques: animation, publication design, electronic publishing, illustration, web page design and TV and video production. Students will learn how to use and apply specialized industry standard software. Students will be encouraged to apply their creativity, problem solving, team-building, collaboration, and advertising skills.

Recommended Electives

Students planning to attend a four-year postsecondary institution are advised to enroll in Algebra II. Students interested in the Visual Communications industry may also want to enroll in Art II.

Prerequisite

- Art I

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete senior level coursework through a work-site experience (students must provide their own transportation) **OR** by participating in the on-campus (ARL) course of advanced skills, which includes a capstone project.

Senior Level Coursework Requirements:

- Complete at least 6-8 hours of work-site experience per week OR daily attendance at the Applications and Research Lab
- Attend weekly senior seminars at the Applications and Research Lab
- Choose a "real world" problem to research
- Maintain and submit a journal and portfolio of senior work
- Present a culminating multimedia presentation for the final grade.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Visual Communications I G/T 845M or Animation I 810M	Visual Communications II G/T 849M or Advanced Animation 811M
Technology Education	Art I 6000		
Elective	Elective	Elective	

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Visual Communications Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 3 credits at Howard Community College.

Industry Certification

Students have the opportunity to complete PrintEd certification.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Desktop Publisher	Animator	Equipment Design Engineer
Digital Imaging Specialist	Art Director/Creative Director	Graphic Design Firm CEO
Game Tester	Game Designer	
Graphic Designer	Pre-press Artist	
Illustrator	Production Artist	
Producer	Video Editor	
Web Page Designer	Video/TV Producer	

"The Academy of Finance is very precise about its teachings. It allows students from different schools to interact with each other."

Hamza Mohsin
Long Reach High School

Business, Management & Finance Cluster

Academy of Finance

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

Established in Howard County in 1999, the Academy of Finance (AOF) is a member program of the National Academy Foundation. The AOF introduces students to the broad career opportunities in the business and financial services industries and, in the process, equips them to make sound post-secondary and career choices. The AOF curriculum is a comprehensive, standards-based sequence of courses addressing industry-specific knowledge and general workplace competencies. Academy students will have the opportunity to develop relationships with local business leaders and to apply their skills in a paid internship experience. Students will be paired with a business professional who will serve as a mentor throughout their junior and senior year.

Recommended Electives

- Computer Science I -- Designing Technology Solutions -- Honors
- Financial Management
- Principles of Business

Prerequisites

- Completion of Algebra I/Data Analysis prior to enrollment in academy coursework.
- A 2.75 GPA upon enrollment in the academy.

Successful Academy Students:

- Maintain a 3.0 GPA in academy courses.
- Participate in job shadowing and student workshops.
- Complete a paid internship during the summer before their senior year.
- Successfully complete a pre-selected college-level course during their senior year.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Principles of Marketing - Honors 565MA
Fine Arts	Elective	Accounting I Honors 561MA	Accounting II Honors 560MA
Technology Education	Elective	Economics and the World of Finance/ Banking and Credit 580M	International Finance/ Financial Planning 581M

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Accounts Clerk	Bank Branch Manager	Actuary
Bank Teller	Contract Underwriter	Campaign Manager
Brokerage Clerk	Financial Advisor	Chief Financial Officer
Collector	Financial or Budget Analyst	Chief Operating Officer
	Loan Officer	Comptroller
	Portfolio Administrator	Economist
	Stockbroker	Statistician

Accounting Academy

Location: All academy coursework is taught at the high school.

Summary

The Accounting Academy is designed for students who have an interest in expanding their understanding and skills related to accounting and financial management. Coursework will provide students the opportunity to study and apply the fundamental accounting principles in a variety of business settings. Students will work in a lab setting utilizing current accounting software. Benefits to Accounting Academy students include a focused course of study, connections with the local professional accounting community, and opportunities to participate in activities created exclusively for academy members.

Recommended Electives

- Computer Science I -- Designing Technology Solutions -- Honors
- E-Commerce and Entrepreneurship
- Principles of Marketing - Honors

Prerequisites

- Completion of Algebra I/Data Analysis prior to enrollment in academy coursework.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a large-scale accounting simulation during the senior year.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts	Elective	Elective	Principles of Business 551M
Technology Education	Financial Management 563M	Accounting I Honors 561M	Accounting II Honors 560M

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Accounting Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 3 credits at The Community College of Baltimore County (CCBC).

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Accounting Clerk	Auditor	Certified Public Accountant
Bookkeeper	Budget Analyst	Chief Financial Officer
Payroll Clerk	Controller	
	Financial Advisor	
	Risk Manager	
	Tax Accountant	

Business Management Academy

Location: All academy coursework is taught at the high school.

Summary

Students in the Business Management Academy will focus on the broad spectrum of careers in business by completing a sequence of courses that provide exposure to a variety of business areas. Student experiences will be project-based using applicable technology. All aspects of managing a business will be explored, including business communication and financial management. A student who completes this program will be able to develop and manage a business plan for a small company and will apply accounting, marketing, and management concepts to realistic business scenarios. Additionally, Business Management Academy students will be provided opportunities to participate in activities created exclusively for academy members.

Recommended Electives

- Computer Science I -- Designing Technology Solutions -- Honors
- Accounting II - Honors
- Principles of Marketing - Honors

Prerequisites

- Completion of Algebra I/Data Analysis prior to enrollment in academy coursework.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a large-scale entrepreneurship project during their senior year.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts	Elective	Elective	Principles of Business 551M
Technology Education	Financial Management 563M	Accounting I Honors 561M	E-Commerce and Entrepreneurship 579M

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Business Management Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 6 credits at Howard Community College.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Commercial Banker Real Estate Agent or Broker Sales Representative	Small Business Owner Entrepreneur Retail Manager Risk Manager	Chief Operating Officer

Marketing Academy

Location: All academy coursework is taught at the high school.

Summary

Marketing Academy students will have the opportunity to focus their studies on the fundamental principles of marketing. Students will develop marketing plans by analyzing customer needs and the market environment. Product development and pricing strategies, advertising and promotion planning, product distribution, and strategies for conducting market research will be explored in depth. Students will have the opportunity to investigate and analyze current marketing trends and campaigns including the recent introduction of e-marketing. Benefits for Academy students include a focused course of study, connections with the local professional marketing community, and opportunities to participate in activities created exclusively for academy members.

Recommended Electives

- Computer Science I -- Designing Technology Solutions -- Honors
- E-Commerce and Entrepreneurship
- Accounting I - Honors
- Accounting II - Honors

Prerequisites

- Completion of Algebra I/Data Analysis prior to enrollment in academy coursework.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a large-scale marketing project during the senior year.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts	Elective	Elective	Principles of Business 551M
Technology Education	Financial Management 563M	Principles of Marketing – Honors 565M	Advanced Marketing - Honors 564M

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

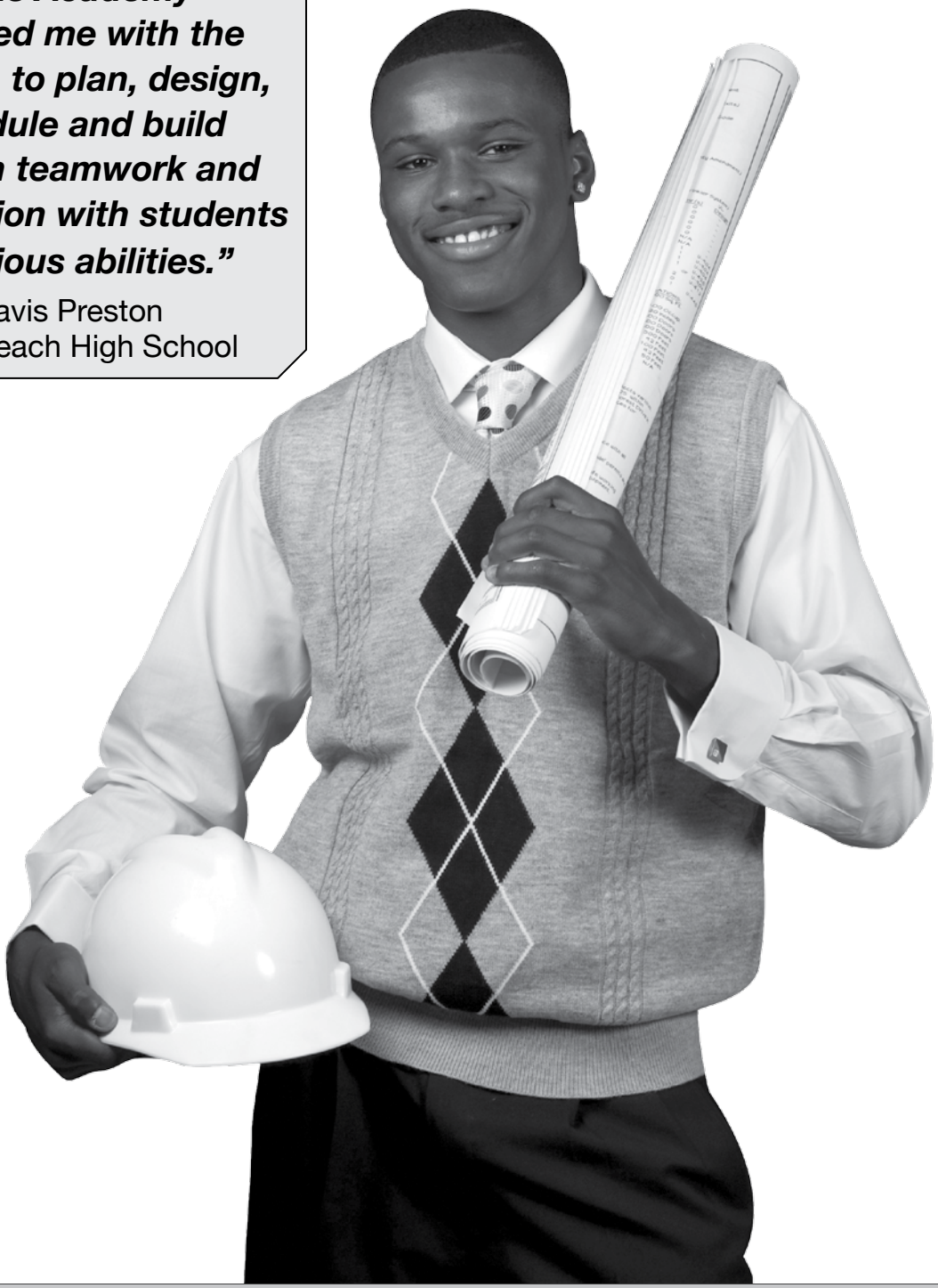
College Articulation

Students who successfully complete the Marketing Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 6 credits at Howard Community College.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Customer Service Representative	Email Marketing Producer	Advertising and Promotions Manager
Sales Representative	International Marketing Specialist	Brand Manager
Telemarketer	Marketing Research Analyst	Field Marketing Manager
	Online Marketing Specialist	Product Manager
	Public Relations Specialist	Promotions Manager

"This Academy provided me with the freedom to plan, design, schedule and build through teamwork and cooperation with students of various abilities."

Travis Preston
Long Reach High School



Construction & Development Cluster

Architectural Design Academy

Location: Academy coursework is taught at the ARL.

Summary

This program will introduce the basic principles and methods of design as applied to architecture. Basic design theories and strategies related to the development of spatial concepts in architectural design, including composition, color, form, and relationship of elements will be applied in the development of 2-D and 3-D design projects. This course further emphasizes the architectural design process while relating these principles to general construction practices.

Recommended Electives

Students who would benefit from additional support for making career academic choices and preparing for college and employment should enroll in **Career Research and Development I** (CRD I) as early as possible. Students seeking postsecondary education are advised to take at least two years of **World Language**. Students seeking degrees in Architectural Design are also advised to enroll in **Physics** and **Chemistry** as science electives.

Prerequisites

Architectural Design Academy students must take the Foundations of Technology course in the ninth grade. Students should be enrolled in Algebra I/Data Analysis as a *minimum* level mathematics course in the 9th grade.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete senior level coursework through a work-site experience (students must provide their own transportation) **OR** by participating in the on-campus (ARL) course of advanced skills, which includes a capstone project.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Science	Science	Elective
U.S. History	American Government	World History	Elective
Fine Arts Elective	Elective	Elective	Advanced Architectural Design 679M
Lifetime Fitness/Health	Elective	Architectural Design 678M	
Foundations of Technology (Technology Education Credit)	Advanced Design Applications (Recommended Course)		

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Architectural Design Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 9 credits at Howard Community College.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Building Codes Inspector	Architect	Urban and Regional Planner
CADD Technician	Civil Engineer	
Construction Manager	Engineer (all types)	
Drafter	Land Surveyor	
Real Estate Manager		

Construction Management Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

The Construction Management Academy focuses on industry-compliant methods, technology and safety standards. Students design, plan, direct, coordinate and budget a variety of projects, including the construction of a residential building. Students will gain the knowledge and skills to prepare them for various careers in construction including project management and supervision, project engineering, contract administration, and safety coordination. In addition to carpentry, students in this program also explore a variety of construction trade areas, such as electrical and plumbing. Participation in an internship that reflects students' interests in the field of construction provides real-world applications of the knowledge and skills learned in the classroom. This National Center for Construction Education Research (NCCER) certified program affords students the opportunity to earn national recognition. The Construction Management Academy provides students with an excellent foundation for continuing education in the building industry.

Recommended Electives

Students who would benefit from additional support for making career academic choices and preparing for college and employment should enroll in Career Research and Development I (CRD I) as early as possible. Students planning to attend a four-year, postsecondary institution are advised to take at least two years of World Language.

Prerequisites

- Foundations of Technology

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics.
- Complete senior level coursework through a work-site experience (students must provide their own transportation) OR by participating in the on-campus (ARL) course of advanced skills, which includes a capstone project.

Senior Level Coursework Requirements:

- Complete at least 6-8 hours of work-site experience per week OR daily attendance at the Applications and Research Lab.
- Attend weekly senior seminars at the Applications and Research Lab.
- Choose a "real world" problem to research.
- Maintain and submit a journal and portfolio of senior work.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or Mathematics Elective	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Fine Arts	Elective	Construction Technology I 854M	Construction Technology II 858M
Lifetime Fitness/Health	Elective		
Elective	Foundations of Technology 6751	Elective	

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Construction Management Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 6 credits at Howard Community College or The Community College of Baltimore County (CCBC).

Industry Certification

Students can pursue a construction apprenticeship in postsecondary programs or complete NCCER certification.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Building Codes Inspector Carpenter Civil Engineering Technician Construction Manager Electrician	Civil Engineer Cost Estimator Environmental Engineer Land Surveyor Project Manager	Urban and Regional Planner

"Learning tends to be a drag if I'm not interested, but the academy classes are fun and actually grab my attention."

Xaviera Rosado
Howard High School

Consumer Services, Hospitality & Tourism Cluster

Culinary Science Academy

Location: All academy coursework is taught at the high school.

Summary

Employing an estimated 12 million people, the restaurant industry is the largest and fastest growing private-sector employer in the United States. Culinary Science Academy students will receive a broad introduction to this dynamic industry through hands-on instruction using ProStart, an industry-directed curriculum. Students in the Culinary Science Academy will have opportunities to participate in industry sponsored events and competitions and will receive individual mentoring from restaurant and hospitality professionals. Upon successful completion of the program, students will have the opportunity to take a national certification examination and to apply for National Restaurant Association Education Foundation scholarships toward postsecondary study.

Recommended Electives

The industry advisory committee recommends students complete at least two years of Spanish in preparation to enter the culinary industry. Students who would benefit from additional support for making career academic choices and preparing for college and employment should enroll in CRD I as early as possible.

Prerequisites

While no specific courses are required as prerequisites, students should seek food service and hospitality work experiences to confirm their career academy choice.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a capstone project integrating culinary skills with knowledge of customer service and business practices.
- Pass Year One and Year Two ProStart Examinations and complete 400 hours of mentored industry experience, 250 of which must be paid (required for students pursuing ProStart Certification).

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or Mathematics Requirement	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Technology Education	Elective	Elective	Elective
Lifetime Fitness/Health	Elective	Culinary Sciences 6525	Elective
Fine Arts	Food and Nutrition Technology 6510	Business Course**	Advanced Culinary Science and Restaurant Operations 657M

* Some students may take Biology G/T in 9th grade. Shaded areas designate completer coursework.

** Choose from Principles of Business (551M), Accounting I Honors (561M), Principles of Marketing Honors (565M), E-commerce and Entrepreneurship (579M), or Financial Management (563M).

College Articulation

With a passing score on the ProStart Examination, Culinary Academy students may be eligible for articulated credit from local institutions including Anne Arundel Community College, Baltimore City Community College, Howard Community College, Montgomery College, Baltimore International College, L'Academie de Cuisine, and Morgan State University. Nationally renowned institutions such as Johnson & Wales, The Culinary Institute of America – Hyde Park (CIA), Cornell University, the Art Institutes International, and Florida International University also award college credit for passage of the ProStart examination. This list of postsecondary institutions awarding credit is always growing. Please visit the National Restaurant Association Educational Foundation website, www.nraef.org/prostart/students, for recently added colleges and universities.

Culinary Science Academy

Industry Certification

Upon completion of the capstone course, Culinary Academy students will be eligible to take examinations for ProStart and for ServSafe, the food safety and sanitation certification required for entry-level employment.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Dining Room Manager	Catering Director	
Food and Beverage Sales	Corporate Trainer	
Food Supplier	Executive Chef	
Host/Server	Food and Beverage Director	
Kitchen Manager	Menu Planner	
Pastry Chef	Nutritionist	
Sous Chef	Restaurant General Manager	

Hotel and Restaurant Management Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

The Hotel and Restaurant Management Academy prepares students for professional careers in the third largest retail industry in the United States and one of the country's largest employers. One out of every eight Americans is employed either directly or indirectly to meet the needs of travelers to and within the United States, and these guests spend an average of $1.64 billion daily on lodging, food, and leisure. This exciting industry includes career ladders in lodging, travel and tourism, airlines and cruise lines, sport and recreation, resorts and theme parks, and restaurants and food services. Students in the Hotel and Restaurant Management Academy will have opportunities to participate in industry-sponsored events and competitions and will receive individual mentoring from professionals in the hospitality industry.

Recommended Electives

The industry advisory committee recommends students enroll in a business elective and complete at least two years of Spanish in preparation to enter the hospitality industry.

Prerequisites

While no specific courses are required as prerequisites, students should seek hospitality work experiences to confirm their career academy choice.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Pass Year One and Year Two Lodging Management examinations and complete a minimum of 30 days of employment in the lodging industry (required for students pursuing the Certified Rooms Division Specialist (CRDS) designation).
- Pass Year One and Year Two ProStart Examinations and complete 400 hours of mentored industry experience, 250 of which must be paid (required for students pursuing ProStart Certification).

Hotel and Restaurant Management Academy

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Science	Science	Elective
U.S. History	American Government	World History	Elective
Technology Education	Elective	Introduction to the Hotel and Restaurant Management Industry 877M	Management and Leadership in Hotels and Restaurants 880M
Lifetime Fitness/Health	Elective		
Fine Arts	Elective	Elective	

Shaded areas designate completer coursework.

College Articulation

Students with passing scores on both Year One and Year Two examinations and successful completion of coursework and industry hours may be eligible for articulated credit from a range of local and national colleges and universities including Howard Community College, Anne Arundel Community College, Widener University, and Johnson and Wales. The list of postsecondary institutions awarding credit is always growing. Please visit the Lodging Management Program website for recently added colleges and universities.

Industry Certification

Upon completion of the second year course, students will be eligible to take the ProStart and Lodging Management examinations to document the skills and knowledge required for pursuit of a professional career path in the hospitality industry. Students will also have the opportunity to earn ServSafe certification.

Sample Career Options		
< 4-Year Degree	4-Year Degree	> 4-Year Degree
Concierge	Food Service Manager	Food Service Manager
Convention Services	Outdoor/Nature Guide	Front Desk Supervisor
Director of Security	Reservations Agent/Manager	General Manager
Event Planner	Resort Professional	
Executive Housekeeper	Shift Supervisor	
Front Desk Employee	Travel Counselor	
	Tour Guide/Operator	

"The Academy prepared me physically and mentally for the real world. I met other students that share the same interests as me."

Michelle Park
Oakland Mills High School

Health & Biosciences Cluster

Allied Health Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

Students will focus on the broad spectrum of health careers by identifying and demonstrating the necessary skills and behaviors needed to succeed in the technologically advanced world of medicine. Students will explore various career opportunities through hands-on training in basic medical skills, medical equipment use, and patient contact and communication. Areas of study include:

- Professional behaviors of healthcare workers.
- Ethical and legal considerations of healthcare providers.
- Human body structure and function.
- Human development and basic needs.

Students will rotate through various health sites and sample specialized health fields to help choose a specific direction in a health-related career.

Recommended Electives

Anatomy and Physiology is highly recommended as a concurrent science. Additionally, Advanced Placement Biology is beneficial as a science elective in 12th grade for students in this academy.

Prerequisites

- Successful completion of Biology.

Corequisite

- Chemistry

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics and science coursework.
- Complete senior level coursework through a work-site experience (students must provide their own transportation) OR by participating in the on-campus (ARL) course of advanced skills, which includes a capstone project.

Senior Level Coursework Requirements:

- Complete at least 6-8 hours of work-site experience per week **OR** daily attendance at the Applications and Research Lab.
- Attend weekly senior seminars at the Applications and Research Lab.
- Choose a "real world" problem to research.
- Write and submit a research proposal, abstract, and reflection paper based on research.
- Maintain and submit a journal and portfolio of senior work.
- Present a culminating multimedia presentation for the final grade.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II	Mathematics Elective
Science Requirement	Biology*	Chemistry	Elective
U.S. History	American Government	World History	Elective
Technology Ed. Requirement	Fine Arts Requirement	Allied Health I 870M	Allied Health II 874M
Lifetime Fitness/Health	Elective		
Elective	Elective	Elective	

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Allied Health Academy coursework with a grade of B or higher in academy courses may be eligible for up to 3 credits at Howard Community College.

Allied Health Academy

Industry Certifications

Students will become certified in First Aid, Cardiopulmonary Resuscitation (CPR), and the Health Insurance Portability and Accountability Act (HIPAA) by the end of their junior year.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Home Health Care Provider	Dietician/Nutritionist	Audiologist
EKG Technician/EEG Tech.	Health Educator	Chiropractor
Medical Assistant	Occupational Therapist	Dentist
Medical Lab Technician	Physician Assistant	Genetic Counselor
		Health Administrator
Medical Office Manager	Registered Nurse	Nurse Practitioner
Personal Trainer	Social Worker	Pharmacist
Pharmacy Technician		Physical Therapist
Physical Therapy Assistant		Physician
Radiographer		Speech and Language Pathologist
Surgical Technologist		

Biotechnology Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

Biotechnology is the use of cells and molecular biology to manufacture products or solve scientific problems. Biotechnology is one of the fastest growing fields in today's scientific community and is used by biologists, forensics scientists, and doctors. Biotechnology is laboratory and math intense, and requires critical thinking. The Biotechnology Academy gives students a solid academic foundation and necessary laboratory skills for future scientific pursuits. Students use modern laboratory equipment at the Applications and Research Laboratory to perform cutting edge experiments.

Recommended Electives

Students seeking a four-year postsecondary institution are advised to enroll in Advanced Placement Biology, Chemistry and advanced mathematics electives.

Prerequisite

- Completion of Biology with a minimum of a B average.

Corequisites

- Chemistry
- Algebra II

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics and science.
- Complete a senior level coursework through a work-site experience (students must provide their own transportation) **OR** by participating in the on-campus (ARL) course of advanced skills, which includes a capstone project.

Biotechnology Academy

Senior Level Coursework Requirements:

- Complete at least 6-8 hours of work-site experience per week **OR** daily attendance at the Applications and Research Lab.
- Attend weekly senior seminars at the Applications and Research Lab.
- Choose a "real world" problem to research.
- Write and submit a research proposal, abstract, and reflection paper based on research.
- Maintain and submit a journal and portfolio of senior work.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Chemistry	Science Elective
U.S. History	American Government	World History	Elective
Technology Education	Fine Arts	Biotechnology I G/T 835M	Biotechnology II G/T 839M
Lifetime Fitness/Health	Elective		
Elective	Elective	Elective	

* Some students may take Biology G/T in 9th grade. Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Biotechnology Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 4 credits at The Community College of Baltimore (CCBC) or up to 3 credits at Montgomery Community College.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Animal Technician	Biochemist	Agricultural Bioengineer
Bench Technician	Biomedical Engineer	Bioinformatics Analyst/Engineer
Biotechnology Laboratory Assistant	Chemical Engineer	Biostatistician
Document Specialist	Laboratory Technician	Forensic Scientist
Medical Lab Technician	Medical Technologist	Geneticist
Process Engineer	Microbiologist	Medical Review Officer
Production Technician	Pharmaceutical Sales Rep.	Pharmacist
Quality Control Specialist	Quality Manager/Technician	Physician
Research Assistant	Research Technician	Plant Pathologist
	Technical Writer	Quality Control Director
		Research Scientist
		Veterinarian

Certified Nursing Assistant Academy

Location: Academy coursework is taught at the ARL.

Summary

The Certified Nursing Assistant (CNA) Academy will prepare students to function as a nursing assistant in a variety of health care settings. This academy has been approved by the Maryland Board of Nursing and provides training in life span development, vital signs, basic patient care skills, etc. Certified Nursing Assistant Theory and Clinical I must be successfully completed to receive a Howard Community College Certificate of Completion. Upon successful completion of the theory and clinical coursework, students are eligible to take the State Geriatric Examination to become a CNA with a specialty in geriatrics (GNA). The knowledge and competencies learned in this academy are valuable in pursuing any health care career. Immunizations, literacy screening, and criminal investigation are required prior to clinical placement.

Recommended Electives

Students who would benefit from additional support for making career academic choices and preparing for college and employment should enroll in Career Research and Development I (CRD I) as early as possible.

Prerequisites

- Completion of Algebra I/Data Analysis
- Completion of Biology

Successful Academy Students:

- Maintain a C average in all academy coursework. Only students who have successfully completed classroom goals and objectives will be recommended for clinical experience.
- Complete state-mandated attendance and performance standards during the program.
- Complete 60 hours of clinical experience **during the school year**. Clinical hours will be completed on weekends. Students receive 1 credit for clinicals.
- Are 16 years or older prior to participation in clinical experiences.
- Complete criminal background check prior to participation in clinical experiences.
- Maintain up-to-date immunizations before participation in clinical expereinces.
- Provide own transportation to all clinical experiences.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Mathematics	Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Technology Education	Fine Arts	Elective	CNA I 6894 and CNA Clinical 6895
Lifetime Fitness/Health	Elective	Elective	
Elective	Elective	Elective	

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

Industry Certification

Students will become certified in First Aid, Cardiopulmonary Resuscitation (CPR), and the Health Insurance Portability and Accountability Act (HIPPA) by the end of their academy course.

Upon completion of CNA coursework and clinical experiences with a grade of 70 or better, students can receive a CNA certificate. Students seeking GNA certification will be required to complete a state examination for a fee.

This career path provides students with a foundation for any health career. See Allied Health Academy careers.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Certified Nursing Assistant Geriatric Nursing Assistant	Licensed Practical Nurse Registered Nurse	Nurse Practitioner

Emergency Medical Technician Academy

Location: EMT-B is taught at the ARL.

Summary

Emergency Medical Technician will prepare students to have the emergency skills to assess a patient's condition and manage respiratory, cardiac and trauma emergencies. The classes provide classroom and clinical experiences. The Emergency Medical Technician Academy is the result of a three-way partnership between Howard County Public Schools, Howard County Department of Fire and Rescue Services, and Howard Community College (HCC). This academy serves as a prerequisite for coursework in the Emergency Medical Services Program at Howard Community College.

Recommended Electives

Students who would benefit from additional support for making career academic choices and preparing for college and employment should enroll in Career Research and Development I (CRD I) as early as possible. The Allied Health Academy, Junior level course and/or Anatomy and Physiology are highly recommended as a basis for the EMT skills set. Students seeking postsecondary education are advised to take at least two years of World Language.

Prerequisites

- Maintain a C average in English.
- Completed application to EMT Academy and interview by Fire and Rescue staff. (Note: EMT Academy is limited to 25 students per year/class.)
- Physical examination prior to acceptance.

Successful Academy Students:

- Complete state-mandated attendance and performance standards during the program. To meet the 165 hours of required content level classwork, students will need to participate in additional scheduled class sessions.
- Are 16 years or older prior to participation in clinical experiences.
- Complete criminal background check prior to participation in clinical experiences.
- Maintain up-to-date immunizations prior to participation in clinical experiences.
- Complete a minimum of 10 clinical hours and 5 pre-hospital calls after school and on weekends. Students receive 2 credits for clinicals.
- Provide own transportation to all clinical experiences.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	EMT - B 6892, and EMT - B Clinical 6893
Technology Education	Fine Arts	Elective	
Lifetime Fitness/Health	CRD I	Elective	Elective
Elective	Elective	Elective	Elective

* Some students may take Biology G/T in 9th grade. Shaded areas designate completer coursework.

College Articulation

Upon graduation and successful completion of EMT-B certification requirements, students may begin college level coursework at HCC and will have earned 7 credits. The Emergency Medical Services Program at HCC is a two-year, Associates of Applied Science – Paramedic curriculum.

Industry Certification

Students will become certified in Cardiopulmonary Resuscitation (CPR), Health Insurance Portability and Accountability Act (HIPPA) OSHA Infection Control, Maryland Emergency Medical Technician - Basic. Opportunities will be provided for Firefighter I and Rescue Technician after graduation.

Sample Career Options		
< 4-Year Degree	4-Year Degree	> 4-Year Degree
Certified Nursing Assistant	Tactical Paramedic (Law)	Nurse Practitioner
Geriatric Nursing Assistant	Disaster Preparedness and Management	Physician Assistant
Firefighter | Paramedic	MS Educator | Occupational Safety and Health	

"The Academy taught me a lot about myself and my own capabilities as a person as well as a teacher. It gives me something to look forward to each day at school which is nice."

Brandon Dean
Reservoir High School

Human Resource Services Cluster

Child Development Academy

Location: All academy coursework is taught at the high school.

Summary: The Child Development Academy is designed for students who intend to pursue a career working with young children. Academy students have the opportunity to conduct formal observations, develop and deliver lesson plans, and participate in special events and activities with either an on-site or nearby childcare or preschool facility. Academy coursework focuses on development and learning theory, positive and effective discipline, methods for guiding children to reach physical, social, and emotional benchmarks, and the creation of developmentally appropriate curriculum and learning environments. Students in the Child Development Academy will have the opportunity to participate in pre-professional development activities including visits to preschools, pediatric medical settings, and recreation programs designed for young children, partnering with community organizations serving young children, and attending conferences and workshops sponsored by and designed for early childhood educators.

Recommended Electives

Child Development Academy students are advised to take at least two years of Spanish as preparation for working in diverse preschool and childhood development settings. In addition to enrolling in the 9th grade in Art I to satisfy the Fine Arts graduation requirement, Child Development students should pursue additional Fine Arts electives such as Introductory Dance, Musical Theatre, Stage Craft, Chorus/Concert Choir and Piano.

Prerequisites

Although no specific courses are required as prerequisites, students should seek volunteer or paid experience working with young children as confirmation of their career academy choice.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a portfolio documenting academic and work-based skills and achievements.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Technology Education	Elective	Elective	Elective
Lifetime Fitness/Health	Food and Nutrition Technology 6510	Elective	Elective
Fine Arts	Child Development - Honors 658M	Foundations of Curriculum and Instruction 6535	Field Experience in Education (Child Development Academy) 6571 - 6572 - 6573

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Child Development Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 3 credits at Howard Community College. To receive credit, students must enroll in one of the following: Associate in Arts; Associate of Arts in Teaching transfer degree programs in Early Childhood or Elementary Education; or certificate program in Early Childhood Development.

Industry Certification

During their field placement all Academy students will be encouraged to take the ParaPro, a nationally recognized examination required by the state of Maryland for employment as a highly qualified instructional assistant.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Childcare Center Owner/Director	Children's Author	Child Psychologist
Family Day Care Provider	Early Childhood Teacher	Guidance Counselor
Instructional Assistant	Elementary Teacher	Pediatric/Obstetrics Nurse
Childcare Worker | Classroom Aide	Parent Educator	Social Worker | Speech Therapist

Government, Law and Public Administration Academy

Location: All academy coursework is taught at the high school.

Note: This academy is not a completer pathway for graduation. See below for Program Choice.

Summary

Public concerns over public safety, security and emergency response and the increased demand for legal intervention and governmental services will continue to drive the growth of legal and court services and government interventions. At the same time, government agencies face increased competition from private business in recruiting new workers. A deep understanding of American and international political systems, the global economy, law, sociological and geographic changes and leadership models will be necessary for government employees of the future. These demands, along with mounting pressures to control costs, will lead to the reinvention of government services at the federal, state and local levels. Government, Law and Public Administration will focus on legislative, administrative and judicial services to carry out general-purpose government functions at the federal, state and local levels and to provide for national security.

Recommended Electives

Speech, Leadership and World Language are recommended for students planning on pursuing a career in this area as well as attending a four-year college or university. Students are also encouraged to complete 4 years of mathematics.

Prerequisite

All students must complete the Intern/Mentor Program I course in their senior year if they chose to complete an internship.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a B average in all academy coursework in order to participate in Intern/Mentor Program I program during the Senior Year.

All students must complete either a capstone project in their Leadership or Political Science course, or an internship in their Intern/Mentor Program I course. Capstone project options include service learning projects, research projects, community involvement, mock trial or Model UN competitions, speech and debate, or Simulated Congressional Hearings. Internship opportunities will be supervised by an on site program coordinator, in collaboration with the on site Gifted and Talented Resource Teacher. Examples of internship opportunities include the States Attorney Office, the County Council, the Howard County Police, the Columbia Council, or private law or consulting firms.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Elective
Science	Biology*	Science	Elective
U.S. History OR G/T US History	American Government OR AP Government and Politics	World History OR AP World History	Speech Communication I*** (Recommended)
Technology Education	Elective	Law and the Citizen*** 285M OR AP Comparative Governments 224M	Sociology** OR AP Micro/Macro Economics** OR AP Human Geography**
Lifetime Fitness/Health	Fine Arts	Leadership*** (Recommended)	Political Science** (Recommended)
Program Choice Requirement	Program Choice Requirement	Program Choice Requirement	Intern/Mentor Program I 191M or 193M (Students involved in internships)

* Some students may take Biology G/T in 9th grade.

*** Indicates a course that may be taken at grades 10, 11, or 12.

Program Choice

The academy is not a program option for graduation. Students much complete either 2 credits of World Languages, 2 credits in an approved Advanced Technology Sequence or the Career Research and Development Program. See page 7 in catalog.

Government, Law and Public Administration Academy

College Articulation

Advanced Placement courses are transferable as entry-level classes in many institutions of higher learning. Students in this program will have opportunities to intern with state and local government officials. Partnerships with several state and local government institutions will be explored.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Armed Forces	Auditor	Accountant
Court Reporter	Budget Analyst	Attorney
Law Enforcement	Campaign Manager	Financial Management Specialist
Paralegal	Financial Administrator	
Policy Researcher	Government Official	
Public Affairs Assistant	Policy Analyst	
Public Records	Public Affairs/Information Specialist	
	Program Manager	

Homeland Security and Emergency Management Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

The Homeland Security and Emergency Management Academy outlines the essential characteristics of national and international acts of terrorism and the roles, functions of, and interdependency between local, federal and international law enforcement, intelligence and military agencies. Students will learn how effective strategies are developed to generate information necessary for intelligence and law enforcement organizations to make timely, effective and efficient decisions for homeland security policies and operations. The curriculum will focus on examining the global and national issues and policies concerning terrorism and homeland security and how different technologies are employed for general and critical legal research, writing and case management. Additionally, students will demonstrate proficiency in communication, problem solving, and team building skills and explore career opportunities in the areas of homeland security.

Recommended Electives

Students would benefit from taking at least two years or more in World Languages.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics and science coursework.
- Complete senior level coursework through a capstone project and sit for Spatial Technology and Remote Sensing (S.T.A.R.S.) certification exam.
- Practice making responsible decisions to be better prepared for security clearance and background checks required in homeland security career fields.

Homeland Security and Emergency Management Academy

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II	Elective
Science Requirement	Biology*	Chemistry	Elective
U.S. History	American Government	World History	Elective
Technology Education Requirement	Fine Arts Requirement	Elective	Advanced Geographic Information Systems and Remote Sensing 823M
		Foundations of Homeland Security and Emergency Preparedness 821M	
Lifetime Fitness/Health	Elective	Geographic Information Systems and Remote Sensing 822M	Geospatial Applications Worksite Experience 824M
Elective	Elective		

* Some students may take Biology G/T in 9th grade. Shaded areas designate academy coursework.

Industry Certification

Upon successful completion of all geographic information systems and remote sensing coursework students sit for the Spatial Technician and Remote Sensing (S.T.A.R.S.) exam to earn an Entry-level Geographic Information Systems (GIS) Technician certification.

College Articulation

Articulation agreements are currently being developed with local colleges.

Sample Career Options		
< 4-Year Degree	4-Year Degree	> 4-Year Degree
GIS Technician	Emergency Management Technician	Computer Systems Analyst
Surveying and Mapping Technician	Transportation, Storage, and Distribution Manager	Security Analyst
Computer Support Specialist	Network Systems and Data Communications Analyst	
Database Administrator	Computer Information Systems Manager	

Teacher Academy of Maryland

Location: All academy coursework is taught at the high school.

Summary

The Teacher Academy of Maryland is designed for students who intend to pursue a career as a elementary, middle, or high school teacher. Over the next decade America is projected to need at least 2.4 million new teachers. As a system, Howard County Public Schools welcomes our own graduates back to begin their new careers as educators in our schools. Academy students have the opportunity to conduct formal observations, develop and deliver lesson plans in a K-12 setting, and participate in special events and activities with other future educators. Academy coursework focuses on development and learning theory, positive and effective classroom management and discipline, curriculum delivery models, and the creation of developmentally appropriate curriculum and learning environments. Students in the Teacher Academy of Maryland will have the opportunity to participate in pre-professional development activities including visits to classrooms at the elementary through high school levels, internship experiences providing interaction with students of multiple age levels and in multiple subjects, and conferences and workshops sponsored by and designed for educators.

Teacher Academy of Maryland

Recommended Electives

Teacher Academy of Maryland students are advised to take at least two years of a World Language; Spanish being recommended. Students who are preparing for a career teaching middle/high school should pursue additional courses in the subject area they are planning to teach (e.g. Mathematics, Science, Social Sciences, Humanities/Arts).

Prerequisites

Although no specific courses are required as prerequisites, students should seek volunteer or paid experience working with children as confirmation of their career academy choice.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a portfolio documenting academic and work-based skills and achievements.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Technology Education	Elective	Elective	Elective
Lifetime Fitness/Health	Elective	Foundations of Curriculum and Instruction 6535	Elective
Fine Arts	Child Development - Honors 658M	Teaching as a Profession - G/T 659M	Field Experience in Education (Teacher Academy) - G/T 660M, 661M, 662M

* Some students may take Biology G/T in 9th grade. Shaded areas designate completer coursework.

College Articulation

Students who are preparing for a career in Early Childhood or Elementary Teaching who earn a grade of B or higher in Child Development, Foundations of Curriculum and Instruction, and Teaching as a Profession may be eligible for up to 6 credits at Howard Community College. To receive this credit, students must enroll in one of the Associate in Arts transfer degree programs in Early Childhood or Elementary Education or in an Associate of Applied Science or certificate career program in Early Childhood Development. Students who are preparing for a career teaching in a secondary setting may earn 3 college credits for receiving a grade of B or higher in Teaching as a Profession. To receive this credit, students must enroll in a Secondary Education Associate of Arts degree.

Students who are preparing for a career in Early Childhood, Elementary or Secondary Teaching, who earn grades of B or higher in all four required Academy courses, may earn three (3) college credits from Towson University.

Industry Certification

Upon completion of the four required Academy courses including the internship, students may choose to take the ParaPro, a nationally recognized examination required by the state of Maryland for employment as a highly qualified instructional assistant.

Sample Career Options		
< 4-Year Degree	4-Year Degree	> 4-Year Degree
Childcare Worker	Early Childhood Teacher	Child Psychologist
Daycare Center Owner/Director	Elementary Teacher	Guidance Counselor
Family Day Care Provider	High School Teacher	Pediatric/Obstetrics Nurse
Instructional Assistant/Aide	Parent Educator	School Administrator
Preschool Director	Preschool Teacher	Social Worker
Recreation Program Director		Speech Therapist

"The career-oriented focus of the academies helped me decide what I want to do when I get older by making me think about my future."

Paige Nelson
River Hill High School

Information Technology Cluster

Computer Programming Academy

Location: All academy coursework is taught at the high school.

Summary

The Computer Programming Academy is designed for students that have an interest in expanding their understanding and skills of computer science and computer programming concepts. Coursework will expose students to the fundamental principles and technology of object-oriented programming. Students will work in a computer lab to gain hands-on programming experience on both individual and team programming projects. Benefits to academy students include a focused course of study, connections with the local professional computer science community, participation in local, national, and international programming events, and opportunities to participate in activities created exclusively for academy members. The academy course sequence includes one AP Computer Science course.

Recommended Electives

- Financial Management
- Principles of Business
- E-Commerce and Entrepreneurship

Prerequisites

- Completion of Algebra I/Data Analysis prior to enrollment in academy coursework.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Complete a large-scale group programming project during the senior year.
- Upon completion of Computer Science III, students are encouraged to take the AP Computer Science A exam.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Geometry or above	Algebra II or above	College Algebra, Pre-calculus or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts	Elective	Elective	Computer Science IV G/T 471M
Computer Science I -- Designing Technology Solutions -- Honors 450M	Computer Science II G/T 460M	Computer Science III AP 465M	Advanced Object Oriented Design G/T 472M

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Computer Operator	Computer Engineer	Computer Forensics Specialist
Database Analyst	Database Developer	Computer Scientist
Database Tester	Software Architect	Cryptanalyst
	Software Programmer	Intelligence Specialist
	Software Tester	Project Manager
	Virtual Reality Developer	Robotics Engineer

Cybersecurity Networking Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

The Cybersecurity Networking Academy is designed for students who have an interest in expanding their knowledge and skills related to computer hardware, software, operating systems, fundamental and advanced networking, and cybersecurity related threats and mitigation techniques. Students will gain practical hands-on experience in these fields. Students will demonstrate their ability to analyze cyber threats by using networking devices, simulation tools, software, and competitions. These courses prepare students to obtain a wide variety of industry recognized IT certifications.

The Computer Networking pathway provides fundamental computer networking concepts and theory needed to build home and medium-sized business networks. It also provides awareness of cybersecurity related issues and provides an overview of risks and vulnerabilities and focuses on understanding network defense techniques. It also covers protecting and securing confidentiality, integrity and availability of sensitive information on networks and systems. This pathway prepares students for Cisco CCENT certification.

The PC Systems pathway provides an introduction to the computer hardware, software, and networks as well as in-depth coverage of cybersecurity concepts and techniques needed to help meet the growing demand for entry-level IT professionals. Students learn to describe the internal components of a PC, install Windows XP/Windows 7, assemble and fix laptops and desktops. It also focuses on identifying various cybersecurity threats and implementing layers of defense mechanisms against these threats. This pathway prepares students for CompTIA A+ certification and provides an internship/mentorship option.

Recommended Electives

- Computer Science I -- Designing Technology Solutions -- Honors
- Financial Management
- Foundations of Technology

Prerequisites

- Algebra I/Data Analysis prior to enrollment in academy coursework.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Participate in student conferences and job shadowing.
- Complete a large-scale networking project during the senior year.
- Consider taking the CISCO Certified Network Associate Exam.
- Practice making responsible decisions to be better prepared for security clearance and background checks required in cybersecurity and computer networking career fields.

<table>
<tr><th>9th Grade</th><th>10th Grade</th><th>11th Grade</th><th>12th Grade</th></tr>
<tr><td>English 9</td><td>English 10</td><td>English 11</td><td>English 12</td></tr>
<tr><td>Algebra I/Data Analysis or above</td><td>Geometry or above</td><td>Algebra II</td><td>Elective</td></tr>
<tr><td>Science Requirement</td><td>Biology*</td><td>Chemistry</td><td>Elective</td></tr>
<tr><td>U.S. History</td><td>American Government</td><td>World History</td><td>Elective</td></tr>
<tr><td>Technology Ed. Requirement</td><td>Fine Arts Requirement</td><td rowspan="2">Computer Networking I 4562 OR PC Software and Hardware 4561</td><td rowspan="3">Computer Networking II 456M OR Networking Essentials 4563</td></tr>
<tr><td>Lifetime Fitness/Health</td><td>Elective</td></tr>
<tr><td>Elective</td><td>Elective</td><td>Elective</td></tr>
</table>

* Some students may take Biology G/T in 9th grade.

Shaded areas designate academy coursework.

Senior Level Coursework Options: Computer Networking Pathway

- Students will complete CISCO certified coursework and sit for Cisco Certified Network Engineer Technician (CCENT) and have the option to sit for Cisco Certified Network Administrator (CCNA) certification exams.
- Students will complete Cyber Watch coursework.

Cybersecurity Networking Academy

Senior Level Coursework Options: PC Systems Pathway

- Students will complete CISCO certified coursework and sit for Comp TIA A+ certification exam. Students will also have the option to sit for Cisco Certified Network Engineer Technician (CCENT) and CompTIA, Security + certification exams.
- Students will have the option of completing a worksite experience in a computer repair or networking field.

College Articulation

Students who successfully complete all Computer Networking pathway (4562 and 456M) coursework with a grade B or higher, are eligible for up to 12 credits at Howard Community College.

Students who successfully complete all PC Systems pathway (4561 and 4563) coursework with a grade of B or higher, are eligible for up to 9 credits at Howard Community College.

Industry Certifications

Upon completion of the Computer Networking pathway experience, students will be prepared to sit for the Cisco Certified Network Engineer Technician (CCENT) and Cisco Certified Network Administrator (CCNA) certification exams.

Upon completion of the PC Systems pathway experience, students will be prepared to sit for the CompTIA A+, Cisco Certified Network Engineer Technician (CCENT) and CompTIA Security + certification exam.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Cabling Technician	CISCO Routing Engineer	Chief Security Officer
Network Administrator	LAN Specialist	Network Engineer
Network Maintenance Technician	Network Design Specialist	Network Systems Analyst
PC Help Desk/Operator	WAN Specialist	Security Analyst
Data Center Technician	PC Service Engineer	Computer Design Engineer
Help Desk Operator	Project Manager	Operations System Engineer
PC Support Technician	Software Tester	Systems Architect
	Technical Support Engineer	

"The academy changed my outlook on my life and future."

Israel Rangel
Wilde Lake High School

Manufacturing, Engineering & Technology Cluster

Pre-Engineering: Project Lead the Way (PLTW) Academy

Location: Academy coursework is taught at the high school.

Summary

The High School Pre-Engineering Academy is a four-year sequence of five courses which, when combined with traditional mathematics and science courses, introduces students to the scope, rigor and discipline of engineering prior to entering college. In grades 9, 10 and 11, students build a foundation of pre-engineering knowledge and skills. In the senior year, students take Engineering Design and Development, where they design and build solutions to authentic engineering problems. These self-directed projects are mentored by engineers. For more information go to www.pltw.org.

Recommended Electives

Students who would benefit from additional support for making career academic choices and preparing for college and employment should enroll in **Career Research and Development I** (CRD I) as early as possible. Students seeking postsecondary education are advised to take at least two years of **World Language**. Students seeking degrees in Engineering are also advised to enroll in **Physics** and **Chemistry.**

Prerequisites

Pre-Engineering Academy students must enter the program in the ninth grade. Students will take Introduction to Engineering Design and must be concurrently enrolled in Algebra I/Data Analysis as a ***minimum*** level mathematics course.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics.

In the senior year Engineering Design and Development course, students work in teams to research, design and construct a solution to an open-ended engineering problem. Students apply principles developed in the four preceding courses and are guided by a mentoring engineer. They must present progress reports, submit a final written report and defend their solutions to a panel of outside reviewers at the end of the school year.

Students are required to take four years of mathematics.

College Articulation

In this program, students may be eligible for articulated credit with many four-year colleges and universities. See the PLTW website for current articulation agreements. (http://www.pltw.org/engineering/professional-development/affiliates/affiliates.ctm)

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Science	Science	Science Elective
U.S. History	American Government	World History	Elective
Fine Arts	Elective	Elective	Elective
Lifetime Fitness/Health	Elective	Digital Electronics G/T 686M	Elective
Introduction to Engineering Design 681M	Principles of Engineering G/T 680M (Technology Education Credit)	Computer Integrated Manufacturing G/T 685M	Engineering Design and Development G/T 687M

Shaded areas designate completer coursework.

Industry Certification

There are no formal certification tests given, however, students who have taken high school pre-engineering courses and/or received transcripted college credit have demonstrated their commitment to a rigorous, challenging program. They are prime candidates for a college or university engineering program. Students are encouraged to interview with the head of college programs to discuss what they have learned in high school and what college courses would be appropriate.

Sample Career Options			
< 4-Year Degree	4-Year Degree		> 4-Year Degree
Engineering Technician	Electrical Engineer	Mechanical Engineer	Scientist
	Industrial Engineer	Process Engineer	
	Manufacturing Engineer	Quality Engineer	
	Materials Engineer	Software Engineer	

Systems and Project Engineering Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

Students in this academy will focus on technical concepts including mechanical drawing, practical fabrication, electronics, mechanics, data acquisition, and analysis. Students will follow the engineering design process to work in teams to design, build, and test a single passenger electrically powered racecar or all-terrain wheelchair. Students will use computer-based design and modeling software when appropriate. Students will also learn practical fabrication skills, such as basic MIG welding and machining as necessary, to construct their portion of the experimental vehicle. Initially, vehicle prototypes will be tested and benchmarked through data collection.

Recommended Electives

Students planning to attend a four-year postsecondary institution are advised to take at least two years of World Language.

Prerequisite

- Foundations of Technology, Engineering Design or Principles of Engineering.

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics.
- Complete senior level coursework through a work-site experience (students must provide their own transportation) **OR** by participating in the on-campus (ARL) course of advanced skills, which includes a capstone project.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II	Elective
Science Requirement	Biology*	Chemistry	Elective
U.S. History	American Government	World History	Elective
Technology Ed. Requirement	Fine Arts Requirement	Systems Management Solutions G/T 860M	Systems Engineering Innovation G/T 864M
Lifetime Fitness/Health	Elective		
Elective	Elective	Elective	

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

Senior Level Coursework Requirements:

- Complete at least 6-8 hours of work-site experience per week **OR** daily attendance at the Applications and Research Lab.
- Attend weekly senior seminars at the Applications and Research Lab.
- Choose a "real world" problem to research.
- Write and submit a research proposal, abstract, and reflection paper based on research.
- Maintain and submit a journal and portfolio of senior work.
- Present a culminating multimedia presentation for the final grade.

College Articulation

Students who successfully complete the Systems and Project Engineering Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 3 credits at Howard Community College.

Sample Career Options		
< 4-Year Degree	**4-Year Degree**	**> 4-Year Degree**
Draftsperson/CAD Operator	Aerospace Engineer	Materials Scientist
Electrician	Design Engineer	Physicist
Equipment Operator	Electrical Engineer	Quality Engineer
Laboratory Technician	Mechanical Engineer	Systems Designer/Engineer
Machinist/Tool and Die Maker		Program Managers/Test Engineer

"It is way better to see how something works with your own eyes rather than reading about it in a book."

Jerrin Thomas
Wilde Lake High School

Transportation Technologies Cluster

Automotive Technology Academy

Location: Junior and senior-level academy courses are taught at the ARL.

Summary

The Automotive Technology academy combines technical, academic and workplace skills in an integrated curriculum in accordance with all National Automotive Technicians Education Foundation, Inc. (NATEF) guidelines. This academy prepares students for further education and careers in automotive technology and consists of four required areas of study for program certification: suspension and steering, brakes, electrical/electronic systems, and engine performance. Each area provides the student with the knowledge and skills necessary to pass the NATEF end-of-course assessments and immediately enter a career in this area and/or attend postsecondary education and/or training. Students develop diagnostic, technical and academic skills through classroom instruction and hands-on maintenance applications. Through theory and real-world experiences, students master the concepts and the ability to identify and perform necessary troubleshooting and repair tasks.

Recommended Electives

It is recommended that students complete Algebra II as part of their mathematics requirements in preparation for automotive technology coursework.

Prerequisites

None

Successful Academy Students:

- Maintain a C average in all academy coursework.
- Maintain a C average in mathematics.
- Complete 120 clock hours of a work-based learning experiences at a certified automotive facility during the summer prior to senior year. Students will complete hours after school or in the summer depending on mentor and student schedules. Students are required to provide their own transportation to and from the internship site.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra I/Data Analysis or above	Geometry or above	Algebra II or above	Mathematics Elective
Science	Biology*	Science	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Fine Arts	Automotive Technology I 856M	Automotive Technology II 857M
Technology Education	Elective		
Elective	Elective	Elective	

* Some students may take Biology G/T in 9th grade.

Shaded areas designate completer coursework.

College Articulation

Students who successfully complete the Automotive Technology Academy program sequence, with a grade of B or higher in academy courses, may be eligible for up to 18 credits at The Community College of Baltimore County (CCBC) or up to 15 credits at Pennsylvania College of Technology.

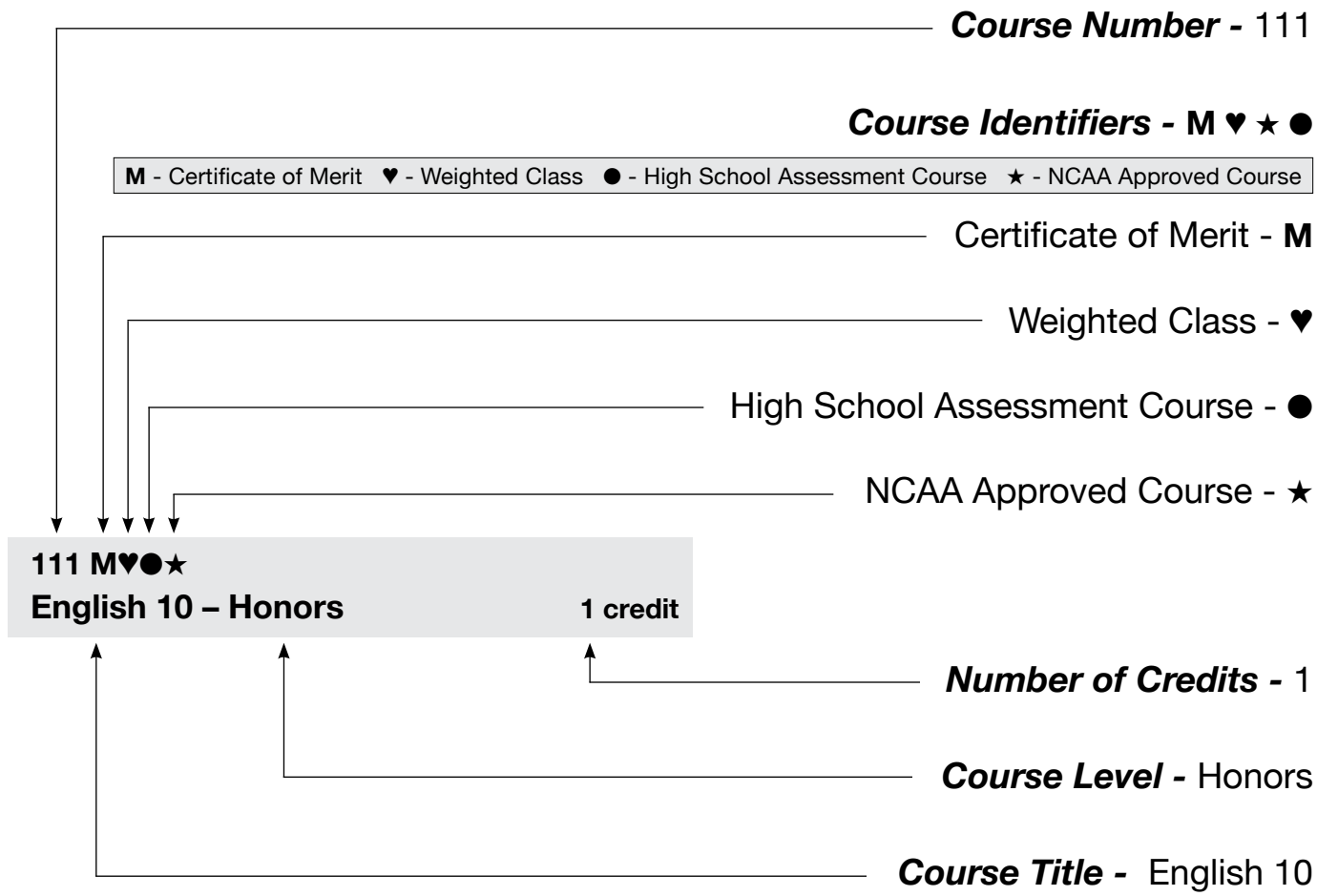
Industry Certification

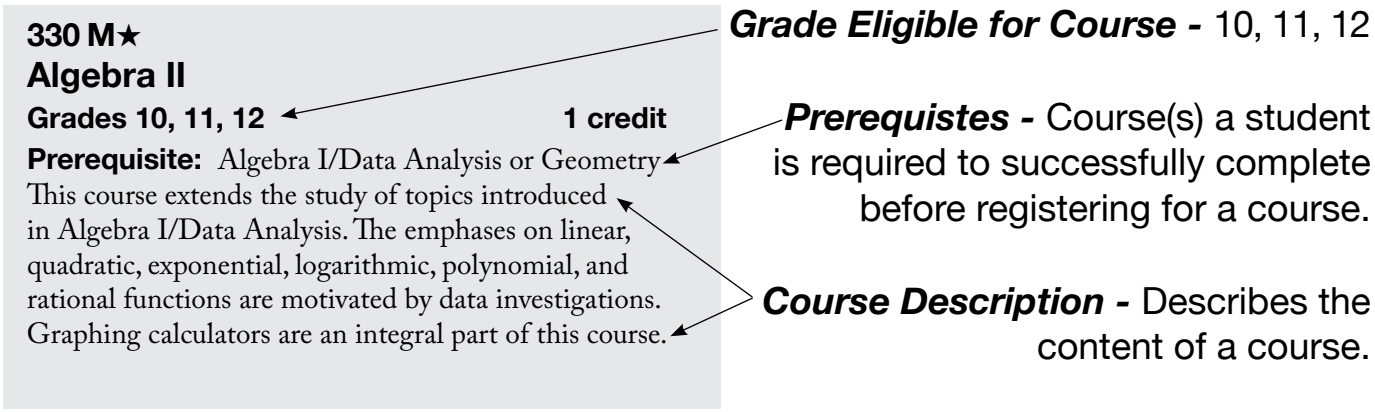
Students have the opportunity to complete NATEF certification assessments in the four areas offered in this program: Brakes, Steering and Suspension, Electrical and Electronic Systems, and Engine Performance.

Sample Career Options		
< 4-Year Degree		4-Year Degree
Automobile Lead Technician	Automobile Service Technician	Upper-Level Automobile Position
Automobile Master Mechanic	Automobile Speciality Technician	
Automobile Service Advisor	Automobile Team Leader	

Course Descriptions

Course Description Diagram





Advanced Research

Advanced Research

The courses listed below are credit courses. They can be used to meet elective credit requirements for graduation. They are listed in this section because they are not directly related to a single content area. In some instances, several content areas satisfy course objectives.

195M♥ - I
196M♥ - II

Independent Research I, II - G/T

Grades 9, 10, 11, 12 **1 credit**

Prerequisites: Teacher recommendations; intake interview with G/T resource teacher.

Independent Research is a college-level course in which students design an original research study or creative production in self-selected areas of interest. Students learn advanced-level research methodologies and college-level writing and oral presentation skills. Under the guidance of the G/T resource teacher, each student identifies a problem and formulates a research question. Student researchers address identified problems, answer research questions, and communicate the results of their achievements to professionals in their selected areas of study.

191M♥ - (1 credit - grade 11 or 12)
192M♥ - (2 credits - grade 11 or 12)
193M♥ - (1 credit - grade 12)
194M♥ - (2 credits - grade 12)

Intern/Mentor Program I, II - G/T

Grades 11, 12 **1-2 credits**

Prerequisites: Grade of "B" or better in related area of study; above average recommendation(s) from teacher or other professional in the field of interest; application; interview with G/T resource teacher; access to reliable transportation. Student participation is subject to mentor availability.

Students in this college-level course design an original research study or creative production intended to contribute new knowledge to the field of study. Students study off-campus (five to ten hours per week) with a professional mentor in a self-selected area of interest. The G/T resource teacher facilitates the experience and provides instruction in research methodologies, advanced writing skills, and oral presentation skills. At the mentor's worksite, students apply their knowledge and skills. Applications are available from the G/T resource teacher.

441M♥★ - (Research I - 1 credit)
444M♥★ - (Research I - 2 credits)
442M♥★ - (Research II - 1 credit)
445M♥★ - (Research II - 2 credits)
443M♥★ - (Research III - 1 credit)
447M♥★ - (Research III - 2 credits)

Mathematics, Science, and Technology Research I, II, III - G/T

Grades 10, 11, 12 **1-2 credits**

Prerequisites for Mathematical Research: Pre-calculus G/T or equivalent; staff recommendation

Prerequisites for Scientific Research: Biology; Algebra II; completion of or concurrent enrollment in Chemistry I; staff recommendation

Prerequisites for Technology Research:

Foundations of Technology or teacher recommendation (Prerequisite will determine which type of technology research a student may complete.)

The purpose of this course is to provide students with an opportunity to pursue independent research in the areas of science, mathematics, and technology. Students formulate a problem or research question, use appropriate research methodologies to solve the problem, and communicate the results to an authentic audience. All students seek professional advice from experts in the area of special interest.

Career & Technology Education (CTE)

Career & Technology Education (CTE)

Career and Technology Education (CTE) offers an opportunity to explore career pathways while still in high school. CTE programs satisfy the following pathways that students may select for graduation: Career Academy (CTE Completer Program), Career Research and Development Program (CTE Completer Program), and Advanced Technology Program. Students may also take CTE courses as elective courses within their four-year high school plan. The CTE program provides coursework that focuses on career exploration and development of the skills needed for success in postsecondary and workplace experiences.

Many CTE courses are offered at the local high school and others are offered only at the Applications and Research Laboratory. Course descriptions for courses offered at the local high school are organized by discipline: Business and Computer Management Systems; Career Research and Development; Family and Consumer Science; and Technology Education. Those courses which are offered only at the Applications and Research Laboratory are listed alphabetically.

All CTE programs are articulated with local postsecondary institutions. Please see your counselor for specific course and program articulated credits.

Business & Computer Management Systems (BCMS)

The courses offered within Business and Computer Management Systems (BCMS) provide students the opportunity to develop the knowledge and skills necessary for working in the technology-based environments of today. The Career Academies Program includes one BCMS Academy which is affiliated with the National Academy Foundation (NAF). This academy is the Academy of Finance, which is offered only at the Applications and Research Laboratory. Course descriptions for this Centralized Career Academy are located in the Centralized Career Academies section of this catalog. In addition, the Career Academies Program includes four academies which are offered at the home high schools. These are the Accounting Academy, the Business Management Academy, the Computer Programming Academy, and the Marketing Academy. Course descriptions for courses that make up the four school-based academies follow.

561M♥

Accounting I - Honors

Grades 10, 11, 12 **1 credit**

Accounting I is an introductory course that covers the basic principles of accounting for personal and professional use. The course consists of learning experiences designed to enable students to set up accounts and prepare qualitative records, to verify accuracy of data by applying auditing principles, and to prepare budgets and final reports. The entire accounting cycle is presented with application problems to simulate authentic business experiences. Current accounting software is integrated throughout the course.

560M♥

Accounting II - Honors

Grades 11, 12 **1 credit**

Prerequisite: Accounting I

Accounting II is an advanced level course that provides students with a comprehensive study of accounting principles and the application of these principles to a wide range of business situations. Topics to be explored include the accounting cycle; accounting for assets, liabilities, and equity; understanding business information; accounting for other forms of organization; special accounting systems; and accounting for business decisions.

564M♥

Advanced Marketing - Honors

Grades 11, 12 **1 credit**

Prerequisite: Principles of Marketing

Advanced Marketing is an advanced level course that provides students with a comprehensive study of marketing, management, sales and merchandising. Students will approach the content from the perspective of a marketing professional, gaining experiences related to merchandising, sales promotion, marketing research and organizing and implementing a large-scale marketing plan. Additional topics include marketing in a global economy.

Business & Computer Management Systems (BCMS)

472M♥

Advanced Object-Oriented Design - G/T

Grades 11, 12 **1 credit**

Prerequisite: Computer Science III AP

This course explores advanced components of object-oriented programming. Topics include Graphic User Interfaces (GUIs), effective web-page design, and advanced aspects of software development. The Java programming language, the use of Java applets, JavaScript, and HTML will be emphasized.

450M♥

Computer Science I - Designing Technology Solutions - Honors

Grades 9, 10, 11, 12 **1 credit**

(Technology Education Credit)

Prerequisite: Algebra I

This challenging course provides an introduction to engineering design and development with a focus on software engineering through the use of two computer programming languages–Alice and Java. In addition, students will develop understanding of technological issues of the "designed world." Topics will include energy and power, construction, manufacturing and communication.

460M♥

Computer Science II - G/T

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Algebra I and Computer Science I

This mid-level course extends the study of object-oriented programming. Topics include data types, control statements, looping structures, functions, arrays, and classes. An emphasis will be placed on computer science skills, problem solving, algorithm design, modularization, and documentation.

465M♥

Computer Science III - AP [AP Computer Science]

Grades 10, 11, 12 **1 credit**

Prerequisite: Computer Science II

Computer Science III is a fast-paced advanced level course that extends the study of the fundamental principles and technology of object-oriented programming using the Java language. Topics include classes, objects, data types, variables, Boolean expressions, methods, looping, input, and output. Advanced topics will include searching, sorting, GUI components and event handling. It is recommended that students in this course take the AP Exam when it is offered in May.

471M♥

Computer Science IV - G/T

Grades 11, 12 **1 credit**

Prerequisite: Computer Science III AP

This fast-paced advanced level course involves the in-depth exploration of data structures using the Java language. Topics include dynamic allocation, stacks, queues, linked lists, trees, templates, information hiding, inheritance, encapsulation, and polymorphism.

579M

E-Commerce and Entrepreneurship

Grades 11, 12 **1 credit**

This fast-paced course is designed to introduce students to the world of e-business. Topics will include online research, analysis of the global market place, development of a business plan, cost analysis, current legal and ethical issues, payment methods, security measures, and global marketing techniques. Students will approach the course from the perspective of an entrepreneur seeking to enter the e-business market. Appropriate technologies will be integrated into the course.

Business & Computer Management Systems (BCMS)

563M

Financial Management

Grades 9, 10, 11, 12 **1 credit**

Financial management provides students with the knowledge and practice they need to make informed financial decisions. Students will learn to successfully manage financial resources. Banking, investing, borrowing, and risk management are core content areas of this course. Students will gain knowledge and understanding of revenue, expenses, credit and money management to enable them to make informed decisions in a highly technical and competitive society.

4530

Laboratory Assistant – BCMS

Grades 11, 12 **1 elective credit**

Prerequisite: Approval of BCMS Instructor

Under the direction of the teacher, students gain experience working in a computer lab. Students will assist in lab maintenance including troubleshooting, software installation and basic networking. They will provide routine assistance to students enrolled in the course and create materials designed by the teacher. Students must be able to work independently. Only one credit can be earned as a student assistant; credit may only be awarded after the 20th graduation credit has been recorded.

551M

Principles of Business

Grades 10, 11, 12 **1 credit**

This course is designed to introduce students to topics related to current business practices. Students examine business trends including consumer economics, marketing, finance, international business, business law, and entrepreneurship. This introductory level course prepares students for entry-level positions in business upon graduation from high school or continuing studies in business at the college level. The student may earn three credits at Howard Community College after successfully completing this course with a grade of B or higher.

565M♥

Principles of Marketing - Honors

Grades 11, 12 **1 credit**

This course introduces students to marketing principles, including market analysis, forecasting, segmenting, product strategy, pricing, distribution, promotion strategy, and international marketing. Experiences will include the investigations and analysis of the marketing strategies of various companies and the development of individual marketing plans.

4520

Software Applications I

Grades 9, 10, 11, 12 **1 credit**

An introductory course intended for students who are interested in learning computer operations, Software Applications I contains topics including keyboarding, word processing, database management, spreadsheets, desktop presentations, use of the Internet, and software integration. The students will apply these skills to both business and personal use.

Note: Credit by exam is available for this course.

4511

Software Applications II

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Software Applications I

Students enrolled in this course will gain hands-on experiences related to computer-based office technologies and personal financial literacy. Students will apply software applications to manage and complete authentic, office-related tasks. Communication, decision-making, problem solving, and personal career development skills will be emphasized.

453M

Software Applications III

Grades 10, 11, 12 **1 credit**

Prerequisite: Software Applications II or staff recommendation

This course is designed to continue exploration of topics included in Software Applications I and II. Students gain experience using a variety of multimedia tools. Topics include advanced MS Office applications, web page design and development using HTML and *Dreamweaver*, basic animation, editing digital still images, and creating and editing digital video. The students will apply this technology to authentic projects.

Career Research & Development

Career Research and Development (CRD) is an approved Career and Technology Education Program that meets the CTE graduation requirement if taken in the sequence of CRD I, CRD II, and Site-Based Work Experience. Students who successfully complete the CRD program, with a grade of B or higher in the CRD course sequence, may be eligible for up to three credits at Howard Community College. CRD I may also be taken as a general elective for those students not pursuing a CTE graduation pathway.

6880

Career Research and Development I

Grades 10, 11, 12 **1 credit**

Students will demonstrate an understanding of how accurate, current and unbiased career information is necessary for successful career planning and management using Maryland's career clusters and pathways. In addition, students will be introduced to basic concepts of financial literacy to help them manage their personal finances. Course content will include topics such as: identifying interests and aptitudes; investigating careers; setting goals and planning to achieve them; finding, applying for, and maintaining employment; communicating effectively; understanding choices and challenges in the world of work; applying reading and mathematic skills to the world of work; and using appropriate technology. Students will complete a career portfolio with the opportunity to earn a Passport to the Future, a partnership with the Howard County Chamber of Commerce.

6881

Career Research and Development II

Grade 12 **1 credit**

Prerequisites: Career Research and Development I; Concurrent enrollment in Site-Based Work Experience

Students will continue to explore career options and develop workplace readiness skills. Course content will include topics such as: meeting the expectations of an employer; teamwork; assessing progress towards career goals; using interpersonal skills on the job; following health and safety rules at work; communicating effectively in the workplace; applying reading and mathematic skills on the job; using computers/ technology at the workplace; becoming an entrepreneur/ leader in the world of work; and financial literacy and money management.

6885 - (2 credits)
6886 - (3 credits)
6887 - (4 credits)

Site-based Work Experience

Grade 12 **2-4 credits**

Prerequisite: Career Research and Development I; Concurrent enrollment in Career Research and Development II

The CRD teacher/coordinator will coach and assist students as they secure placement based on the results from career research, interest inventories, and aptitude assessments taken in CRD I. The workplace component is a mentored experience with a written, personalized work-based training plan. Students will sign a student placement contract. The student's work hours must overlap the afternoon work hours of the CRD teacher. Special education students who require more direct support to be successful at the worksite, may receive services through the Work-Study teacher at their school as determined by the IEP team.

Family & Consumer Sciences

Family and Consumer Sciences is an interdisciplinary study providing students hands-on activities to develop the technical, critical thinking, problem solving, decision-making, and interpersonal skills that will empower them to manage the challenges of living and working in a diverse society. Four high school Career Academy Programs are offered under Family and Consumer Sciences: Child Development, Culinary Science, Hotel and Restaurant Management, and the Teacher Academy of Maryland (TAM). Course descriptions for the Hotel and Restaurant Management Academy are included in the ARL-based academy section of this catalog. Course descriptions for courses that make up the three school-based academies follow.

657M

Advanced Culinary Science and Restaurant Operations

Grades 11, 12 **1 credit**

Prerequisite: Culinary Sciences

The final course in the Culinary Academy is designed for the student who is pursuing college study and/or immediate entry into the professional restaurant and hospitality industries. Providing advanced training, the course focuses on the practices and skills required of professionals in food production, food services, and hospitality. Students who complete the course will finish the second level of the ProStart program and will be eligible to sit for the final examination for ProStart certification.

Family & Consumer Sciences

658M♥

Child Development - Honors

Grades 10, 11, 12 **1 credit**

The first course for students in the Child Development or Teacher Academies, Child Development is designed for students interested in working with children in a variety of careers. It focuses on the major theories of child development and learning. Practical experience is gained by observation of and interaction with young children. Students must be in at least the 10th grade. Students who complete Child Development and Foundations of Curriculum and Instruction with a B or higher may be eligible for three college credits at Howard Community College.

6525

Culinary Sciences

Grades 11, 12 **1 credit**

Prerequisite: Food and Nutrition Technology

This Academy course is for the student who is pursuing a professional career in either the restaurant or hospitality industry. Through a hands-on, project-oriented approach, student teams will develop advanced food preparation, safety, and sanitation skills. Students will learn to use professional equipment and techniques. Culinary Sciences students will finish the first level of the ProStart program, the National Restaurant Association curriculum, and be eligible to sit for year one of the national examination.

6571 - (1 credit)
6572 - (2 credits)
6573 - (3 credits)

Field Experience in Education (Child Development Academy)

Grade 12 **1-3 credits**

Prerequisite: Successful completion of or concurrent enrollment in Foundations of Curriculum and Instruction.

Required for the Child Development Academy, this site-based course offers individual placement in a school, childcare center, or other setting related to the care and education of children. Students will have the opportunity to apply and extend their knowledge of children's physical, intellectual, emotional and social development under the supervision of a professional in the field of childcare and development. At the culmination of this course, students will present for juried review a portfolio that includes reflection and documentation of their growing knowledge and skills.

660M♥ - (1 credit)
661M♥ - (2 credits)
662M♥ - (3 credits)

Field Experience in Education - G/T (Teacher Academy only)

Grade 12 **1-3 credits**

Prerequisite: Successful completion of Child Development and either Teaching as a Profession or Curriculum and Instruction. Concurrent enrollment in Field Experience and the remaining course required to complete the Teacher Academy. This course is the capstone experience for the Teacher Academy of Maryland. Students will have the opportunity to apply and extend their knowledge about teaching in a K-10 classroom setting under the supervision of a mentor teacher. During their placement, students will examine what makes an effective teacher, the importance of family and caregivers in the learning process, and methods for creating and maintaining an effective learning environment. Students will also collaborate with the mentor teacher to develop and implement lesson plans that address diverse student needs and learning styles. Once placed, students are supervised by the Teacher Academy of Maryland teacher and must scheduled a portion of their placement hours during the Teacher Academy teacher's afternoon work hours to allow for monitoring and evaluation.

6510

Food and Nutrition Technology

Grades 9, 10, 11, 12 **1 credit**

Practical activities in the laboratory provide the student with in-depth experiences in cooking techniques and principles of basic food preparation. This introductory experience is combined with instruction in management, consumerism, and nutrition. This course offers students the opportunity to choose and prepare healthy meals either as an individual or as a first step in preparation for a career in the restaurant and hospitality industries.

6535

Foundations of Curriculum and Instruction

Grades 11, 12 **1 credit**

Prerequisite: Grade of C or higher in Child Development

The second course in the Child Development and Teacher Education Academies, Foundations of Curriculum and Instruction, focuses on curriculum delivery models in response to the developmental needs of children and adolescents. Emphasis is placed on the development of instructional materials and activities to promote learning, classroom management strategies, and a supportive classroom environment. Students will explore basic theories of motivation that increase learning. Students will participate in guided observations and field experiences to critique classroom lessons in preparation for developing and implementing their own. Students will continue to develop the components of a working portfolio to be assembled upon completion of the internship. Students who complete Child Development and Foundations of Curriculum and Instruction with a B or higher may be eligible for three college credits at Howard Community College.

Family & Consumer Sciences

6556

Foundations of Fashion and Interior Design

Grades 9, 10, 11, 12 **1 credit**

This Fine Arts course is designed for students who are interested in pursuing careers in either Fashion or Interior Design. It provides a foundation in the elements and principles of design, an overview of both the Fashion and Interior Design fields, and encourages the development of creative problem solving and drawing skills. Students may enroll in this course to fulfill the one-credit Fine Arts graduation requirement.

659M♥

Teaching as a Profession - GT

Grades 11, 12 **1 credit**

Prerequisite: Child Development or permission of Child Development instructor

Required for all Teacher Academy students, this course is for the student interested in a teaching career in any grade level from Early Childhood through high school. Class discussion and assignments will focus on the profession of teaching – its history, purposes, issues, ethics, laws, roles, and qualifications. Students will participate in guided observations and field experiences outside of class to identify characteristics of an effective classroom teacher and to reflect upon their personal career goals.

Technology Education

In a society that is dependent upon technology, it is important that all students develop technological literacy. The National Standards for Technological Literacy (2001) define a body of knowledge for the study of technology. This includes the study of topics such as: The Nature of Technology, Technology and Society, Design, Abilities for a Technological World, and The Designed World. In order to meet or exceed these standards along with the Maryland state outcomes for Technology Education, Howard County offers a comprehensive program in Technology Education. Certain combinations of these courses will also satisfy the Advanced Technology credit option for graduation.

The following courses meet the Technology Education Graduation Requirement:

684M

Engineering Design

Grades 10, 11, 12 **1 credit**

(Technology Education Credit)

This course provides a foundation for a variety of engineering and technical career fields, such as mechanical, electrical, civil, and aerospace engineering. Topics may include simple and complex machines, electricity and electronics, structural design and analysis, and thermodynamics. Students will solve engineering problems through mechanical drawing, prototype construction, and testing in a multi-sensory laboratory setting.

6751

Foundations of Technology

Grades 9, 10, 11, 12 **1 credit**

(Technology Education Credit)

This course prepares students to understand and apply technological concepts and processes that are the cornerstone of the high school technology education program. Students study the nature and technological issues of the "designed world." Group and individual activities engage students in creating ideas, developing innovations, design, fabricating, and engineering practical solutions. Technology content, resources, and laboratory/classroom activities allow students to apply science, mathematics, and other school subjects in authentic situations.

The following courses meet the Advanced Technology Education Credit:

676M

Advanced Design Applications

Grades 10, 11, 12 **1 credit**

(Advanced Technology Education Credit)

Prerequisite: Foundations of Technology or Computer Science I

This is a standards-based, technological design course that provides a deeper understanding of the designed world consisting of four separate learning units, each nine weeks in length: **Manufacturing Technologies, Energy and Power Technologies, Construction Technologies** and **Transportation Technologies.** Group and individual activities engage students in creating ideas, developing innovations, design, fabricating, and engineering practical solutions to a variety of problems.

Technology Education

677M

Advanced Technological Applications

Grades 10, 11, 12 **1 credit**

(Advanced Technology Education Credit)

Prerequisite: Foundations of Technology or Computer Science I

This is a standards-based, technological design course that provides a deeper understanding of the designed world consisting of four separate learning units, each nine weeks in length: **Information and Communication Technologies, Medical Technologies, Agriculture and Related Biotechnologies, and Entertainment and Recreation Technologies.** Group and individual activities engage students in creating ideas, developing innovations, design, fabricating, and engineering practical solutions to a variety of problems.

685M♥

Computer Integrated Manufacturing (CIM) - G/T

Course is part of the Pre-Engineering: Project Lead the Way (PLTW) Academy

Grades 10, 11, 12 **1 credit**

Prerequisites: Principles of Engineering or staff recommendation; Algebra II (330M) is the minimum mathematics requirement

Computer Integrated Manufacturing (CIM) is a course that applies principles of robotics and automation. The course builds on computer solid modeling skills developed in Introduction to Engineering Design and uses computer-controlled equipment to produce actual models of three-dimensional designs. Fundamental concepts of robotics used in automated manufacturing and design analysis are included.

686M♥

Digital Electronics (DE) - G/T

Course is part of the Pre-Engineering: Project Lead the Way (PLTW) Academy

Grades 10,11, 12 **1 credit**

Prerequisite: Principles of Engineering or staff recommendation; Algebra II (330M) is the minimum mathematics requirement

Students use computer simulations to learn about the logic of electronics while they design, test, and actually construct circuits and devices. Students apply logic that encompasses the application of electronic circuits and devices.

687M♥

Engineering Design and Development (EDD) - G/T

Course is part of the Pre-Engineering: Project Lead the Way (PLTW) Academy

Grade 12 **1 credit**

Prerequisites: Computer Integrated Manufacturing; Digital Electronics

Teams of students, guided by community mentors and professional engineers, work together to research, design, and construct solutions to open-ended engineering problems. Students apply principles developed in the four preceding courses. They must present progress reports, submit a final written report, and defend their solutions to a panel of outside reviewers at the end of the school year. Some of these activities may take place outside the school day.

681M

Introduction to Engineering Design (IED)

Course is part of the Pre-Engineering: Project Lead the Way (PLTW) Academy

Grades 9, 10 **1 credit**

Prerequisites: Must be concurrently enrolled in Algebra I/Data Analysis as a ***minimum*** mathematics requirement

Students use computer modeling software, such as AutoDesk Inventor, to study and apply the engineering design process. Models of product solutions are created, analyzed and communicated using solid modeling computer design software.

680M♥

Principles of Engineering (POE) - G/T

Course is part of the Pre-Engineering: Project Lead the Way (PLTW) Academy

Grades 10, 11 **1 credit**

(Technology Education Credit for students in Project Lead the Way)

Prerequisite: Intro. to Engineering Design; Geometry is the ***minimum*** math requirement

Principles of Engineering is a "hands-on" course that helps the student understand the field of engineering and engineering technology. Students design, construct, test and evaluate various projects that apply knowledge and skills. Students explore various technology systems and manufacturing processes to learn how engineers and technicians apply math, science and technology in an engineering problem-solving process.

Centralized Academy Courses

Offered ONLY at the Applications and Research Laboratory (ARL)

561MA♥

Accounting I - Honors

Grade 11 **1 credit**

Accounting I consists of learning experiences designed to enable students to set up accounts and prepare qualitative records, to verify accuracy of data by applying auditing principles, and to prepare budgets and final reports. The entire accounting cycle is presented with application problems to simulate authentic business experiences. Current accounting software is integrated throughout the course. (Academy of Finance)

560MA♥

Accounting II - Honors

Grade 12 **1 credit**

Prerequisite: Accounting I

Accounting II is an advanced level course that provides students with a comprehensive study of accounting principles and the application of these principles to a wide range of business situations. The course includes extended use of the computer for accounting applications. Topics to be explored include the accounting cycle; accounting for assets, liabilities, and equity; understanding business information; accounting for other forms of organization; special accounting systems; and accounting for business decisions. (Academy of Finance)

811M

Advanced Animation

Grade 12 **3 credits**

Prerequisite: Animation I

This course continues to teach higher-level animation skills and techniques to students who successfully completed Animation. Topics covered in this course include advanced special effects, real time video, advanced digital video compositing, bluescreen technology, and audio and sound effects. Students will continue work on their final project from Animation for a completed product for their portfolio. (Visual Communication Academy)

679M

Advanced Architectural Design

Grade 12 **3 credits**

Prerequisite: Architectural Design

In this advanced course, students will deepen and apply their understanding of architectural design by designing several different types and styles of residential buildings using selected 3D modeling software. Students will develop complete sets of construction documents, electronic renderings, 3D animations and architectural models. Utilizing architectural specific software, students will create a full set of residential and or commercial plan cost estimates and prepare presentations in electronic format. (Architectural Design Academy)

870M

Allied Health I

Grades 11, 12 **2 credits**

Prerequisite: Biology; Completion of or concurrent enrollment in Chemistry

This course introduces students to career opportunities in the health care field. Topics include: client safety, vital signs, universal precautions, aseptic techniques, first aid, assisting with lab tests and procedures, assisting with patients and with non-clinical tasks. Students are certified in First Aid and Cardiopulmonary Resuscitation. Students visit health care settings including hospitals, rehabilitation centers, longterm care facilities, and nursing homes. Emphasis is placed upon communication skills, qualities of effective health care workers, and legal responsibilities. (Academy of Health Professions)

874M

Allied Health II

Grade 12 **3 credits**

Prerequisite: Allied Health I

This is the final required course to complete the Allied Health Academy. Students participate in an internship related to their career interests. Students are required to complete at least 6-8 hours per week at the mentor site, attend weekly senior seminars, and submit research abstracts on "real world" problems, and write reflection papers based on their project work. Students provide their own transportation or on-campus placements at ARL are available. (Academy of Health Professions)

810M

Animation I

Grades 11, 12 **2 credits**

Prerequisite: Art I

Students will use 3D Max software to simulate real objects by learning and applying complex 3D effects to create digital images that can then be integrated into other media types using familiar compositing and editing techniques. Projects will include representative products from the following areas: broadcasts, animated short films, feature films, visual effects, interactive video games, visualization, and the Internet. Students will also address the complex issue of graphic design problem solving. (Visual Communications Academy)

Centralized Academy Courses

678M
Architectural Design
Grades 11, 12 **2 credits**

Prerequisite: Foundations of Technology

This course will introduce the basic principles and methods of design as applied to architecture. Basic design theories and strategies related to the development of spatial concepts in architectural design including composition, color, form and relationship of elements will be applied in the development of 2D and 3D design projects. This course further emphasizes the architectural design process while relating these principles to general construction practices. (Architectural Design Academy)

856M
Automotive Technology I
Grades 11, 12 **2 credits**

Students will receive training covering every system of the automobile, related tools, and industry equipment. Emphasis is on diagnostics, troubleshooting skills, safe use of equipment, suspension and steering, and brake systems. Course content provides students with the knowledge and skills required for entry-level employment as a repair technician in any modern shop. Curriculum is developed from the National Automotive Technology Education Foundation (NATEF) task lists. Students will take the National Automotive Student Skills Standards Assessments (NA3SA). (Automotive Technology Academy)

857M
Automotive Technology II
Grade 12 **3 credits**

Prerequisite: Automotive Technology I

Students will continue to study the components of the automobile technology curriculum. Topics include diagnostics, troubleshooting skills, safe use of equipment, electrical and electronic systems, and engine performance. Course content provides students with the knowledge and skills required for entry-level employment as a repair technician in any modern shop. Curriculum is developed from the National Automotive Technology Education Foundation (NATEF) task lists. Students will take the National Automotive Student Skills Standards Assessments (NA3SA). (Automotive Technology Academy)

835M♥
Biotechnology I G/T
Grades 11, 12 **2 credits**

Prerequisites: Grade of B or better in Biology; completion of or concurrent enrollment in Chemistry and Algebra II

Students will develop a strong foundation in molecular biology including genetics, microbiology, and cell biology. This course will introduce students to procedures and instruments used in biotechnology laboratories. Students will connect biological processes to medical diagnostics, forensic science, agricultural biology, genetics and genetic counseling, and bioethics. Safety protocols and maintenance of written records will be emphasized. Students will integrate molecular biology concepts with lab procedures, mathematics and technical writing. (Biotechnology Academy)

839M♥
Biotechnology II G/T
Grade 12 **3 credits**

Prerequisite: Biotechnology I G/T

This course completes the Biotechnology Academy series. Students participate in laboratory research-based internships. Students complete at least 8-10 hours per week of work-site experience, attend weekly seminars, submit research papers and share findings in culminating end-of-year presentations. Off-campus students provide their own transportation to site-based placements. Students who remain on campus apply skills and knowledge from Biotechnology I to advanced topics in Biotechnology II. Topics include: toxicology, agriculture and industry, cancer research, pharmacogenetics, tissue culturing, and bioinformatics. Students complete a semester long research project and share findings in a culminating end-of-year presentations. (Biotechnology Academy)

6894
Certified Nursing Assistant I
Grade 12 **3 credits**

6894
Certified Nursing Assistant I - Clinical
Grade 12 **1 credits**

Prerequisites: Successful completion of Biology and Algebra I

This course prepares students to function as nursing assistants in various healthcare settings. This academy is approved by the Maryland Board of Nursing and provides training in lifespan development, vital signs, basic patient care, etc. Upon successful completion, students are eligible to take the State Geriatric Examination to become a CNA with a specialty in geriatrics (GNA). The knowledge and competencies learned in this course are valuable in pursuing any career in healthcare. (Academy of Health Professions)

Centralized Academy Courses

4562

Computer Networking I

Grades 11, 12 **2 credits**

Prerequisites: Algebra I

The Computer Networking I course provides a basic framework for understanding the why, where and how of the components of a PC and its operating system. It then introduces the fundamentals of computer networking through the use of the Cisco CCNA Discovery 1 and 2 curriculums, which cover the range of small home networks through medium sized business networks. This course prepares students for the globally recognized CISCO CCENT certification, as well as foundational skills for cybersecurity concepts, or a continued pathway to CCNA Discovery 3 and 4 to earn full CCNA certification. (Cybersecurity Networking Academy)

456M

Computer Networking II

Grade 12 **3 credits**

Prerequisites: Computer Networking I

The Computer Networking II course provides awareness of cybersecurity related issues and the essential skills that are needed to implement systems security in a given network. It covers the overview of risks and vulnerabilities and focuses on understanding network attacks and defense techniques. It also deals with protecting and securing confidentiality, integrity and availability of sensitive information on networks and systems. This course offers hands-on interactive activities to help students learn and analyze the latest cyber-related threats and mitigation techniques. This course offers an option for continued study of CCNA Discovery 3 & 4 if chosen to complete full CCNA certification. (Cybersecurity Networking Academy)

854M

Construction Technology I

Grades 11, 12 **2 credits**

Prerequisites: Foundations of Technology

Students apply architectural engineering, construction technology, and management principles to practical projects within residential and commercial construction. In addition to carpentry, students in this course also explore a variety of construction trade areas, such as electrical and plumbing. Current software solutions, machines, material usage, and design techniques are employed. Students will work in teams to construct models and full-scale projects appropriate to the solution of design, management, and construction problems. (Construction Management Academy)

858M

Construction Technology II

Grade 12 **3 credits**

Prerequisite: Construction Technology I

This is the final required course to complete the Construction Technology Academy. Students participate in an internship related to their career interests. Students are required to complete at least 6-8 hours per week at the mentor site, attend weekly senior seminars, choose a "real world" problem to research and complete a senior project. Students provide their own transportation, or on-campus placements at the ARL are available. (Construction Management Academy)

580M

Economics and the World of Finance/ Banking And Credit

Grade 11 **1 credit**

Corequisite: Accounting I

This course provides students with a comprehensive study of economics, finance, and banking principles, and the application of these principles to a wide range of business situations. Topics include basic economic principles, government and the economic system, labor and the economy, a history of banking, banking in the US today, retail banking, and careers in finance and banking. This is a required course for the Academy of Finance program. (Academy of Finance)

6892

Emergency Medical Technician Basic

Grade 12 **2 credits**

Prerequisites: C average in English

The Emergency Medical Technician Basic (EMT-B) class will prepare students with the emergency skills to assess a patient's condition and manage respiratory, cardiac, and trauma emergencies. The class provides classroom and clinical experiences. This is the first course in the high school Paramedic/Firefighter pathway. It serves as a prerequisite for coursework in the Emergency Medical Services Program at Howard Community College. (Academy of Health Professions)

6893

Emergency Medical Technician Basic - Clinical

Grade 12 **2 credits**

Students enrolled in EMT-B complete both skills training and clinical experience in one year. A minimum of 10 clinical hours and 5 pre-hospital calls are completed after school and weekends. If students do not complete clinical, they could still pass the class but not receive the completer. (Academy of Health Professions)

Centralized Academy Courses

821M

Foundations of Homeland Security and Emergency Preparedness

Grades 11, 12 **1 credit**

This course introduces students to Homeland Security and Emergency Preparedness guidelines, concepts, and action plans. Emphasis is placed on unique aspects of public safety and public health. The course explores the various methodologies for intelligence gathering and dissemination and introduces students to various local, state, and federal assets. Students will prepare an action plan that includes initial notification, emergency response (on and off scene), and recovery. (Homeland Security and Emergency Management Academy)

822M

Geographic Information Systems and Remote Sensing

Grades 11, 12 **1 credit**

This class introduces students to Geographic Information System (GIS) and Remote Sensing (RS) technology through academic study and applied instruction. This course is the foundation of the STARS Entry-Level GIS Technician Certification. Students learn the skills required to work on and/or build a Geographic Information Systems/Remote Sensing project. Students are introduced to each skill with a real world application and led in the problem solving process. Follow-up applied practice application will direct the student to apply acquired skills to cases in the local community using the supplied data. (Homeland Security and Emergency Management Academy)

823M

Advanced Geographic Information Systems and Remote Sensing

Grade 12 **1 credit**

Prerequisites: Foundations of Homeland Security and Emergency Preparedness and Geographic Information Systems and Remote Sensing

In this course students continue to learn the skills required to work on and/or build a Geographic Information Systems/ Remote Sensing project. Students will learn and apply Spatial Analyst and 3D Analyst to gain a different perspective on their environment by modeling surfaces three dimensionally. Students will also learn methods of integrating external hardware to incorporate real time data from GPS units in order to accurately survey their community. This is the fourth and final course in the STARS Certification series. Students will use the Project Management Model to complete a capstone project and achieve a 70% or higher on the written STARS exam to become STARS certified. (Homeland Security and Emergency Management Academy)

824M

Geospatial Applications Worksite Experience

Grade 12 **2 credits**

Prerequisites: Foundations of Homeland Security and Emergency Preparedness and Geographic Information Systems and Remote Sensing Students participate in an internship related to their career interests within geographic information systems career fields. Students are required to complete at least 6-8 hours per week at the mentor site, attend weekly senior seminars, submit research abstracts on "real world" problems, and write reflection papers based on their project work. Students provide their own transportation or on-campus placements at ARL are available. (Homeland Security and Emergency Management Academy)

581M

International Finance/Financial Planning

Grades 12 **1 credit**

Corequisite: Accounting II

Students explore major components of the international financial system such as foreign trade, the international monetary system, foreign exchange rates and markets, international financial markets, international banking, and the multinational corporation. Students investigate the financial planning process and the components of a comprehensive financial plan. Students prepare a financial plan that includes saving, investing, borrowing, risk management (insurance), and retirement and estate planning. This is a required course for the Academy of Finance program. (Academy of Finance)

877M

Introduction to the Hotel and Restaurant Management Industry

Grades 11, 12 **2 credits**

This course introduces students to the career pathways within the rapidly growing Hospitality industry. Students will explore and develop the basic skills and knowledge needed for first level professional careers in hotels and resorts, restaurants and food services, parks and recreation, and travel and tourism. This course is only offered at the ARL. (Hotel and Restaurant Management Academy)

Centralized Academy Courses

880M

Management and Leadership in Hotels and Restaurants

Grade 12 **3 credits**

Prerequisite: Introduction to the Hospitality and Tourism Industry

This course provides a comprehensive overview of hotel and lodging operations including the organizational structures, divisions and functions. These functions include human resources, sales and marketing, housekeeping, guest services and banquet management. Upon successful completion of the Hospitality Academy, students will be eligible to sit for the nationally recognized Certified Rooms Division Specialist Certification examination and may also receive articulated college credit from a growing list of local and national colleges and universities. (Hotel and Restaurant Management Academy)

4563

Networking Essentials

Grade 12 **3 credits**

Prerequisite: PC Software and Hardware

The Networking Essentials curriculum provides in-depth coverage of small-to-medium or ISP network knowledge and current cybersecurity risks and threats to an organization's data, combined with a structured way of addressing the safeguarding of these critical electronic assets. This course offers a hands-on approach to learning with interactive tools and easy-to-follow labs to help students learn the general theory needed to build networks. It provides a foundation for those responsible for protecting network services, devices, traffic and data. Additionally, it provides the broad-based knowledge necessary to prepare students for further study in other specialized security fields. Students who complete the course will have working knowledge of globally recognized Cisco CCENT certification. (Cybersecurity Networking Academy)

4561

PC Software and Hardware

Grades 11, 12 **2 credits**

Prerequisite: Algebra I

The PC Software and Hardware course provides an introduction to the computer hardware and software and fundamental networking skills needed to help meet the growing demand for entry-level IT professionals. The curriculum covers the fundamentals of PC technology, networking, and systems security, and also provides an introduction to advanced concepts. Students who complete this course will be able to describe the internal components of a PC, install Windows XP/ Windows 7, assemble and fix laptops and desktops. Hands-on labs and e-learning tools help students develop critical thinking and complex problem-solving skills in a network environment. This course prepares students for CompTIA A+ certifications as well as offers a learning pathway to the Networking Essentials and CCNA Discovery curricula. (Cybersecurity Networking Academy)

565MA♥

Principles of Marketing - Honors

Grade 12 **1 credit**

Prerequisite: Economics and the World of Finance/ Banking and Credit

This accelerated course provides students with a foundation in market analysis, forecasting, segmenting, product strategy, pricing, distribution, promotion strategy, and international marketing. Students conduct a comprehensive study of marketing, management, sales, and merchandising. Students will approach the content from the perspective of a marketing professional, gaining experiences related to merchandising, sales promotion, marketing research, and organizing and implementing a large-scale marketing plan. (Academy of Finance)

864M♥

Systems Engineering Innovation G/T

Grade 12 **3 credits**

Prerequisite: Systems Management Solutions G/T

This course includes components that address community and environmental responsibility, project-based engineering technology solutions and project management principles (possible industry certification) including energy conservation, green technology (LEEDS certification), and solutions for the future. Students have the option to participate in an internship related to their career interests. Students are required to complete at least 6-8 hours per week at the mentor site, attend weekly senior seminars, choose "real world" problems to research and submit research abstracts, and write reflection papers based on their project work. Students provide their own transportation to the mentor site or an on-campus placement at the ARL is available. (Systems and Project Engineering Academy)

860M♥

Systems Management Solutions G/T

Grades 11, 12 **2 credits**

Prerequisite: Foundations of Technology, Engineering Design, or Principles of Engineering

Students completing this course will develop their ability to analyze technical systems, apply basic principles of force, rate, work and mechanics to multiple energy systems, including mechanical, fluid, thermal and electrical. Students explore activities that provide them with the initial preparation necessary for successful careers in multiple engineering industries, including program/project management and various technical service disciplines. This course includes project-based engineering technology solutions and project management principles including energy conservation, green technology and solutions for the future. (Systems and Project Engineering Academy)

Centralized Academy Courses

845M♥

Visual Communications I G/T

Grades 11, 12 **2 credits**

Prerequisite: Art I

This course introduces students to advanced desktop publishing techniques used by the professional graphic designer. Topics include desktop publishing, digital illustration, digital image editing, videography, typography, printing processes, and web design. Creative design solutions will be demonstrated through individual and team projects. Students will also be able to demonstrate proficiency in the use of various processes, graphic design, and graphics software. An emphasis will be placed on the development of professional skills. (Visual Communications Academy)

849M♥

Visual Communications II G/T

Grade 12 **3 credits**

Prerequisite: Visual Communications I or Animation I and teacher recommendation

This is the final required course to complete the Visual Communications Academy. Students participate in an internship related to their career interests. Students are required to complete at least 6-8 hours per week at the mentor site, attend weekly senior seminars, choose "real world" problems to research and submit a portfolio of their project work. Students provide their own transportation or on-campus placements at ARL are available. (Visual Communications Academy)

Junior Reserve Officers Training

Junior Reserve Officers Training Corps is a cooperative effort between the school system, the U.S. Army (at Atholton and Howard High Schools), and the U.S. Air Force (at Oakland Mills High School). JROTC provides a career pathway for students interested in careers in the military. The program can be taken all four years of high school. Cadets are involved in community service and outside leadership programs. Many cadets also participate in related extracurricular activities such as drill team, color guard, or other team competitions. The mission of Junior Reserve Officer Training is to motivate young people to become better citizens. The program includes citizenship, leadership, communication skills, historical perspectives, and other topics to help cadets in high school and after graduation. The program is designed so that learning progresses as cadets develop at each grade level.

7501

JROTC I

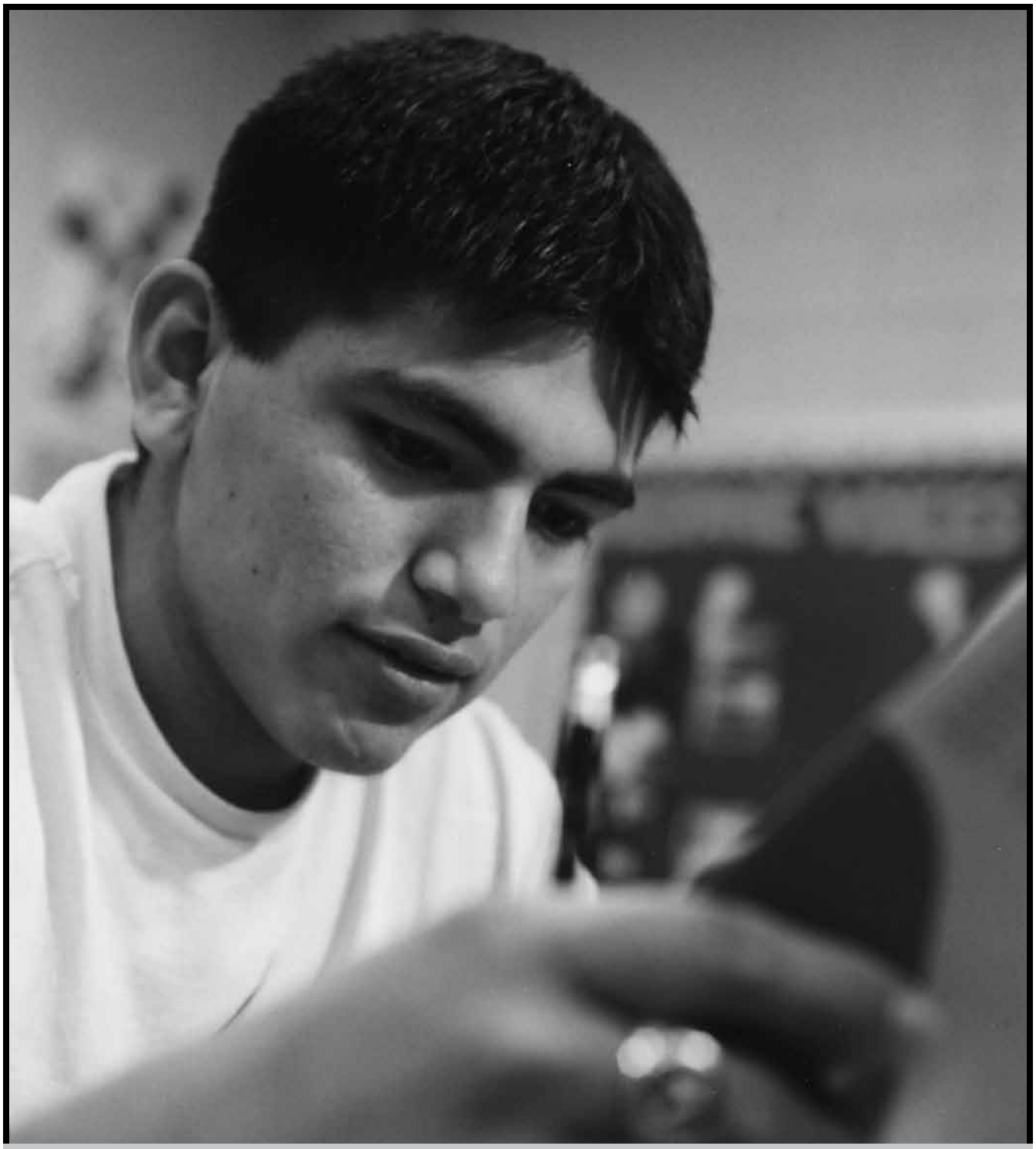
Grades 9, 10, 11, 12 **1 credit**

Junior Reserve Officer Training Corps introduces students to leadership development through theory, practice, drill and ceremony. Additional content covered will vary with the branch of service in which the student is enrolled. Complete JROTC uniforms are issued, and students are required to wear them one school day per week. Army JROTC is available at Atholton High and Howard High; Air Force JROTC is available at Oakland Mills High. No military obligation is incurred.

JROTC II 7502 - Grade 10
JROTC III 7503 - Grade 11
JROTC IV 7504 - Grade 12
JROTC Advanced 7505 - Grade 12

Grades 10, 11, 12 **1 credit**

As students progress through the JROTC program, they gain more specific knowledge in the area of intermediate and applied leadership development. Additional content will vary with the branch of service. Drill skills are increased. Students are required to wear the issued uniform one school day per week. Army JROTC is available at Atholton High and Howard High; Air Force JROTC is available at Oakland Mills High. No military obligation is incurred.



English

English

The high school English program is designed to fulfill the Maryland State Department of Education's requirement that each student earn four credits in English. All students must earn one credit each in English 9, 10, 11, and 12. In addition, all students enrolled in English 10, regardless of level, must pass the English 10 High School Assessment at the end of grade 10.

1010★

English 9 – Review Level

1 credit

The teacher in this course provides comprehensive explicit instruction when teaching language, writing, and reading skills. The class pace is slower than other English 9 classes; however, the units are the same. Required units of study include Writers Record Experience, Writers Invent Character and Point of View, Writers Choose Language, and Writers Create Meaning: Theme. This section may not be scheduled in all high schools.

1015★

English 9

1 credit

This course integrates the analysis and interpretation of literary genres with oral and written composition activities. Students may write in the various forms they will be reading and, thereby, bring a writer's point of view to the literature they study. Required units of study include Writers Record Experience, Writers Invent Character and Point of View, Writers Choose Language, and Writers Create Meaning: Theme.

1011

English 9 Seminar

1 elective credit

Prerequisite: Teacher recommendation
Corequisite: Enrollment in English 9

English 9 Seminar is an elective course for selected students. The course provides ninth grade students with additional instructional time and instruction in developing organizational and study skills, strategic reading when reading literary and informational text, writing and vocabulary development, and language skills in order to ensure continued success in high school. Instruction is provided in small group settings with a high degree of one-on-one interaction with the co-teachers.

101M♥★

English 9 – Honors

1 credit

Although somewhat less rigorous than 9 G/T, English 9 Honors requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency when addressing the demands of this accelerated course. This is a Certificate of Merit course.

102M♥★

English 9 – G/T

1 credit

This class offers an enriched and accelerated version of English 9. Students in English 9 G/T exhibit strong reading and writing skills. Students who are enrolled in this course also receive preparation for the English Language and Composition AP examination in the junior year and Literature and Composition AP examination in the senior year. This is a Certificate of Merit course.

1110●★

English 10 – Review Level

1 credit

The teacher in this course provides comprehensive explicit instruction when teaching language, writing, and reading skills. The class pace is slower than other English 10 classes; however, the units are the same. Students enrolled in this course must take and pass the English 10 High School Assessment in order to graduate. This section may not be scheduled in all high schools.

1115★●

English 10

1 credit

This course allows students to examine literary origins in an effort to determine the recurring elements or patterns which unite all literature. Required units of study include The World of Romance, The Tragic Stance, Satire: The Pen as Scalpel, and The Search for Self. Each unit of study integrates appropriate oral and written composition activities. Students enrolled in this course must take and pass the English 10 High School Assessment in order to graduate.

1118

English 10 Seminar

Grades 10 **1 elective credit**

English 10 Seminar is an elective course for students concurrently enrolled in English 10. The course provides tenth grade students with additional instruction in strategic reading, critical thinking, and language skills in order to ensure their success in English 10 and on the English 10 High School Assessment. Instruction is provided in small group settings with a high degree of one-on-one interaction with the co-teachers. The English 10 Seminar co-teachers are also the student's English 10 co-teachers.

English

111M♥★●

English 10 – Honors **1 credit**

Although somewhat less rigorous than 10 G/T, English 10 Honors requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency when addressing the demands of this accelerated course. Students enrolled in this course must take and pass the English 10 High School Assessment in order to graduate. This is a Certificate of Merit course.

112M♥★●

English 10 – G/T **1 credit**

An enriched and accelerated version of English 10, English 10 G/T seeks students who exhibit strong reading and writing skills. Students receive preparation for the English Advanced Placement examinations in the junior and senior years. Students must pass the English 10 High School Assessment in order to graduate. This is a Certificate of Merit course.

1112 - Semester I **1/2 credit**
1113 - Semester II **1/2 credit**
Year - 1114 **1 credit**

Preparing for Standardized Assessments

Grades 10 **1/2-1 credit**

This course provides additional assistance to students for developing critical reading and writing skills for success on standardized assessments such as the English 10 HSA and the SAT. Required areas of study include brief and extended constructed responses in preparation for the high school assessment and the SAT, as well as multiple choice/selected responses about literature and language.

1116 - Semester I
1117 - Semester II

English High School Assessment (HSA) Mastery

Grades 10, 11, 12 **1/2 elective credit**

Prerequisite: English 10

English HSA Mastery is an elective semester course for students who have taken English 10 and who have failed the English High School Assessment. These students may or may not have passed English 10. The goal of this course is to build self-esteem while engaging students in whole class, small group, and one-on-one instruction based upon student data. Student progress will be closely monitored and documented. The course fulfills the requirement for appropriate assistance to HSA non-masters. Students will take the English HSA during the administration closest to the end of the course.

1215★

English 11 **1 credit**

This course allows students to complete a chronological survey of American literature by examining the thematic concerns of selected major writers. Instructional units in English 11 include A Meeting of Traditions, Emerging American Visions, American Frontiers, and Modern and Contemporary American Literature.

121M♥★

English 11 – Honors **1 credit**

Although somewhat less rigorous than 11 G/T, English 11 Honors requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency when addressing the demands of this accelerated course. This is a Certificate of Merit course.

122M♥★

English 11 - AP [AP English Language and Composition] **1 credit**

This class offers an enriched and accelerated version of English 11. Students in English 11 AP exhibit strong reading and writing skills. It is recommended that students in this course take the AP Exam when it is offered in May.

1315★

English 12 **1 credit**

Students will complete modules of content from among the following: Themes in Literature and Life, The English Literary Tradition, Social Issues in Literature and Life, and the Word and the Image. Each module balances and blends the study of literature and language with a variety of oral and written composition experiences.
Note: Credit by exam is available for this course. Contact the school's counselor for details.

131M♥★

English 12 – Honors **1 credit**

Although somewhat less rigorous than 12 G/T, English 12 Honors requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency when addressing the demands of this accelerated course This is a Certificate of Merit course.

English

132M♥★

English 12 – AP [AP English Literature and Composition] 1 credit

Students in English 12 AP exhibit strong reading and writing skills. It is recommended that students in this course take the AP Exam when it is offered in May. This is a Certificate of Merit course.

141M★ - Semester I
142M★ - Semester II
Year – 140M★

Advanced Composition

Grades 11, 12 **1/2 -1 elective credit**

Throughout this elective course students write papers in each of the four traditional rhetorical modes of description, narration, persuasion, and exposition. In addition, students may have opportunities to write creative pieces in four genres: poetry, short fiction, one-act plays, and memoir/ creative nonfiction. Analysis of literature, vocabulary development, self-assessment, journaling, and revision are emphasized. This course supplements but does not replace English 11 or English 12.

1800 - Semester I
1801 - Semester II
1802 - Year

African American Literature

Grades 11, 12 **1/2-1 credit**

This course exposes students to African American writers and their contributions to the development of American literature. The chronological, thematic approach helps to foster an appreciation of African-American writers from the Post-Civil War era to the present. Students will be expected to reflect on their readings both creatively and critically.

1311 - Semester I
1312 - Semester II

College Readiness

Grade 12 **1/2 credit**

Prerequisites: English 9, 10, 11

This course is designed especially for students whose placement scores on the College Board Accuplacer Examination, which was administered to students as juniors in their home schools, indicate the need for additional skill development to ensure success in college courses. This course is tailored to each individual student's needs. Reading comprehension, which measures a student's ability to understand what he or she has read when identifying main ideas, understanding direct statements/secondary ideas, making inferences and applications is a major component of the course. Sentence skills which measure student understanding of sentence structure when recognizing complete sentences, coordination, and clear sentence logic is also a major focus of the course. In addition, study and test-taking strategies, time management, and student identification of their specific learning styles are course foci. Upon completing this course, students will take an Accuplacer Examination, on which their actual college placement will be based if entering Howard Community College or other participating institutes.

181M♥★

Humanities I - G/T (English)

Grade 9 **1 credit**

Prerequisite: Teacher recommendation

Corequisite: Concurrent enrollment in 281M Humanities I G/T (Social Studies)

Humanities I integrates the study of United States History or Modern World History and Cultures with literature of the cultures and time periods. The course is structured around the United States History or World History curriculum and literature which illustrates the various time periods. Because students are concurrently enrolled in 281M, they receive two credits, one for English and one for Social Studies, (United States History or Modern World History).

182M♥●★

Humanities II - G/T (English)

Grade 10 **1 credit**

Prerequisite: Recommendation from G/T English and Social Studies

Corequisite: Concurrent enrollment in 282M Humanities II G/T (Social Studies)

This course integrates the study of Advanced Placement Government and Politics with literature that complements the study of government. Connections between the literature read in this course and the major political concepts of the time are discussed. Because students are concurrently enrolled in 282M, they receive two credits, one for English and one for Social Studies (American Government). At the end of the course, students must take the High School Assessment for English 10.

English

183M♥★

Humanities III - AP (English) [AP English Language and Composition]

Grade 11 **1 credit**

Prerequisite: Recommendation from G/T English and Social Studies

Corequisite: Concurrent enrollment in 283M Humanities III G/T (Social Studies)

This course integrates the study of Advanced Placement World History or Advanced Placement U.S. History with American literature. Students receive credit for Advanced Placement World History or Advanced Placement U.S. History and are recommended to take the Advanced Placement Examination. Students are also prepared for and recommended to take the English Language and Composition AP Exam when it is offered in May. This course requires a historical research paper and a literary research paper. Because students are concurrently enrolled in 283M, they receive two credits, one for English and one for Social Studies, (United States History or World History).

184M♥★

Humanities IV - AP (English) [AP English Literature and Composition]

Grade 12 **1 credit**

Prerequisite: Recommendation from G/T English and Social Studies

Corequisite: Concurrent enrollment in 284M Humanities IV G/T (Social Studies)

Humanities IV integrates the study of twentieth century history and literature as well as current issues. To enhance the non-western component of the course, students are required to complete a research paper on an aspect of a developing country. It is recommended that students in this course take the Literature and Composition AP Exam when it is offered in May. Because students are concurrently enrolled in 284M, they receive two credits, one for English and one elective credit for social studies.

1500

Journalism I

Grades 9, 10, 11, 12 **1 credit**

A practical, hands-on introduction to journalism, Journalism I exposes students to skills necessary for writing, designing, distributing, financing, and evaluating a newspaper. Units are sequenced to parallel the publication schedule of the school newspaper. Students use print and nonprint news sources, interact with the media as consumers, and interpret the news critically. Some assignments may include tasks outside of class. Level I students may expect to invest 1-2 hours of out-of-class time each week.

150M

Journalism II

Grades 10, 11, 12 **1 credit**

Prerequisite: Journalism I

Students learn the practical experience of producing the school newspaper. This experience includes forming a staff, an editorial board, and a business organization. Students gain experience with all tasks necessary for desktop publishing, including article writing, editing, layout design, the use of graphics, the use of photography, and paste-up techniques. Some assignments may include tasks outside of class. Level II students may expect to invest 2-3 hours of out-of-class time each week.

151M

Journalism III

Grades 11, 12 **1 credit**

Prerequisite: Journalism II

Students continue to obtain practical experience in journalism through the production of the school newspaper. Students further develop the skills in writing and in technical areas of newspaper production learned in Journalism II. In addition, students assume greater responsibility for various assignments and tasks related to production. Some assignments may include tasks outside of class. Level III students may expect to invest approximately 4 hours of out-of-class time each week.

152M

Journalism IV

Grade 12 **1 credit**

Prerequisite: Journalism III

Students refine journalistic skills and assume major responsibilities for the production of the school newspaper. In addition, they assist in the orientation and training of less experienced staff. Some assignments may include tasks outside of class time. Level IV students may expect to invest approximately 4 hours of out-of-class time each week.

1955 - Semester I
1956 - Semester II
Year – 1957

SAT Preparation Course

Grades 10, 11, 12 **1/2-1 elective credit**

Prerequisite: It is recommended that students have completed Algebra I and Geometry prior to taking this course.

This course provides strategy-based instruction designed to improve students' test-taking skills and to increase their potential for success on both the PSAT and SAT tests. This course focuses on the teaching and the application of proven mathematics and verbal strategies as recommended by the College Board. Students are expected to register and take the SAT upon completing the course.

English

1601★ - Semester I
1605★ - Semester II
1603★ - Year

Speech Communication I

Grades 10, 11, 12 **1/2-1 credit**

The student learns to speak effectively in both formal and informal situations, develops insight into the structure and purpose of the basic speech process, and appreciates the importance that speech plays in daily living. Skills developed include discussion, group dynamics, audience analysis, speech delivery, listening, and oral interpretation. Students may elect to participate in outside oratory events.

1606★ - Semester I
1602★- Semester II
1604★ - Year

Speech Communication II

Grades 11, 12 **1/2-1 credit**

Prerequisite: Speech Communication I or consent of instructor

This course provides students with the opportunity to polish and refine some of the basic speech skills introduced in Speech Communication I. Experiences with formal debate, oral interpretation, reader's theatre and interpersonal communication provide the content of the program. Students may elect to participate in outside oratory events.

1530

Yearbook I

Grades 9, 10, 11, 12 **1 credit**

Students receive a practical, hands-on introduction to yearbook production. Students learn the tasks necessary for writing, designing, and evaluating a yearbook. Units are sequenced to parallel the publication deadlines of the school's yearbook. Students learn the techniques of business operation, advertising, promotion, and management. Students may be expected to produce a literary magazine. Some assignments may include tasks outside of class. Level I students may expect to invest 1-2 hours of out-of-class time each week.

1531

Yearbook II

Grades 10, 11, 12 **1 credit**

Prerequisite: Yearbook I

Students continue practical experiences in publications through the production of a yearbook, developing their skills in photography, layout, business operation, advertising, promotion, and management. In addition, students assume greater responsibility for various assignments and tasks related to yearbook production. Some assignments may include tasks outside of class. Level II students may expect to invest 2-3 hours of out-of-class time each week.

153M

Yearbook III

Grades 11, 12 **1 credit**

Prerequisite: Yearbook II

Students refine publication skills and assume major management responsibilities for the production of the yearbook. In addition, they assist in the orientation and training of less experienced staff. Some assignments may include tasks outside of class time. Level III students may expect to invest approximately 4 hours of out-of-class time each week.

154M

Yearbook IV

Grade 12 **1 credit**

Prerequisite: Yearbook III

Students polish their publication skills and assume leadership responsibilities for the production of the school yearbook. In addition, they continue to assist in the orientation and training of less experienced staff. Some assignments may include tasks outside of class. Level IV students may expect to invest approximately 4 hours of out-of-class time each week.

1799

Laboratory Asst. – English Language Arts

Grades 11, 12 **1 elective credit**

Working under the direction of the teacher, student assistants help distribute, collect, and store the materials of instruction; type and duplicate materials designed by the teacher; provide routine assistance to students during the administration of exercises and tests; and provide occasional tutorial assistance to students under the guidance of the teacher. Only one elective credit can be earned as a student assistant; credit may only be awarded after the 20th required graduation credit has been recorded. Students do not have access to student grades or personal data.

ESOL

ESOL

The English for Speakers of Other Languages Program (ESOL) is an appropriate assistance program for English language learners who need direct and intense study in English in order to participate successfully in content areas classes. Instruction is provided at selected high schools by ESOL teachers and instructional assistants. Course selection is based on staff recommendation, achievement in previous ESOL or English language development courses, and scores on English language proficiency assessments.

Newcomer ESOL Program

These course offerings are designed for English language learners with little or no proficiency in the English language. They provide an intense level of English language instruction in order to accelerate readiness for ESOL English I and related courses. The Newcomer courses are provided as full or half credit options to accommodate students who enroll in the school system first or second semester. Some English language learners may benefit from participation in the Transitional ESOL Mathematics and Seminar courses as precursors to Algebra I.

9516
Newcomer ESOL English I
1 credit

9517
Newcomer ESOL English IA
1/2 credit

9518
Newcomer ESOL English IB
1/2 credit

Grade 9

The goal of Newcomer ESOL English I is to provide students with intensive instruction in English by focusing on vocabulary development, reading skills and writing skills. Students earn one World Language Credit.

9519
Newcomer ESOL English II
1 elective credit

9520
Newcomer ESOL English IIA
1/2 elective credit

9521
Newcomer ESOL English IIB
1/2 elective credit

Grade 9

The goal of Newcomer ESOL English II is to provide students with intensive vocabulary and content development in Science and United States History.

9522
Newcomer ESOL Transitional Mathematics
1 elective credit

9523
Newcomer ESOL Transitional Mathematics A
1/2 elective credit

9524
Newcomer ESOL Transitional Mathematics B
Grade 9 **1/2 elective credit**

The goal of Newcomer ESOL Transitional Mathematics is to provide intensive vocabulary development and content instruction to English language learners who do not have the prerequisite mathematics skills.

9529
Newcomer ESOL Transitional Mathematics Seminar
1 credit

Corequisite: Enrollment in Newcomer ESOL Transitional Math – 9522

9530
Newcomer ESOL Transitional Mathematics Seminar A
1/2 credit

Corequisite: Enrollment in Newcomer ESOL Transitional Math A – 9523

9531
Newcomer ESOL Transitional Mathematics Seminar B
1/2 credit

Grade 9

Corequisite: Enrollment in Newcomer ESOL Transitional Math B – 9524

Newcomer ESOL Transitional Mathematics Seminar is to be taken in conjunction with Newcomer ESOL Transitional Mathematics. It provides students with additional instructional time to master mathematics concepts and develop English language skills.

ESOL

ESOL Level I Program

These course offerings are designed for English language learners with high beginning or low intermediate level proficiency in the English language. They provide a level of language instruction that builds on beginning English language development. Some of the courses are provided as full or half credit options to accommodate students who enroll in the HCPSS first or second semesters.

9501
ESOL English Literature & Composition I
1 credit

Corequisite: Enrollment in English Language Development I-9508

9525
ESOL English Literature & Composition IA
1/2 credit

Corequisite: Enrollment in ESOL English Language Development IA-9527

9526
ESOL English Literature & Composition IB
Grade 9 **1/2 credit**

Corequisite: Enrollment in ESOL English Language Development IB-9528

This course is appropriate for students with high beginning or low intermediate level proficiency in English. Listening, speaking, reading, and writing skills are emphasized through the analysis and interpretation of literary genres. Students earn English credit.

9508
ESOL English Language Development I
1 credit

Corequisite: Enrollment in ESOL English Literature and Composition I-9501

9527
ESOL English Language Development IA
1/2 credit

Corequisite: Enrollment in ESOL English Literature and Composition IA-9525

9528
ESOL English Language Development IB
Grade 9 **1/2 credit**

Corequisite: Enrollment in ESOL English Literature and Composition IB-9526

This elective course for ESOL I students provides additional instruction in listening, speaking, reading, and writing English. The course is a skills-based class using mostly informational text to develop reading and writing strategies. Vocabulary development, language structures, academic language, and oral language development are stressed. Students earn World Language credit. ***Note: Course may not meet all colleges' entrance requirements.***

9505
ESOL Introduction to US History
Grades 9, 10, 11, 12 **1 elective credit**

This course introduces beginning English language learners to US History. The course emphasizes significant events in US History, basic geography skills, and academic skills related to social studies. The course also includes information on significant holidays and celebrations and cultural norms as related to American historical events.

9506
ESOL Tutorial I
1 credit

9509
ESOL Tutorial IA
1/2 credit

9513
ESOL Tutorial IB
1/2 credit

Grades 9, 10, 11, 12

This course offers beginning English language learners additional practice in all four skill areas of language learning. Brief oral presentations and practical problem solving situations allow students to improve their communicative competence and build their speaking confidence. A variety of topics and instructional methods prepare students to successfully participate in general education classes.

ESOL Level II Program

These course offerings are designed for English language learners with intermediate level proficiency in the English language. They provide a level of language instruction that continues English language development gained through prior English language instruction.

9502
ESOL English Literature & Composition II
Grades 9, 10 **1 credit**

Corequisite: Enrollment in English Language Development II-9511

9535
ESOL English Literature & Composition IIA
1/2 credit

Corequisite: Enrollment in ESOL English Language Development IIA-9537

9536
ESOL English Literature & Composition IIB
1/2 credit

Corequisite: Enrollment in ESOL English Language Development IIB-9538

This course is appropriate for students with intermediate level proficiency in English. Listening, speaking, reading, and writing skills are emphasized through the analysis and interpretation of literary genres. Students earn English credit.

ESOL

9511

ESOL English Language Development II

Grades 9, 10 **1 credit**

Corequisite: Enrollment in ESOL English Literature and Composition II-9502

9537

ESOL English Language Dev II A 1/2 credit

Corequisite: Enrollment in ESOL English Literature and Composition II A-9535

9538

ESOL English Language Dev II B 1/2 credit

Corequisite: Enrollment in ESOL English Literature and Composition II B-9536

This course for ESOL II students provides additional instruction in listening, speaking, reading, and writing English. The course is a skills-based class using mostly informational text to develop reading and writing strategies. Vocabulary development, language structures, academic language, and oral language development are stressed. Students earn World Language credit. ***Note: Course may not meet all colleges' entrance requirements.***

9515

ESOL United States History

Grades 9, 10, 11, 12 **1 credit**

This course presents a comprehensive study of United States history from 1877 to the present. Emphasis is placed on the mastery of basic skills. These include study habits, reading for comprehension and interpretation, written and oral expression, as well as social studies skills. This course fulfills the United States History graduation requirements.

9507

ESOL Tutorial II

Grades 9, 10, 11, 12 **1 elective credit**

This course provides English language learners additional language practice. Conversational activities and group projects help students develop greater confidence in listening and speaking. A variety of topics and instructional methods prepare students to successfully participate in general education classes once they leave the ESOL program. Preparation for the English High School Assessment is offered for any student who has not yet met the test requirements.

ESOL Advanced Level Program

These course offerings are designed for English language learners with advanced proficiency in the English language. They provide a level of language instruction that supports participation in general education classes.

9504★

ESOL American Government

Grades 10, 11, 12 **1 credit**

This course presents a comprehensive study of national, state, and local government. Additional topics of study include current issues, law, and economics. Students practice library research skills by completing a research paper. ***Note: This course fulfills the American Government graduation requirement.***

9512

ESOL English Language Development III

Grades 9, 10, 11, 12 **1 credit**

Corequisite: Enrollment in English 9 or English 10

9539

ESOL English Language Development III A

1/2 credit

Corequisite: Enrollment in English 9 or English 10

9540

ESOL English Language Development III B

1/2 credit

Corequisite: Enrollment in English 9 or English 10

This course provides additional instruction in listening, speaking, reading, and writing for English language learners. The course is a skills-based class using mostly informational text to develop strategic reading, technical, and creative writing skills. Vocabulary development, language structures, academic language, and oral language development are stressed. Students earn World Language credit. ***Note: Course may not meet all colleges' entrance requirements.***

9510

ESOL Health

Grades 9, 10, 11, 12 **1 credit**

Focusing on the goals of Maryland's health education curriculum, this course's instruction provides support for students with limited English language skills. Topics include alcohol, tobacco, and other drugs; nutrition and fitness; mental health; disease prevention; safety, first aid, and injury prevention; and family life and human sexuality. In accordance with Maryland's education bylaws, parents have the option of excusing students from discussion of human sexuality and AIDS prevention, and optional health education curriculum is available.

9503★

ESOL Modern World History

Grade 9, 10, 11, 12 **1 credit**

This course is designed to survey the history of the human experience from the late middle ages to the present. Significant events, concepts, and understandings from both the Western and non-Western world traditions are explored. Emphasis is placed upon the mastery of basic skill areas, including study habits, reading for comprehension and interpretation, and written and oral expression. ***Note: This course fulfills the World History graduation requirement.***

Fine Arts

Art

The art program is designed to develop creative problem solving and studio skills in the visual arts at the highest possible level. Objectives relating to aesthetics, history and culture, and criticism are sequenced with regard for developmentally appropriate behavioral characteristics of the studio learner. All art courses satisfy the Fine Arts graduation requirement except History of Art.

Art Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Math Requirement	Math Requirement	Math Requirement	Elective
Earth Science	Biology	Science Requirement	Elective
U.S. History	American Government	World History	Elective
World Language	World Language	Elective	Elective
PE/Health	Tech. Ed. Requirement	Elective	Art History AP/GT
Art I	Art II, Art II - G/T or Photo I	Art III, Art III - AP, Photo II or Photo II - AP	Art IV, Art IV - AP, Photo III or Photo III - AP

A four-year comprehensive program in visual art allows the opportunity to build a portfolio and resume for college applications, incorporate reading and writing through criticism, brainstorming, sketchbook idea generation and art history, and allows the student to embrace personal ideas and concepts. Students who are preparing a portfolio in studio art or photography that will be used for admission to college have the option to take Art III/IV and Photo II/III for double credit. For students taking AP level studio and photography courses, this provides additional studio time to prepare their portfolios. Art II may be taken for Honors credit, and both Art III/IV and Photo II/III may be taken for AP credit.

6000

Art I: Foundations of Studio Art

Grades 9, 10, 11, 12 **1 credit**

As the foundation course, Art I: Foundations of Studio Art is the prerequisite course for the comprehensive high school art program and fulfills the one-credit Fine Arts graduation requirement. Studio problems are designed to build creative and critical thinking skills through practice in drawing, painting, printmaking, sculpture, crafts, and other art disciplines.

6001

Art II: Developing Ideas in Media

Grades 10, 11, 12 **1 credit**

Prerequisite: Art I

This course challenges students who continue at this level to refine their skills in fine arts media and creative problem solving. These problems become increasingly complex and require students to draw upon knowledge of both traditional and contemporary art from diverse cultures. Works of art that reflect a personal aesthetic and exhibit breadth and quality become the basis for a cumulative portfolio including a sketchbook/journal.

608M♥

Art II: Developing Ideas in Media - G/T

Grades 10, 11, 12 **1 credit**

Prerequisites: Art I

This course challenges students who continue at this level to refine their skills in fine arts media and creative problem solving. These problems become increasingly complex and require students to draw upon knowledge of both traditional and contemporary art from diverse cultures. This course is recommended for students who have demonstrated an ability to work successfully at a demanding pace. Emphasis is placed on creative problem solving, independent research, and task commitment.

602M♥ - (1 credit)
603M♥ - (2 credits)

Art III: Portfolio Development – Honors

Grades 11, 12 **1-2 credits**

Prerequisite: Art II or Art II - G/T

This course challenges students to take risks, experiment with new art media, and explore new ideas through researching traditional and contemporary art from diverse cultures. Each student is expected to handle visual arts media with a sense of quality, breadth, and concentration on a particular interest or problem as evidenced in a cumulative portfolio including a sketchbook/journal. Each student will clearly articulate his/her intent in a written artist's statement.

Art

604M♥ - (1 credit)
605M♥ - (2 credits)
Art III: Portfolio Development - AP [AP Studio Art: Drawing, 2-D Design, and 3-D Design]
Grades 11, 12 **1-2 credits**

Prerequisite: Art II or Art II - G/T

The course begins the development of the body of work leading to the Advanced Placement Examination. It is recommended for students who have demonstrated an ability to complete challenging work successfully at a demanding pace. Emphasis is placed on creative problem solving, independent research and learning, task commitment and special topics. It is recommended that students in this course take the AP Exam when it is offered in May.

600M♥ - (1 credit)
601M♥ - (2 credits)
Art IV: Personal Directions in Art Studio – Honors
Grade 12 **1-2 credits**

Prerequisites: Art III or Art III - AP

In this course, students develop a body of work informed by research of contemporary and master artists, cultural exemplars, and peer dialogue. Students maintain a sketchbook/journal to accumulate and investigate ideas, themes, and media. The portfolio reflects a breadth of experiences, concentration on a specific theme and the quality execution of artworks and is defended by a personal artist's statement.

606M♥ - (1 credit)
607M♥ - (2 credits)
Art IV: Personal Directions in Art Studio - AP [AP Studio Art: Drawing, 2-D Design and 3-D Design]
Grade 12 **1-2 credits**

Prerequisites: Art III or Art III - AP

In this course, students develop a body of work informed by research of contemporary and master artists, cultural exemplars and peer dialogue. The portfolio reflects a breadth of experiences, concentration on a specific theme, and quality execution of artworks. Each student defends the portfolio in a personal artist's statement. The course continues the development of the body of work begun in Art III: Portfolio Development (AP). It is recommended that students in this course take the AP Exam when it is offered in May.

690M♥
Art History - AP
Grades 11, 12 **1 credit**

Prerequisite: Art I

The Advanced Placement offering in History of Art is designed to provide the same benefits to high school students as those provided by an introductory college course in art history. In this course, students examine major forms of artistic expression from the past as well as the present and from a variety of cultures. It is recommended that students in this course take the AP Exam when it is offered in May.

6005
New Forms in Art
Grades 11, 12 **1 credit**

Prerequisite: Art I

Students will research the work of contemporary artists employing studio processes such as collaboration, digital technology, installation, inter-arts, mixed-media, performance and site-specific works. The search for personal meaning and student artists' intentions provides a thematic center for making works of art based upon the themes of celebration and community, both local and global.

6006
Photography I: Introduction to Photography
Grades 10, 11, 12 **1 credit**

Prerequisite: Art I

In this course, students apply the language of art in producing fine art photographs. Primary experiences will center around the use of a 35mm single lens reflex camera, film processing, darkroom techniques, print manipulation, and the presentation of work. Technical skills evolve through the introduction of pinhole photography and contact printing. Experiences throughout the course will include composing, exposing, processing, enlarging images in the darkroom, and basic experiences in digital imaging.

691M♥ - (1 credit)
698M♥ - (2 credits)
Photography II: Portfolio Development - Honors
Grades 11, 12 **1-2 credits**

Prerequisite: Photography I

In this course, students refine and master technical skills as well as experiment with alternative approaches and materials as they compose unique photographs. Additionally, students will develop a photographic portfolio that demonstrates quality, shows breadth of formal, technical, and expressive experiences and concentrates on a specific theme or problem. Through collaboration with peers and instructors students will develop a personal aesthetic viewpoint. In-class and independent problems further the development of skills and techniques.

Art

696M♥ - (1 credit)

697M♥ - (2 credits)

Photography II: Portfolio Development – AP [AP Studio Art: 2-D Design]

Grades 11, 12 **1-2 credits**

Prerequisite: Photo I

This course begins the development of a body of work leading to the Advanced Placement Examination. Students will refine and master technical skills as well as experiment with alternative approaches and materials as they compose photographs. Additionally, students will develop a photographic portfolio that demonstrates quality, shows breadth of formal, technical, and expressive experiences and concentrates on a specific theme or problem. Through collaboration with peers and instructors students will develop a personal aesthetic viewpoint that will be demonstrated through the AP Portfolio. It is recommended that students in this course take the AP Exam when it is offered in May.

694M♥ - (1 credit)

695M♥ - (2 credits)

Photography III: Personal Directions in Photography - Honors

Grade 12 **1-2 credits**

Prerequisite: Photography II or Photography II - AP

In this course students will develop a thematic body of work that can be used for college admissions, scholarships and student exhibitions. As students move from the second to the third level in photo studio, the content sharpens in focus upon self-assessment and evaluation. Students continue working in a sketchbook/journal to refine personal imagery based on the study of master artists.

692M♥ - (1 credit)

693M♥ - (2 credits)

Photography III: Personal Directions in Photography - AP [AP Studio Art: 2-D Design]

Grade 12 **1-2 credits**

Prerequisite: Photography II or Photography II - AP

In this course each student will develop a thematic body of work that can be used for the Advanced Placement portfolio, college admissions, scholarships, and student exhibitions. As students move from the second to the third level in photo studio, the content sharpens its focus upon self-assessment and evaluation. Students continue working in a sketchbook/journal to refine personal imagery based on the study of master artists. It is recommended that students in this course take the AP Exam when it is offered in May.

Dance Education

Dance education promotes aesthetic sensitivity and provides an opportunity for students to experience intellectual, physical, emotional and social growth. Students observe, respond, create and perform using the body as an instrument to communicate feelings, thoughts and ideas. Through exploring dance concepts, students demonstrate critical thinking skills and core values as well as develop personal integrity. Dance education fosters positive student interaction and an appreciation for diverse points of view, while establishing strong human bonds which transcend racial, ethnic and socioeconomic barriers. The sequentially developed program presents a broad cultural and historical perspective, providing unique opportunities for cross-curricular connection. All dance courses satisfy the Fine Arts Graduation requirement.

Dance Education Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Math Requirement	Math Requirement	Math Requirement	Elective
Earth Science	Biology	Science Requirement	Elective
U.S. History	American Government	World History	Elective
World Language	World Language	Elective	Elective
PE/Health	Tech. Ed. Requirement	Elective	Dance IV or Dance IV - G/T Junior Dance Company or Dance Company*
Dance I or Junior Dance Company or Dance Company*	Dance II or Junior Dance Company or Dance Company*	Dance III or Dance III - G/T or Junior Dance Company or Dance Company*	G/T Mentor Program - Dance Teaching Assistant

* By audition only

A four-year comprehensive program in dance allows students to discover their own inherent aptitude for the communication of ideas, thoughts, and feelings through the art of dance. Students interested in pursuing dance in college should plan on building their performance portfolio as soon as possible. Students in need of additional performance opportunities have the option to audition for one of two performance ensembles offered: Junior Dance Company or Dance Company. By auditioning into Junior Company or Dance Company, students have the opportunity to perform at a challenging pace. Both groups have opportunities to perform at various venues locally and nationally. A student that participates in the Dance Company GT receives Merit Credit.

The G/T Resource program offers advanced students desiring a more rigorous and challenging experience to mentor under the dance teachers in the capacity of a teaching assistant.

7120
Dance I
Grades 9, 10, 11, 12 **1 credit**

In this Fine Arts course, students are introduced to a basic working knowledge of performance concepts that they can apply to all dance forms. Experiences are based on fundamentals of ballet, modern and jazz dance. This course fulfills the graduation requirement for the Fine Arts elective as it provides instruction in aesthetics, dance history, anatomy, choreographic techniques, and performance components. The number of required non-school practices, events and performances during a school year may not exceed 15.

7121
Dance II
Grades 9, 10, 11, 12 **1 credit**

Prerequisites: Dance I

In this Fine Arts course students are challenged in sessions of dance technique that use a working knowledge of performance concepts that students will apply to all dance forms. Experiences are based on further developing principles and techniques of ballet, modern and jazz dance. This course fulfills the graduation requirement for the Fine Arts elective as it provides instruction in aesthetics, dance history, anatomy, and choreographic techniques. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 15.

7123
Dance III
Grades 9, 10, 11, 12 **1 credit**

Prerequisites: Dance II

In this Fine Arts course, students are challenged in sessions of dance techniques that use their maximum movement range. Various styles of dancing are explored. Individuality of artistic expression is encouraged through improvisation and composition, using specific choreographic forms. This course fulfills the Fine Arts elective requirement as it provides instruction in aesthetics, dance history, anatomy, and choreographic techniques. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 15.

Dance Education

714M
Dance IV
Grades 9, 10, 11, 12 **1 credit**
Prerequisites: Dance III
In this Fine Arts course, students are challenged in sessions of dance techniques that enhance their maximum movement range. Various styles of dancing are explored. Individuality of artistic expression is encouraged through improvisation and composition, using specific choreographic forms. The majority of the class time will be dedicated to providing opportunities to utilize production components and further develop choreographic skills. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 20.

715M♥
Dance IV - G/T
Grades 9, 10, 11, 12 **1 credit**
Prerequisites: Dance III
In this Fine Arts course, students are challenged in sessions of dance techniques that enhance their maximum movement range. Emphasis is placed on original creation, portfolio development, independent research, task commitment and special topics. Various styles of dancing are explored and individuality of artistic expression is required. The majority of the class time will be dedicated to providing opportunities to utilize production components and further develop choreographic skills. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 20.

712M
Dance Company
Grades 10, 11, 12 **1 credit**
Prerequisite: Audition Only
In this Fine Arts course, students are accelerated in rigorous sessions of dance techniques that use their maximum movement range. Students will have opportunities to master set and student choreographs. Production and performance are the major components and foci of this elite performance ensemble. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 30.

716M♥
Dance Company - G/T
Grades 10, 11, 12 **1 credit**
Prerequisite: Audition Only
In this Fine Arts course, students are accelerated in rigorous sessions of dance techniques that use their maximum movement range. Students will have opportunities to master set and student choreography. Production and performance are the major components and foci of this elite performance ensemble. Additionally, students will refine a performance portfolio that demonstrates originality, quality and breadth of formal, technical and expressive experiences. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 30.

7122
Junior Dance Company
Grades 9, 10, 11, 12 **1 credit**
Prerequisite: Audition Only
In this Fine Arts course, students are challenged in rigorous sessions of dance techniques that use their maximum movement range. Various styles of dancing will be reviewed and performed. The majority of the class time will be dedicated to the learning of set choreography to enhance performance qualities through production. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 30.

713M♥
Junior Dance Company - G/T
Grades 9, 10, 11, 12 **1 credit**
Prerequisite: Audition Only
In this Fine Arts course, students are challenged in rigorous sessions of dance techniques that use their maximum movement range. Various styles of dancing will be reviewed and performed. The majority of the class time will be dedicated to the learning of set choreography to enhance performance qualities through production. Additionally, students will develop and refine a performance portfolio that demonstrates originality, quality, shows breadth of formal, technical, and expressive experiences. Performance components beyond the regular school day are required. The number of required non-school practices, events and performances during a school year may not exceed 30.

Music

Each course in the music program is designed to develop skills, understanding, and musicality at the highest possible level. Inherent in the musical experience is a simultaneious combination of visual, auditory, and kinesthetic learning, as well as the emotional connection to the art form. Additionally, the process of musical study enhances the development of creative and critical thinking skills, affords opportunity to build individual and group discipline, and increases achievement through both individual and collective effort.

Students enrolling in the performance-based courses, such as those in band, chorus, and orchestra, should be aware that attendance at rehearsals, sectional practices, and performances is an integral part of the course. Every effort is made by directors to arrange sectional and pre-concert rehearsals and to schedule concerts within the context of the school's master schedule. Prior to registration for these classes, music students and their parents should carefully review Board of Education Policies 8000-8120 concerning requirements. All music courses satisfy the Fine Arts graduation requirement.

Music Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Math Requirement	Math Requirement	Math Requirement	Elective
Earth Science	Biology	Science Requirement	Elective
U.S. History	American Government	World History	Elective
World Language	World Language	Elective	Elective
PE/Health	Tech. Ed. Requirement	Music Theory I, Music Technology or another music course	Music Theory I or II AP, Music Technology or another music course
Music (courses in Band, Chorus, Orchestra)*	Music (courses in Band, Chorus, Orchestra)*	Music (courses in Band, Chorus, Orchestra)*	Music (courses in Band, Chorus, Orchestra)*

* May be taken for G/T credit

A four-year comprehensive music education program with a focus in performance allows students the opportunity to develop the requisite musical skills necessary to build a portfolio and resume required for college applications. Students may be able to participate in multiple music courses during the same year if scheduling can be arranged. Music courses – Wind Ensemble G/T, Chamber Choir G/T, and String Orchestra G/T – may be taken for G/T credit based on an audition. Music Theory II AP is for AP credit – Music Theory I is a prerequisite.

6280, 6281
655M, 656M

Band - Concert

Grades 9, 10, 11, 12 **1 credit**

Students perform a variety of band literature, with an emphasis placed on building a foundation of individual and ensemble performance skills. The band may participate in concerts and performance assessments. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 25. Previous band experience or director approval is required.

6201, 6202
620M, 621M

Band - Symphonic/Marching

Grades 9, 10, 11, 12 **1 credit**

Students perform band literature representing a variety of styles and historical periods in concerts, annual local and state performance assessments, some athletic events, and parades. Emphasis is on both individual and ensemble skill development. After-school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. Audition or director selection is required.

Music

6480, 6481
653M, 654M
Band - Symphonic Winds/Marching
Grades 9, 10, 11, 12 **1 credit**

Students perform band literature from a variety of styles and historical periods in concerts, in performance assessments, athletic events, and parades. The band performs more difficult music than Symphonic/Marching Band (if it is offered). After-school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. Audition or director selection is required.

6400, 6401
651M, 652M
Band - Wind Ensemble/Marching
Grades 9, 10, 11, 12 **1 credit**

Students perform band literature from a variety of styles and historical periods and from the highest level of difficulty in concerts, performance assessments, athletic events, and community programs. Emphasis is on increased skill development. After-school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. Audition or director selection is required.

638M♥, 639M♥
640M♥, 641M♥
Band - Wind Ensemble/Marching - G/T
Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Application and audition are required.

Students perform with and meet the curricular requirements of the WE/Marching. In addition, students will prepare an e-portfolio consisting of individual performances of solo literature from difficulty levels V-VI (on a scale of VI) and written assignments including research, analysis, and reflection of performances. The number of required non-school hour performances and practices during a school year may not exceed 40.

6460, 6461
649M, 650M
Percussion Ensemble
Grades 9, 10, 11, 12 **1 credit**

Students perform various percussion ensemble and/or band music. The ensemble may perform in concerts, local and state performance assessments, athletic events, and parades. Both individual and ensemble skill development are emphasized. After-school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 25. Audition or director selection is required.

6284, 6285
634M, 633M
Jazz Ensemble
Grades 9, 10, 11, 12 **1 credit**

Students perform a variety of traditional and popular jazz, investigating jazz theory, improvisation, performance techniques, styles, and literature, both individually and in the ensemble. Students may perform in concerts and performance assessments. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 25. Audition or director selection is required.

6220, 6225
6230, 6235
Instrumental Ensemble
Grades 9, 10, 11, 12 **1/2-1 credit**

Students perform a variety of music representing various styles and genres in small ensemble experiences. Students may perform in concerts and recitals. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 15. Audition or director approval is required.

Music

6380, 6385
6390, 6395
Vocal Ensemble
Grades 9, 10, 11, 12 **1/2-1 credit**

Students perform choral literature representing a variety of styles and genres in small ensemble experiences. Performances may include concerts, performance assessments, and community programs. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 15. Audition or director approval is required.

6351, 6352
6353, 6354
Chorus
Grades 9, 10, 11, 12 **1 credit**

Students perform a variety of choral literature representing various styles and historical periods, for soprano, alto, tenor, and bass voices. The Chorus may perform in concerts and performance assessments. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 25. All students with an interest in group singing may participate.

6301, 6302
630M, 631M
Concert Choir
Grades 9, 10, 11, 12 **1 credit**

Students perform choral literature representing various styles and historical periods, for soprano, alto, tenor, and bass voices. The Concert Choir may perform in concerts, performance assessments, and community programs. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. An audition may be required if Chorus is also offered.

6361, 6362
636M, 637M
Chamber Choir
Grades 9, 10, 11, 12 **1 credit**

Students perform a variety of choral literature emphasizing singing in four or more parts as well as solo singing. Performances may include concerts, performance assessments, and community programs. After-school activities and practices are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. Audition or director selection is required and the local school may require concurrent enrollment/ participation in Concert Choir.

623M♥, 624M♥
625M♥
Chamber Choir - G/T
Grades 10, 11, 12 **1 credit**

Prerequisite: Application and audition are required.

Students perform with and meet the curricular requirements of the Chamber Choir. In addition, students will prepare an e-portfolio consisting of individual performances of solo literature from difficulty levels V-VI (on a scale of VI) and written assignments including research, analysis, and reflection of performances. The number of required non-school hour performances and practices during a school year may not exceed 40.

6198 - Semester I
6199 - Semester II
6200 - Year
Music Technology
Grades 9, 10, 11, 12 **1/2-1 credit**

Students learn basic compositional techniques and apply them using notation and sequencing software programs. Using original compositions, students analyze, describe, and discuss the various compositional techniques. Students also develop multimedia presentations to describe/ accompany their original music compositions and participate in a "live" concert performance of their original compositions in a concert setting. All students interested in music technology may participate.

Music

6462, 6465
6468, 6471

String Ensemble

Grades 9, 10, 11, 12 **1/2-1 credit**

Students will perform a variety of orchestral literature while developing individual and ensemble skills in concerts, performance assessments, and community programs. After-school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. Previous orchestra experience or director approval is required.

6410, 6420
643M, 646M

String Orchestra

Grades 9, 10, 11, 12 **1 credit**

Students perform orchestral literature from a variety of styles and historical periods in concerts, performance assessments, and community programs. Emphasis is on skill development, both individual and in the ensemble. After-school activities and rehearsals are integral to the course, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 40. Previous orchestra experience or director approval is required.

626M♥, 627M♥
628M♥, 629M♥

String Orchestra - G/T

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Application and audition are required.

Students perform with and meet the curricular requirements of the String Orchestra. In addition, students will prepare an e-portfolio consisting of individual performances of solo literature from difficulty levels V-VI (on a scale of VI) and written assignments including research, analysis, and reflection of performances. The number of required non-school hour performances and practices during a school year may not exceed 40.

6491 - Semester I
6492 - Semester II
6490 - Year

Guitar I

Grades 9, 10, 11, 12 **1/2-1 credit**

Students develop basic guitar techniques through performing solo and ensemble guitar literature from difficulty levels I and II (on a scale of VI). Skills emphasized include (1) tuning and proper tone production, (2) note reading using traditional notation and guitar tablature, and (3) utilizing current technology to assist in developing basic improvisational and compositional techniques. Previous guitar experience is not required.

6405

Guitar II

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Completion of previous level(s) or teacher permission

Students develop intermediate guitar techniques through performing solo and ensemble guitar literature from difficulty levels III and IV (on a scale of VI). Skills emphasized include (1) identifying and analyzing musical elements and structural characteristics of various styles and genres and (2) utilizing current technology to assist in further development of improvisational and compositional techniques. After-school activities, such as recitals and performances, may be required, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 5.

6409♥

Guitar III/IV - Honors

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Completion of previous level(s) or teacher permission

Students develop advanced guitar techniques through performing solo and ensemble guitar literature from difficulty levels V and VI (on a scale of VI). Skills emphasized include (1) performing with alternate tunings and more sophisticated chord progressions and (2) developing advanced improvisational and compositional techniques. After-school activities, such as recitals and performances, may be required, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 10.

Music

6496 - Semester I
6497 - Semester II
6495 - Year

Piano I

Grades 9, 10, 11, 12 **1/2-1 credit**

Students develop basic piano techniques through performing a variety of piano literature representing various styles and genres from difficulty levels I and II (on a scale of VI). Skills emphasized include (1) performing with independent parts for right and left hands, (2) note reading using traditional notation, and (3) utilizing current technology to assist in developing basic improvisational and compositional techniques. Previous piano experience is not required.

6407

Piano II

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Completion of previous level(s) or teacher permission

Students develop intermediate piano techniques through performing a variety of piano literature representing various styles and genres from difficulty levels III and IV (on a scale of VI). Skills emphasized include (1) identifying and analyzing musical elements and structural characteristics of various styles and genres and (2) utilizing current technology to assist in further development of improvisational and compositional techniques. After-school activities, such as recitals and performances, may be required, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 5.

6408♥

Piano III/IV - Honors

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Completion of previous level(s) or teacher permission

Students develop advanced piano techniques through performing a variety of piano literature representing various styles and genres from difficulty levels V and VI (on a scale of VI). Skills emphasized include (1) performing scales and arpeggios in all keys and (2) developing advanced improvisational and compositional techniques. After-school activities, such as recitals and performances, may be required, and grades may reflect such participation. The number of required non-school hour performances and practices during a school year may not exceed 10.

6110

Music Theory I

Grades 9, 10, 11, 12 **1 credit**

Students learn the basic elements of music and their applications in elementary composition. Aural development is stressed throughout the year through rhythmic and melodic dictation and sight-singing. Music technology will be used as a resource to develop aural and compositional skills. A student with limited experiences in music must seek teacher approval.

612M♥

Music Theory II - AP [AP Music Theory]

Grades 10, 11, 12 **1 credit**

Prerequisite: Music Theory I or its equivalent

Students learn more advanced concepts in music theory as well as twentieth-century compositional techniques. Aural development will continue through sight-singing and rhythmic and melodic dictation. Music technology will be used as a resource to develop aural and compositional skills. It is recommended that students in this course take the AP Exam when it is offered in May.

6101 - Semester I
6102 - Semester II
6100 - Year

Music and Society

Grades 9, 10, 11, 12 **1/2-1 credit**

Students learn about music and its relationship to society through investigation of music from a variety of styles, genres, and historical periods. This study enables students to make connections with art, dance, and drama, as well as with other content areas. This is a non-performance music course.

Theatre Arts

The Theater Arts Program is designed to develop performance and production skills, creative collaboration, and aesthetic appreciation of Theatre at the highest possible level. The process of Theatre Arts study enhances the development of creative and critical thinking skills, affords opportunities to build individual and group work ethics, and increases achievement through both individual and collective efforts. All Theatre Arts courses satisfy the Fine Arts graduation requirement. The Theatre Arts Program affords opportunities in co-curricular productions that allow for mastery and application of performance and production skills taught in Theatre Arts courses.

Theatre Arts Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Math Requirement	Math Requirement	Math Requirement	Elective
Earth Science	Biology	Science Requirement	Elective
U.S. History	American Government	World History	Elective
World Language	World Language	Elective	Elective
PE/Health	Tech. Ed. Requirement	Elective	Elective
Theatre Arts I	Theatre Arts II, Musical Theatre I or Stagecraft I	Theatre Arts III, Theatre Arts III - GT, Musical Theatre II or Stagecraft II	Theatre Arts IV, Theatre Arts IV - GT, Musical Theatre III or Stagecraft III

A four-year comprehensive program in Theatre Arts allows the opportunity to build a performance-based skill set, portfolio, and resume for college applications, and incorporate persuasive communication skills, text analysis, critical reading and writing through criticism in performance and/or technical theatre. Students may further enhance this experience via participation in the co-curricular, after-school main stage production program.

1690

Theatre Arts I

Grades 9, 10, 11, 12 **1 credit**

Theatre Arts 1 is a performance-based course which offers students an introduction to the process and production of theatre. Students will use critical thinking and problem solving to create personal meaning through collaborative performances. Students will use theatre practices to create, perform, and reflect in social and historical contexts. An expectation is that students will attend live theatrical productions during after-school hours. The number of required non-school events during a school year may not exceed 6.

1691

Theatre Arts II

Grades 10, 11, 12 **1 credit**

Prerequisite: Theatre Arts I

In Theatre Arts II, students continue to enrich and expand their knowledge of theatre. This course provides a more in depth experience with acting, production elements, American theatre forms, and the connections among artistic disciplines. Students in all advanced levels of Theatre Arts are expected to participate in the performances offered by the Theatre Arts department. The number of required non-school practices, events, and performances during a school year may not exceed 25.

169M

Theatre Arts III

Grades 11, 12 **1 credit**

Prerequisite: Theatre Arts II

In Theatre Arts III, students continue to enrich and expand their knowledge of world theatre history, classical and contemporary acting techniques, and textual and performance analysis. Students will identify and utilize conventions of different theatrical periods and styles. Students in all advanced levels of Theatre Arts are expected to participate in the performances offered by the Theatre Arts department. The number of required non-school practices, events, and performances during a school year may not exceed 25.

169M♥

Theatre Arts III - GT

Grades 11, 12 **1 credit**

Prerequisite: Theatre Arts II or Stagecraft I

In Theatre Arts III GT, students continue to enrich and synthesize their knowledge of world theatre history, classical and contemporary acting techniques, and textual and performance analysis. For the purpose of college and career readiness, students begin to develop a body of work with emphasis placed on creative problem solving, independent research and learning, task commitment and special topics. Students in all advanced levels of Theatre Arts are expected to participate in the performances offered by the Theatre Arts department. The number of required non-school practices, events, and performances during a school year may not exceed 25.

Theatre Arts

170M
Theatre Arts IV
Grade 12 **1 credit**

Prerequisite: Theatre Arts III or Theatre Arts III - G/T

In Theatre Arts IV students integrate art forms, acquired performance and production techniques, and knowledge of theatre in social, cultural, and historical context to create original devised works. Students will compare the works of a variety of theatre artists including artists traditionally underrepresented. Students in all advanced levels of Theatre Arts are expected to participate in the performances offered by the Theatre Arts department. The number of required non-school practices, events, and performances during a school year may not exceed 25.

172M♥
Theatre Arts IV - GT
Grade 12 **1 credit**

Prerequisite: Theatre Arts III or III - GT

In Theatre Arts IV GT, students continue to develop a body of work informed by research of contemporary and master theatre practitioners, cultural exemplars and peer leadership. The portfolio reflects a breadth of performance experiences, concentration on various theatrical conventions, critical analysis of dramatic texts and performances, and quality execution of scripted and original devised works. Each theatre student will reflect on the portfolio in a cumulative artistic statement. Students in all advanced levels of Theatre Arts are expected to participate in the performances offered by the Theatre Arts department. The number of required non-school practices, events, and performances during a school year may not exceed 25.

1721
Musical Theatre I
Grades 10, 11, 12 **1 credit**

Prerequisite: Theatre Arts I

In this performance-based course, the student receives training in the specialized skills of performing and producing Musical Theatre. Students in all advanced levels of Theatre Arts are expected to participate in some way in the performances offered by the Theatre Arts department. The number of required non-school practices, events and performances during a school year may not exceed 25.

1722
Musical Theatre II
Grades 11, 12 **1 credit**

Prerequisite: Musical Theatre I

With primary emphasis on performance, students continue to enrich and expand their knowledge of the areas emphasized in Musical Theatre I. Students in all advanced levels of Theatre Arts are expected to participate in some way in the performances offered by the Theatre Arts department. The number of required non-school practices, events and performances during a school year may not exceed 25.

1723
Musical Theatre III
Grade 12 **1 credit**

Prerequisite: Musical Theatre II

With primary emphasis on performance, students continue to enrich and expand their knowledge of the areas emphasized in

Musical Theatre II. Students in all advanced levels of Theatre Arts are expected to participate in some way in the performances offered by the Theatre Arts department. The number of required non-school practices, events and performances during a school year may not exceed 25.

1711
Stagecraft I
Grades 10, 11, 12 **1 credit**

Prerequisite: Theatre Arts I

This course provides students with theory and practice in various technical and management aspects of theatre production. The number of required non-school practices, events and performances during a school year may not exceed 25.

1712
Stagecraft II
Grades 11, 12 **1 credit**

Prerequisite: Stagecraft I

Students further develop the skills learned in Stagecraft I and further hone their design skills. Students may assume major technical roles in production areas. The number of required non-school practices, events and performances during a school year may not exceed 25.

1713
Stagecraft III
Grade 12 **1 credit**

Prerequisite: Stagecraft II

Students further develop the skills learned in Stagecraft II and further hone their design skills. Students may assume major technical roles in production areas. The number of required non-school practices, events and performances during a school year may not exceed 25.

Guidance/ Health Education

Guidance/Health Education

GUIDANCE

1900

Student Services Office Assistant/Tutor

Grade 12 **1 elective credit**

Under the direction of the School Counseling Team Leader, students will gain experience working in a high school counseling center. Students will collect and distribute materials, operate equipment, assist students, locate career and college information, process materials, perform clerical duties, and other duties as assigned. Students will be required to take a mid-term and final exam as with other credit bearing courses. Only one elective credit may be earned as a student assistant.

Students have the option of earning a credit only or earning a credit AND up to 75 student service learning hours. If a student wishes to earn service learning hours using this option, pages 1 and 2 of an Individual Service Learning Project Proposal should be completed and submitted to the School Counseling Team Leader and Principal for approval. The student must prepare for additional projects, mediation or tutoring assignments beyond the duties of other office assistants in order to be approved for service learning hours. Upon completion of the course, the student must complete the Service Learning Validation Form in order to be awarded the 75 service learning hours.

HEALTH EDUCATION

Health Education helps students develop the knowledge, attitudes, and skills they need to avoid risky behavior and maintain and improve their health. Health instruction gives students opportunities to practice skills that result in health-promoting behaviors. The standards for health education are designed to help students become health literate, obtain, interpret, and understand basic health information and services, and use such information and services in ways that enhance health. All students must earn one half credit in Health Education.

7001–Semester I

7003–Semester II

Health

Grade 9 (required for graduation) **1/2 credit**

This course will focus on the health standards of the Maryland state curriculum which include: alcohol, tobacco and other drugs; nutrition and fitness; social and emotional health; disease prevention and control; safety, first aid, and injury prevention; family life and human sexuality; and personal and consumer health. In accordance with Maryland's education regulations, parents have the option of having their children excused from instruction in family life and human sexuality and HIV/AIDS prevention education.

Note: This course should be taken sequentially with lifetime fitness in Grade 9.

7251 – Semester I

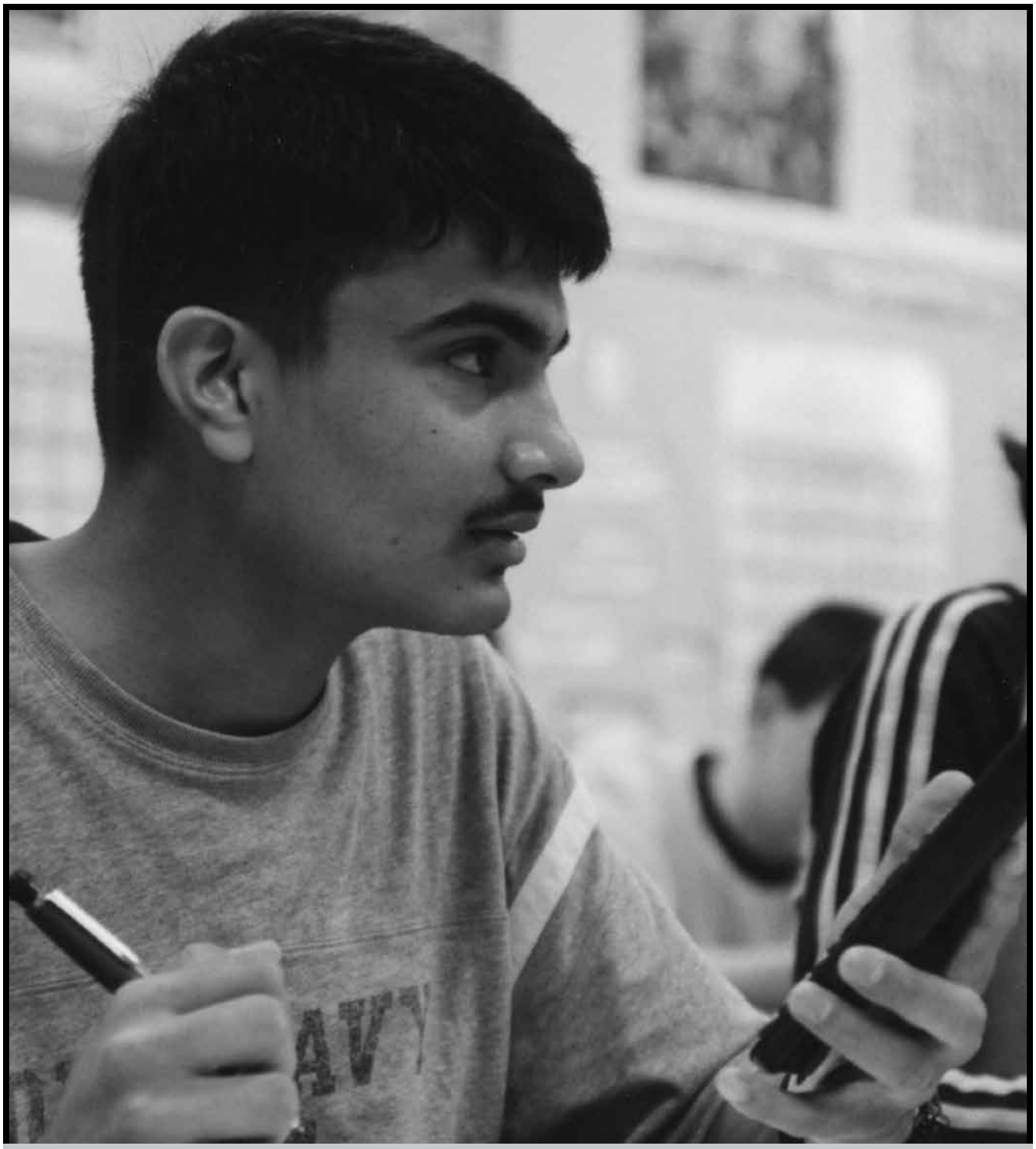
7252 – Semester II

7253 – Year

Current Health Issues

Grades 10, 11, 12 **1/2–1 credit**

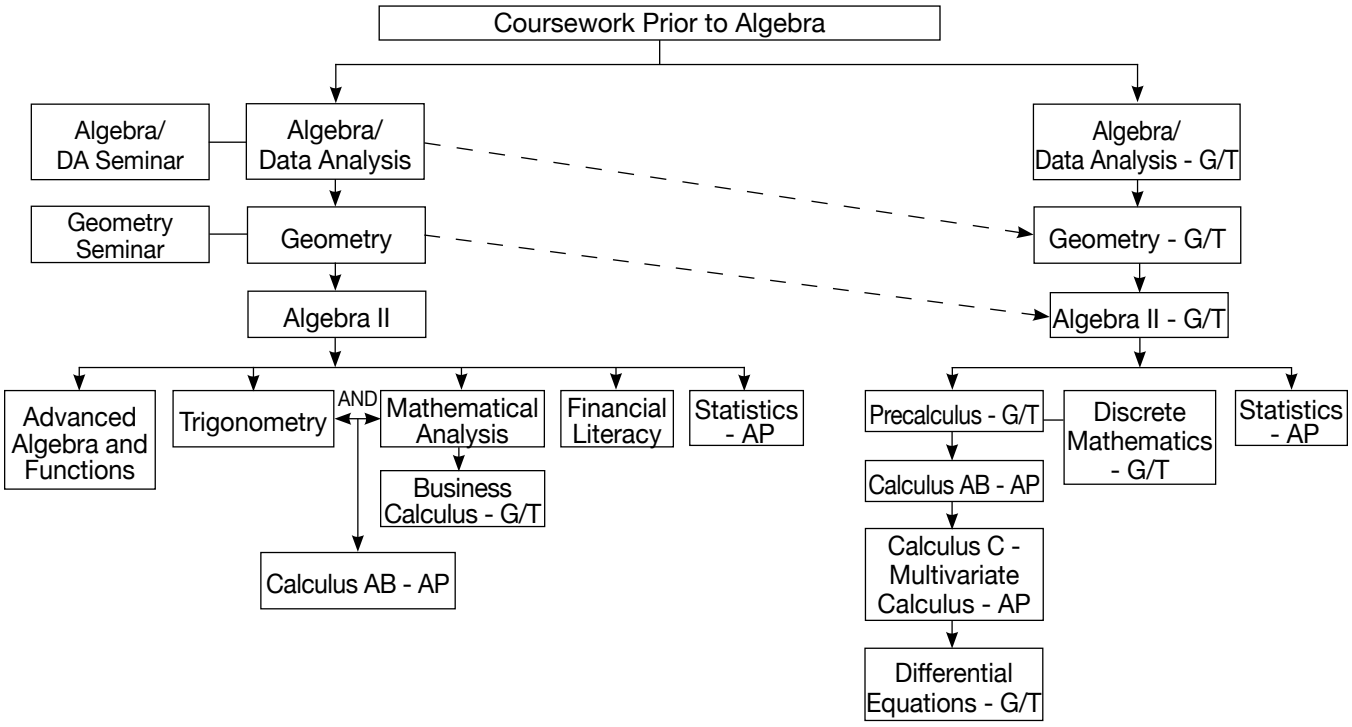
This course is designed to develop skills for living healthy lifestyles among adolescents preparing to enter college and the world of work. The course is organized around the Health Education National Standards placing a greater emphasis on personal skills. Students will discuss and apply a variety of skills to everyday situations they may face. Skills include how to determine the validity of health resources and services, analyzing internal and external influences on personal health behaviors, verbal and nonverbal skills to develop and maintain healthy personal relationships, making healthy decisions, setting personal health goals and advocating for personal, family and community health. In accordance with Maryland's education regulations, parents have the option of having their children excused from instruction in family life and human sexuality and HIV/AIDS prevention education.



Mathematics

Mathematics

The need for all students to study mathematics is becoming more evident as society becomes increasingly technology dependent. In all mathematics courses communication, connections, reasoning, problem solving, and technology are major strands. Courses in mathematics are worthwhile not only for students who plan to continue their education in college, but also for those students who plan to enter the work force immediately upon completion of high school.



Note 1: Algebra I/DA Seminar is an elective credit to be taken together with Algebra I/DA.
Note 2: Geometry Seminar is an elective credit to be taken together with Geometry.
Note 3: Differential Equations - G/T is an option for advanced mathematics students who have completed Calculus C/Multivariate Calculus AP.
Note 4: A student may enroll in the one-semester, **SAT Prep** in any sequence after completion of Geometry, but prior to the student's senior year.
Note 5: Business Calculus - G/T replaces Calculus - G/T. This name change is an effort to align with recommendations from colleges and universities.

3041★●

Algebra I/Data Analysis

Grades 9, 10, 11 **1 credit**

This course is the basic course for all college preparatory mathematics courses. Students study data analysis, probability, linear and quadratic functions, matrices, and applications of these concepts. This course prepares students for the High School Assessment in Algebra I/Data Analysis. Graphing calculators are an integral part of this course. Since it is the foundation for all subsequent mathematics courses, it is recommended that any student earning a final grade of D repeat Algebra I/Data Analysis.

3043

Algebra I/Data Analysis Seminar

Co-requisite: Concurrent enrollment in Algebra I/Data Analysis 3041

Grades 9, 10, 11 **1 elective credit**

Algebra I/Data Analysis Seminar is an elective course for students concurrently enrolled in Algebra I/Data Analysis. It provides students with additional instructional time to master essential algebraic content, applications-based problem solving, communication of mathematical ideas, and statistical analysis. This course provides the opportunity for students to improve study skills and build the mathematical foundations for future mathematics study. As an integral component of the course, technology facilitates investigation and deepens understanding.

M - Certificate of Merit ♥ - Weighted Class ● - High School Assessment Course ★ - NCAA Approved Course

Mathematics

3044 - Semester I
3045 - Semester II

Algebra I/Data Analysis High School Assessment (HSA) Mastery

Grades 10, 11, 12 **1/2 elective credit**

Prerequisite: Algebra I/Data Analysis

Algebra HSA Mastery is an elective course for students who have not passed the Algebra I/Data Analysis High School Assessment. The course fulfills the requirement for appropriate assistance before a student can re-take the Algebra I/Data Analysis HSA. Instruction is offered in small group settings with a high degree of one-on-one interaction with the teacher. Students take the Algebra I/Data Analysis High School Assessment during the administration closest to the end of the course.

3202★

Geometry

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Algebra I/Data Analysis

This course emphasizes an introduction to logic and its symbolism, inductive and deductive reasoning, geometric definitions, postulates, and theorems. The properties of plane and solid figures are studied. Other topics include an introduction to trigonometry, an introduction to coordinate geometry, and an introduction to transformational geometry.

3200

Geometry Seminar

Grades 10, 11 **1 elective credit**

Co-requisite: Concurrent enrollment in Geometry 3202

Geometry Seminar is an elective course for students concurrently enrolled in Geometry. It provides students with additional instructional time to master essential geometric content, applications-based problem solving, communication of mathematical ideas, and reasoning and proof. This course provides the opportunity for students to improve study skills and build mathematical foundations for future mathematical study. As an integral component of the course, technology facilitates investigation and deepens understanding.

322M♥★

Geometry - G/T

Grade 9 **1 credit**

Prerequisite: Algebra I/Data Analysis

This course covers transformational, Euclidean, and coordinate geometry with extensive real world application. Two and three dimensional representations and vectors will also be studied. Course requirements are rigorous, and students are expected to read extensively as a means of learning mathematics.

1955 - Semester I
1956 - Semester II
1957 - Year

SAT Preparation Course

Grades 10, 11, 12 **1/2-1 elective credit**

Prerequisite: Algebra I and Geometry

This course provides strategy-based instruction designed to improve students' test-taking skills and to increase their potential for success on both the PSAT and SAT tests. This course focuses on the teaching and application of proven mathematics and verbal strategies as recommended by the College Board. Students are expected to register for and take the SAT upon completing the course.

330M★

Algebra II

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Algebra I/Data Analysis; Geometry - G/T (with teacher recommendation) Geometry or Intro to Geometry (with teacher recommendation).

This course extends the study of topics introduced in Algebra I/Data Analysis. The emphases on linear, quadratic, exponential, logarithmic, polynomial, and rational functions are motivated by data investigations. Graphing calculators are an integral part of this course. This course may be taken concurrently with Geometry. ***Note: Credit by exam is available for this course. Contact the school's counselor for details.***

331M♥★

Algebra II – G/T

Grades 9, 10 **1 credit**

Prerequisite: Geometry - G/T

This course is for students capable of and interested in progressing through the concepts of Algebra II and enrichment topics at an accelerated rate and in more depth. Course requirements are rigorous, with an emphasis on mathematical reasoning and communication. Graphing calculators are an integral part of this course.

3055★

Advanced Algebra and Functions

Grade 12 **1 credit**

Prerequisite: Algebra II

This course is designed to further student understanding of the content initially presented in Algebra II. This course, collaboratively developed with Howard Community College, is designed to prepare students for entry into a college level, credit-bearing mathematics course. In addition to college level learning strategies, topics include linear, quadratic, radical, rational, exponential, and logarithmic functions, as well as applications of algebraic functions. Graphing calculators are an integral part of this course.

Mathematics

3035

Financial Literacy

Grades 11, 12 **1 credit**

This course is intended to provide students with the skills necessary to be financially literate consumers and citizens. The content includes units on earning income, banking, credit and loans, housing, transportation, taxes, budgeting, investments, and retirement.

348M

Mathematical Analysis

Grades 10, 11, 12 **1 credit**

Prerequisite: Algebra II or Algebra II - G/T

This course serves as a foundation for students who will be taking calculus. It focuses on graphical analysis through the study of sequence and series; polynomials, rational, radical, exponential, logarithmic, and logistic functions; continuity and limits; vectors; and absolute value, greatest integer, and piecewise functions. This course emphasizes the use of graphing calculator.

345M

Trigonometry

Grades 10, 11, 12 **1 credit**

Prerequisite: Algebra II or Algebra II - G/T

This course serves as a foundation for students who will be taking calculus. It focuses on right triangle trigonometry; circular functions; graphs of trigonometric functions inverse trigonometric functions; trigonometric identities; trigonometric equations; coordinate geometry; oblique triangles; conic sections; parametric equations; and polar coordinates.

342M★

Precalculus

Grades 11, 12 **1 credit**

Prerequisite: Functions and Trigonometry or Algebra II (with teacher recommendation)

Pre-calculus prepares students for calculus. This course includes topics in trigonometry, functions, conic sections, data analysis, vectors, sequences and series, and limits. Technology and applications to real life situations are emphasized. Graphing calculators are an integral part of this course.

343M♥★

Precalculus - G/T

Grades 9, 10, 11 **1 credit**

Prerequisite: Algebra II - G/T

This course extends the concepts of algebra and includes topics in trigonometry; statistics; parametric, polar, trigonometric, and rational functions; data analysis; and sequences and series. This course is for students capable of and interested in progressing through the concepts of pre-calculus and enrichment topics at an accelerated rate and in more depth. Course requirements are rigorous, with an emphasis on mathematical reasoning and communication. Graphing calculators are an integral part of this course.

363M♥★

Statistics – AP

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Algebra II or Algebra II - G/T

Statistics AP offers students an opportunity to learn college level, non-calculus based statistics that focuses on four major topics: data exploration, study planning, probability as it relates to distributions of data and simulations, and inferential reasoning. The course content prepares students to meet the rigor and the calculator requirements of the Advanced Placement examination. Graphing calculators are an integral part of this course. It is recommended that students in this course take the AP Exam when it is offered in May.

341M♥★

Discrete Mathematics G/T

Grade 11, 12 **1 credit**

Prerequisite: Precalculus - G/T

This course is an introduction to the study of Discrete Mathematics, a branch of contemporary mathematics that develops reasoning and problem-solving abilities, with an emphasis on proof. Topics include logic, mathematical reasoning and proof, set theory, combinatorics, probability cryptology, and graph theory. Course requirements are rigorous with an emphasis on mathematical reasoning and communication. This course is intended for students interested in mathematics and/or the computer sciences. Graphing calculators are an integral part of this course.

Mathematics

369M♥★

Business Calculus - G/T

Grade 11, 12 **1 credit**

Prerequisite: Precalculus or Precalculus - G/T

Business Calculus - G/T is an applications-based calculus course. Concepts of rate of change and differentiation of functions are applied to such topics as motion, optimization, and average cost. Concepts of accumulation of change and integration of functions are applied to such topics as present and future value and population growth. The content of this course is not intended to prepare students for the Advanced Placement exam. Graphing calculators are an integral part of this course.

365M♥★

Calculus AB – AP

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Precalculus or Precalculus - G/T

This course is fundamental to the study of all advanced mathematics, science, and engineering. The content includes the study of limits, derivatives, algebraic and transcendental functions, differentials, indefinite integrals, applications of derivatives and definite integrals, and methods of integration. The course content prepares students to meet the rigor and the calculator requirements of the Advanced Placement examination, AB Level. It is recommended that students in this course take the AP Exam when it is offered in May.

370M♥★

Calculus C/Multivariate Calculus – AP

[AP Calculus BC]

Grades 10, 11, 12 **1 credit**

Prerequisite: Calculus AB - AP

Calculus C/Multivariate Calculus continues concepts studied in Calculus AB. Topics include hyperbolic functions, sequences and series, parametric and vector-value functions, partial derivatives, improper integrals, directional directives, multiple integration, and applications. Optional topics include Green's Theorem, Stokes' Theorem, and the Divergence Theorem. This course is designed to meet the rigor and calculator requirements of the Advanced Placement examination, BC Level. It is recommended that students in this course take the AP Exam when it is offered in May.

380M♥★

Differential Equations - G/T

Grades 11, 12 **1 credit**

Prerequisite: Calculus C/Multivariate Calculus - AP

The course content includes a study of standard types of elementary differential equations, linear equations, systems of linear equations, series solutions, numerical methods, stability, elementary partial differential equations, boundary value problems, applications, and other selected topics.

3999

Laboratory Assistant–Mathematics

Grades 11, 12 **1 elective credit**

Prerequisite: Approval of the mathematics instructional team leader

Working under the direction of the teacher, students gain work experience in the paraprofessional aspects of teaching in the developmental mathematics classes. Student assistants will distribute, collect, and store materials of instruction, provide routine assistance to students, and provide occasional tutorial assistance to students under the guidance of the teacher. Only one elective credit can be earned as a student assistant; credit may be awarded only after the 20th required graduation credit has been recorded.


TYLER
•Yeah, we're a lot better now and if we keep winning games, we will make it into the playoffs.
Camera 1
TYLER
•Yeah, we're a lot better now and if we keep winning games, we will make it into the playoffs.
Camera 1
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Media

Media

The study of television production provides students with the theoretical background and hands-on experience necessary to produce television broadcasts and videos for instructional purposes. Lectures and student productions are interwoven to produce a comprehensive understanding of the television medium. Students will work individually and in small groups as they plan, design, and produce video programs that are consistent with the basic principles of instructional design and which demonstrate an understanding of the concepts of video production.

1860

Television

Grades 11, 12 **1 credit**

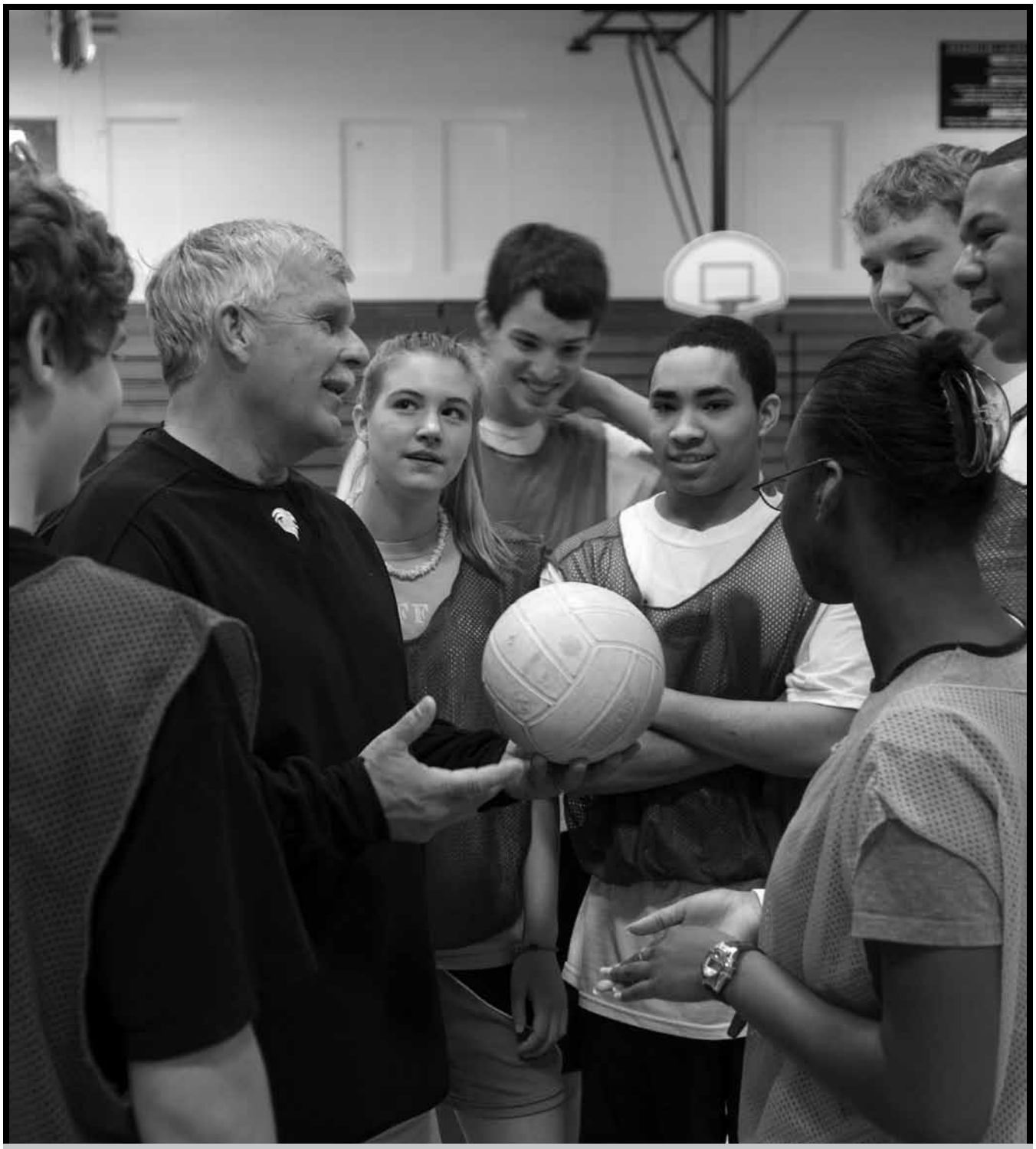
In this course, students receive instruction and experience in various technical and artistic aspects of television production. Topics covered include principles of communications, camera operation, lighting, storyboarding, script writing, graphic design, audio mixing, technical direction, and editing. Students will create and direct their own productions based on class assignments. Enrollment is limited and based on permission of the instructor.

1899

Laboratory Assistant - Media

Grades 11, 12 **1 elective credit**

Under the direction of the media specialist, students gain experience in working in a high school media center. Students will collect and distribute materials, operate equipment, assist students, process materials, perform clerical duties, and create audiovisual productions. Students must be able to work independently. Enrollment is limited and based on permission of the instructor. Only one elective credit can be earned as a student assistant; credit may only be awarded after the 20th required graduation credit has been recorded.



Physical Education

Physical Education

Physical Education helps students develop skills, knowledge, and attitudes for healthy, physically active, and productive lives. Physical Education provides students with opportunities to participate in activities that help them pursue physically active lifestyles while understanding that activity provides enjoyment, challenge, self-expression, and social interaction.

7000 - Semester I
7002 - Semester II
Lifetime Fitness 9 (required for graduation)
Grade 9 **1/2 credit**

This course is designed to help students apply health-related fitness concepts to lifelong physical education activities. Students will set short and long-term fitness goals based on physiological assessments. Individual, dual, and team activities will provide students opportunities to meet their individual fitness goals. Periodic assessments will assist students with activity selection and provide feedback for goal attainment. This course should be taken sequentially with Health Education in Grade 9.

7018
Aerobic Conditioning and Weight Training I
Grades 10, 11, 12 **1 credit**

This course introduces students to aerobic fitness concepts such as calorie burn, body composition, target heart rates, and proper nutrition. Students will participate in aerobic dance, step aerobics, rope jumping, and cardio respiratory machines. Students will experience gains in muscular endurance through circuit and pyramid weight training.

7019
Aerobic Conditioning and Weight Training II
Grades 10,11, 12 **1 credit**

Prerequisite: Aerobic Conditioning and Weight Training I

This course reinforces and expands the concepts learned in Aerobic Conditioning and Weight Training I. Student goals include developing and maintaining optimal health and fitness. Students will be required to monitor caloric intake, identify types of calories, establish a nutritional plan, and determine body composition. Students will use their knowledge of basic exercise physiology to design a circuit weight program.

7021 - Semester I
7022 - Semester II
7020 - Year
Specialty Sports
Grades 10, 11, 12 **1/2-1 credit**

This course includes instruction in three or fewer selected individual, dual, or team sports. Students from beginning levels through advanced levels will develop an in-depth knowledge of strategies, coaching techniques, officiating procedures, and progressive skill development. Individual schools will select the sport activities that meet the needs of their student populations. Students may take this course more than once.

7031 - Semester I
7032 - Semester II
7030 - Year
Sport for Life
Grades: 10, 11, 12 **1/2-1 credit**

Prerequisite: Lifetime Fitness

This course will provide students with the knowledge, confidence, and skills to enjoy participation in team, dual, individual, and lifetime activities. Students will learn through quality participation and social interaction. Instruction is provided to students at all levels of skill. Individual schools will select the activities that meet the needs of their student populations. Students may take this course more than once.

7016
Strength and Conditioning I
Grades 10, 11, 12 **1 credit**

This course is an introduction to weight training. Students receive a basic working knowledge of human anatomy, physical fitness concepts, nutrition, principles of weight training (circuit, pyramid, supersets, and power cycles), proper technique, and all safety aspects. Students will be introduced to cardio-respiratory exercise machines and learn how to reach target heart rates.

7017
Strength and Conditioning II
Grades 10, 11, 12 **1 credit**

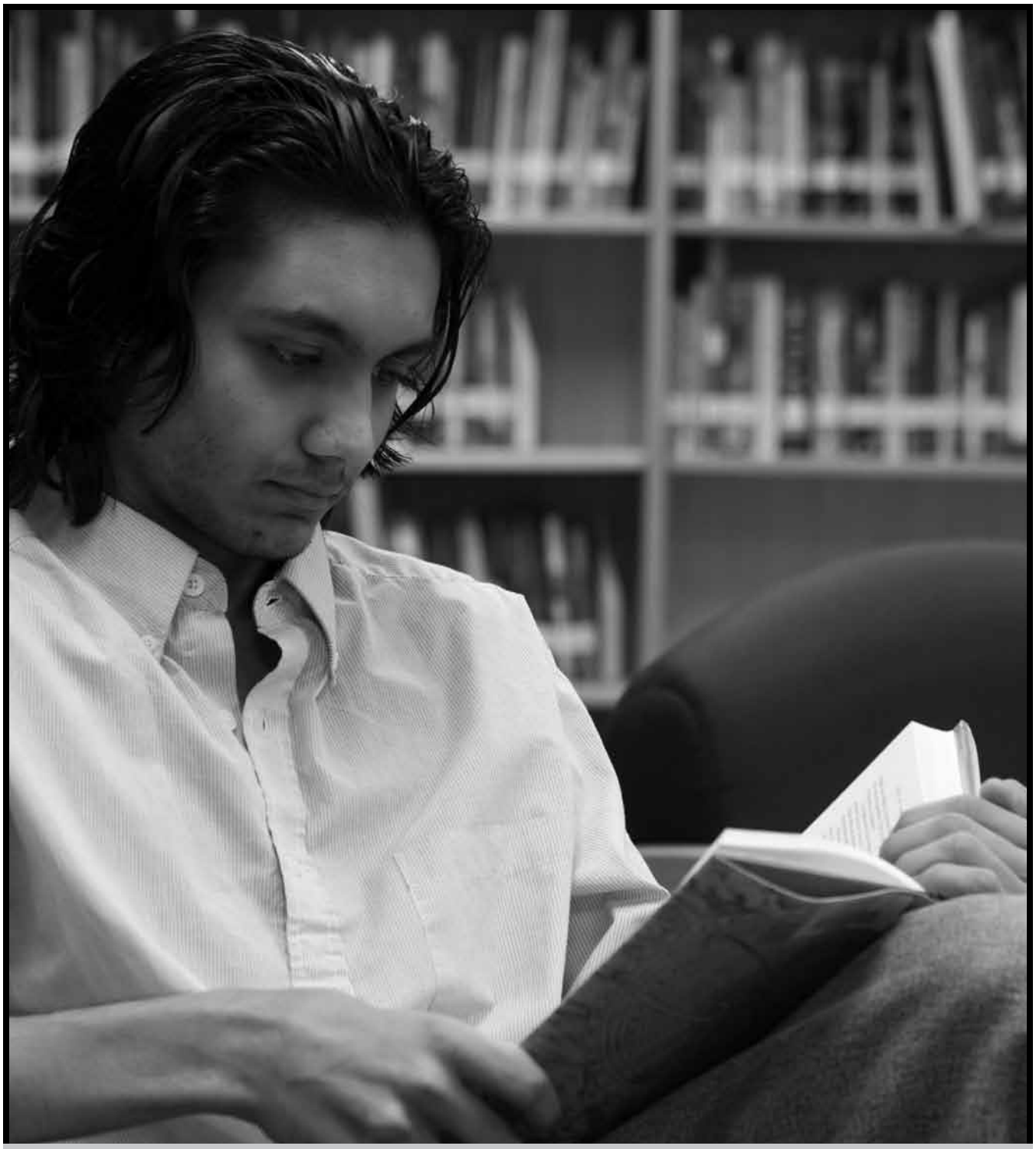
Prerequisite: Strength and Conditioning I

This course reinforces the concepts taught in Strength and Conditioning I to strengthen students' working knowledge of the weight room. Students will be able to identify all forms of weight training, muscle groups, muscle articulation, and they will determine body composition and daily caloric intake. Building on their knowledge of nutrition and cardio-respiratory fitness, students will be required to design a nutritional and cardio respiratory workout plan.

7014
Strength and Conditioning III
Grades 11, 12 **1 credit**

Prerequisite: Strength and Conditioning II or Aerobic Conditioning and Weight Training II

This course is designed for the competitive athlete. Students will be challenged in the rigorous aspects of strength and advanced conditioning. Physiology of exercise and kinesiology will be introduced, as well as fundamental conditioning and plyometric activities.



Reading

Reading

The high school reading program is supported by the collaborative efforts of English, reading, special education, and ESOL staff members to ensure the success of students as they advance toward proficiency in reading.

7306, 7330, 7331, 7332

Reading

Grades 9, 10, 11, 12 **1 credit**

This course is designed to provide reading instruction to students who need to continue or begin a specialized reading intervention that is not available in the Strategic Reading course to address their needs in decoding and comprehension. The course incorporates a multi-sensory approach and uses reading programs such as Wilson or Project Read to meet the needs of students. This course is available at all the high schools and is open to students with or without IEPs.

1005 - Grade 9
1006 - Grade 10

Strategic Reading

Grades 9, 10 **1 credit**

Students entering 9th grade who are marked Below Level in reading on their fourth quarter grade 8 report card and who are two or more years below grade level in reading would be eligible for enrollment in this program. The high school reading specialist and special educator or ESOL teacher co-teach the program. Together they provide students with explicit reading instruction in the following areas: phonemic awareness, phonics, vocabulary, fluency, and comprehension related to all content areas. Students are taught in a small group setting utilizing research-based instructional strategies. The goal of the program is to support the student in becoming a functional reader across all content areas as a basis for moving toward reading proficiency. Students may continue the program in Grade 10 with the recommendation of the reading specialist.

1011

English 9 Seminar **1 elective credit**

Prerequisite: Teacher recommendation
Co-requisite: Enrollment in English 9

English 9 Seminar is an elective course for selected students. The course provides ninth grade students with additional time and instruction in developing organizational and study skills, strategic reading when reading literary and informational text, writing and vocabulary development, and language skills in order to ensure continued success in high school. Instruction is provided in small group settings with a high degree of one-on-one interaction with the co-teachers.

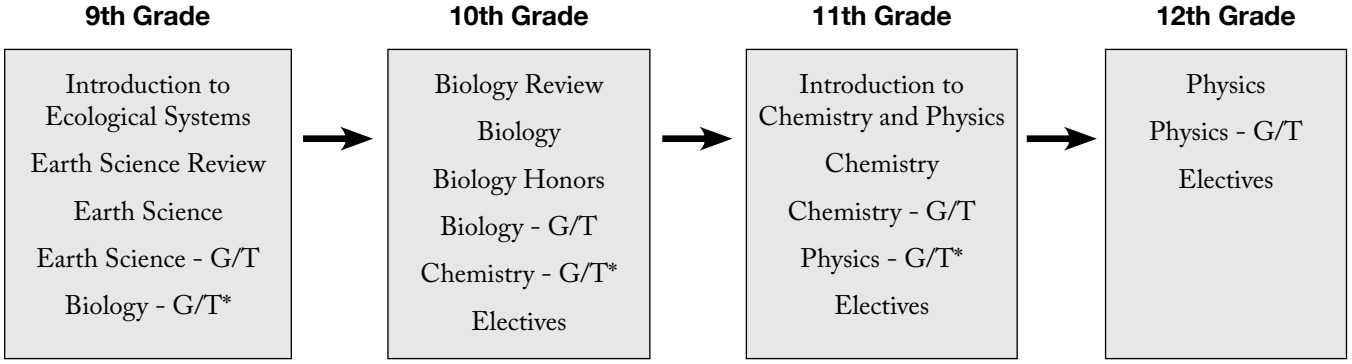
Science

Science

The science courses are designed to provide an effective student-centered approach to learning that engages students physically and mentally in an inquiry-based laboratory program. The major goal is to develop substantive science literacy in all students. The courses provide students with opportunities to expand, enhance, and modify the ways in which they view the world. Such course variety provides an environment that promotes student thinking, honesty, curiosity, and questioning. Students are encouraged to express and share ideas, solve problems, and make decisions based on evidence.

At the high school level, each student must earn a minimum of three science credits. One credit must be in Biology, the state-assessed course. Two additional credits may be earned in any combination of earth, life, physical science or environmental science. Colleges recommend courses where laboratory experiences are an integral component. Students must pass the High School Assessment in Biology (or earn a combined passing score on the Algebra/Data Analysis, Biology and English in order to graduate.

Course Options



*Note: This is a quantitatively rigorous sequence of science courses. Please carefully note the recommendations for registration.

4000★

Earth and Space Science – Review Level

Grades 9, 10 **1 credit**

This course builds on the foundations of science established in middle school and includes the study of oceanography, geology, astronomy, meteorology, and geography. Students will perform laboratory investigations that develop an understanding of the natural environment, the processes that bring about change, and the impact of earth and space science on society. The course emphasizes the mastery of basic skills, study habits, reading for comprehension and interpretation, and written and oral expression.

4001★

Earth and Space Science

Grades 9, 10 **1 credit**

This course builds on the foundations of science established in middle school and includes the study of oceanography, geology, astronomy, meteorology, and geography. Students will perform laboratory investigations that develop an understanding of the natural environment, the processes that bring about change, and the impact of earth and space science on society. Students will be expected to demonstrate the ways of thinking and acting that are inherent in the practice of science. Concurrent enrollment in or completion of Introduction to Algebra/Data Analysis is recommended.

400M♥★

Earth and Space Science – G/T

Grades 9, 10 **1 credit**

This course builds on the foundations of science established in middle school and includes the study of oceanography, geology, astronomy, meteorology, and geography. Students will perform laboratory investigations that develop an understanding of the natural environment, the processes that bring about change, and the impact of earth and space science on society. Students will be expected to conduct research related to earth and space science and to share their findings with peers or members of the scientific community. Concurrent enrollment in or completion of Algebra I/Data Analysis is recommended.

Science

4401★

Introduction to Ecological Systems

Grades 9, 10 **1 credit**

This course prepares students for Biology by building on the foundations of science established in middle school and introducing students to ecological systems, cellular processes, energy and matter cycles, and the interdependence of organisms as they apply to the Chesapeake Bay watershed. Students will perform laboratory investigations that explore these topics. The course emphasizes the mastery of basic skills, study habits, reading and vocabulary building, and writing. This course is especially designed for students who are English language learners or who have educational needs for science skill reinforcement. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

4100●★

Biology – Review Level

Grades 10, 11 **1 credit**

This course includes the study of cellular structure, function and energy transfer; genetics; evolution, diversity and classification; and ecology. Students will perform laboratory investigations that study life processes, explain how organisms adapt to meet the challenges of living in their environment, and demonstrate the relationships between structures and function and change over time. The course emphasizes the mastery of basic skills, study habits, reading for comprehension, and written and oral expression. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

4101●★

Biology

Grades 10, 11 **1 credit**

This course includes the study of cellular structure, function and energy transfer; genetics; evolution, diversity and classification; and ecology. Students will perform laboratory investigations that study life processes, explain how organisms adapt to meet the challenges of living in their environment, and demonstrate the relationships between structures and function and change over time. Students will be expected to demonstrate the ways of thinking and acting that are inherent in the practice of science. Concurrent enrollment in or completion of Geometry is recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

4102 - Semester I

4103 - Semester II

Biology High School Assessment (HSA) Mastery

Grades 10, 11, 12 **1/2 elective credit**

Prerequisite: Biology

Biology HSA Mastery is an elective course for students who have not passed the Biology High School Assessment. The course fulfills the requirement for appropriate assistance before a student can re-take the Biology HSA. Instruction is offered in small group settings with a high degree of one-on-one interaction with the teacher. Students take the Biology HSA during the administration that is closest to the end of the course.

410M♥●★

Biology – Honors

Grade 10 **1 credit**

This course includes the study of cellular structure, function and energy transfer; genetics; evolution, diversity and classification; and ecology. Students will perform laboratory investigations that study life processes, explain how organisms adapt to meet the challenges of living in their environment, and demonstrate the relationships between structures and function and change over time. Students will be expected to participate in the design of laboratory investigations and to report on biology-related issues that affect society. Concurrent enrollment in or completion of Geometry is recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

411M♥●★

Biology – G/T

Grades 9, 10 **1 credit**

This course includes the study of cellular structure, function and energy transfer; genetics; evolution, diversity and classification; and ecology. Students will perform laboratory investigations that study life processes, explain how organisms adapt to meet the challenges of living in their environment, and demonstrate the relationships between structures and function and change over time. Students will be expected to conduct research related to the biological sciences and to share their findings with peers or members of the scientific community. Concurrent enrollment in or completion of Geometry G/T is recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

Science

413M♥★

Biology - AP

Grades 11, 12 **1 credit**

This course builds on the foundations of Biology and is designed to be the equivalent of a college-level introductory biology course. The course covers three general areas: molecules and cells, genetics and evolution, and organisms and populations. Descriptive and experimental laboratory investigations will emphasize detailed observation, data recording, data interpretation and statistical analysis. It is recommended that students in this course take the AP Exam when it is offered in May. Completion of Biology and Chemistry and concurrent enrollment in or completion of Physics are recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

420M★

Chemistry

Grades 10, 11, 12 **1 credit**

This course includes the study of the periodic table, bonding, gases, solutions, organic molecules, and acids and bases. Students will perform laboratory investigations to develop an understanding of the characteristics and quantitative relationships associated with matter. The course emphasizes the use of technology to collect and analyze data as well as algebraic and other mathematics skills for problem solving. Students will be asked to explain scientific principles and their applications in society. Concurrent enrollment in or completion of Algebra II is recommended.

421M♥★

Chemistry - G/T

Grades 10, 11 **1 credit**

This course includes the study of the periodic table, bonding, gases, solutions, organic molecules, and acids and bases. Students will design and implement laboratory investigations to develop an understanding of the characteristics and quantitative relationships associated with matter. Advanced algebraic and other mathematics skills will be used for problem solving. Students will be expected to conduct research related to chemistry and to share their findings with peers or members of the scientific community. Completion of Algebra II is recommended.

423M♥★

Chemistry - AP

Grades 11, 12 **1 credit**

This course builds on the foundations of Chemistry and is designed to be the equivalent of a college-level introductory chemistry course. The course covers the structure of matter, the kinetic theory of gases, chemical equilibrium and kinetics, and thermodynamics. Descriptive and experimental laboratory investigations will emphasize detailed observation, data recording, data interpretation, statistical analysis, and higher order thinking. It is recommended that students in this course take the AP Exam when it is offered in May. Completion of Chemistry and concurrent enrollment in or completion of Physics is recommended.

412M★

Anatomy and Physiology

Grades 10, 11, 12 **1 credit**

This elective course builds on the foundations of Biology and is designed to help students understand the anatomic and physiological basis of life. The course covers cytology, histology and the human body systems. Students will engage in laboratory experiences that involve dissections, models, and technological resources to understand the interdependence of structure and function in biological systems. Students will be expected to integrate relevant information and acquired skills in the exploration of careers in the medical sciences. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

440M★

Astronomy

Grades 11, 12 **1 credit**

This elective course builds on the foundations of Earth and Space Science. It covers the historical development of astronomic models and the contributions of early astronomers; the characteristics of light; the solar system; constellations; stellar compositions, energy sources, and life cycles; and theories related to the origin of the solar system and the universe. Students use astronomic instruments to perform descriptive and experimental laboratory investigations that stress detailed observation, data recording, data interpretation and statistical analysis. Concurrent enrollment in or completion of Algebra II; Earth and Space Science is recommended.

Science

4400★

Environmental Science

Grades 11, 12 **1 credit**

This elective course builds on the foundations of Biology and Earth and Space Science. It is designed to help students understand the interdisciplinary nature of environmental science. The course covers the interdependence of organisms, populations, and natural resources; renewable and non-renewable energy resources; and man's impact on the environment. Students will participate in descriptive and field investigations, service projects, and research related to environmental law and will be given the opportunity to explore environmental careers. Completion of Biology and Earth Science are recommended prior to enrollment.

446M♥★

Environmental Science - AP

Grades 11, 12 **1 credit**

This course builds on the foundations of Biology and Earth and Space Science and is designed to be the equivalent of a college-level introductory environmental science course. The course covers interrelationships among elements of the natural world, environmental problems, and the relative risks associated with them. Descriptive laboratory field investigations will emphasize detailed observation, data recording, data interpretation, and statistical analysis. Completion of Earth Science, Biology, and Chemistry are recommended concurrent enrollment in or completion of Physics is also recommended. It is recommended that students in this course take the AP Exam when it is offered in May. Completion of Earth Science and concurrent enrollment in or completion of Physics are recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

425M★

Forensic Science

Grades 11,12 **1 credit**

This elective course builds on the foundations of Biology and Chemistry and is designed to help students understand the principles of Forensic Science. The course covers forensic methodologies, the identification of human evidence, and the importance of proper collection and handling of specimens to ensure the integrity of evidence collected at crime scenes. Students will participate in laboratory investigations where an interdisciplinary approach incorporates aspects of chemistry, biology, physics, geology, and various medical sciences. Completion of Biology and Introduction to Chemistry and Physics, or completion of Biology and concurrent enrollment in or completion of Chemistry is recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

4200★

Introduction to Chemistry and Physics

Grades 11, 12 **1 credit**

This elective course is designed to help students understand the fundamental concepts of the physical sciences. The course covers a semester of chemistry concepts: atomic structure, the periodic table, bonding, chemical reactions, and acids and bases. The course also includes one semester of physics topics: mechanics, electricity, and magnetism. Students will participate in laboratory investigations, use technology to collect and analyze data, and use algebraic and other mathematics skills to solve problems. Concurrent enrollment in or completion of Algebra I/Data Analysis is recommended.

415M★

Marine Science

Grades 11, 12 **1 credit**

This elective course builds on the foundations of Biology and Earth and Space Science and is designed to help students study oceanography and marine biology. The course covers the history and methodology of marine science, oceanography, marine biology, and how physical and human factors influence marine ecology. The students will perform laboratory investigations that will help them understand adaptations in marine life organisms, the characteristics of the oceans, and interactions and relationships within marine ecosystems. Completion of Earth Science and Biology and concurrent enrollment in or completion of Physics are recommended. ***Note: Animals may be dissected in this course. Alternatives to dissection are available.***

Science

430M★

Physics

Grades 11,12 **1 credit**

This course develops student understanding of forces, motion, and gravity; energy and momentum; electricity and magnetism; and waves. Students will perform laboratory investigations to develop an understanding of the characteristics and quantitative relationships that are associated with energy and matter. The course emphasizes experimental design, the use of technology to collect and analyze data, and the use of algebra and geometry to solve problems. Students will be asked to explain scientific principles and their applications in society. Completion of or concurrent enrollment in Algebra II is recommended.

431M♥★

Physics - G/T

Grades 10, 11, 12 **1 credit**

This course develops in-depth student understanding of forces, motion, and gravity; energy and momentum; electricity and magnetism; and waves. Students will design and perform laboratory investigations to develop an understanding of the characteristics and quantitative relationships associated with energy and matter. The course emphasizes problem solving using technology and advanced algebra. Students will be expected to explain scientific principles, their applications in society, and to participate in a project utilizing applied physics. Completion of or concurrent enrollment in Pre-calculus is recommended.

432M♥★

Physics C: Mechanics - AP

Grades 11, 12 **1 credit**

This course builds on the foundations of Physics and is designed to be the equivalent of a college-level introductory physics course. The course covers Newtonian mechanics using algebra, trigonometry, and calculus. Advanced Placement Physics concepts will be explored in laboratory investigations. It is recommended that students in this course take the AP Exam when it is offered in May. Completion of or concurrent enrollment in Calculus is recommended.

434M♥★

Physics C: Electricity and Magnetism - AP

Grades 11, 12 **1 credit**

Prerequisites: Completion of AP Physics C: Mechanics.

This course builds on the foundations of Physics and is designed to be the equivalent of a college-level introductory physics course for physics and/or engineering majors. The course covers electricity and magnetism using algebra, trigonometry, and calculus. Descriptive and experimental laboratory investigations will emphasize detailed observation, data recording, data interpretation, and statistical analysis. It is recommended that students in this course take the AP Exam when it is offered in May. Completion of or concurrent enrollment in Calculus is recommended.

4499

Laboratory Assistant - Science

Grades 11, 12 **1 elective credit**

Prerequisites: Biology; Chemistry; teacher recommendation

This elective course trains students in generalized laboratory techniques and safety procedures. The course emphasizes practicality and is designed to develop individual facility and dexterity while performing common laboratory practices. Students must be able to work independently. Only one assistant credit may be applied toward graduation. Only one elective credit can be earned as a student assistant, and credit may only be awarded after the 20th required graduation credit has been recorded.

Social Studies

Social Studies

The high school social studies program is designed to integrate knowledge and skills from history and the social sciences into a comprehensive instructional sequence. The overall goal is to prepare students for the responsibilities of citizenship. The content includes knowledge of democratic government, the dignity and self worth of the individual, and equality of opportunity. The curriculum reinforces specific social studies skills introduced at the elementary and middle school years. Among these are geographic skills, social science research skills, critical thinking skills, historiography, and both individual and group problem solving skills.

At the high school level, each student must earn a minimum of three credits in social studies (one credit in US History, one credit in American Government, and one credit in World History). In addition to required courses, students may choose electives that focus on history, global studies, the social science disciplines, and related behavioral sciences.

SPECIAL NOTE: Advanced Placement G/T Government and Politics, Advanced Placement G/T World History and Advanced Placement United States History may be substituted for the American Government, World History or United States History graduation requirement. Advanced Placement G/T Government and Politics, Advanced Placement World History and Advanced Placement United States History may be taken as electives beyond the American Government, World History or United States History graduation requirements.

Social Studies Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
U.S. History	American Government	Modern World History	Social Studies Elective(s)
U.S. History (H)	American Government (H)	Modern World History (H)	Social Studies Elective(s)
U.S. History (G/T)	American Government (AP)	World History (AP)	Social Studies Elective(s)

2208★

United States History – Review Level

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Staff recommendation

This course presents a comprehensive study of United States history from 1877 to the present. Emphasis is placed on the mastery of basic skills. These include study habits, reading for comprehension and interpretation, written and oral expression, as well as social studies skills. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies coursework. This course fulfills the United States History graduation requirement.

2209★

United States History

Grades 9, 10, 11, 12 **1 credit**

This course presents a comprehensive study of United States history from 1877 to the present. This course is designed for the general student population. This course fulfills the United States History graduation requirement.

219M♥★

United States History – Honors

Grades 9, 10, 11, 12 **1 credit**

This course presents a comprehensive study of United States history from 1877 to the present. United States History Honors is an enriched course with more challenging expectations than the standard course. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. The recommendation of a student's current social studies teacher and consistently high achievement in previous social studies coursework is desirable. This course fulfills the United States History graduation requirement.

220M♥★

United States History – G/T

Grade 9 **1 credit**

This course presents a comprehensive study of United States history from 1877 to the present. United States History GT is an enriched course with more challenging expectations than the honor course, including at least two historical research investigations or participation in National History Day. This course requires students to have a commitment to academic pursuits while demonstrating self-motivation and independency. The recommendation of a student's current social studies teacher and consistently high achievement in previous social studies coursework is desirable. This course fulfills the United States History graduation requirement.

Social Studies

213M♥★

United States History – AP

Grades 11, 12 **1 credit**

This course examines United States history through a chronological approach that emphasizes the major themes in the nation's past. Students are expected to complete at least one major written historical investigation and to participate in several seminar meetings. This course may be taken as an elective or as the United States History graduation requirement. Students electing this course may be given optional summer or pre-course readings. It is recommended that students in this course take the AP Exam when it is offered in May.

2110●★

American Government – Review Level

Grades 10, 11, 12 **1 credit**

This course presents a comprehensive study of national, state, and local government. Additional topics of study include law, economics, financial literacy, and current issues. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies coursework and staff recommendations. This course fulfills the government graduation requirement.

2111★●

American Government

Grades 10, 11, 12 **1 credit**

This course presents a comprehensive study of national, state, and local government. Additional topics of study include law, economics, financial literacy, and current issues. This course is designed for the general student population and fulfills the government graduation requirement.

211M♥★●

American Government – Honors

Grades 10, 11, 12 **1 credit**

This course presents a comprehensive study of national, state and local government. Additional topics of study include law, economics, financial literacy and current issues. American Government Honors is an enriched course with more challenging expectations than the standard course. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. The recommendation of a student's current social studies teacher and consistently high achievement in previous social studies coursework is desirable. This course fulfills the Government graduation requirement.

2013★

Modern World History

Grades 11, 12 **1 credit**

This course is designed to survey the history of the human experience from the late Middle Ages to the present. Significant events, concepts, and understandings from both the Western and non-Western traditions are explored. This course fulfills the World History graduation requirement and is designed for the general student population.

203M♥★

Modern World History – Honors

Grades 11, 12 **1 credit**

This course is designed to survey the history the human experience from the late Middle Ages to the present. Significant events, concepts, and understandings from both the Western and non-Western traditions are explored. Modern World History Honors is an enriched course with more challenging expectations than the standard course. This course requires students to have a commitment to academic pursuits, while demonstrating self-motivation and independency. The recommendation of a student's current social studies teacher and consistently high achievement in previous social studies coursework is desirable. This course fulfills the World History graduation requirement.

205M♥★

World History – AP

Grades 11, 12 **1 credit**

The purpose of this course is to develop greater understandings about the evolution of global processes and contacts in interaction with different types of human societies from approximately 1000 AD/CE to the present. This course may be taken as an elective or to meet the World History graduation requirement. Students electing this course may be given summer or pre-course readings. It is recommended that students in this course take the AP Exam when it is offered in May.

256M★- Semester I
257M★ - Semester II
255M★ - Year

African-American Studies

Grades 10, 11, 12 **1/2-1 credit**

This course is a comprehensive study of the history of the African-American experience. Topics include the origin of civilizations in Africa, the evolution of the slave system in the United States, the issues facing African Americans in the post-Civil War Era, and the progress of and problems faced by African Americans in the 20th and 21st Centuries.

Social Studies

291M★ - Semester I
292M★ - Semester II
290M★ - Year

Ancient and Medieval History

Grades 10, 11, 12 **1/2-1 credit**

This course presents a survey of the human experience from 5000 BC/BCE to 1300 AD/CE. The course will focus on the major intellectual, social, political, historical, economic, and geographic themes from both the western and non-western traditions. Major units of study include History as an Academic Discipline, the Ancient World, the Inheritors of the Roman World, and the World Beyond Europe. This course will NOT fulfill the World History graduation requirement.

242M★ - Semester I
243M★ - Semester II
241M★ - Year

Anthropology

Grades 10, 11, 12 **1/2-1 credit**

This course provides an opportunity for studying human culture. It is divided into two broad areas, physical anthropology and cultural anthropology. Physical anthropology is concerned with the evolution of human beings, where students explore archaeology, skull structure, and evolution. Cultural anthropology examines mankind's interaction with the environment and covers ancient culture, problems of cultural change, art, mythology, and language.

224M♥★

Comparative Government and Politics – AP

Grades 11, 12 **1 credit**

The instructional purpose of this course is to help students gain knowledge of the world's diverse political structures and practices, including the study of both specific countries (Great Britain, France, Russia, and China) and general concepts key to understanding relationships found in all national politics. Students electing this course may be given summer or pre-course readings. This course will NOT fulfill the American Government graduation requirement. It is recommended that students in this course take the AP Exam when it is offered in May.

230M♥★

European History – AP

Grades 11, 12 **1 credit**

The instructional purpose of this course is the study of European civilization from the Renaissance period to present day. Students are expected to complete at least one major written historical investigation and to participate in several seminar meetings. Students electing this course may be given summer or pre-course readings. This course will NOT fulfill the World History graduation requirement. It is recommended that students in this course take the AP Exam when it is offered in May.

293M★

Far Eastern Studies

Grades 11, 12 **1 credit**

This interdisciplinary course focuses on the history, literature, philosophy, art, and religions of China, Korea, Japan, Cambodia, and Vietnam. In addition to the historical perspective, the course emphasizes the current role of this part of the world. This requires that students have a strong understanding of twentieth century events or express a willingness to do outside reading to become familiar with these events. Students will read novels and works of literature to support classroom activities.

223M♥★●

Government and Politics – AP [AP United States Government and Politics]

Grades 10, 11, 12 **1 credit**

This course covers politics and government in the United States and other nations, as well as general concepts used to interpret American and international politics and analysis of specific case studies. It requires familiarity with the various institutions, beliefs, and ideas that define American and international politics. This course meets the American Government graduation requirement or the elective requirement. Students may be given optional summer or pre-course readings. It is recommended that students in this course take the AP Exam when it is offered in May.

Social Studies

206M♥★

Human Geography – AP

Grades 11, 12 **1 credit**

This course introduces students to the systematic study of the patterns and processes that have shaped human understanding of Earth's surface, and how it is used and altered. Students employ spatial concepts and landscape analysis to analyze human social organization and its environmental consequences. They also learn about the methods and tools geographers use in their science and practice. It is recommended that students in this course take the AP Exam when it is offered in May.

281M♥★

Humanities I - G/T (Social Studies)

Grade 9 **1 credit**

Prerequisite: Teacher recommendation

Co-requisite: Concurrent enrollment in 181M Humanities I G/T (English)

Humanities I integrates the study of United States History or Modern World History and Cultures with literature of the cultures and time periods. The course is structured around the United States History or World History curriculum and literature which illustrates the various time periods. Because students are concurrently enrolled in 181M, they receive 2 credits, one for English and one for Social Studies (United States History or Modern World History).

282M♥●★

Humanities II/Government and Politics - AP (Social Studies) [AP Government and Politics]

Grade 10 **1 credit**

Prerequisite: Recommendation from G/T English and Social Studies

Co-requisite: Concurrent enrollment in 182M Humanities II G/T (English)

This course integrates the study of Advanced Placement Government and Politics with literature that complements the study of government. Students receive credit for Advanced Placement Government and Politics and are recommended to take the AP Exam. Connections between the literature read in this course and the major political concepts of the time are discussed. Because students are concurrently enrolled in 182M, they receive 2 credits, one for English and one for Social Studies, (American Government). At the end of this course, students must take the High School Assessment for English 10.

283M♥★

Humanities III/World History - AP or United States History - AP (Social Studies)

[AP World History or AP United States History]

Grade 11 **1 credit**

Prerequisite: Recommendation from G/T English and Social Studies

Co-requisite: Concurrent enrollment in 183M Humanities III G/T (English)

This course integrates the study of Advanced Placement World History or Advanced Placement U.S. History with American literature. Students receive credit for Advanced Placement World History or Advanced Placement U.S. History and are recommended to take the AP Exam. Students are also prepared for and are expected to complete a historical research paper and a literary research paper. Because students are concurrently enrolled in 183M, they receive 2 credits, one for English and one for Social Studies, (United States History or World History).

284M♥★

Humanities IV - G/T (Social Studies)

Grade 12 **1 credit**

Prerequisite: Recommendation from G/T English and Social Studies

Co-requisite: Concurrent enrollment in 184M Humanities IV G/T (English)

Humanities IV integrates the study of twentieth century history and literature as well as current issues. To enhance the non-western component of the course, students are required to complete a research paper on an aspect of a developing country. Students in this class are recommended to take the Literature and Composition AP Exam. Because students are concurrently enrolled in 184M, they receive 2 credits, one for English and one elective credit for Social Studies.

295M★- Semester I

296M★- Semester II

297M★ - Year

Latin American Studies

Grades 10, 11, 12 **1/2-1 credit**

This Latin American Studies course focuses on the historic influences that have led to the evolution of modern Latin America. This course identifies the geographic regions of Latin America and traces the social, political, economic, and international factors that have contributed to the development of this racially, ethnically, politically and economically diverse part of the Western Hemisphere.

Social Studies

286M★ - Semester I
287M★ - Semester II
285M★ - Year

Law and the Citizen

Grades 10, 11, 12 **1/2–1 credit**

This course is designed to enable students to explore issues related to law, justice, and the American legal system. The following topics are included in this course: introduction to the law and the legal system, criminal law and the juvenile justice system, torts, consumer law, family law, housing law, and individual rights and liberties.

270M - Semester I
272M - Semester II

Leadership I

Grades 10, 11, 12 **1/2 credit**

This semester course emphasizes the acquisition of skills needed to become an effective leader. Topics include intrapersonal and interpersonal skills, an examination of organizational structure and operations, and judgmental skills. This course is recommended for students who wish to explore and develop leadership potential.

273M - Semester I
271M - Semester II

Leadership II/Community Service

Grades 10, 11, 12 **1/2 credit**

(Fulfills Student Service Learning Requirement)

Prerequisite: Completion of Leadership I or similar experience

This semester course is designed to give students practical opportunities to demonstrate leadership skills in various settings. Topics for study include organizational structure and operational techniques, application of interpersonal skills, and appropriate problem-solving and decision-making skills. Participation in a community service project is required of all students.

268M - Semester I
269M - Semester II
294M - Year

Leadership I/II

Grades 10, 11, 12 **1/2–1 credit**

This course combines many of the activities and course outcomes from the Leadership I and Leadership II courses (see descriptions), but is designed to accommodate students who need either a year or a semester option. This course will fulfill the Service Learning requirement as a service learning project is required.

280M♥★

Microeconomics/Macroeconomics – AP

Grades 11, 12 **1 credit**

Students receive in-depth instruction in both microeconomics and macroeconomics. Major areas of study include economic concepts, product and factor markets, the role of government, management of economic performance, national income and price determination, and international economics and growth. Students electing this course may be given optional summer or pre-course readings provided by the instructor. It is recommended that students in this course take the AP Exam when it is offered in May.

261M★ - Semester I
262M★ - Semester II
260M★ - Year

Native American Cultures

Grades 10, 11, 12 **1/2-1 credit**

This course examines cultural traits and societal forms of specific North American indigenous peoples prior to the settlement of Europeans. Students explore the changes in the lifestyles of indigenous peoples as a result of the historical clash of cultures from the 15th century to the present.

240M★

Political Science

Grades 10, 11, 12 **1 credit**

This course provides for the study of politics and various political systems throughout the world, with special emphasis given to the United States political experience. This course will NOT fulfill the American Government graduation requirement.

Social Studies

246M★ - Semester I
247M★ - Semester II
245M★ - Year

Psychology

Grades 11, 12 **1/2-1 credit**

This course involves the study of individual human behavior. Topics include learning, intelligence, personality, patterns of behavior, growth and development, interpersonal relationships, and social issues.

248M♥★

Psychology – AP

Grades 11, 12 **1 credit**

The instructional purpose of this course is to introduce students to the systematic and scientific study of the behavior and mental processes of human beings and other animals. Students explore the psychological facts, principles, and phenomena associated with each of the major subfields within psychology. Students electing this course may be given optional summer or pre-course readings. It is recommended that students in this course take the AP Exam when it is offered in May.

251M★ - Semester I
252M★ - Semester II
250M★- Year

Sociology

Grades 11, 12 **1/2-1 credit**

This course examines human behavior in society and institutions, as well as the roles and relationships of individuals and groups. Topics of study include culture, societal norms, roles, socialization, social stratifications, group dynamics, and pertinent social problems.

277M★ - Semester I
278M★ - Semester II
276M★ - Year

Studies In Nonviolence

Grades 11, 12 **1/2–1 credit**

This course analyzes the use of nonviolent methods to solve conflicts throughout history and around the world. Students examine historical case studies, such as the Solidarity Movement in Eastern Europe, Satyagraha in South Africa and India, and the Civil Rights Movement in the United States. Students compare the use of force with the use of nonviolence to solve problems on a local and global scale and examine the role of the individual in solving conflicts.

265M★ - Semester I
266M★ - Semester II
267M★ - Year

World Religions

Grades 11, 12 **1/2-1 credit**

This course investigates the various forms and values of several ancient and contemporary religious groups. Students are asked to compare major and minor religious movements including Hinduism, Buddhism, Confucianism, Taoism, Judaism, Christianity and Islam.

Special Education

Special Education

Special education services in each Howard County high school are designed to provide instruction, related services, and support for students who have been determined to be eligible through the Individualized Education Program (IEP) process. An IEP is developed for each student with a disability by the IEP team and reflects special education and related services in accordance with least restrictive environment guidelines. All students must complete graduation requirements as described in Section A of this catalog.

Academic/Life Skills

7320 Academic Life Skills English **1 credit**
7321 Academic Life Skills Social Studies **1 credit**
7322 Academic Life Skills Math **1 credit**
7323 Academic Life Skills Science **1 credit**
7324 Academic Life Skills Tutorial **1 credit**
7325 Academic Life Skills Enclave 1.0 **1 credit**
7352 Academic Life Skills Enclave 2.0 **2 credits**
7353 Academic Life Skills Enclave 3.0 **3 credits**
7354 Academic Life Skills Enclave 4.0 **4 credits**
7355 Academic Life Skills Work Experience **1 credit**

These courses are options for students who are identified as being in need of special education services, are working towards a Maryland Certificate of Program Completion, and the IEP team has determined this to be the least restrictive environment for the student.

7305 **1 credit**

Braille

This tutorial aligns with the IEP of a student who is blind or visually impaired. Instruction is provided in the reading and writing of the literary Braille code and the Nemeth code for math and science. Instruction in the following specialized Braille codes is provided as appropriate: foreign language, music, computer, and chemical codes. Additional areas of instruction include tactile graphics, textbook format, and the use of specialized technology to access and produce written work.

Resource Classes

Students who are eligible may receive instructional services in the general education classroom or a resource classroom according to the student's Individualized Education Program (IEP) and least restrictive environment determinations. Instruction provided in a resource class follows the Essential Curriculum that is offered in a general education classroom setting.

Students with IEPs in regional programs may receive their course credit in a resource class. All other students with IEPs will receive elective credit for resource classes. For example, a student will enroll in the English 9 course in the general education setting for an English credit. In addition, the student may also sign up for a Resource English class for additional support and would receive an elective credit.

Resource English

7300★ Resource English 9 **1 credit**
7310★ Resource English 10 **1 credit**
7326★ Resource English 11 **1 credit**
7327★ Resource English 12 **1 credit**

Resource Math

7312 Resource Math **1 elective credit**

Resource Science

7343★ Resource Earth and Space Science **1 credit**
7344★ Resource Biology **1 credit**
7345★ Resource Environmental Science **1 credit**
7346★ Resource Intro. to Chemistry & Physics **1 credit**

Resource Social Studies

7340★ Resource World History **1 credit**
7341★ Resource American Government **1 credit**
7342★ Resource U.S. History **1 credit**

Special Education

7335

Peer Assistant/Tutor

Special Education: Grades 11,12 1 elective credit

(Fulfills Student Service Learning Requirement)

Prerequisites: Successful completion of all courses taken previous year; permission of Special Education Instructional Team Leader

This course is designed to provide experience for general education students in working with students with disabilities. Only one elective credit can be earned as a peer assistant. Credit may only be awarded after the 20th required graduation credit has been recorded.

Tutorial

7328 - Semester I 1/2 credit
7329 - Semester II 1/2 credit
7314 - Year 1 credit

Prerequisite: Students must have an IEP, a 504, and/or an academic action plan.

This course is designed to help students improve their organizational, test-taking and self-advocacy skills. Students who receive special education services will have the opportunity to work on mastering their IEP goals and objectives. Instruction is offered in small group settings with a high degree of interaction by the instructor.

Work Study

7313 - Semester I 1/2 credit
7319 - Semester II 1/2 credit
7315 1 credit
7316 2 credits
7317 3 credits
7318 4 credits
Grades 11, 12 1/2-4 credits

The Work Study program is a supervised, hands-on work experience program in a community-based setting. Students are introduced to a variety of half-day training sites beginning in the third year or later of high school. Students engage in work activities aligned with their employment and independent living IEP goals related to transition. Work Study may be taken for elective credit. It may not be used in place of the Career Research and Development completer.

World Languages

World Languages

The study of world languages uses a proficiency-based approach, which focuses on what students can do with the language and to what degree they are able to function in the language. World language study enhances the integration of communication skills with higher order thinking skills and creativity. The study of culture is an integral part of the curriculum; it sets the stage for language use and heightens students' sensitivity to and appreciation for diverse groups of people, environments, and customs. Students also develop broader knowledge of and facility in their native languages and tend to increase their verbal performance. The study of world languages contributes to positive self-esteem, builds on individual strengths, and accommodates a variety of learning styles. Additional world language courses taken outside of HCPSS may be used for credit toward graduation requirements if course content has been approved by the Coordinator of World Language and prior approval to take the course has been given by the principal.

World Language Course Sequence

Program	7th Grade	8th Grade	9th Grade	10th Grade	11th Grade	12th Grade
7th Grade	Level I-A	Level I-B	Level II	Level III	Level IV	Level V
9th Grade			Level I	Level II	Level III	Level IV
10th Grade				Level I	Level II	Level III
11th Grade					Level I	Level II
12th Grade						Level I

Alternative preparation and experiences in the languages may substitute for grade level designations and prerequisite courses.

American Sign Language

5350★

American Sign Language I

Grades 9, 10, 11, 12 **1 credit**

This class is designed to introduce students to American Sign Language. Students will begin developing skills needed to communicate with deaf persons – such as fingerspelling, signed words, mime, and gestures. Students will have the opportunity to use the skills learned in class to communicate with deaf persons. ***Note: Course may not meet all colleges' entrance requirements.***

5360★

American Sign Language II

Grades 10, 11, 12 **1 credit**

Prerequisite: American Sign Language I

Students will continue to build skills learned in Sign Language I. New vocabulary will be added as students learn to increase their speed of expressive and receptive signing. Films and fieldtrips will provide opportunities for students to learn about deaf people and their culture. ***Note: Course may not meet all colleges' entrance requirements.***

Chinese

5560★

Chinese I

Grades 9, 10, 11, 12 **1 credit**

Chinese I introduces students to the Chinese language and culture with an overview of Chinese history, people, current affairs, politics, economics, science, technology, arts, and literature. Students explore pronunciation and common terms and may expect experiences in all four of the traditional language acquisition skills with an emphasis on listening and speaking. Chinese I highlights the evolution and Romanization of Chinese and a study of tone, an extremely important aspect of the Chinese language.

5561★♥

Chinese I – Honors

Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as Chinese I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in more depth. Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

World Languages

5602★

Chinese II

Grades 10, 11, 12 **1 credit**

Prerequisite: Chinese I

This course continues the study of the Chinese language and culture, including Chinese history, people, current affairs, politics, economics, science, technology, arts, and literature. Students may expect language-learning experiences in all four of the traditional language acquisition skills. Study of the evolution and the Romanization of the Chinese language is also included. Tone, an extremely important aspect of the Chinese language, is an important aspect of study in this course.

5603★♥

Chinese II – Honors

Grades 10, 11, 12 **1 credit**

Prerequisite: Chinese I / Chinese I - Honors

Though the content is the same as Chinese II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in more depth. Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

555M

Chinese III

Grades 11, 12 **1 credit**

Prerequisite: Chinese II

Chinese III reinforces basic communication skills and expands to include more sophisticated reading, writing and grammar. Prevailing vocabulary is introduced for conversational purposes. Reading skills are emphasized at this level, and grammatical structures are studied in more detail. Students continue to study Chinese culture through readings, lectures, discussions in the language and the use of media and technology.

554M♥

Chinese III – Honors

Grades 11, 12 **1 credit**

Prerequisite: Chinese II / Chinese II - Honors

Though the content is the same as Chinese III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in more depth. Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

556M

Chinese IV

Grades 12 **1 credit**

Prerequisite: Chinese III

Chinese IV continues to refine and expand communication skills with emphasis on oral, reading and writing proficiency. The study of culture emphasizes the history, literature and fine arts of the Chinese-speaking world. At the end of this course, students will be able to communicate in Chinese on basic social topics and current events.

559M♥

Chinese IV - AP Chinese Language and Culture

Grades 12 **1 credit**

Prerequisite: Chinese III / Chinese III - Honors

The Chinese IV class in Advanced Placement Chinese Language and Culture prepares students to demonstrate their level of Mandarin Chinese proficiency across the three communicative modes (Interpersonal, Interpretive, and Presentational) and the five goal areas (Communication, Cultures, Connections, Comparisons, and Communities). Its aim is to provide students with ongoing and varied opportunities to further develop their proficiencies across the full range of language skills within a cultural frame of reference reflective of the richness of Chinese language and culture. It is recommended that students in this course take the AP Exam when it is offered in May.

French

These course offerings provide a possible five-year sequence of the study of French. The major goal of the courses is communication in three modes-interpersonal, interpretive, and presentational-that reinforce the skills of listening, reading, speaking, and writing in French. In addition, students gain knowledge and understanding of other cultures, make connections with other disciplines, develop insight into the nature of language and culture, and explore opportunities to use the language in the classroom setting and beyond.

5000★

French I

Grades 9, 10, 11, 12 **1 credit**

This course is an introduction to the French language and francophone culture. In French I, students communicate on a variety of topics, such as exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, locating places around town, and ordering foods in a café. Students explore the francophone and examine the differences and similarities between francophone and American cultures.

World Languages

5005♥★
French I – Honors
Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as French I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth. Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

5010★
French II
Grades 9, 10, 11, 12 **1 credit**

Prerequisite: French I

This course emphasizes what students are able to do in the language. Students communicate regarding a variety of topics in the past, present and future. Students continue to study francophone culture through reading, lectures, discussions, and the use of media and technology.

5020♥★
French II – Honors
Grades 9, 10, 11, 12 **1 credit**

Prerequisite: French I / French I - Honors

Though the content is the same as French II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth. Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

503M★
French III
Grades 10, 11, 12 **1 credit**

Prerequisite: French II

French III reinforces basic communication skills and expands to include more sophisticated writing and spontaneous speaking. Events are discussed in the present, past, and future tenses. Students continue to study the culture of the French speaking world through readings, lectures, discussions and the use of varied media and technology.

504M♥★
French III – Honors
Grades 10, 11, 12 **1 credit**

Prerequisite: French II /French II - Honors

Though the content is the same as French III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth. Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

505M★
French IV
Grades 11, 12 **1 credit**

Prerequisite: French III

French IV continues to refine and expand communication skills. There is review of key grammar structures, expanding on previously learned items to more advanced structures. Study of the francophone world emphasizes the history of France and people who have made significant contributions to French culture.

506M♥★
French IV – Honors
Grades 11, 12 **1 credit**

Prerequisite: French III /French III - Honors

Though the content is the same as French IV, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth. . Students learn additional applications of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

507M♥★
French V – AP French Language and Culture
Grade 12 **1 credit**

Prerequisite: French IV /French IV - Honors

The AP French Language and Culture course provides students with opportunities to demonstrate their proficiency at the advanced level in each of the three modes of communication (Interpersonal, Interpretive, and Presentational). The course strives to promote both fluency and accuracy in language use. The course engages students in an exploration of culture in both contemporary and historical contexts and is structured around six themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. These themes provide the context for developing advanced proficiency and refining communication skills in the language. It is recommended that students in this course take the AP Exam when it is offered in May.

World Languages

509M♥★

Intermediate Special Topics in French – Honors

Grades 11, 12 **1 credit**

Prerequisite: French III

Intermediate Special Topics in French is designed for the continuing study of French though a content-based approach to world language study. Content-based instruction in French integrates the performance objectives and language structures with other curricular areas, using French as the vehicle for instruction.

510M♥★

Advanced Special Topics in French – Honors

Grades 11, 12 **1 credit**

Prerequisite: French IV, Intermediate Special Topics in French

Advanced Special Topics in French is designed for the continuing study of French though a content-based approach to world language study. Content-based instruction in French integrates the performance objectives and language structures with other curricular areas, using French as the vehicle for instruction.

German

These course offerings provide a possible four-year sequence of the study of German. The major goal of the courses is communication in three modes—interpersonal, interpretive, and presentational—which reinforce the skills of listening, reading, speaking, and writing in German. In addition, students gain knowledge and understanding of other cultures, make connections with other disciplines, develop insight into the nature of language and culture, and explore opportunities to use the language in the classroom setting and beyond.

5100★

German I

Grades 9, 10, 11, 12 **1 credit**

This course introduces students to the language and cultures of the German-speaking world. In German I, students communicate about various topics such as exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, and identifying rooms in a house. Students explore the German- speaking world, focusing on the geography of Germany and neighboring countries. They also compare relevant aspects of the culture of the United States and Germany.

5101♥★

German I – Honors

Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as German I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

5110★

German II

Grades 10, 11, 12 **1 credit**

Prerequisite: German I

This course emphasizes what students are able to do in the language. Students communicate on a variety of topics in the past, present and future. Students continue to study the German-speaking world through readings, lectures, discussions, and the use of media and technology.

World Languages

5111♥★

German II – Honors

Grades 10, 11, 12 **1 credit**

Prerequisite: German I / German I - Honors

Though the content is the same as German II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

512M★

German III

Grades 11, 12 **1 credit**

Prerequisite: German II

German III reinforces communication skills and expands to include more sophisticated writing and spontaneous speaking. Events are discussed in the past, present and future tenses. Students continue to study the culture of the German-speaking world through readings, lectures, discussions, and the use of varied media and technology.

515M♥★

German III – Honors

Grades 11, 12 **1 credit**

Prerequisite: German II /German II - Honors

Though the content is the same as German III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

513M★

German IV

Grade 12 **1 credit**

Prerequisite: German III

German IV continues to refine and expand communication skills. Topics include reflecting on teenage life, expressing food preferences, identifying parts of the car. There is review of key grammar structures, expanding on previously learned items to more advanced structures. The study of culture emphasizes the history, literature, and fine arts of the German-speaking world.

514M♥★

Advanced Special Topics in German – Honors

Grade 12 **1 credit**

Prerequisite: German IV

Advanced Special Topics in German is designed for the continuing study of German through a content-based approach to world language study. Content-based instruction in German integrates the performance objectives and language structures with other curricular areas, using German as the vehicle for instruction.

517M♥★

German IV – AP German Language and Culture

Grade 12 **1 credit**

Prerequisite: German III /German III - Honors

The AP German Language and Culture course provides students with opportunities to demonstrate their proficiency at the advanced level in each of the three modes of communication (Interpersonal, Interpretive, and Presentational). The course strives to promote both fluency and accuracy in language use. The course engages students in an exploration of culture in both contemporary and historical contexts and is structured around six themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. These themes provide the context for developing advanced proficiency and refining communication skills in the language. It is recommended that students in this course take the AP Exam when it is offered in May.

Italian

These course offerings provide a possible four-year sequence of the study of Italian. The major goal of the courses is communication in three modes—interpersonal, interpretive, and presentational—which reinforce the skills of listening, reading, speaking, and writing in Italian. In addition, students gain knowledge and understanding of other cultures, make connections with other disciplines, develop insight into the nature of language and culture, and explore opportunities to use the language in the classroom setting and beyond.

5200★

Italian I

Grades 9, 10, 11, 12 **1 credit**

This course is an introduction to the Italian language and culture. In Italian I, students communicate on a variety of topics such as exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, locating places around town, and ordering foods in a restaurant. Students explore the Italian-speaking world with a focus on the geography of Italy and examine the differences and similarities between Italian and American cultures.

World Languages

5201♥★

Italian I – Honors

Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as Italian I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

5210★

Italian II

Grades 10, 11, 12 **1 credit**

Prerequisite: Italian I

In this course, there is still an emphasis on what students are able to do in the language. Students communicate on a variety of topics in the past, present and future. Students continue to study the Italian culture through readings, lectures, discussions, and the use of varied media and technology.

5211♥★

Italian II – Honors

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Italian I / Italian I - Honors

Though the content is the same as Italian II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

522M★

Italian III

Grades 11, 12 **1 credit**

Prerequisite: Italian II

Italian III reinforces basic communication skills and expands to include more sophisticated writing and spontaneous speaking. Events are discussed in the past, present and future tenses. Students continue to study the Italian culture through readings, lectures, discussions, and the use of media and technology.

524M♥★

Italian III – Honors

Grades 11, 12 **1 credit**

Prerequisite: Italian II / Italian II - Honors

Though the content is the same as Italian III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

523M★

Italian IV

Grade 12 **1 credit**

Prerequisite: Italian III

In Italian IV, communication skills continue to be refined and expanded. There is review of key grammar structures, expanding on previously learned items to more advanced structures. The study of culture emphasizes the history, literature, and fine arts of the Italian-speaking world.

525M♥★

Italian IV - AP Italian Language and Culture

Grade 12 **1 credit**

Prerequisite: Italian III / Italian III - Honors

The AP Italian Language and Culture course provides students with opportunities to demonstrate their proficiency at the advanced level in each of the three modes of communication (Interpersonal, Interpretive, and Presentational). The course strives to promote both fluency and accuracy in language use. The course engages students in an exploration of culture in both contemporary and historical contexts and is structured around six themes: Global Challenges, Science and Technology, Contemporary Life, Personal and Public Identities, Families and Communities, and Beauty and Aesthetics. These themes provide the context for developing advanced proficiency and refining communication skills in the language in preparation for the Advanced Placement examination. It is recommended that students in this course take the AP Exam when it is offered in May.

World Languages

Latin

These course offerings provide a possible four-year sequence of the study of Latin. The major goal of the courses is communication in three modes—interpersonal, interpretive, and presentational—which reinforce the skills of listening, reading, speaking, writing, and translation in Latin. In addition, students gain knowledge and understanding of other cultures, make connections with other disciplines, develop insight into the nature of language and culture, and explore opportunities to use the language in the classroom setting and beyond.

5250★
Latin I
Grades 9, 10, 11, 12 **1 credit**

Latin I covers the fundamentals of Latin grammar and develops a basic working vocabulary. The aims include the ability to translate Latin on a first-year level, recognition and understanding of English derivatives, an understanding of English and Latin grammar, an appreciation of the development and structure of language, and an appreciation of Roman culture.

5251♥★
Latin I – Honors
Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as Latin I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

5260★
Latin II
Grades 10, 11, 12 **1 credit**

Prerequisite: Latin I

Latin II covers more complicated grammatical structures. It seeks to develop increased facility in translation and knowledge of Roman history.

5261♥★
Latin II – Honors
Grades 10, 11, 12 **1 credit**

Prerequisite: Latin I / Latin I - Honors

Though the content is the same as Latin II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

527M★
Latin III
Grades 11, 12 **1 credit**

Prerequisite: Latin II

Latin III will build on the instruction provided in Latin II. Students will receive a more comprehensive study of Roman mythology, Latin poetry, and Roman history and culture with special emphasis on Cicero.

526M♥★
Latin III – Honors
Grades 11, 12 **1 credit**

Prerequisite: Latin II / Latin II - Honors

Though the content is the same as Latin III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

528M★
Latin IV
Grade 12 **1 credit**

Prerequisite: Latin III

In alternate years, Latin IV will build on the instruction provided in Latin III. Students will receive a more comprehensive study of Roman mythology, Latin poetry, and Roman history and culture with special emphasis on Cicero.

530M♥★
Latin IV – AP [AP Latin: Virgil]
Grade 12 **1 credit**

Prerequisite: Latin III / Latin III - Honors

Latin IV - AP develops students' ability to read, translate, analyze, and interpret Latin text. It follows one of two syllabi, determined by the instructor: Virgil's Aeneid or Latin Literature (Cicero, Horace, or Ovid). Students practice translating passages, explicating contextual words or phrases, identifying an excerpt's context and significance, discussing and comparing themes among passages, identifying features of a poem's or argument's construction, determining meter, and sight reading. It is recommended that students in this course take the AP Exam when it is offered in May.

529M♥★

Advanced Special Topics in Latin – Honors

Grade 12 **1 credit**

Prerequisite: Latin IV

Advanced Special Topics in Latin is designed for the continuing study of Latin though a content-based approach. Students practice translating passages, explicating contextual words or phrases, identifying an excerpt's context and significance, discussing and comparing themes among passages, identifying features of a particular text, and exploring evidence of Latin's continued influence on modern society.

Russian

These course offerings provide a possible four-year sequence of the study of Russian. The major goal of the courses is communication in three modes—interpersonal, interpretive, and presentational—that reinforce the skills of listening, reading, speaking, and writing in Russian. In addition, students gain knowledge and understanding of other cultures, make connections with other disciplines, develop insight into the nature of language and culture, and explore opportunities to use the language in the classroom setting and beyond.

5300★

Russian I

Grades 9, 10, 11, 12 **1 credit**

This course is an introduction to the Russian language and culture. In Russian I, students communicate on a variety of topics including exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, locating places around town, and ordering foods in a restaurant. Students explore the Russian-speaking world with a focus on geography and examine the differences and similarities between Russian and American cultures.

5301♥★

Russian I – Honors

Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as Russian I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

5310★

Russian II

Grades 10, 11, 12 **1 credit**

Prerequisite: Russian I

In this course, there is still an emphasis on what students are able to do in the language. Students communicate on a variety of topics in the past, present and future. Students continue to study the Russian culture through readings, lectures, discussions, and the use of varied media and technology.

5311♥★

Russian II – Honors

Grades 10, 11, 12 **1 credit**

Prerequisite: Russian I / Russian I - Honors

Though the content is the same as Russian II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

532M★

Russian III

Grades 11, 12 **1 credit**

Prerequisite: Russian II

Russian III reinforces basic communication skills and expands to include more sophisticated writing and spontaneous speaking. Events are discussed in the present, past, and future tenses. Students continue to study the cultures of the Russian-speaking world through readings, lectures, discussions, and the use of media and technology.

534M♥★

Russian III – Honors

Grades 11, 12 **1 credit**

Prerequisite: Russian II / Russian II - Honors

Though the content is the same as Russian III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

533M★

Russian IV

Grade 12 **1 credit**

Prerequisite: Russian III

Russian IV continues to refine and expand communication skills. There is review of key grammar structures, expanding on previously learned items to more advanced structures. The study of culture emphasizes the history, literature, and fine arts of the Russian-speaking world.

World Languages

Spanish

These course offerings provide a possible five-year sequence of the study of Spanish. The major goal of the courses is communication in three modes—interpersonal, interpretive, and presentational—which reinforce the skills of listening, reading, speaking, and writing in Spanish. In addition, students gain knowledge and understanding of other cultures, make connections with other disciplines, develop insight into the nature of language and culture, and explore opportunities to use the language in the classroom setting and beyond.

5400★

Spanish I

Grades 9, 10, 11, 12 **1 credit**

This course introduces students to the language and cultures of the Spanish-speaking world. In Spanish I, students communicate about various topics, such as exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather and seasons, locating places around town, and shopping for clothing. Students explore the Spanish-speaking world, focusing on the geography of Spain and Latin America. They compare relevant aspects of the cultures of the Americas and Spain.

5401♥★

Spanish I – Honors

Grades 9, 10, 11, 12 **1 credit**

Though the content is the same as Spanish I, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

5410★

Spanish II

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Spanish I

This course emphasizes what students are able to do in the language. Students communicate about a variety of topics in past, present and future. Students study the culture of the Spanish-speaking world through readings, lectures, discussions, and the use of media and technology.

5420♥★

Spanish II – Honors

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Spanish I / Spanish I - Honors

Though the content is the same as Spanish II, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

543M★

Spanish III

Grades 10, 11, 12 **1 credit**

Prerequisite: Spanish II

Spanish III reinforces communication skills and expands to include more sophisticated writing and spontaneous speaking. Events are discussed in the present, past, and future tenses. Students continue to study the culture of the Spanish-speaking world through readings, lectures, discussions, and the use of media and technology.

544M♥★

Spanish III – Honors

Grades 10, 11, 12 **1 credit**

Prerequisite: Spanish II / Spanish II - Honors

Though the content is the same as Spanish III, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

545M★

Spanish IV

Grades 11, 12 **1 credit**

Prerequisite: Spanish III

Spanish IV continues to refine and expand communication skills. There is review of key grammar structures, expanding on previously learned items to more advanced structures. The study of culture emphasizes the mix of cultural influences on a variety of aspects of the Spanish-speaking world, including history, literature, and the fine arts.

World Languages

546M♥★

Spanish IV – Honors

Grades 11, 12 **1 credit**

Prerequisite: Spanish III / Spanish III - Honors

Though the content is the same as Spanish IV, this course is designed for the student capable of and interested in progressing through the material at an accelerated rate and exploring it in greater depth with more application of vocabulary and grammar concepts within a cultural context. Course requirements are more rigorous.

547M♥★

Spanish V – AP Spanish Language

Grade 12 **1 credit**

Prerequisite: Spanish IV / Spanish IV - Honors

The Spanish V class in Advanced Placement Spanish Language is a rigorous course which develops the individual student's interest and competencies in Spanish literature, history, politics, civilization, and culture. These content areas provide the context for developing advanced proficiency and refining communication skills in the language. It is recommended that students in this course take the AP Exam when it is offered in May.

548M♥★

Spanish V – AP Spanish Literature

Grade 12 **1 credit**

Prerequisite: Spanish IV / Spanish IV - Honors

The Spanish V class in Advanced Placement Spanish Literature familiarizes students with literary selections and develops their ability to read, write, and speak critically and intelligently about literature. The course provides students the opportunity to identify and interpret the relationships among the various elements of the composition of a literary text, where they acquire a fuller understanding and appreciation of the art and meaning of a literary work. It is recommended that students in this course take the AP Exam when it is offered in May.

549M♥★

Intermediate Special Topics in Spanish – Honors

Grades 11, 12 **1 credit**

Prerequisite: Spanish III

Intermediate Special Topics in Spanish is designed for the continuing study of Spanish though a content-based approach to world language study. Content-based instruction in Spanish integrates the performance objectives and language structures with other curricular areas, using Spanish as the vehicle for instruction.

550M♥★

Advanced Special Topics in Spanish – Honors

Grades 11, 12 **1 credit**

Prerequisite: Spanish IV, Intermediate Special Topics in Spanish

Advanced Special Topics in Spanish is designed for the continuing study of Spanish though a content-based approach to world language study. Content-based instruction in Spanish integrates the performance objectives and language structures with other curricular areas, using Spanish as the vehicle for instruction.

552M♥

Intermediate Special Topics for Native Speakers of Spanish – Honors

Grades 9, 10, 11, 12 **1 credit**

Intermediate Special Topics for Native Speakers of Spanish is designed to approach the study of Spanish through a content-based curriculum. Content-based instruction in Spanish integrates the four skills of listening, reading, writing, and speaking Spanish with a variety of curricular areas, such as history, science, literature, and the arts.

World Languages

553M♥★

Advanced Special Topics for Native Speakers of Spanish – Honors

Grades 9, 10, 11, 12 **1 credit**

Prerequisite: Intermediate Special Topics for Native Speakers of Spanish

Advanced Special Topics for Native Speakers of Spanish is designed to approach the study of Spanish through a content-based curriculum. Content-based instruction in Spanish integrates the four skills of listening, reading, writing, and speaking Spanish with a variety of curricular areas, such as history, science, literature, and the arts.

5099

Laboratory Assistant - World Languages

Grades 11, 12 **1 elective credit**

Working under the direction of the teacher, student assistants with language skills gain experience in the development of second language acquisition. Laboratory Assistants type and duplicate materials designed by the teacher; provide assistance to students in World Language classes or to English language learners during the administration of exercises, activities, projects, and tests; and provide tutorial assistance to students under the guidance of the teacher. Only one elective credit can be earned as a student assistant; credit may only be awarded after the 20th required graduation credit has been recorded. Students do not have access to student grades or personal data.

Course Index

Course Index

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Four Year High School Plan

Graduation Requirements

English	4 Credits
Social Studies	3 Credits
Mathematics	3 Credits
Science	3 Credits
Physical Education	1/2 Credit
Health	1/2 Credit
Fine Arts	1 Credit
Technology Education	1 Credit
Program Choice	2-4 Credits
Electives	1-3 Credits
Total Credits	**21 Credits**

Program Choice:

World Language
(2 Credits)

OR

American Sign Language (2 Credits)

OR

Advanced Technology (2 Credits)

OR

Career Academy
(Advanced Technology Completer)
(4 Credits)

Additional Requirements:

- Service Learning
- Career Preparation
- High School Assessment Requirements

Grade 9	
English 9	
U.S. History	
Mathematics	
Science	
Fitness for Life/Health I	
Summer School	
Credits Earned	

Grade 10	
English 10	
American Government	
Mathematics	
Science	
Summer School	
Credits Earned	

Grade 11	
English 11	
Modern World History	
Mathematics	
Science	
Summer School	
Credits Earned	

Grade 12	
English 12	
Summer School	
Credits Earned	

Student Name: _____

Directory of High Schools

Atholton
6520 Freetown Road
Columbia, MD 21044
Jennifer Clements, Principal
www.hcpss.org/ahs
410-313-7065 (school)
410-313-7068 (counseling)

Centennial
4300 Centennial Lane
Ellicott City, MD 21042
Carl Perkins, Principal
www.centennialonline.org
410-313-2856 (school)
410-313-2857 (counseling)

Glenelg
14025 Burntwoods Road
Glenelg, MD 21737
Karl Schindler, Principal
www.hcpss.org/ghs
410-313-5528 (school)
410-313-5535 (counseling)

Hammond
8800 Guilford Road
Columbia, MD 21046
Marcia Leonard, Principal
www.hammondhs.org
410-313-7615 (school)
410-313-7620 (counseling)

Howard
8700 Old Annapolis Road
Ellicott City, MD 21043
Gina Massella, Principal
www.hcpss.org/hhs
410-313-2867 (school)
410-313-2871 (counseling)

Long Reach
6101 Old Dobbin Lane
Columbia, MD 21045
David Burton, Principal
www.hcpss.org/lrhs
410-313-7117 (school)
410-313-7412 (counseling)

Marriotts Ridge
12100 Woodford Drive
Marriottsville, MD 21104
Adrian Kaufman, Principal
www.hcpss.org/mrhs
410-313-5568 (school)
410-313-5446 (counseling)

Mt. Hebron
9440 Route 99
Ellicott City, MD 21042
Scott Ruehl, Principal
www.mthebron.com
410-313-2880 (school)
410-313-2883 (counseling)

Oakland Mills
9410 Kilimanjaro Road
Columbia, MD 21045
Frank Eastham, Principal
www.hcpss.org/omhs
410-313-6945 (school)
410-313-6950 (counseling)

Reservoir
11550 Scaggsville Road
Fulton, MD 20759
Patrick Saunderson, Principal
www.hcpss.org/reservoir
410-888-8850 (school)
410-888-8860 (counseling)

River Hill
12101 Route 108
Clarksville, MD 21029
Nick Novak, Principal
www.hcpss.org/rhhs
410-313-7120 (school)
410-313-7400 (counseling)

Wilde Lake
5460 Trumpeter Road
Columbia, MD 21044
James LeMon, Principal
www.hcpss.org/wlhs
410-313-6965 (school)
410-313-6968 (counseling)

Special Schools/Centers

Applications and Research Lab
10920 Route 108
Ellicott City, MD 21042
Edmund Evans, Principal
410-313-6998 (school)

Cedar Lane School
11630 Scaggsville Road
Fulton, MD 20759
Paul Owens, Principal
410-888-8800 (school)

Homewood Center
10914 Route 108
Ellicott City, MD 21042
Tina Maddox, Principal
www.hcpss.org/homewood
410-313-7081 (school and counseling)

Central Office

Howard County Public School System
10910 Route 108 • Ellicott City, MD 21042
410-313-6600

Central Office Personnel

Mamie Perkins
Deputy Superintendent

Linda T. Wise
Chief Academic Officer

Clarissa B. Evans
Executive Director, School Improvement and Curricular Programs

William Ryan
Executive Director, School Improvement and Administration

David A. Bruzga
Director, Secondary School Administration

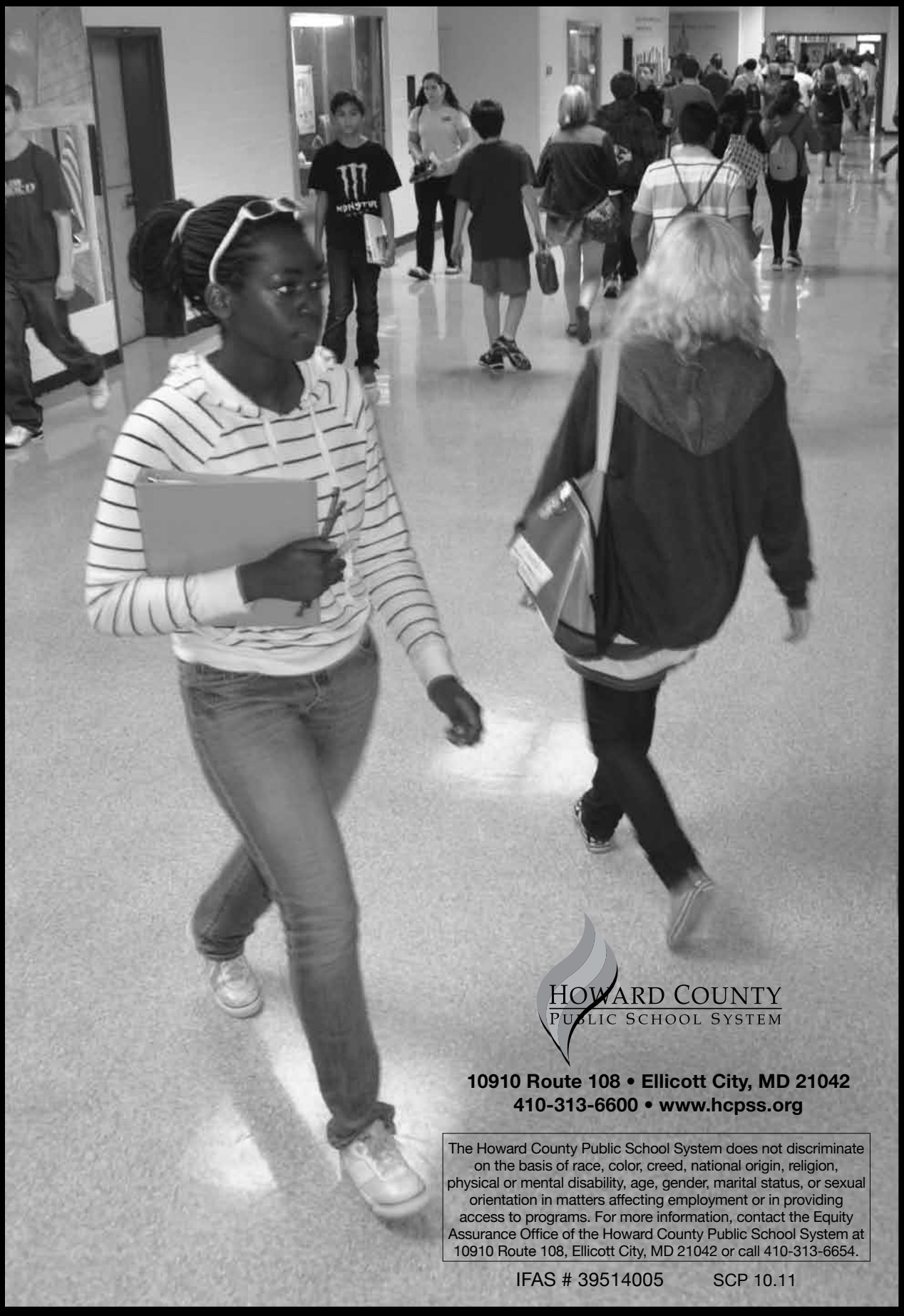
Daniel J. Michaels
Director, Secondary School Administration

Diane B. Martin
Director, Student, Family and Community Services

Patricia Daley
Director, Special Education

Pamela Blackwell
Director, Student Services

Lisa L. Boarman
Coordinator, School Counseling



HOWARD COUNTY
PUBLIC SCHOOL SYSTEM

10910 Route 108 • Ellicott City, MD 21042
410-313-6600 • www.hcpss.org

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