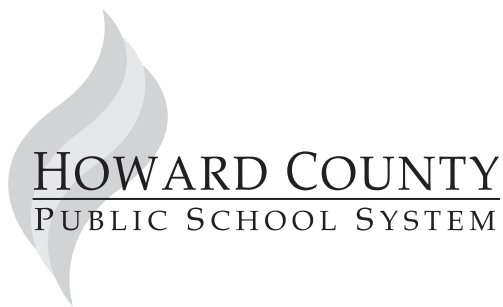


HOWARD COUNTY
PUBLIC SCHOOL SYSTEM

CATALOG OF APPROVED HIGH SCHOOL COURSES 2007 - 2008

EXCELLENCE IN TEACHING AND LEARNING



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,

A handwritten signature in black ink, which appears to read "S. L. Cousin". The signature is fluid and cursive.

Sydney L. Cousin
Superintendent of Schools

Contents

A - Graduation Requirements

Overview	A-1
Credit Requirements	A-2, A-3, A-4
Program Choices	A-5, A-6
Career Preparation Requirements	A-7
Student Service Requirements	A-7

B - General Information

Overview	B-1
Attendance	B-2
Release time	B-2
Grading and Reporting	B-3
Academic Eligibility	B-4
NCAA Eligibility	B-5
Diploma Endorsements: HCPSS Certificate of Merit	B-5
Maryland High School Certificate	B-5
Course Levels	B-6
Special Education	B-6
504	B-6
Teen Parenting	B-6
ESOL	B-7
JROTC	B-7
Advanced Research	B-7
Alternative Sources of Credit	B-8
Alternative to Four-Year Enrollment	B-9
Maryland High School Assessments	B-9
Guidelines for Students Planning to Attend College or Technical School	B-11

C - Career Academies

Overview	C-2
General Information	C-3
Architecture and Engineering Cluster	C-7
Biotechnology and Health Services Cluster	C-13
Business and Entrepreneurship Cluster	C-19
Culinary Arts and Hotel Management Cluster	C-25
Education Cluster	C-29
Energy, Power, and Transportation Cluster	C-33
Multimedia Arts and Technology Cluster	C-37

D - Course Descriptions

Overview	D-1
Advanced Research	D-3
Art	D-5
Career and Technology Education	D-9
Business and Computer Management	D-10
Career Research and Development	D-12
Family and Consumer Sciences	D-13
Technology Education	D-15
Centralized Academy Courses	D-17
JROTC	D-21
English	D-23
ESOL	D-29
Guidance	D-33
Health Education	D-33
Mathematics	D-35
Media	D-39
Music	D-41
Physical Education/Dance Education	D-45
Reading	D-49
Science	D-51
Social Studies	D-57
Special Education	D-63
Theatre Arts	D-65
World Languages	D-69

Appendix

Four-Year High School Plan	E-1
Career Academy Declaration	E-2

Overview

Graduation Requirements

Section A

Credit and Assessment Requirements	A-2, A-3
Fine Arts Course List	A-4
Technology Education Course List	A-4
Program Choices	A-5
Advanced Technology Sequences	A-5
Career Academy Programs	A-6
Career Preparation Requirements	A-7
Student Service Requirements	A-7

Graduation Requirements Class of 2008

Credit and Assessments Requirement: Students must take the Maryland High School Assessments (HSA) for English 10, Algebra/Data Analysis, American Government and Biology. 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 Intro. to Algebra/Data Analysis or Algebra I/Data Analysis* 1 credit in Introduction to Geometry or 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	American Government
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 A-4	
1	Technology Education	See Technology Education course list on page A-4	
2-4	Program Choice	2 credits in World Language** OR 2 credits in an approved Advanced Technology Program OR 4 credits in a Career Academy (State approved Career and Technology Education Completer Program)	
1-3	Electives	Any courses beyond the above requirements; number depends on program choice	

*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.

Graduation Requirements Class of 2009 and Beyond

Credit and Assessment Requirements: Students must take the Maryland High School Assessments for English 10, Algebra/Data Analysis, Biology and American Government. The student must achieve on of the following:

1. the passing score on each test
2. a minimum score for each test and a combined overall score,
3. a specific score on n MSDE-approved comparable assessment(s), or
4. a passing score on the four High School Assessments by a combination of (1) and (3).

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

Credits	Subject	Specific Credit 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 Intro. to Geometry or 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	American Government
1	Fine Arts	See Fine Arts course list on page A-4	
1/2	Physical Education	1/2 credit in Lifetime Fitness	
1/2	Health	1/2 credit in Health Education or Current Health Issues	
1	Technology Education	See Technology Education course list on page A-4	
2 - 4	Program Choice	2 credits in World Language** OR 2 credits in an approved Advanced Technology Program. (see Program Choices on page A-5) 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. A student who passed Intro to Algebra/Data Analysis and passed the Algebra/Data Analysis HSA in 2005-2006 has fulfilled the Algebra graduation requirement.

** 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 the program choice option.

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 G/T)
 Art III: Portfolio Development (Honors)
 Art IV: Personal Directions in Art Studio (AP G/T)
 Art IV: Personal Directions in Art Studio (Honors)
 History of Art (AP G/T)
 New Forms in Art
 Photography I, II, III

Theatre

Theatre I, II, III, IV
 Musical Theatre I, II, III
 Stage Craft I, II, III

Music Fine Art Courses

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

Physical Education Fine Art Courses (Dance)

Introductory Dance
 Intermediate Dance
 Advanced Dance
 Junior Dance Company
 Dance Company

Media Fine Art Courses

Television

Technology Education Course List

1 credit each

Computer Science I
 Engineering Design
 Food and Nutrition Technology
 Principles of Engineering (Only available in high schools with the Pre-Engineering Academy)
 Software Applications I
 Technology Systems

Program Choices:

Students must complete at least one of these options.

- Option 1: World Language**
2 Credits of a World Language Course
- Option 2: Advanced Technology Sequence**
2 Credits of an approved Advanced Technology Sequence in addition to Technology Education Credit
- Option 3: Career and Technology Education Completer**
Career Academy or
Career Research and Development

Program Option 2: Advanced Technology Sequences

Prerequisite (Tech. Ed. Credit)	+	Advanced Technology Credit	Advanced Technology Credit
Technology Systems	+	Mechanical Drawing or Intro to Engineering Design	Architectural Design
Technology Systems	+	Mechanical Drawing or Intro to Engineering Design	Engineering Design
Technology Systems	+	Materials & Processes	Production Technology
Technology Systems	+	Mechanical Drawing or Intro to Engineering Design	Communications Technology
Software Applications I	+	Accounting I	Accounting II
Software Applications I	+	Software Applications II	Software Applications III
Computer Science I	+	Computer Science II (G/T)	Computer Science III (AP)
Computer Science I	+	Computer Science III (AP)	Computer Science IV (AP)

Program Option 3: Career and Technology Education Completer

Career Academy

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. Section C of this *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.

Career Academy Clusters

Architecture and Engineering Cluster

- Construction Technology Academy
- * Architectural Design Academy
- * Pre-Engineering Academy

Biotechnology and Health Services Cluster

- Allied Health Academy
- Biotechnology Academy
- Certified Nursing Assistant Academy
- Emergency Technician/Paramedic Academy

Business and Entrepreneurship Cluster

- Academy of Finance
- * Accounting Academy
- * Business Management Academy
- * Marketing Academy

Culinary Arts and Hotel Management Cluster

- Hotel and Restaurant Management Academy
- * Culinary Science Academy

Education Cluster

- * Child Development Academy
- * Teacher Academy of Maryland

Energy, Power, and Transportation Cluster

- Energy, Power, and Transportation Academy
- Automotive Technology Academy

Multimedia Arts and Technology Cluster

- Computer Networking Academy
- PC Systems Academy
- Visual Communications Academy
- * Computer Programming Academy

• ARL-based for 11th and 12th grade academy courses.

* All courses are offered at the local high school.

Program Option 3: Career and Technology Education Completer

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 who complete the Career Research and Development Program will have mastered the High School Core Learning Goals, demonstrating the skills for success. These include learning, thinking, communication, technology, and interpersonal skills. Students will develop an individualized portfolio containing examples of completed assignments and/or special projects representing mastery of the skills for success.

Career Research and Development	Any Technology Education Course (Except credits in this sequence)	+	Career Research and Development I	Career Research and Development II	Site-Based Work Experience OR Concurrent Enrollment	Site-Based Work Experience OR Concurrent Enrollment
---------------------------------	---	---	-----------------------------------	------------------------------------	---	---

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 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.)

Overview

General Information

Section B

Attendance	B-2
Release time: Qualifications and Procedures	B-2
Grading and Reporting	B-3
Reporting Student Progress	B-3
Final Grades and Credits	B-3
Weighted Grade Point Average (GPA) and Class Rank	B-3
Promotion	B-4
Withdrawal from Courses	B-4
Academic Eligibility	B-4
Earning Academic Eligibility	
Marking Period Criteria	
Summer School	
Special Education Students	
National Collegiate Athletic Association (NCAA) Eligibility	B-5
Diploma Endorsements: HCPSS Certificate of Merit	B-5
Maryland High School Certificate	B-5
Course Levels	B-6
Review Courses	
Regular Courses	
Honor Courses	
Gifted and Talented Courses (G/T)	
Advanced Placement Courses (AP)	
Special Education	B-6
504	B-6
Teen Parenting	B-6
ESOL	B-7
JROTC	B-7
Advanced Research Courses	B-7
Intern/Mentor Program (G/T)	
Independent Research I, II, (G/T)	
Mathematics, Science, and Technology Research I, II, III (G/T)	
Alternative Sources of Credit	B-8
Summer School	
Tutoring for Credit	
College Courses	
Credit by Exam	
Online Courses	
Alternative to Four-Year Enrollment	B-9
Early Graduation Application Procedures	
Articulated Credit	
Maryland High School Assessments	B-9
Maryland High School Diploma Requirements	B-9
Assessment Outcomes	B-10
Interventions and Retaking Assessments	B-10
Maryland State Department of Education Online Assistance	B-10
AP Substitute Exams for the Maryland HSA	B-10
Guidelines for Attending College/Technical School	B-11
Public Two-Year Colleges in Maryland	
Technical Schools, Private Junior Colleges/ Out-of-state 2-Year Colleges	
Other Colleges and Universities	
The University of Maryland System	

GENERAL INFORMATION

Note: Information in this section summarizes HCPSS policies. Although deemed accurate, this information does NOT supersede policy. See the ABOUT US 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).

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.

**Attending school regularly is
the first step toward
academic excellence!**

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.

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 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 class rank if they earn a grade of "A" or "B" in Advanced Placement (AP) courses. They receive weighted class rank if they earn a grade of "A" or "B" in designated Gifted and Talented (G/T) courses and in designated Honors courses. Weighted classes are designated in the catalog with the symbol ♥.

♥. Students earn

1.0 additional quality points for designated GT and AP courses and .5 additional quality point for designated Honors courses.

Both weighted and non-weighted GPA and rank are reported on a student's senior transcript.

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 2060) 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.

To be promoted to grade 10 students must have:

- Completed five credits including one English credit
- No more than two failures in grade 9
- One year of satisfactory high school attendance.

To be promoted to grade 11 students must have:

- Completed ten credits including two English credits
- No more than two failures in grade 10
- Two years of satisfactory high school attendance.

To be promoted to grade 12 students must have:

- Completed fifteen credits including two English credits
- No more than two failures in grade 11
- Three years of satisfactory high school attendance.

Withdrawal from Courses

Howard County Public School System Policy 2122 (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.

- 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.
- 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 handicapping condition.

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 - <http://www.ncaa.org/eligibility/cbsa/clearinghouse.html>.

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.

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

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 - 5 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.

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.

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. 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.

Be sure to challenge yourself. Consider enrolling in appropriate honors, GT and AP classes.

ESOL

World Language credit is not awarded for these courses. All eligible students must be notified of these courses at registration. Names of recommended students should be submitted to the Curriculum Coordinator for World Languages and 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:

Centennial High School
Hammond High School
Long Reach High School
Mt. Hebron High School
Oakland Mills High School
Reservoir High School
River Hill High School
Wilde Lake High School

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.

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: Software Applications I or Technology Systems and teacher recommendation (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.

College Courses

Credit towards high school graduation may be given for 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.

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

Credit by Examination

Only those courses so designated in this program are eligible for credit by examination: Software Applications I.

Online Courses

Students 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:

1. A formal meeting with your 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
- Four teacher recommendations
- 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.

Maryland High School Assessments

The HSAs are challenging tests that students in the graduating class of 2009 and after **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 four 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 in graduating classes prior to 2009 do not have to pass the HSA; however, they must take the tests.

To receive the Maryland High School Diploma, students in the class of 2009 and after will either:

- Take and pass all four HSAs (English 10, algebra/data analysis, American government 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 four HSAs and earn a minimum score (an acceptable score that is below the passing score on each HSA) and earn a combined score of 1602. Passing and minimum scores are as follows:

MD HS Assessment	Passing score	Minimum score
Algebra/Data Analysis	412	402
Biology	400	391
Government	394	387
English 10	396	386

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 2121 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 Course
	Tutorial classes for extra assistance and support	After school intervention programs and tutoring
	After-school intervention programs and tutoring	

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)	Students who entered grade 9 in or after 2005	Students who entered grade 9 before 2005
Algebra/Data Analysis	<ul style="list-style-type: none"> Calculus AB Calculus BC Statistics 	<ul style="list-style-type: none"> Take AP course and test 	<ul style="list-style-type: none"> Take AP course and test
English 2	<ul style="list-style-type: none"> English Language English Literature 	<ul style="list-style-type: none"> Earn acceptable score 	
Government	<ul style="list-style-type: none"> U.S. Government and Politics 	<ul style="list-style-type: none"> Substitute acceptable AP score for HSA passing score. 	
Biology	<ul style="list-style-type: none"> Biology 		

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 remedial noncredit courses until they meet basic proficiency levels. In mathematics, the standard of proficiency is Algebra 2.

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 of Maryland System 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 of Maryland System

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

Bowie State University

Coppin State College

Frostburg State University

Towson University

Salisbury University

University of Maryland, Baltimore County

University of Maryland, College Park

University of Maryland, Eastern Shore

University of Maryland, University College

University System of Maryland Required Coursework	
Subject	Number of Course Credits
English	4
Lab Science	3
Mathematics (Algebra I, Geometry, and Algebra II)	3
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 nine institutions of the University of Maryland System or by consulting resources available in the counseling center.

3 Career Academies



Overview

Career Academies

Section C

General Information

C-3

Career Research and Development

C-5

Career Academies

C-7

Architecture and Engineering Cluster

- Construction Technology Academy
- * Architectural Design Academy
- * Pre-Engineering Academy

Biotechnology and Health Services Cluster

C-13

- Allied Health Academy
- Biotechnology Academy
- Certified Nursing Assistant Academy
- Emergency Technician/Paramedic Academy

Business and Entrepreneurship Cluster

C-19

- Academy of Finance
- * Accounting Academy
- * Business Management Academy
- * Marketing Academy

Culinary Arts and Hotel Management Cluster

C-25

- Hotel and Restaurant Management Academy
- * Culinary Science Academy

Education Cluster

C-29

- * Child Development Academy
- * Teacher Academy of Maryland

Energy, Power, and Transportation Cluster

C-33

- Energy, Power, and Transportation Academy
- Automotive Technology Academy

Multimedia Arts and Technology Cluster

C-37

- Computer Networking Academy
- PC Systems Academy
- Visual Communications Academy
- * Computer Programming Academy

● ARL-based for 11th and 12th grade academy courses

* All courses are offered at the local high school.

General Information

Introduction

The Howard County Public School System has embarked on a new 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 Biotechnology and Health Services Cluster, you will find four different Career Academies 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:

- specific courses that all students in the academy successfully pass
- 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 Clusters
- an advisory board consisting of business leaders in the Career Cluster and
- adherence to 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 will be part of a small group of students with similar interests completing courses together. An advisor and business mentor will be provided to answer questions and help each student as they complete their high school experience. Students completing the requirements for the academy will receive a certificate and student transcripts will 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 an appointment with a guidance counselor to develop or revise the student's four-year plan such that the student will be able to complete successfully all requirements listed in this supplement 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.

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 or the teacher at your school who teaches the academy courses, or the Career Academy facilitator at your high school.

General Information

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, like 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 for any student to take other classes like 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**.

CAREER RESEARCH AND DEVELOPMENT

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

Summary

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, other careers, and college options. Students who complete the Career Research and Development Program will have mastered the Skills for Success High School Core Learning Goals: Learning, Thinking, Communication, Technology, and Interpersonal skills. Students will develop an individualized portfolio containing examples of completed assignments and/or special projects representing mastery of the Skills for Success.

Recommended Electives

- World Language
- Software Applications

Prerequisites

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 or concurrent enrollment. Any interested student may take CRD I as a general elective.

NOTE: Students may enroll in CRD I in the sophomore year.

Special Requirements

Students taking the CRD program sequence as a completer for graduation must either work or enroll at Howard Community College or another postsecondary institution during their senior year. Students must concurrently enroll in Career Research and Development II.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
(min) Intro. To Algebra Algebra I/DA or above	(min) Algebra I/DA Geometry or above	(min) Geometry Algebra II or above	Mathematics Elective
Science Requirement	Biology *	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Tech Ed Requirement	Elective	Elective	CRD II Class/Seminar 6881
Lifetime Fitness/Health	Elective	Elective	Site-Based Work Experience or HCC Class
Fine Arts Requirement	Elective	CRD I 6880	

*Some students may take Biology GT as 9th graders.

Shaded areas designate completer coursework.

College Articulation

Successful completion of the CRD program sequence, with a grade B or higher, earns the student up to 3 credits at Howard Community College.

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 easy access to career incentive programs, scholarships, and entrance to higher education and certification programs.

Sample Assessments/Inventories

Myers-Briggs	Armed Services Vocational Assessment Battery (ASVAB)
Self-Directed Search	Choices/CX online
Multiple Intelligences	

Architecture and Engineering Cluster

**“My dream has always
been the same,
but the Academy
has made a difference
by making it easier
for me to get my
foot in the door.”**

Chris Atkinson
Wilde Lake High School



CONSTRUCTION TECHNOLOGY ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

Summary

The Construction Technology Academy prepares students for further education and/or careers in construction management, architecture, project estimating, and engineering. Students apply architectural engineering, construction technology, and management principles to practical projects within residential and commercial construction. The student will research, design, collaborate, and work in teams to construct models and full-scale projects appropriate to the solution of posed problems.

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 use some of their elective slots to take at least two years of World Language. Students seeking future postsecondary degrees in Construction Technology are also advised to enroll in Mechanical Drawing.

NOTE: Students planning to attend a college or university must take Algebra II before graduation.

Prerequisites

Students must take the Technology Systems course in the ninth grade. One of the three following courses is required in Grade 10: Mechanical Drawing, Architectural Drawing, or Materials and Processes. These courses will provide a foundation for junior and senior year construction courses.

Special Requirements

Maintain a 2.0 Grade Point Average (G.P.A.) in all academy class work.

Maintain a 2.0 G.P.A. in Mathematics.

In the senior year students have the option to participate in a work-related experience. Students will provide their own transportation to and from work-related experiences. Students are required to maintain and submit a journal and portfolio in their 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 Mathematics Requirement	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Fine Arts Requirement	Elective	Construction Technology I 854M	Construction Technology II 858M
Lifetime Fitness/Health	Elective		
Technology Systems 6750	Material and Processes 6756 or Architectural Drawing 6810 or Mechanical Drawing 6800	Elective	

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

Shaded areas designate academy coursework.

College Articulation

Articulation with the Community College of Baltimore County – Catonsville (CCBC) is planned.

Industry Certification

Students can pursue a construction apprenticeship in postsecondary programs.

Sample Careers

Carpenter	Surveyor	Manufacturing Engineer	Project Manager
Civil Engineer	Construction Technician	Construction Estimator	Architect
Construction Manager	Plumber	Engineering Technician	Industrial Engineer
Materials Technician	Real Estate Manager	Electrician	
Building Codes Inspector	HVAC Technician		

ARCHITECTURAL DESIGN ACADEMY

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

Summary

The Architectural Design Academy is for students interested in architecture or to prepare for further study in an area of architecture. Students will study various design problems from topics in architectural history to contemporary residential and commercial architecture. Students will study measurement and dimensions and complete professional sketches, working drawings (plot plans, foundation plans, floor plans, electrical plans, section plans, and elevations), presentation drawings, CAD drawings, and the construction of architectural models.

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 use some of their elective slots to take at least two years of World Language. Students considering future degrees in Architectural Design are also advised to enroll in Mechanical Drawing. Physics and Chemistry are recommended as science electives.

Prerequisites

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

Special Requirements

In the senior year, students will take "Technology Education – Site-Based Experience" (course #6754). Job placements are arranged on an individual basis and are supervised by a Work Experience Coordinator. Enrollment requires teacher approval. Students will provide their own transportation to and from work-related experiences.

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 or Science Elective
Science Requirement	Biology*	Science Requirement	Principles of Business 551M
U.S. History	American Government	World History	Engineering Design 684M
Fine Arts Requirement	Elective	Elective	Site-Based Work Experience 6754 (1-4 credits)
Lifetime Fitness/Health	Software Applications I (Prerequisite for Principles of Business)	Elective	
Technology Systems 6750	Mechanical Drawing 6800 (Recommended Course)	Architectural Drawing 6810	

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

Shaded areas designate academy coursework.

College Articulation

Students with a final grade of B or better in Mechanical Drawing, Architectural Design, and Engineering Design can earn up to 9 credits at Howard Community College.

Sample Careers

Architect
Construction Manager
Land Surveyor

Drafter
Civil Engineer
Building Code Inspector

CADD Technician
Engineer (all types)
Real Estate Manager

PRE-ENGINEERING ACADEMY

Location: All academy coursework is taught at the local high school. For 2007-2008, the Pre-Engineering Academy is ONLY offered at Atholton, Centennial, Hammond, Howard, Long Reach, Marriotts Ridge, Reservoir, River Hill, and Wilde Lake high schools.

Summary

The 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, in which they design and build solutions to authentic engineering problems. These self-directed projects are mentored by engineers.

The program consists of five courses that are divided into three groups.

Foundation Courses:	Principles of Engineering (POE), Introduction to Engineering Design (IED), and Digital Electronics (DE)
Specialization Courses:	Computer Integrated Manufacturing
Capstone Course:	Engineering Design and Development

Students are expected to:

1. Develop thinking skills by solving real-world engineering problems;
2. Use computer software to produce, analyze, and evaluate models of project solutions;
3. Use industry-standard computer software in testing and analyzing digital circuitry;
4. Use three-dimensional computer software to solve design problems. They assess their solutions, modify their designs, and use prototyping equipment to produce 3-D models.

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 use some of their elective slots to take at least two years of World Language. Physics and chemistry are recommended as science electives.

Prerequisites

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

Special Requirements

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 also encouraged to apply for summer internship work with local engineering firms. This is a voluntary internship experience. A formal Internship is not a part of this Academy program.

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 Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Fine Arts Requirement	Elective	Elective	Elective
Lifetime Fitness/Health	Elective	Digital Electronics 686M	Elective
Principles of Engineering 680M	Introduction to Engineering Design 681M	Computer Integrated Manufacturing 685M	Engineering Design and Development 687M

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

Shaded areas designate academy coursework.

College Articulation

If students meet college enrollment requirements, pay designated tuition, and have a B average in Engineering Design and Development (grade 12), and all courses leading up to it (POE, IED, DE, and a technical elective), students may receive college credit for ENES101 at UMBC. In addition, students must complete a college credit examination or submit an appropriate portfolio. Students in this academy may also earn articulated credit with 15 or more four-year colleges and universities. See the Project Lead the Way website for current articulation agreements. (<http://www.pltw.org/AffPolicyCredit.shtml>)

Industry Certification

There are no formal certification tests given; however, students who have taken high school pre-engineering courses and/or received 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 Careers

Engineering Technician	Scientist	Software Engineer	Industrial Engineer
Test Engineer	Engineer	Tooling Engineer	Ergonomic Engineer
Process Engineer	Materials Engineer	Project Manager	Quality Engineer
Electrical Engineer	Manufacturing Engineer	Mechanical Engineer	

Biotechnology and Health Services Cluster

“The Academy has definitely changed my outlook on what I want to do in my career. It pointed out my strengths and weaknesses and gave me a new direction.”

Dominique Hall
Long Reach High School



ALLIED HEALTH ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

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, and
- ✦ 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

The recommended Technology Education course is Software Applications I to develop the skills necessary to generate the research projects required of students in this academy. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language. 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

- Biology I
- Software Applications I

Corequisite

- Chemistry

Special Requirements

Maintain a Grade Point Average (G.P.A.) of 2.5 in all academy coursework
Maintain a 2.0 G.P.A. in mathematics and science coursework

Students have the option of completing the senior practicum through a work-site experience (own transportation required) or by attending the on-campus (ARL) senior practicum of advanced skills, which includes a capstone project at the ARL campus.

Students are required to: complete at least 6-8 hours of experience per week at the mentor site; attend weekly senior seminars at the Applications and Research Laboratory; (or attend daily at ARL); choose a "real world" problem to research; and write and submit a research proposal, abstract, and reflection paper based on their research project work. Students will give a culminating multimedia senior presentation for their final grade. Students are required to maintain and submit a journal and portfolio of their senior practicum work. Students must provide their own transportation to a worksite or participate in on-campus placements at ARL.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Elective
Science Requirement	Biology*	Chemistry	Elective
U.S. History	American Government	World History	Elective
Software Applications I	Fine Arts	Allied Health Junior Practicum 870M	Allied Health Senior Practicum 871M
Lifetime Fitness/Health	Elective		
Elective	Elective		

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

Shaded areas designate academy coursework.

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.

College Articulation

Successful completion with a grade of B or higher in all coursework earns the student up to 5 credits at Howard Community College.

Sample Careers

Medical Assistant	Medical Transcriptionist	Psychiatrist
Health Educator	Ultra Sound Technologist	Medical Office Manager
Optician	Chiropractor	Dental Technician/Assistant
Laboratory Technician	Pharmacy Technician	Respiratory Therapist
Radiology Technician	Dental Hygienist	Psychologist
Personal Trainer	Recreational Therapist	Home Health Care Provider
Dietician	Acupuncturist Nurse Practitioner	Nursing Assistant
Registered Nurse/Practical Nurse	Social Worker	Physical Therapist/Assistant
Health Administration	Speech Pathologist	Medical Records Clerk
EKG Technician	Nurse Instructor	Mental Health Counselor
Physician/Physician's Assistant	Medical Technologist	Dentist
Sports Medicine Specialist	Emergency Health Manager	Registered Records Clerk
Administrator	Phlebotomist	Occupational Therapist
Operating Room Technician		

BIOTECHNOLOGY ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

Summary

Biotechnology is one of the fastest growing and expanding fields in today's scientific community. Students will be involved in learning the skills and techniques used in the biotechnology industry. Emphasis will be on applications of techniques in genetic engineering, DNA fingerprinting, and cloning of genes. Students will also receive training in basic laboratory skills so they will be able to recognize and use highly technical equipment as well as read, follow, and understand protocols. Students will also focus on researching and discussing advances in genetics, current events in biotechnology, and bio-ethical issues.

Recommended Electives

The recommended Technology Education course is Software Applications I to develop the skills necessary to generate the research projects required of students in this academy. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language. Additionally, Advanced Placement Biology, Chemistry, and higher mathematics electives are beneficial in 11th and 12th grades for students in this academy.

Prerequisite

- Biology I

Corequisites

- Chemistry I
- Algebra II

Special Requirements

Completion of Biology I with a minimum of a B average

Maintain a Grade Point Average (G.P.A.) of 2.75 or above in all academy coursework.

Maintain a 2.0 G.P.A. in mathematics

Students have the option of completing the senior practicum through a work-site experience (own transportation required) or by attending the on-campus (ARL) senior practicum of advanced skills, which includes a capstone project at the ARL campus. Students are required to: complete at least 6-8 hours of experience per week at the mentor site; attend weekly senior seminars at the Applications and Research Laboratory; (or attend daily at ARL); choose a "real world" problem to research; and write and submit a research proposal, abstract, and reflection paper based on their research project work. Students will give a culminating multimedia senior presentation for their final grade. Students are required to maintain and submit a journal and portfolio of their senior practicum work. Students must provide their own transportation to a work-site, or participate in on-campus placements at ARL.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Chemistry	Science Elective
U.S. History	American Government	World History	Elective
Tech. Ed. Requirement	Fine Arts Requirement	Biotechnology Junior practicum 835M	Biotechnology Senior Practicum 839
Lifetime Fitness/Health	Elective		
Elective	Elective		

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

Shaded areas designate academy coursework.

College Articulation

Successful completion of the Biotechnology Academy with a grade of B or higher in all coursework earns the student up to 6 credits at Howard Community College. (HCPSS is currently working on future articulation agreements with the Community College of Baltimore County and Montgomery Community College.)

Sample Careers

Laboratory Technician
Medical Technician
Staff Scientist
Forensic Scientist
Physician
Geneticist
Plant Pathologist
Quality Control Inspector
Cell Biologist

Pharmaceutical Sales and Marketing Representative
Research Associate
Quality Assurance Inspector
Environmental Biologist
Agricultural Bioengineer
Biomedical Engineer
Microbiologist
Molecular Biologist
Biological Research Technician

CERTIFIED NURSING ASSISTANT ACADEMY

Location: Academy course is taught at the Applications and Research Laboratory.

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 and Certified Nursing Assistant Theory and Clinical II 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.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Mathematics Requirement	Elective
Science Requirement	*Biology	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Software Apps. I	Fine Arts Requirement	*CNA Theory and Clinical 6894	Elective
Lifetime Fitness/Health	Elective		Elective
Elective	Elective		Elective

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

** This academy can be completed in junior or senior year.

Shaded areas designate academy coursework.

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 & Development I (CRD I) as early as possible. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language.

Prerequisites

- Completion of Algebra I with a C average or better
- Completion of Biology I with a C average or better
- Completion of Software Applications I

Special Requirements

- Maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework. Only students who have successfully completed classroom objectives and goals will be recommended for clinical experience.
- Completion of 60 hours clinical experience **during the school year**. Clinical hours will be completed on weekends. Students must be 16 years or older to participate in clinical experiences.
- A criminal background check is required before students can participate in clinical experiences. Student immunizations must be up-to-date before participating in clinical experiences. Students must provide their own transportation for all clinical experiences.

Industry Certification

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

Upon completion of CNA/GNA 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.

Sample Careers

Certified Nursing Assistant	Registered Nurse
Geriatric Nursing Assistant	Nurse Practitioner
Licensed Practical Nurse	

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

EMERGENCY MEDICAL TECHNICIAN/PARAMEDIC ACADEMY

Location: EMT-B is taught at the Fire and Rescue Training Academy on Route 108 in Clarksville.

Summary

This 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 program is a one-year senior high school and two-year community college pathway. The Emergency Medical Technician Basic (EMT-B) and Fire Science 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. 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 & Development I (CRD I) as early as possible. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language.

Prerequisites

- Overall 2.5 Grade Point Average (G.P.A.) prior to and during the program
- Maintain 3.0 Grade Point Average (G.P.A.) in English
- Submission of Paramedic/Firefighter Pathway Application-Academy is limited to 25 students per year. Students are required to have a physical examination prior to acceptance.

Special Requirements

- Successful completion of state-mandated attendance and performance standards during the program
- Students must provide their own transportation in their senior year to the Fire and Rescue Training Academy.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II	Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Tech Ed. Requirement	Fine Arts Requirement	Elective	EMT – B 6892
Lifetime Fitness/Health	Elective	Elective	
Elective	Elective	Elective	

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

Shaded areas designate academy coursework.

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 senior year.

College Articulation

After completing EMT-B certification requirements, students can concurrently enroll in college level coursework at HCC. Upon high school graduation, students could have 7-13 credits at HCC. Following high school graduation, students will continue their studies at HCC in the two-year Emergency Health Sciences degree program and be eligible to obtain licensure as an EMT-Paramedic.

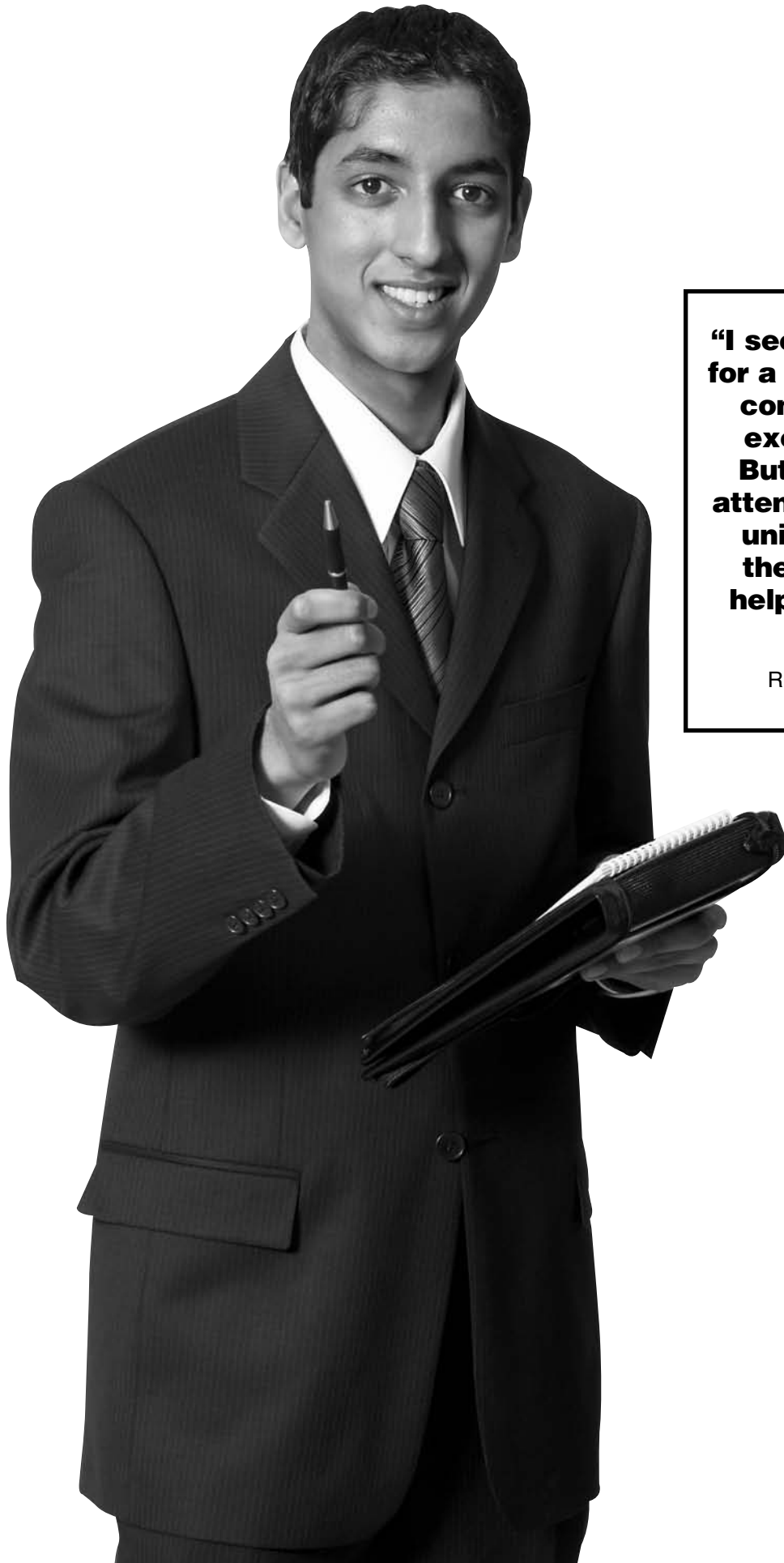
Sample Careers

Emergency Medical Technician
Paramedic
Firefighter
Fire Medic
EMS Supervisor
Flight Medic

Cardiac Monitor Technician
Registered Nurse
EMS Educator
Nurse Practitioner
Disaster Health Services Researcher
or Policy Maker

Homeland Security
Emergency Room Technician
Shock Trauma Technician
Law Enforcement
Physician's Assistant

Business & Entrepreneurship Cluster



“I see myself working for a huge, successful company as a top executive officer. But first, I plan on attending a top-notch university. I know the Academy can help me get there.”

Sagar Gupta
River Hill High School

ACADEMY OF FINANCE

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

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 that will serve as a mentor throughout their junior and senior year.

Recommended Electives

- Software Applications II
- Software Applications III
- Career Research and Development I
- World Language I
- World Language II

Prerequisites

- Completion of Algebra I/DA prior to enrollment in academy coursework
- Successful completion of Software Applications I – fulfills Technology Education Requirement

Special Requirements

- Minimum of a 2.75 cumulative GPA upon enrollment in academy
- Maintenance of a 2.75 cumulative GPA throughout academy program and a 3.0 in academy courses
- Participation in job shadowing and student workshops
- Completion of a paid internship during the summer before their senior year
- Successful completion of a pre-selected college-level course during their senior year

ACADEMY OF FINANCE

CAREER ACADEMIES

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Principles of Marketing 565MA
Fine Arts Requirement	Elective	Accounting I 5601A	Accounting II 560MA
Software Applications I 4520 (Tech Ed Requirement)	Principles of Business 551M	Economics/World of Banking and Credit 580M	International Finance/ Financial Planning 581M

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

Shaded areas designate required academy coursework.

College Articulation

Students who complete the academy program with grades of B or better in academy courses may be eligible for up to 9 credits at Howard Community College.

Sample Careers

Bank Teller
Contract Underwriter
Loan Officer
Collector
Budget Analyst
Controller
Accounts Clerk

Chief Operating Officer
Financial Advisor
Accountant
Portfolio Administrator
Financial Analyst
Entrepreneur
Business Analyst

Financial Consultant
Stock Broker
Risk Manager
Bank Branch Manager
Retail Manager
Chief Finance Officer
Economist

ACCOUNTING ACADEMY

Location: All academy coursework is taught at the local 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

- Software Applications III
- Career Research and Development I
- Principles of Marketing
- World Language I
- World Language II

Prerequisites

- Completion of Algebra I prior to enrollment in academy coursework

Special Requirements

- Maintenance of a minimum of 2.0 in academy courses
- Completion of 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 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts Requirement	Principles of Business 551M	Elective	Elective
Software Applications I 4520 (Tech Ed Requirement)	Software Applications II 4511	Accounting I 5601	Accounting II 560M

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

Shaded areas designate academy coursework.

College Articulation

Students that complete the academy program with grades of B or better in academy courses may be eligible for up to 6 credits at Howard Community College. Upon completion of the program students will be prepared to complete the College Level Examination Program in Accounting.

Sample Careers

Auditor	Chief Financial Officer
Managerial Accountant	Financial Advisor
Forensic Accountant	Compliance Manager
Financial Analyst	Controller
Budget Analyst	Risk Manager
Tax Accountant	
Finance Manager	

BUSINESS MANAGEMENT ACADEMY

Location: All academy coursework is taught at the local 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

- Software Applications III
- Career Research and Development I
- Accounting II
- Principles of Marketing
- World Language I
- World Language II

Prerequisites

- Completion of Algebra I prior to enrollment in academy coursework

Special Requirements

- Maintenance of a minimum of 2.0 G.P.A. in academy courses
- Completion of 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 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts Requirement	Principles of Business 551M	Elective	Elective
Software Applications I 4520 (Tech Ed Requirement)	Software Applications II 4511	Accounting I 5601	E-Commerce and Entrepreneurship 579M

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

Shaded areas designate academy coursework

College Articulation

Students who complete the academy program with grades of B or better in academy courses may be eligible for up to 6 credits at Howard Community College.

Sample Careers

Real Estate Agent or Broker
Commercial Banker
Entrepreneur
Retail Manager
Risk Manager
Chief Operating Officer
Small Business Owner
Sales Representative

MARKETING ACADEMY

Location: All academy coursework is taught at the local 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, 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

- Software Applications III
- Career Research and Development I
- Accounting I
- Accounting II
- World Language I
- World Language II

Prerequisites

- Completion of Algebra I prior to enrollment in academy coursework

Special Requirements

- Maintenance of a minimum of 2.0 in academy courses
- Completion of 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 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts Requirement	Principles of Business 551M	Elective	Elective
Software Applications I 4520 (Tech Ed Requirement)	Software Applications II 4511	Principles of Marketing 565M	Advanced Marketing 564M

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

Shaded areas designate academy coursework.

College Articulation

Students who complete the academy program with grades of B or better in academy courses may be eligible for up to 9 credits at Howard Community College. Upon completion of the program, students will be prepared to complete the College Level Examination Program in Marketing.

Sample Careers

Advertising
Marketing Research
Sales
Internet Marketing Specialist
Product Manager

Public Relations
Brand Manager
E-mail Marketing Producer
Marketing Manager
Field Marketing Manager

Telemarketer
Online Marketing Specialist
International Marketing Specialist
Promotions Manager

Culinary Arts and Hotel Management Cluster

“The Academy is different because we have more guest speakers from the real world and a classroom that is an actual kitchen.”

Caitlyn Quinn
River Hill High School



CULINARY SCIENCE ACADEMY

Location: All academy coursework is taught at the local 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. 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. Students who are considering postsecondary study in Hospitality Management and/or Business should select College Algebra/Trigonometry/Statistics as the 12th grade mathematics elective course.

Prerequisites

While no specific courses are required as prerequisites, students should seek food service and hospitality work experiences to confirm their career academy choice. Students should note that Principles of Business, 551M, requires successful completion of Software Applications I as a prerequisite.

Special Requirements

Maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework.
Students in the Culinary Academy will have opportunities to participate in industry-sponsored events and competitions and will receive individual mentoring from restaurant and hospitality professionals. The final course in the sequence, Advanced Culinary and Restaurant Operations, will include a capstone project integrating hands-on culinary skills with knowledge of sound customer service and business practice. In addition, students who wish to pursue the ProStart Certification must complete a minimum of 400 paid hours of mentored industry experience.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or Mathematics Req.	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
US History	American Government	World History	Elective
Software Applications I 4520 (Tech Ed Requirement)	Elective	Elective	Elective
Lifetime Fitness/Health	Elective	Culinary Sciences 6525	Elective
Fine Arts Requirement	Food and Nutrition Technology 6510	Principles of Business 551M	Advanced Culinary Science and Restaurant Operations 6527

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

College Articulation

With a passing score on the ProStart Examination, Culinary Academy students are 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, and 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.

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 Careers

Sous Chef	Food Service Manager	Food and Beverage Director	Event Planner
Executive Chef	Kitchen Supervisor	Catering Director	Prep Cook
Kitchen Manager	Caterer	Restaurant General Manager	Dining Room Manager
Food Supplier	Host	Pastry Chef	Convention Services
Food and Beverage Sales	Server	Corporate Trainer	Line Cook

HOTEL AND RESTAURANT MANAGEMENT ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

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.

Recommended Electives

The industry advisory committee recommends students enroll in Principles of Business (551M) and complete at least two years of Spanish in preparation to enter the hospitality industry. Students who are considering postsecondary study in Hospitality Management and/or Business should select College Algebra/Trigonometry/Statistics as the 12th grade mathematics elective course.

Pre-requisites

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

Special Requirements

Students must maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework.

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. Students who wish to pursue the Certified Rooms Division Specialist (CRDS) designation must pass both Year One and Year Two examinations and be employed in the lodging industry for a minimum of 30 days. In addition, some students may seek additional ProStart Certification through completion of the Year One and Year Two ProStart examinations and completion of 400 hours of industry experience.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Tech Ed Requirement	Elective	Introduction to the Hotel and Restaurant Industry 877M	Management and Leadership in Hotels and Restaurants 880M
Lifetime Fitness/Health	Elective		
Fine Arts Requirement	Software Applications I 4520	Elective	

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

Shaded areas designate academy coursework.

College Articulation

Students with passing scores on both Year One and Year Two examinations and successful completion of coursework and industry hours are 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 Lodging Management examinations to document the skills and knowledge required for pursuit of a professional career path in the hospitality industry. Students will also earn serv-safe certification.

Sample Careers

Front Office Manager
Executive Housekeeper
Director of Security
Food Service Managers

General Manager
Front Desk Supervisor
Outdoor/Nature Travel Guide
Event Planner

Resort Professional
Travel Counselor
Tour Guide/Operator
Shift Supervisor

Front Desk Employee
Concierge
Reservationist/
Reservation Manager
Convention Services

Education Cluster



**"I think the best part
of being in the
Academy is having the
opportunity to
get hands-on
experience in
teaching children."**

John Duff
Mt. Hebron High School

CHILD DEVELOPMENT ACADEMY

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

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.

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.

Special Requirements

Students must maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework.

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. During the first course, Child Development, students will begin a portfolio documenting academic and work-based achievements. All Child Development Academy students will supplement this portfolio with original materials developed during a senior year field experience in a preschool or elementary setting.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Tech Ed Elective	Elective	Elective	Elective
Lifetime Fitness/Health	Food & Nutrition Technology 6510	Elective	Elective
Fine Arts Requirement	Child Development 6531	Foundations of Curriculum and Instruction 6535M	Field Experience in Education 6571 - 6572 - 6573

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

Shaded areas designate academy coursework

College Articulation

Students who earn a grade of B or higher in both Child Development and Foundations of Curriculum and Instruction may earn three college credits from 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.

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 Careers

Early Childhood Teacher
Child Care Center
Owner/Director
Parent Educator
Children's Author

Family Day Care Provider
Classroom Aide
Elementary Teacher
Guidance Counselor
Speech Therapist

Recreational Therapist
Recreation Program Leader
Pediatric/Obstetrics Nurse
Child Psychologist

Social Worker
Childcare Worker
Instructional Assistant

TEACHER ACADEMY OF MARYLAND

Location: All academy coursework is taught at the local 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.

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.

Special Requirements

Maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework.

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.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Tech Ed Elective	Elective	Elective	Elective
Lifetime Fitness/Health	Elective	Foundations of Curriculum and Instruction 6535	Elective
Fine Arts Requirement	Child Development 6531	Teaching as a Profession 6534	Field Experience in Education 6571 - 6572 6573

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

Shaded areas designate academy 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 earn 6 college credits from 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.

Industry Certification

Upon completion of the four required Academy courses including the internship, students may sit for the ParaPro, a nationally recognized examination required by the state of Maryland for employment as a highly qualified instructional assistant. Students will also be encouraged to sit for the Praxis I, the national examination required by Maryland for teacher certification. Most baccalaureate institutions require students to pass Praxis I prior to admission to a teacher education program. Associate of Arts in Teaching majors at Howard Community College must pass Praxis I in order to receive their degree.

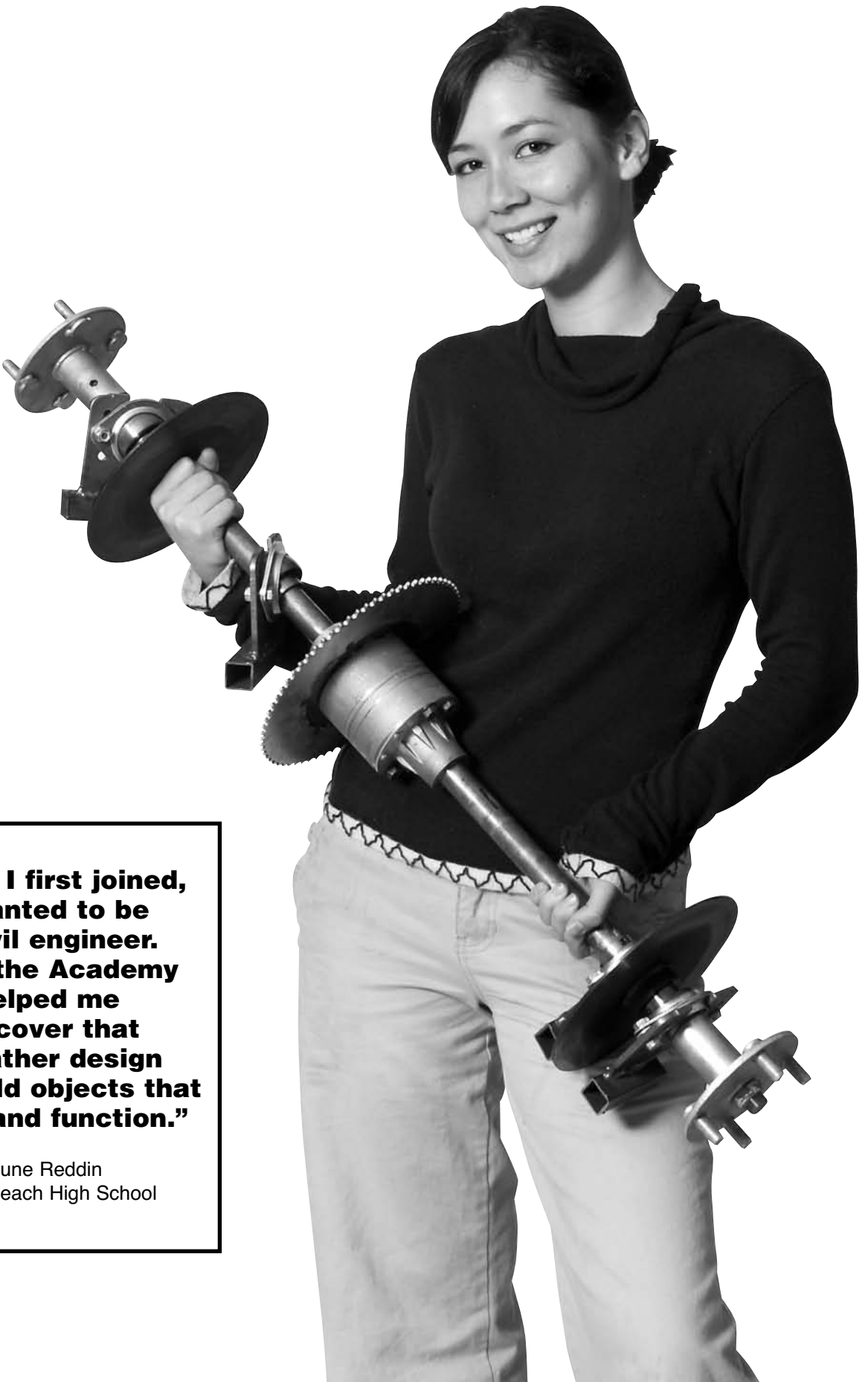
Sample Careers

Instructional Assistant/Aide	School Administrator	Elementary Teacher	Recreation Program Leader
Daycare Center Owner/Director	Social Worker	Pediatric/Obstetrics Nurse	Social Service Worker
Parent Educator	Preschool Teacher	Speech Therapist	Middle School Teacher
Early Childhood Teacher	Family Day Care Provider	Child Psychologist	Guidance Counselor
High School Teacher	Preschool Director	Childcare Worker	Recreational Therapist

Energy, Power, and Transportation Cluster

**“When I first joined,
I wanted to be
a civil engineer.
Then the Academy
helped me
discover that
I’d rather design
and build objects that
move and function.”**

June Reddin
Long Reach High School



ENERGY, POWER, AND TRANSPORTATION ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

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 techniques when appropriate. They will also learn practical fabrication skills such as basic welding and machining as necessary to construct their portion of the experimental vehicle. Initially, vehicle prototypes will be benchmarked with time trials with an eye toward actual competition in the future.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Fine Arts Requirement	Energy, Power, and Transportation Junior Practicum 860M	Energy, Power, and Transportation Senior Practicum 861M
Elective	Tech. Systems 6750 or Engineering Design 684M		
Elective	Elective	Elective	

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

Shaded areas designate academy coursework.

Recommended Electives

An additional recommended Technology Education course is Software Applications I to develop the skills necessary to generate the research projects required of students in this academy. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language.

Prerequisite

- Technology Systems or Engineering Design

Special Requirements

- Maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework
- Maintain a 2.0 G.P.A. in mathematics

Students have the option of completing the senior practicum through a work-site experience (own transportation required) or by attending the on-campus (ARL) senior practicum of advanced skills, which includes a capstone project at the ARL campus. Students are required to: complete at least 6-8 hours of experience per week at the mentor site; attend weekly senior seminars at the Applications and Research Laboratory; (or attend daily at ARL); choose a "real world" problem to research; and write and submit a research proposal, abstract, and reflection paper based on their research project work. Students will give a culminating multimedia senior presentation for their final grade. Students are required to maintain and submit a journal and portfolio of their senior practicum work. Students must provide their own transportation to a work-site, or participate in on-campus placements at ARL.

College Articulation

Successful completion of the Energy, Power, & Transportation program, with a grade B or higher in all coursework, earns the student up to 9 credits at Howard Community College.

Sample Careers

Aerospace Engineer
Design Engineer
Test Engineer
Physicist
Electrician
Automotive Technician
Program Managers

Electrical Engineer
Transportation Engineer
Mechanical Engineer
Automotive Collision Repair Technician
Equipment Operator
Laboratory Technician
Tool and Die Makers

Automotive Service Writer
Systems Designer
Environmental Engineer
Machinist
Draftsperson
Civil Engineer
Materials Scientist

AUTOMOTIVE TECHNOLOGY ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

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

An additional recommended course is Software Applications I to develop skills required for written communication. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language. It is recommended that students complete Algebra II as part of their mathematics requirements in preparation for automotive technology coursework.

Prerequisite

None

Special Requirements

- Maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework
- Maintain a 2.0 G.P.A. in mathematics

Students are required to complete up to 325 clock hours of work-based learning experiences at a certified automotive facility during their junior and senior years for completion of program. Students will need to complete hours after or during school or in the summer depending on mentor and student schedules. Students will be 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 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Fine Arts Requirement	Automotive Technology I 856M	Automotive Technology II 857M
Tech Education Requirement	Elective		
Elective	Elective		

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

Shaded areas designate academy coursework.

College Articulation

Students can earn up to 18 credit hours toward an Associates Arts Degree (AAS) in Automotive Technology for successfully passing the Automotive Technology Academy coursework with a B or better and an instructor's recommendation at the Community College Baltimore County (Catonsville).

Students can also earn up to 18 credit hours toward an Associates Arts Degree (AAS) in Automotive Technology for successfully passing four ASE Certification Exams at the Community College Baltimore County (Catonsville).

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 Careers

Automobile Service Technician
Automobile Master Mechanic
Automobile Speciality Technician

Electronic Equipment Installer and
Repairer - motor vehicle
Automobile Lead Technician

Automobile Team Leader
Automobile Service Advisor
Diagnostician
Upper-Level Automobile Position

Multimedia Arts and Technology Cluster



“My friends were already part of the Academy and told me I would benefit from it. It required more commitment than anything else I’ve done, but it was really worth it.”

Serena Chen
Long Reach High School

COMPUTER NETWORKING ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

Summary

The Computer Networking Academy is designed for students that have an interest in expanding their understanding and skills regarding how computer networks are created and maintained. Students will gain the knowledge and skills needed to install, configure, and operate LAN, WAN, and dial access services for small networks (100 nodes or fewer), including but not limited to use of these protocols: IP, IGRP, Serial, Frame Relay, IP RIP, VLANs, RIP, Ethernet, and Access Lists. Students will gain practical hands-on experience in the field of PC networking by working in a laboratory setting with a CISCO-certified instructor.

Recommended Electives

- Career Research and Development I
- Computer Science I
- World Language I
- World Language II
- Technology Systems I

Prerequisites

- Successful completion of Algebra I prior to enrolling in academy coursework
- Successful completion of Software Applications I – fulfills Technology Education Requirement

Special Requirements

- Maintenance of a minimum of 2.0 in academy courses
- Completion of paid summer internship during the summer before senior year.
- Participation in student conferences and job shadowing
- Completion of a large-scale networking project during the senior year
- Successful completion of a pre-selected college-level course during senior year.
- Upon completion of academy program, students will be encouraged to sit for the CISCO Certified Network Associate Exam.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Networking Design II 4568
Fine Arts Requirement	Elective	Networking Design I 4567	Advanced Networking 455M
Elective	Software Applications I 4520 (Tech Ed Requirement)	PC Systems Fundamentals 4566	

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

Shaded areas designate academy coursework.

College Articulation

Upon completion of the academy program with grades of B or better, students may be eligible for up to 9 credits at Howard Community College.

Industry Certification

At the completion of the academy experience, students will be prepared to sit for the CISCO Certified Network Associate exam.

Sample Careers

Network Engineer	Network Systems Analyst
Network Design Specialist	PC Help Desk Operator
WAN Specialist	LAN Specialist
CISCO Routing Engineer	Network Maintenance Technician

For additional information about the Computer Networking Academy Program and academy course descriptions, visit www.hcpss.org/bcms. For additional information about the CISCO Certified Network Associate certification visit www.cisco.com/en/US/learning/.

PC SYSTEMS ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

Summary

The PC Systems Academy is designed for students who have an interest in expanding their knowledge and skills related to how a PC and PC operating systems work from the inside out. Coursework will focus on the development of core hardware and operating system technologies including installation, configuration, diagnosis, preventative maintenance, and basic networking. Students will gain practical hands-on experience in the field of PC systems, operations, troubleshooting, and repair work by working in a laboratory setting with an A+ certified instructor.

Recommended Electives

- Career Research and Development I
- Computer Science I
- World Language I
- World Language II
- Technology Systems I

Prerequisites

- Successful completion of Algebra I prior to enrolling in academy coursework
- Successful completion of Software Applications I – fulfills Technology Education Requirement.

Special Requirements

- Maintenance of a minimum of 2.0 in academy courses
- Upon completion of this academy program, students will be encouraged to sit for the CompTIA A+ Exam
- Completion of paid summer internship during the summer before senior year
- Participation in student conferences and job shadowing
- Successful completion of a pre-selected college-level course during senior year.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Algebra II or above	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	PC Operating Systems 4565
Fine Arts Requirement	Elective	PC Hardware 4561	BCMS Work Experience 5752
Elective	Software Applications I 4520 (Tech Ed Requirement)		

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

Shaded areas designate academy coursework.

College Articulation

- Completion of PC Hardware with a B or better may earn the student up to 6 credits at Howard Community College
- Completion of PC Operating Systems with a B or better may earn the student up to 3 credits at Howard Community College

Industry Certification

At the completion of the academy experience, students will be prepared to sit for the CompTIA A+ certification exam.

Sample Careers

PC Service Engineer	Systems Analyst
Computer Design Engineer	Data Center Technician
Help Desk Operator	Software Tester
IT Specialist	

For additional information about the PC Systems Academy program and academy course descriptions, visit www.hcpss.org/bcms.

For information about CompTIA A+ certification visit www.comptia.org/certification/a/default.aspx.

VISUAL COMMUNICATIONS ACADEMY

Location: Junior and senior-level academy courses are taught at the Applications and Research Laboratory.

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 also learn how to use and apply specialized industry standard applications such as Adobe Photoshop, QuarkXpress, Adobe Premiere, 3D Studio Max and CorelDraw. Students will be involved in solving visual problems during video production such as getting resources together, directing actors, and troubleshooting hardware equipment. Students will be encouraged to apply their skills in creativity, problem solving, team-building, collaboration, and advertising.

Recommended Electives

The recommended Technology Education course is Software Applications I to develop the skills necessary to generate the research projects required of students in this academy. Students planning to attend a four-year postsecondary institution are advised to use some of their elective slots to take at least two years of World Language and Algebra II. Students interested in the Visual Communications industry may also want to enroll in Art II.

Prerequisite

- Art I

Special Requirements

- Maintain a Grade Point Average (G.P.A.) of 2.0 in all academy coursework

Students have the option of completing the senior practicum through a work-site experience (own transportation required) or by attending the on-campus (ARL) senior practicum of advanced skills, which includes a capstone project at the ARL campus.

Students are required to: complete at least 6-8 hours of experience per week at the mentor site; attend weekly senior seminars at the Applications and Research Laboratory; (or attend daily at ARL); choose a "real world" problem to research; and write and submit a research proposal, abstract, and reflection paper based on their research project work. Students will give a culminating multimedia senior presentation for their final grade. Students are required to maintain and submit a journal and portfolio of their senior practicum work. Students must provide their own transportation to a worksite, or participate in on-campus placements at ARL.

9th Grade	10th Grade	11th Grade	12th Grade
English 9	English 10	English 11	English 12
Algebra 1/DA or above	Geometry or above	Mathematics Requirement	Mathematics Elective
Science Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Visual Communications Junior Practicum 845M or Animation I 810M	Visual Communications Senior Practicum 849M or Advanced Animation 811M
Tech Ed Requirement	Art I 6000		
Elective	Elective		

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

Shaded areas designate academy coursework.

College Articulation

Successful completion of the Visual Communications Program, with a grade B or higher in all coursework, earns the student up to 9 credits at Howard Community College or up to 20 credits at the Art Institute of Washington.

Sample Careers

Production Artist	Video Editor
Photographer	Exhibit Artist
Digital Artist	Video/TV Producer
Imaging Technician	Pre-press Artist/Technician
Web Page Designer	Digital Imagery Productions Manager
Graphic Designer	Illustrator
Multimedia Designer	Presentations Designer
Art Director/Creative Director	Videographer
Visual Communications Teacher	Desktop Publishing Specialist
Technical Illustrator	Multimedia Graphics Specialist

COMPUTER PROGRAMMING ACADEMY

Location: All academy coursework is taught at the local 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 two AP Computer Science courses.

Recommended Electives

- Software Applications I
- Software Applications II
- Software Applications III
- Career Research and Development I
- Principles of Business
- World Language I
- World Language II
- Technology Systems I

Prerequisites

- Completion of Algebra I prior to enrollment in academy coursework

Special Requirements

- Maintenance of a minimum of 2.0 in academy courses
- Completion of a large-scale group programming project during their senior year
- Upon completion of Computer Science III, students are encouraged to take the AP Computer Science A exam.
- Upon completion of Computer Science IV, students are encouraged to take the AP Computer Science AB 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 Requirement	Biology*	Science Requirement	Elective
U.S. History	American Government	World History	Elective
Lifetime Fitness/Health	Elective	Elective	Elective
Fine Arts Requirement	Technology Education Requirement	Elective	Elective
Computer Science I 450M	Computer Science II G/T 460M or Computer Science III AP G/T 465M	Computer Science III AP G/T 465M or Computer Science IV AP G/T 471M	Computer Science IV AP G/T 471M or Advanced Object Oriented Design G/T 472M

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

Shaded areas designate academy coursework.

Sample Careers

- | | |
|---------------------|-------------------------------|
| Computer Engineer | Cryptanalyst |
| Computer Operator | Database Developer |
| Software Tester | Intelligence Specialist |
| Software Programmer | Computer Forensics Specialist |
| IT Specialist | Virtual Reality Developer |
| Robotics Engineer | Computer Scientist |



Overview

Course Description

COURSE DESCRIPTIONS

322-Course Number

M-Certificate of Merit

♥ Weighted Class

● High School Assessment Course

★ NCAA Approved Course

Course Title

Course Level

Grades Eligible for Course

Number of Credits

322 M ♥ ● ★

Geometry G/T

Grades 9, 10

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.

Credit 1

Prerequisites

Course Description

Contents	
Advanced ResearchD-3	Health EducationD-33
ArtD-5	MathematicsD-35
Career and Technology EducationD-9	MediaD-39
Business and Computer Management . . .D-10	MusicD-41
Career Research and Development. . . .D-12	Phys. Ed./Dance Ed.D-45
Family and Consumer SciencesD-13	ReadingD-49
Technology EducationD-15	ScienceD-51
Centralized Academy CoursesD-17	Social StudiesD-57
JROTCD-21	Special EducationD-63
EnglishD-23	Theatre ArtsD-65
ESOLD-29	World LanguagesD-69
GuidanceD-33	

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.

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.

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.

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

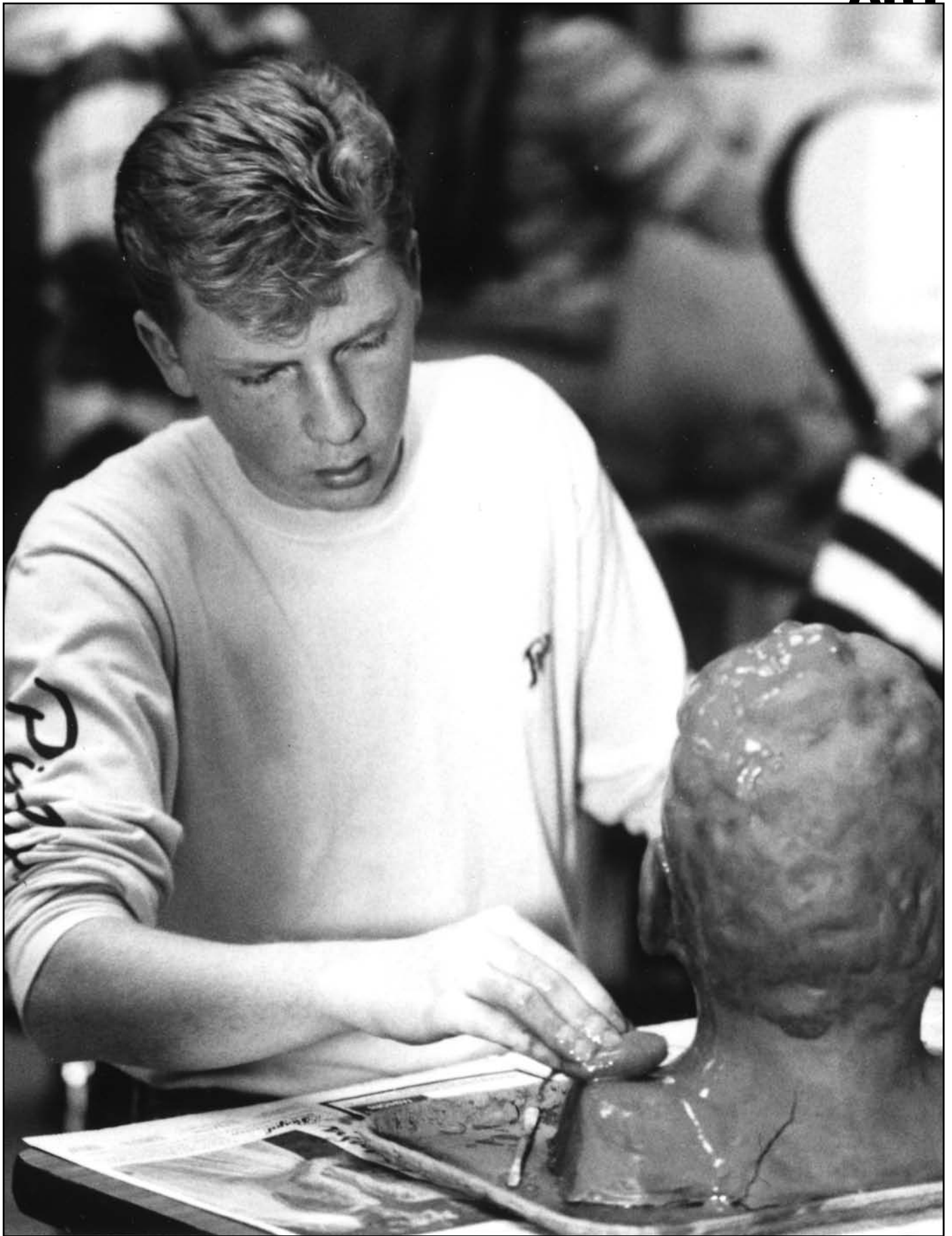
Chemistry I; staff recommendation

Prerequisites for Technology Research: Software

Applications I or Technology Systems; 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.



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. Upper-level courses may be taken for one or two credits at either Honors or GT/AP-level designation. All art courses satisfy the Fine Arts graduation requirement except History of Art.

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: Grade C or better in 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: Grade B or better in Art I and a portfolio review

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: Grade B or better in Art II

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.

604M♥ (1 credit)

605M♥ (2 credits)

Art III: Portfolio Development – Advanced Placement G/T [AP Studio Art: Drawing, 2-D Design, and 3-D Design]

Grades 11, 12

1-2 credits

Prerequisite: Grade B or better in Art II and a portfolio review

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.

600M (1 credit)

601M (2 credits)

Art IV: Personal Directions in Art Studio – Honors

Grade 12

1-2 credits

Prerequisites: Grade B or better in Art III

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 –
Advanced Placement G/T [AP Studio Art:
Drawing, 2-D Design, and 3-D Design]**
Grade 12 **1-2 credits**

Prerequisites: Grade B or better in Art III and a portfolio review

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 (Advanced Placement G/T), leading to the Advanced Placement examination.

690M♥
AP Art History - Advanced Placement G/T
Grades 11, 12 **1 credit**

Prerequisite: Grade B or better in 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. Upon completion, students are expected to take the Advanced Placement examination.

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

Prerequisite: Grade B or better in 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: Grade C or better in 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
Photography II: Portfolio Development
Grades 11, 12 **1 credit**

Prerequisite: Grade B or better in Photography I

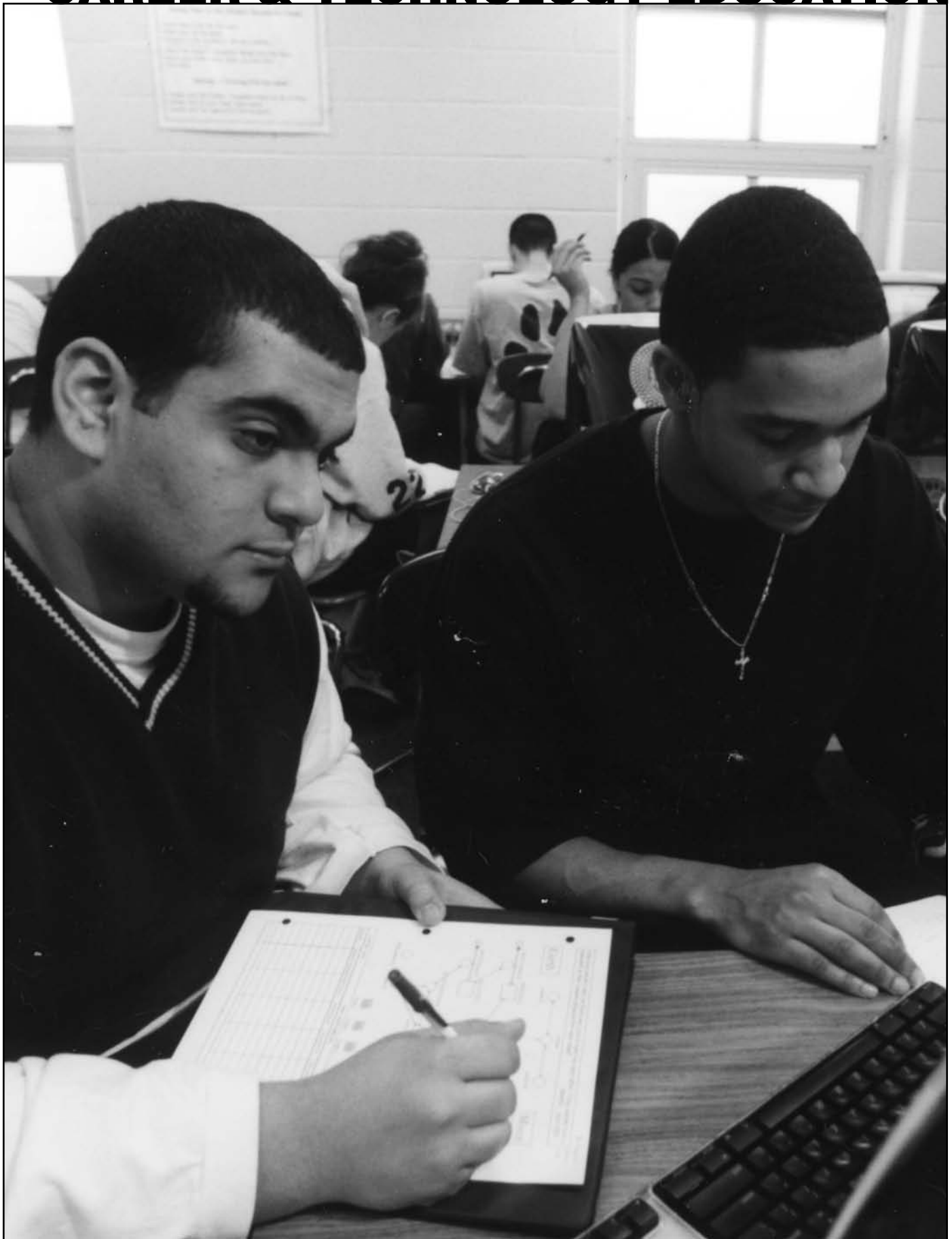
In this course, students refine and master technical skills as well as experiment with alternative approaches and materials as they compose unique photographs. Additionally, students will develop a photographic portfolio that demonstrates quality, shows breadth of formal, technical, and expressive experiences 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.

692M♥ (1 credit)
693M♥ (2 credits)
**Photography III: Personal Directions in
Photography [AP Studio Art: 2-D Design]**
Grade 12 **1-2 credits**

Prerequisite: Photography II (with a grade B or better)

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.

CAREER & TECHNOLOGY EDUCATION



CAREER AND 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 (see page A-5). 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 AND COMPUTER MANAGEMENT SYSTEMS (BCMS)

The courses offered within Business and Computer Management Systems (BCMS) provide students the opportunity to develop both the knowledge and skills necessary to prepare for work in the technology-based environments of today. The Career Academies Program includes three BCMS Academies which are affiliated with the National Academy Foundation (NAF). These academies are the Academy of Finance, the Computer Networking Academy and the PC Systems Academy. These three academies are offered only at the Applications and Research Laboratory. Course descriptions for these ARL-Based academies are located in the ARL-Based Academy segment of this section of the 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.

4520

Software Applications I*

Grades 9, 10, 11, 12

1 credit

(Technology Education 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. Successful completion of this course, with a grade of B or better, earns the student three credits at Howard Community College.

**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.

551M

Principles of Business

Grades 10, 11, 12

1 credit**Prerequisite:** Software Applications I

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 better.

5601

Accounting I

Grades 10, 11, 12

1 credit**Prerequisite:** Software Applications I

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

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. 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.

565M

Principles of Marketing

Grades 11, 12

1 credit**Prerequisite:** Completion of or concurrent enrollment in Principles of Business

This course introduces students to basic 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. Appropriate technology is integrated throughout this course.

564M

Advanced Marketing

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. Appropriate technology is integrated throughout the course.

579M

E-Commerce and Entrepreneurship

Grades 11, 12

1 credit**Prerequisite:** Principles of Business

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.

5751 (1 credit)

5752 (2 credits)

5753 (3 credits)

Business and Computer Management Systems Work Experience

Grades 11, 12

1-3 credits

As a part of the third year in the Career and Technology Education completion program, students are eligible for work experience. Such paid or unpaid placements must be scheduled on an individual basis and supervised by a school coordinator. The number of approved hours as well as job performance will determine the number of credits received. Enrollment in this class requires Business and Computer Management Systems teacher approval.

450M

Computer Science I

Grades 9, 10, 11, 12

1 credit

(Technology Education Credit)

Prerequisite: Algebra I

Computer Science I is an introductory programming course that exposes students to the fundamental principles and technology of object-oriented programming primarily through the Visual Basic language. Topics to be explored include Graphical User Interfaces (GUIs), variables and constants, decision structures, looping structures, functions, mathematical and business functions, arrays, graphics, as well as sorting and searching.

460M♥

Computer Science II G/T

Grades 9, 10, 11, 12

1 credit**Prerequisite:** Computer Science I

This mid-level course extends the study of object-oriented programming through the Java language. 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 Advanced Placement G/T [Computer Science A]

Grades 10, 11, 12

1 credit**Prerequisite:** Grade of "B" or better in Computer Science I or 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, and GUI components and event handling. The objective of this course is to prepare students for the A version of the Advanced Placement Computer Science examination.

471M♥

Computer Science IV-Advanced Placement G/T [Computer Science AB]

Grades 11, 12

1 credit**Prerequisite:** Grade of "B" or better in Computer Science III AP or G/T or staff recommendation

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. The objective of this course is to prepare students to take the AB version of the Advanced Placement Computer Science examination.

472M♥

Advanced Object-Oriented Design – G/T

Grades 11, 12

1 credit**Prerequisite:** Computer Science III AP or G/T

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.

4530

Laboratory Assistant-BCMS

Grades 11, 12

1 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.

CAREER RESEARCH AND 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 or Concurrent Enrollment. Successful completion of the CRD program, with a grade of B or higher in the CRD course sequence, earns the student 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 meet the High School Core Learning Goals including the Skills for Success while exploring career options and developing workplace readiness skills. Course content will include topics such as: identifying interests and aptitudes; investigating careers; setting goals and planning to achieve them; finding and applying for a job; communicating effectively; understanding choices and challenges in the world of work; applying reading and mathematic skills to the world of work; and using computers and technology.

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 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 mathematics 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 Development II.

The CRD teacher/coordinator will coach and assist students as they secure employment based on the results from career research, interest inventories, and aptitude assessments taken in CRD I. Students will sign a required work-based contract. Students' work hours must overlap the afternoon work hours of the CRD work-site coordinator.

6889 - (2 credits)

6890 - (3 credits)

6891 - (4 credits)

Concurrent Enrollment

Grades 10, 11, 12

2-4 credits

As an option to site-based employment, students may substitute enrollment at Howard Community College/Post-Secondary program in a career pathway. This may be in a credit or non-credit class as approved by the Career Research and Development teacher.

FAMILY AND 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 Sciences, Hospitality Management, and the Teacher Academy of Maryland (TAM). Course descriptions for the Hospitality 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.

6510

Food and Nutrition Technology

Grades 9, 10, 11, 12

1 credit

(Technology Education 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.

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.

6527

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.

6531

Child Development

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 better are eligible for three college credits at Howard Community College.

6535

Foundations of Curriculum and Instruction

Grades 11, 12

1 credit**Prerequisite:** Grade of C or better 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 better are eligible for three college credits at Howard Community College.

6534

Teaching as a Profession

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.

6571 - (1 credit)

6572 - (2 credits)

6573 - (3 credits)

Field Experience in Education

Grade 12

1-3 credits**Prerequisite:** Successful completion of or concurrent enrollment in Foundations of Curriculum and Instruction.

Required for the Child Development and Teacher Academies, this site-based course offers individual placement in a school, childcare center, or other setting related to the care of children. Once placed, students are supervised by the Teacher Academy of Maryland teacher and must schedule a portion of their placement hours during the Teacher Academy teacher's afternoon work hours to allow for monitoring and evaluation.

6555

Fashion Technology

Grades 10, 11, 12

1 credit

Fashion Technology is a course focused on the study of the elements of design, textile construction, the history and psychology of apparel, retail merchandising, apparel careers, business skills and trends, and industry computer applications. Students will view these topics from a consumer as well as a business perspective. Using field trips, guest speakers, and the Internet, students will explore the use of technology for apparel design, advertising and merchandising.

TECHNOLOGY EDUCATION

In a society that is dependent upon technology, it is important that all students develop technological literacy. The recent development of the National Standards for Technological Literacy (2001) has defined a body of knowledge for the study of technology. This body of knowledge 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.

Course descriptions for courses in the Construction Technology Academy are in the ARL-based Academy segment of this section of the catalog. Course descriptions for courses that make up the two school-based academies and courses that meet the Technology Education & Advanced Technology Education graduation requirements follow.

6750

Technology Systems

Grades 9, 10, 11, 12

1 credit

(Technology Education Credit)

The Technology Systems course prepares students to understand and apply technological concepts and processes that are cornerstones of the technological and designed world. Students explore the major systems of technology: Communication, Construction, Manufacturing, and Energy-Power-Transportation. Students apply knowledge of the nine "core technologies," basic research techniques, and problem solving procedures to address simulated real-world technological problems. Technology content, resources, and activities engage students in applications of science, mathematics, and other school subjects in authentic situations.

6753

Communication Technology

Grades 10, 11, 12

1 credit**Prerequisite:** Technology Systems or staff recommendation

In this course, students explore areas of communication technology. Students will develop, produce, and assess practical solutions to problems in audio, visual, and audio-visual systems. Activities may include experiences in desktop publishing, print production, digital audio and video production, computer-aided drafting CADD, website development, and career explorations in the above areas.

6756

Materials and Process Technology

Grades 10, 11, 12

1 credit**Prerequisite:** Technology Systems or staff recommendation

Students gain a basic understanding of materials and manufacturing processes required to complete a variety of activities and projects. Students are trained in machine and tool operation and safety, and they construct products using a variety of materials, such as wood, plastics, metals, and ceramics.

6755

Production Technology

Grades 10, 11, 12

1 credit**Prerequisite:** Materials and Process Technology

Students explore advanced areas of manufacturing technology in this "hands-on" course. Students will learn and experience the processes necessary to develop and produce a manufactured item. Topics may include marketing, cost analysis, layout and measurement, CADD, jig and fixture design, facility planning, line production, quality control, and packaging. Students will use tools, machines, and various materials to develop marketable products while simulating a manufacturing enterprise.

6800

Mechanical Drawing

Grades 10, 11, 12

1 credit**Prerequisite:** Technology Systems or staff recommendation

This course is for students interested in architectural design and/or engineering design. Students will develop freehand sketches, two-dimensional drawings, pictorial drawings, and CADD-based drawings. Topics may include care and use of drawing instruments, measurement, dimensions, multi-view drawings, section drawings, surface developments, technical illustrations, and architectural designs.

6810

Architectural Drawing

Grades 10, 11, 12

1 credit**Prerequisite:** Technology Systems or staff recommendation

In the Architectural Drawing course, students study various design problems. Topics range from architectural history to contemporary residential and commercial architecture. Students learn and apply basic and universal drafting techniques and then design residential structures. Computer-Aided Drafting and Design (CADD) may be used in the course.

684M

Engineering Design

Grades 10, 11, 12

1 credit

(Technology Education Credit)

Prerequisite: Technology Systems or staff recommendation

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.

6754 - (1 credit)
 6757 - (2 credit)
 6758 - (3 credit)
 6759 - (4 credit)

Technology Education - Site Based Experience

Grade 12

1-4 credits

This course is part of the Career and Technology Education Program (CTE). Placements are arranged on an individual basis and are supervised by a Work Experience Coordinator. Enrollment requires teacher approval.

The following five courses are only offered at the following high schools Atholton, Centennial, Hammond, Howard, Long Reach, Marriotts Ridge, Reservoir, River Hill, and Wilde Lake.

680M

Principles of Engineering (POE)

Grades 9, 10

1 credit

(Technology Education Credit)

Prerequisite: Algebra I / Data Analysis (341) is the minimum mathematics 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.

681M

Introduction to Engineering Design (IED)

Grades 9, 10, 11

1 credit

Prerequisites: Principles of Engineering or staff recommendation; Geometry is the 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.

685M

Computer Integrated Manufacturing (CIM)

Grades 10, 11, 12

1 credit

Prerequisites: Introduction to Engineering Design or staff recommendation; Algebra II (330M) is the minimum mathematics requirement.

Computer Integrated Manufacturing 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)

Grades 10, 11, 12

1 credit

Prerequisite: Introduction to Engineering Design 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

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.

CENTRALIZED ACADEMY COURSES OFFERED ONLY AT THE APPLICATIONS AND RESEARCH LABORATORY (ARL)

Note: EMT-B is taught at the Fire and Rescue Training Center.

5601A

Accounting I

Grades 10, 11, 12

1 credit

Prerequisite: Software Applications I

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. (Academy of Finance)

560MA

Accounting II

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. 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)

455M

Advanced Networking

Grade 12

2 credits

Prerequisite: PC Systems, Fundamentals and Networking Design I

Corequisite: Networking Design II

This is the final required course which students take to complete the Computer Networking Academy. This course covers Wide Area Networking concepts, components, services, connectivity options and protocols. It includes an independent research project where students complete work simulations. The work simulations will present "real world" problems for research. (Computer Networking Academy)

870M

Allied Health Junior Practicum

Grades 11, 12

2 credits

Prerequisite: Biology I; 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, long-term care facilities, and nursing homes. Emphasis is placed upon communication skills, qualities of effective health care workers, and legal responsibilities. (Allied Health Academy)

874M

Allied Health Senior Practicum

Grade 12

3 credits

Prerequisite: Allied Health Junior Practicum and teacher recommendation

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. (Allied Health Academy)

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)

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 be tested on Automotive Service Excellence (ASE) criteria. (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 be tested on Automotive Service Excellence (ASE) criteria. (Automotive Technology Academy)

5752

BCMS Work Experience

Grade 12

1 credit**Prerequisite:** PC Hardware

As part of the fourth year in the PC Systems Academy, students will participate in a work experience related to their technology career interests. Placements must be scheduled on an individual basis and supervised by a school coordinator. (PC Systems Academy)

835M♥

Biotechnology Junior Practicum

Grades 11, 12

2 credits**Prerequisites:** Biology I; successful completion of or concurrent enrollment in Chemistry and Algebra II

This course is designed to introduce students to procedures and instruments used in biotechnology laboratories. Students will obtain the core background of molecular biology including molecular genetics, microbiology, and cellular biology. Students will use biological and chemical processes relating to the human genome, agricultural biology, genetics, tissue cultures, assays, and quality assurance. Safety protocols and maintenance of written records will be emphasized. Laboratory experiences will enhance the core background of molecular biology, genetics, and microbiology. (Biotechnology Academy)

839M♥

Biotechnology Senior Practicum

Grade 12

3 credits**Prerequisite:** Biotechnology Junior Practicum and teacher recommendation

This is the final course to complete the Biotechnology Academy. Students participate in internships related to career interests. Students complete at least 6-8 hours per week at the mentor site, attend weekly seminars, submit research abstracts on "real world problems," and write reflection papers. Students provide their own transportation to off-campus placements. Students on campus examine applications of biotechnology in the modern world. Topics include agriculture and industry, bioinformatics, genetics and genetic counseling, and bioethics. (Biotechnology Academy)

6894

Certified Nursing Assistant

Grade 11, 12

3 credits**Prerequisites:** Successful completion of Algebra I/DA, Software Applications I, and Biology 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 life span 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. (Certified Nursing Assistant Academy)

854M

Construction Technology I

Grades 11, 12

2 credits**Prerequisites:** Technology Systems and Materials and Processes or Architectural Drawing or Mechanical Drawing

Students apply architectural engineering, construction technology, and management principles to practical projects within residential and commercial construction. 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 Technology Academy)

858M

Construction Technology II

Grade 12

3 credits**Prerequisite:** Construction Technology I and teacher recommendation

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 submit abstracts based on their project work. Students provide their own transportation, or on-campus placements at the ARL are available. (Construction Technology Academy)

580M

Economics and the World of Finance/Banking And Credit

Grades 11, 12

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 B

Grade 12

3 credits**Prerequisites:** Overall G.P.A of 2.5 and a 3.0 G.P.A. 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. (Emergency Technician/Paramedic Academy)

860M♥

Energy, Power and Transportation**Junior Practicum**

Grades 11, 12

2 credits**Prerequisite:** Technology Systems or Engineering Design

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. Students will be challenged individually and in teams to design "products" to solve real world technical problems. (Energy, Power, & Transportation Academy)

864M♥

Energy, Power and Transportation**Senior Practicum**

Grade 12

3 credits**Prerequisite:** Energy, Power and Transportation Junior Practicum and teacher recommendation

This is the final required course to complete the Energy, Power and Transportation 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 research abstracts, and write reflection papers based on their project work. Students provide their own transportation or on-campus placements at ARL are available. (Energy, Power, & Transportation Academy)

581M

International Finance/Financial Planning

Grades 11, 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 Hospitality and Tourism 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)

880M

Management and Leadership in Hotels and Restaurants

Grade 12

3 credits

Prerequisite: Completion of 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, 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)

4567

Networking Design I

Grades 11, 12

1 credit

Corequisite: PC Fundamentals

Networking Design I introduces the fundamentals of computer networking with an emphasis on Cisco routing protocols. Students will learn networking theories and topologies as well as planning for a variety of networking configurations. Hands-on lab activities will involve installing network cabling and configuring networks for TCP/IP protocol. (Computer Networking Academy)

4568

Networking Design II

Grades 11, 12

1 credit

Prerequisite: Networking Design I

Corequisite: Networking Design I

Networking Design II continues the study of the Cisco networking objectives. Topics include router configuration and operation, LAN segmentation, Internet operation, network segmentation, virtual LANs, frame relay, WAN services, ISDN networking, routing, and switching. (Computer Networking Academy)

4561

PC Hardware

Grades 11, 12

2 credits

Prerequisite: Software Applications I; Algebra I

This course is intended to cover the topics that make up sections of the Comp TIA A+ exam. The course will develop skills related to the fundamentals, installation, configuration, upgrading, diagnosing, troubleshooting, PC systems and components. This course will be held in a computer lab where students will gain hands-on practical experience under the direction of an A+ certified instructor. (PC Systems Academy)

4565

PC Operating Systems

Grade 12

1 credit

Prerequisite: PC Hardware

This course is intended to cover the topics that make up sections of the Comp TIA A+ exam.

The course will develop skills related to the fundamentals, installation, configuration, upgrading, diagnosing, troubleshooting, and networking of PC operating systems. Additional topics include: help desk support, bench tech, field tech. This course will be held in a computer lab where students will gain hands-on practical experience under the direction of an A+ certified instructor. (PC Systems Academy)

4566

PC Systems Fundamentals

Grades 11, 12

1 credit

Prerequisite: Software Applications I, Algebra I

Corequisite: Networking Design I

This course provides a basic framework for understanding how a PC and its operating systems function. The course will focus on the basic components of a PC, the connectivity of the components, basic maintenance, and troubleshooting. Additional topics will include introduction to operating systems and peripheral devices. (Computer Networking Academy)

565MA

Principles of Marketing

Grades 11, 12

1 credit

Prerequisite: Economics (World of Banking and Credit)

This course introduces students to basic 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. Appropriate technology is integrated throughout this course.

845M♥

Visual Communications Junior Practicum

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 Senior Practicum

Grade 12

3 credits**Prerequisite:** Visual Communications Junior Practicum 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 research abstract, and write reflection papers based on their project work. Students provide their own transportation or on-campus placements at ARL are available. (Visual Communications Academy)

Junior Reserve Officers Training (JROTC)

Junior Reserve Officers Training 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 - 10th Grade

JROTC III 7503 - 11th Grade

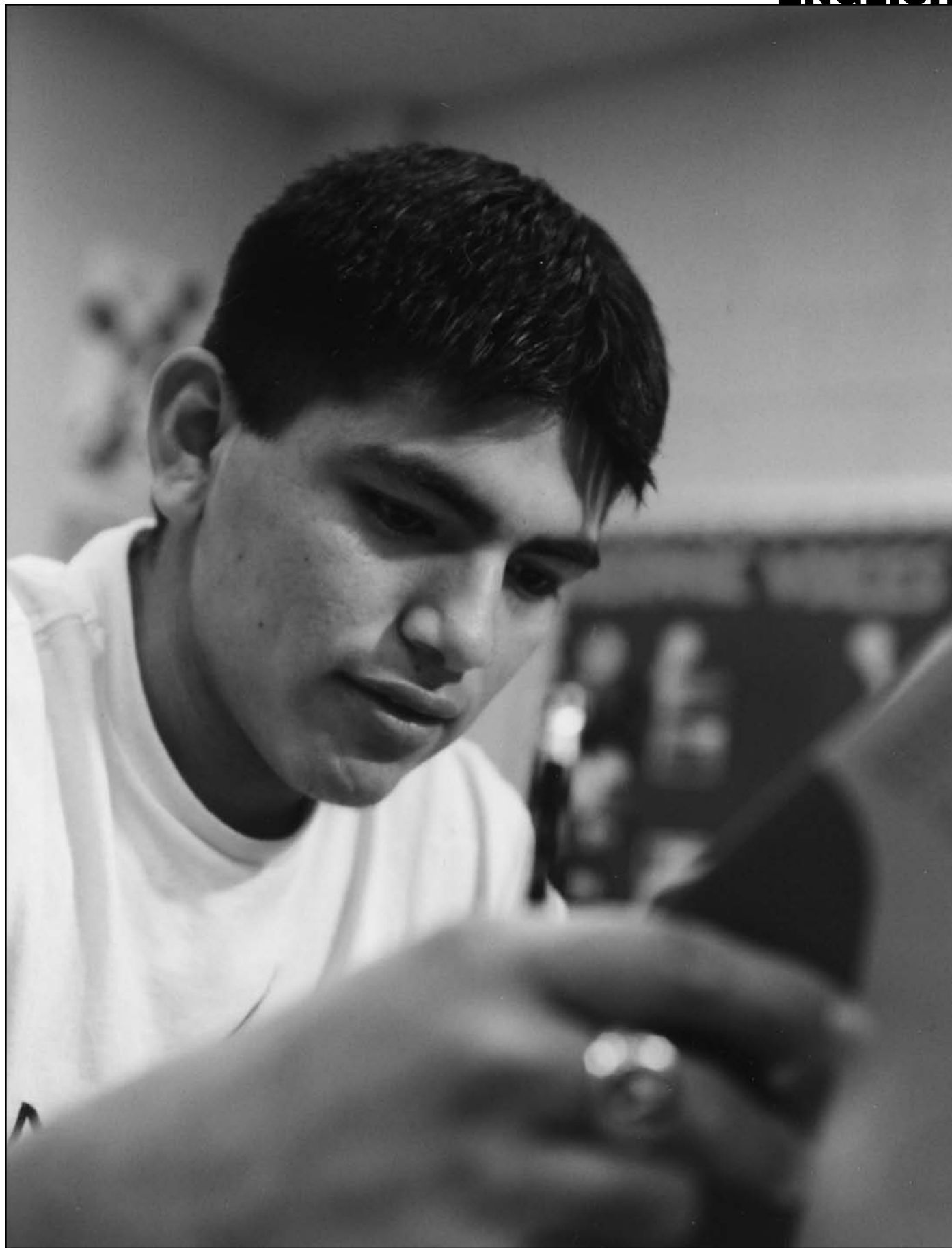
JROTC IV 7504 - 12th Grade

JROTC II, III, IV

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 LANGUAGE ARTS

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.

WHEN STUDENTS MUST REPEAT AN ENGLISH COURSE

Required English courses have no prerequisites. Students may enroll in two different grade levels of English during the same school year, complete an English credit in the Evening High School or Summer School, or transfer an English credit from another school system. Students should be warned, however, that it is very demanding to take two required English courses simultaneously, particularly after failing one previously.

WHEN STUDENTS NEED AN ADDITIONAL ENGLISH CREDIT

A student entering a Howard County high school as a senior sometimes needs an additional credit in English. These students may be enrolled concurrently in more than one section of English 12 if the teachers are offering different content modules. English electives may not be used to satisfy Maryland's graduation requirement of four credits in English.

1010

English 9 – Review level **1 credit**

This class provides additional assistance to students who find written composition and independent reading extremely difficult. 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**

English 9 Seminar is an elective course for students concurrently enrolled in English 9. It is intended to provide ninth graders with additional instruction in strategic reading, technical and creative writing, language skills, and study skills that they will need to be successful in all courses throughout the remainder of their high school careers. Instruction is in small group settings with a high degree of one-on-one interaction with the teacher.

101M♥★

English 9 – Honors **1 credit**

Although somewhat less rigorous than a gifted and talented class, English 9 Honors is more difficult than regular English classes and requires students to have a commitment to academic pursuits. Students should be at least one year above grade level in reading and writing skills. The recommendation of a student's current English teacher and consistently high achievement in previous English courses are desirable for enrollment in this class. 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 reading and writing skills which are at least two years above grade level. The recommendation of a student's current English teacher is desirable prior to enrolling in this class. 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**

This class provides additional assistance to students who find written composition and independent reading extremely difficult. 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.

111M♥★●

English 10 – Honors 1 credit

Although somewhat less rigorous than a gifted and talented class, English 10 Honors requires students to have a commitment to academic pursuits. Students should be at least one year above grade level in reading and writing skills. The recommendation of a student's current English teacher and consistently high achievement in previous English courses are desirable for enrollment in this class. 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 reading and writing skills which are at least two years above grade level. The recommendation of a student's current English teacher is desirable prior to enrollment. 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.

Semester I - 1112

Semester II - 1113

Preparing for Standardized Assessments**1/2 credit**

Grade 10

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. This course is intended to be taken concurrently with English 10.

Semester I - 1116

Semester II - 1117

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 all based upon 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.

1210

English 11 – Review level 1 credit**Prerequisite:** Staff recommendation

This class provides additional assistance to students who find written composition and independent reading extremely difficult. The class pace is slower than other English 11 classes; however, the units are the same. Students will complete a chronological survey of American literature by examining the thematic concerns of selected major writers. This section may not be scheduled in all high schools.

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 a gifted and talented class, English 11 Honors requires students to have a commitment to academic pursuits. Students should be at least one year above grade level in reading and writing skills. The recommendation of a student's current English teacher is desirable for enrollment. This is a Certificate of Merit course.

122M♥★

English 11 – G/T 1 credit

This class offers an enriched and accelerated version of English 11. Students in English 11 G/T exhibit reading and writing skills which are at least two years above grade level. The recommendation of a student's current English teacher is desirable prior to enrolling in this class. Students who are enrolled in this course are encouraged to take the Language and Composition AP examination during their junior year. This is a Certificate of Merit course.

1310

English 12 – Review level 1 credit

This class provides additional assistance to students who find written composition and independent reading extremely difficult. The class pace is slower than other English 12 classes; however, the units are the same. Students will complete two semester 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.

1315★

English 12**1 credit**

Students will complete two semester 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.

131M♥★

English 12 – Honors**1 credit**

Although somewhat less rigorous than a gifted and talented class, English 12 Honors requires students to have a commitment to academic pursuits. Students should be at least one year above grade level in reading and writing skills. The recommendation of a student's current English teacher is desirable for enrollment in this course. This is a Certificate of Merit course.

132M♥★

English 12 – Advanced Placement G/T**1 credit**

Students in English 12 G/T exhibit reading and writing skills which are at least two years above grade level. The recommendation of a student's current English teacher is desirable prior to enrolling in this class. Students are encouraged to take either the Literature and Composition Advanced Placement examination or the Language and Composition Advanced Placement examination in the spring of their senior year. This is a Certificate of Merit course.

Semester I – 141M★

Semester II – 142M★

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.

Semester I – 1955

Semester II – 1956

Year – 1957

SAT Preparation Course

Grades 10, 11, 12

1/2-1 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.

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.

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.

Semester I – 1601★

Semester II – 1605★

Year – 1603★

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.

Semester I – 1606★

Semester II – 1602★

Year – 1604★

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.

1799

Laboratory Assistant – English Language Arts

Grades 11, 12

1 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.

Semester I – 1800

Semester II – 1801

Year – 1802

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.

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 2 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**Prerequisites:** Recommendation from GT 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 2 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 and the High School Assessment for American Government.

183M♥

Humanities III G/T (English)

Grade 11

1 credit**Prerequisites:** Recommendation from GT 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 prepared to take the Advanced Placement Examination. Students are also prepared for and expected to take the Advanced Placement examination in English Language and Composition. This course requires a historical research paper and a literary research paper. Because students are concurrently enrolled in 283M, they receive 2 credits, one for English and one for Social Studies, (United States History or World History).

184M♥

Humanities IV G/T (English)

Grade 12

1 credit**Prerequisites:** Recommendation from GT 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. This class prepares students for the Literature and Composition AP Examination. Because students are concurrently enrolled in 284M, they receive 2 credits, one for English and one elective credit for social studies.



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 courses are provided as full or half credit options to accommodate students who enroll in the school system's first or second semesters. Some Newcomer English language learners may benefit from participation in the Transitional ESOL Mathematics courses as precursors to Mathematics Concepts and Applications.

9516

Newcomer ESOL English I

Grade 9

1 credit

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. The course is to be taken in conjunction with Newcomer ESOL English II, which focuses on vocabulary and content development in Science and United States History.

9517

Newcomer ESOL English IA

Grade 9

1/2 credit

The goal of Newcomer ESOL English IA is to provide students with intensive instruction in English by focusing on vocabulary development, reading skills, and writing skills. The course is to be taken in conjunction with Newcomer ESOL English IIA, which focuses on vocabulary and content development in Science and United States History.

9518

Newcomer ESOL English IB

Grade 9

1/2 credit

The goal of Newcomer ESOL English IB is to provide students with intensive instruction in English by focusing on vocabulary development, reading skills, and writing skills. The course is to be taken in conjunction with Newcomer ESOL English IIB, which focuses on vocabulary and content development in Science and United States History.

9519

Newcomer ESOL English II

Grade 9

1 credit

The goal of Newcomer ESOL English II is to provide students with intensive vocabulary and content development in Science and United States History. The course is to be taken in conjunction with Newcomer ESOL English I, which focuses on literacy skills development in English.

9520

Newcomer ESOL English IIA

Grade 9

1/2 credit

The goal of Newcomer ESOL English IIA is to provide students with intensive vocabulary and content development in Science and United States History. The course is to be taken in conjunction with Newcomer ESOL English IA, which focuses on literacy skills development in English.

9521

Newcomer ESOL English IIB

Grade 9

1/2 credit

The goal of Newcomer ESOL English IIB is to provide students with intensive vocabulary and content development in Science and United States History. The course is to be taken in conjunction with Newcomer ESOL English IB, which focuses on literacy skills development in English.

9522

Newcomer ESOL Transitional Math

Grade 9

1 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.

9523

Newcomer ESOL Transitional Math A

Grade 9

1/2 credit

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

9524

Newcomer ESOL Transitional Math B

Grade 9

1/2 credit

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

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

Grades 9, 10, 11, 12

1 credit

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 one English credit.

9525

ESOL English Literature & Composition IA

Grades 9, 10, 11, 12

1/2 credit

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. This course is to be taken in conjunction with ESOL English Literature & Composition IB so that students earn one English credit.

9526

ESOL English Literature & Composition IB

Grades 9, 10, 11, 12

1/2 credit

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. This course is to be taken in conjunction with ESOL English Literature & Composition IA so that students earn one English credit.

9508

ESOL English Language Development I

Grades 9, 10, 11, 12

1 credit

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.

9527

ESOL English Language Development IA

Grades 9, 10, 11, 12

1/2 credit

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. This course is to be taken in conjunction with ESOL English Language Development IB.

9528

ESOL English Language Development IB

Grades 9, 10, 11, 12

1/2 credit

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. This course is to be taken in conjunction with ESOL English Language Development IA.

9505

ESOL Introduction to US History

Grades 9, 10, 11, 12

1 credit

This elective credit course introduces beginning ESOL students 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

Grades 9, 10, 11, 12

1 credit

This elective credit course offers beginning ESOL students 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.

9509

ESOL Tutorial IA

Grades 9, 10, 11, 12

1/2 credit

This elective credit course offers beginning ESOL students 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, 11, 12

1 credit

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 one English credit.

9511

ESOL English Language Development II

Grades 9, 10, 11, 12

1 credit

This elective 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.

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 credit

This elective credit course for ESOL students enrolled in ESOL English II provides 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 High School Assessments is offered for any students who have not yet met these 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.

9512

ESOL English Language Development III

Grades 9, 10, 11, 12

1 credit

This elective course provides additional instruction in listening, speaking, reading, and writing for English language learners enrolled in English 9 or 10. 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.

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. This course fulfills the American Government graduation requirements.

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. This course fulfills the World History graduation 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.

GUIDANCE/HEALTH EDUCATION



GUIDANCE

1900

Tutoring Program

Grade 12

1 credit

Student participants will gain skills in tutoring, locating career information, and using reference and audio/visual materials. Additionally, they will build skills in group dynamics by working with other students. Only one elective credit can be earned as a student assistant; credit may only be awarded after the 20th graduation credit has been recorded.

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)

1/2 credit

The course will focus on the goal areas of Maryland's health education curricular framework: alcohol, tobacco, and other drugs; nutrition and fitness; mental 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 students excused from the units on family life and human sexuality and HIV/AIDS prevention education.

7251 – Semester I

7252 – Semester II

7253 – Year

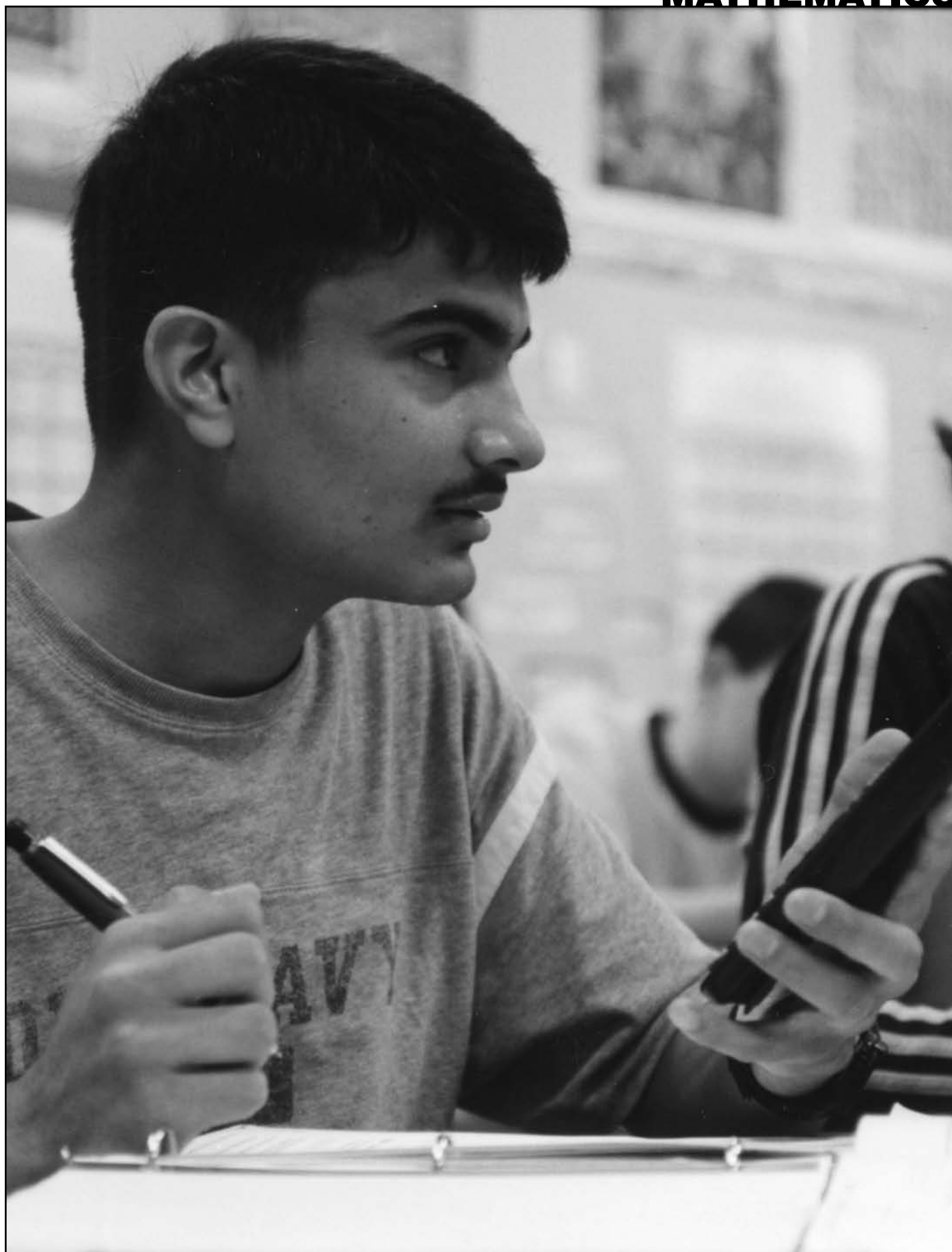
Current Health Issues

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 includes maintaining meaningful relationships, communicating with others, conflict resolution, dealing with change, personal safety, substance abuse prevention, human sexuality, goal setting, sexually transmitted infections, stress management, and personal loss. Course expectations will include research, journals, projects, and personal health plans. Parental permission is required for family life and human sexuality topics.

MATHEMATICS

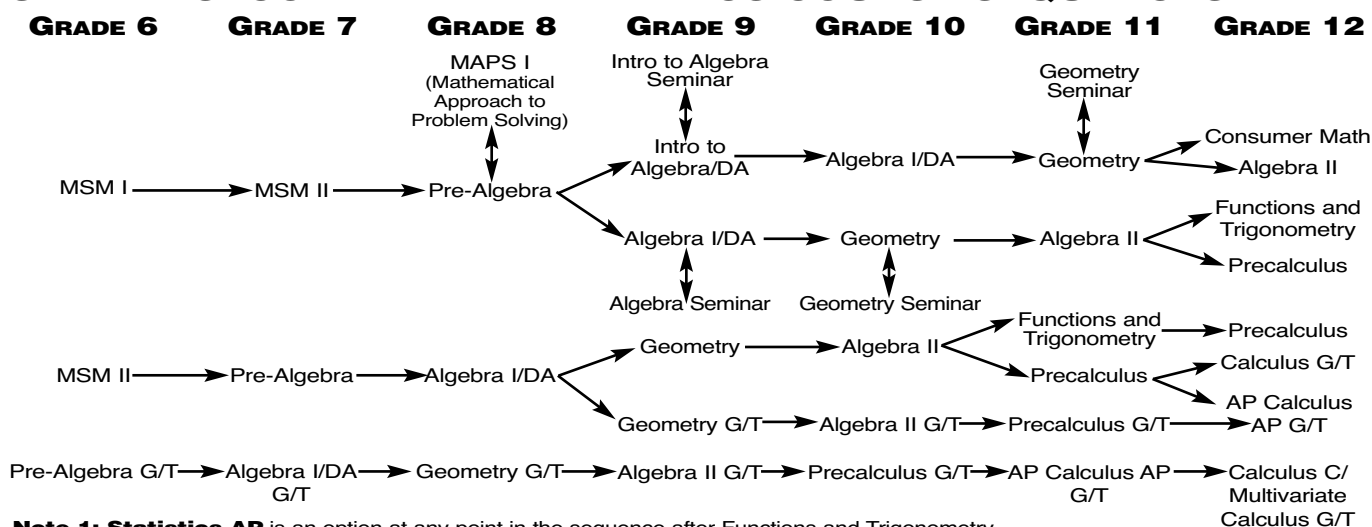


MATHEMATICS

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 from high school.

In order to graduate, students need three credits in mathematics, including Algebra/Data Analysis and either Introduction to Geometry or Geometry. All students must take the High School Assessment in Algebra/Data Analysis. Students who entered ninth grade in 2005 or later must pass the High School Assessment in Algebra/Data Analysis (or earn a combined passing score on the Algebra/Data Analysis, Biology, English 10 and American Government assessments) in order to graduate.

SAMPLE SECONDARY MATHEMATICS COURSE SEQUENCES



Note 1: Statistics AP is an option at any point in the sequence after Functions and Trigonometry.

Note 2: Differential Equations is an option for advanced mathematics students who have completed Calculus C/Multivariate Calculus.

Note 3: Students may enroll in the one-semester **SAT Prep** in any sequence shown after successful completion of Geometry, but prior to the students' senior year. **Introduction to Statistics** may be taken sequentially with SAT Prep anytime after Geometry.

3030

Introduction to Algebra/Data Analysis Seminar

Grade 9

1 elective credit

Coerequisite: Enrollment in Introduction to Algebra/Data Analysis 3040

This course is designed for students who need additional support in order to be successful in Introduction to Algebra I/Data Analysis. The principal focus is on building Algebra-readiness skills. The content includes geometric concepts, algebraic concepts, and applications to real-life situations. Students enrolled in this seminar will be enrolled concurrently in Introduction to Algebra.

3035

Consumer Mathematics

Grades 11, 12

1 credit

This elective course is intended to provide students with the skills necessary to be informed consumers and citizens. The content includes units on car buying, budgeting, taxes, consumer credit, interpreting data and statistics, careers, real estate, buying and selling foods and services, home ownership, and investments.

3040★

Introduction to Algebra/Data Analysis

Grades 9, 10

1 credit

This course provides the prerequisite skills to be successful in Algebra 1/Data Analysis. Topics include patterns, statistics, matrices, linear functions and applications-based problem solving. Graphing calculators are an integral part of this course. Students who complete this course are required to enroll in Algebra 1/Data Analysis and pass the Algebra/Data Analysis High School Assessment.

3043

Algebra I/Data Analysis Seminar

Prerequisite: Concurrent enrollment in

Algebra 1/Data Analysis

Grades 9, 10, 11

1 elective credit

Algebra / Data Analysis Seminar is an elective course for students concurrently enrolled in Algebra 1/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.

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 1/Data Analysis.

Semester I - 3044

Semester II - 3045

Algebra 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.

Semester I – 3060

Semester II – 3061

Intermediate Topics in Algebra/Geometry

Grades 10, 11, 12

1/2 credit**Prerequisites:** Algebra 1/Data Analysis and Geometry

This course is designed for students who want instruction on additional Algebra and Geometry topics before enrolling in upper level mathematic courses. It provides an extension of algebra and geometric concepts covered in both Algebra 1/ Data Analysis and Geometry. The students will use the graphing calculator to explore concepts in greater depth and for real world applications.

3201★

Introduction to Geometry

Grades 10, 11, 12

1 credit**Prerequisite:** Introduction to Algebra/Data Analysis and/or Algebra 1/Data Analysis

This course is designed for students who need additional time, practice, and support to master geometric concepts. The course covers geometric figures, their properties, classifications, and relationships and applications through hands-on activities.

3200

Geometry Seminar

Grades 10, 11, 12

1 elective credit**Prerequisite:** Concurrent enrollment in Geometry

Geometry Seminar is an elective course for students concurrently enrolled in Geometry. It provides students with additional instructional time to master essential geometric content, investigations-based problem solving, and communication of mathematical ideas. 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.

3202★

Geometry

Grades 9, 10, 11, 12

1 credit**Prerequisite:** Algebra 1/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.

322M♥★

Geometry G/T

Grade 9, 10

1 credit**Prerequisite:** Algebra 1/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.

Semester I - 1955

Semester II - 1956

Year - 1957

SAT Preparation Course

Grades 10, 11, 12

1/2-1 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 10, 11, 12

1 credit**Prerequisite:** Algebra I/Data Analysis; Geometry

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.

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.

329M

Introduction to Statistics

Grades 10, 11, 12

1/2 credit**Prerequisite:** Geometry

This course is an introduction to the study of statistics. It is designed to help students cope intelligently with and make informed decisions about their quantitative world. Students explore, summarize, and display data; design surveys and experiments; and explore simulations, samples, and random behavior. Graphing calculators are an integral part of this course.

344M★

**Functions and Trigonometry
(formerly College Algebra/
Trigonometry/Statistics)**

Grades 11, 12

1 credit**Prerequisite:** Algebra II

This course reviews and extends material covered in Algebra II. New topics include binomial expansion, advanced polynomial function properties, trigonometry, matrices, and applications of these concepts. Trigonometry includes right triangle trigonometry and circular functions and their inverses and graphs, physical applications of trigonometry, and complex numbers. Graphing calculators are an integral part of this course.

342M★

Precalculus

Grades 11, 12

1 credit**Prerequisite:** Algebra II

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–Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisite:** Pre-calculus

Statistics AP/GT 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.

369M♥★

Calculus G/T

Grade 11, 12

1 credit**Prerequisite:** Pre-calculus

Calculus GT 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–Advanced Placement G/T

Grades 9, 10, 11, 12

1 credit**Prerequisite:** Pre-calculus

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.

370M♥★

**Calculus C/Multivariate Calculus–Advanced
Placement G/T [AP Calculus BC]**

Grades 10, 11, 12

1 credit**Prerequisite:** Calculus AB

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 derivatives, 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.

380M♥★

Differential Equations –G/T

Grades 11, 12

1 credit**Prerequisite:** Calculus C/Multivariate Calculus

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.

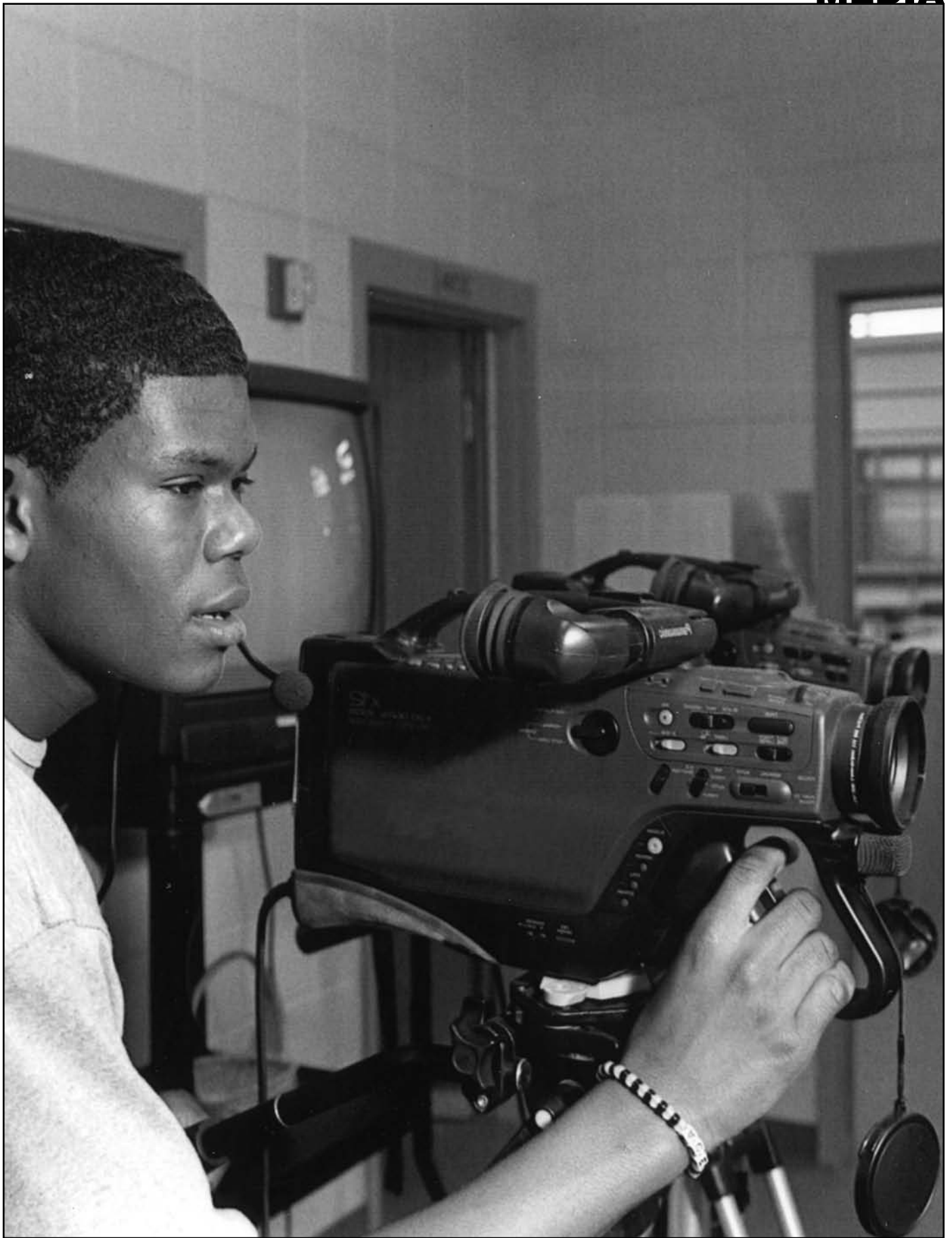
3999

Laboratory Assistant–Mathematics

Grades 11, 12

1 credit**Prerequisite:** Approval of mathematics instructional 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.



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, scriptwriting, graphic design, audio mixing, technical direction, and editing. Students will create and direct their own productions based on class assignments.

1899

Laboratory Assistant - Media

Grades 11, 12

1 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.



MUSIC

The music program is designed to develop skills, understanding, and musicality at the highest possible level. Inherent in the musical experience is a simultaneous combination of visual, auditory, and kinesthetic learning. 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 band, instrumental string and vocal ensembles, percussion, chorus, concert choir, madrigal singers, and string orchestra should be aware that attendance at rehearsals, sectional practices, and performances is an integral part of the course. Every effort is made by the local school to rotate sectional and pre-concert rehearsals, thus limiting the number of other classes missed. Prior to registration for these classes, music students and their parents should carefully review Board of Education Policy # 10123 concerning requirements.

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 adjudications, 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.

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, adjudications, 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 difficulty levels V and VI in concerts, in adjudications, at some athletic events, and in parades. 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.

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 adjudications. 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.

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 adjudications, 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 adjudications. 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 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 25. Audition or director approval is required.

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 director approval.

612M♥

Music Theory II AP G/T [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. Upon successful completion of the course, students will be prepared to take the AP Music Theory examination.

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 adjudications. 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, adjudications, 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 25. An audition may be required if Chorus is also offered.

6361, 6362

636M, 637M

Madrigal Singers

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, adjudications, 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 selection is required and the local school may require concurrent enrollment/ participation in Concert Choir.

6380, 6385

6390, 6395

Vocal Ensembles

Grades 9, 10, 11, 12

1 credit

Students perform choral literature representing a variety of styles and genres in small ensemble experiences. Performances may include concerts, adjudications, 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.

Semester I - 6496

Semester II - 6497

Year - 6495

Piano I

Grades 9, 10, 11, 12

1 credit

Students develop basic skills while performing piano music of various styles from difficulty levels I and II. Skills emphasized include independent parts for right and left hands and pedal techniques. Students also develop listening skills by identifying and analyzing the elements and structural characteristics of music. Additionally, students learn basic musical elements and rhythms, as well as improvisational skills based on the "12-bar blues." This course develops skills for the beginning level pianist.

6407

Piano II

Grades 9, 10, 11, 12

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

Students expand their knowledge of vocabulary, musical styles, note reading, and sight-reading while performing a variety of piano music from difficulty levels III and IV. Students continue to develop an awareness of the technological advances as they pertain to performing, creating, and listening to piano music. A more in-depth study of improvisation and composition is included. Students are also required to attend at least one live performance and submit a written critique.

6408

Piano III/IV Honors

Grades 9, 10, 11, 12

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

Students perform piano music representing various styles and genres from difficulty levels V and VI. Previous material is enhanced and new techniques are introduced, such as major and minor scales and arpeggios in all keys up to four octaves. Students further develop their improvisational and compositional techniques using musical and technological resources. Each student will submit written critiques of at least four live performances. This is an advanced course for serious musicians.

Semester I - 6491

Semester II 6492

Year - 6490

Guitar I

Grades 9, 10, 11, 12

1 credit

Students develop basic guitar techniques through performing solo and ensemble guitar literature from difficulty levels I and II. Skills emphasized include proper right and left hand technique, tone production, and tuning. Students also develop listening skills by identifying and analyzing the elements and structural characteristics of blues, folk, pop, and rock music. Additionally, students learn basic improvisational and compositional techniques using technology. This course develops skills for the beginning level guitarist.

6405

Guitar II

Grades 9, 10, 11, 12

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

Students expand their knowledge of vocabulary, musical styles, note reading, and sight-reading while performing a variety of guitar music from difficulty levels III and IV. Students continue to develop an awareness of technological advances as they pertain to performing, creating, and listening to guitar music. More in-depth study of improvisation and composition are included. Students are also required to attend and submit a written critique of at least one live performance.

6409

Guitar III/IV Honors

Grades 9, 10, 11, 12

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

Students perform a variety of guitar music from difficulty levels V and VI. Previous material is enhanced and new techniques are introduced, such as note-bending, alternate tuning, classical guitar study, and more sophisticated jazz chords and blues progressions. Students further develop their improvisational and compositional techniques using musical and technological resources. Students are also required to submit written critiques of at least four live performances. This is an advanced course for serious musicians.

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, adjudications, 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 25. Previous orchestra experience or director approval is required.

6462

String Ensemble

Grades 9, 10, 11, 12

1 credit

Students will perform a variety of orchestral literature while developing individual and ensemble skills in concerts, adjudications, 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 25. Previous orchestra experience or director approval is required.

Semester I - 6101

Semester II - 6102

Year 6100

Music and Society

Grades 9, 10, 11, 12

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.

Semester I - 6198

Semester II - 6199

Year 6200

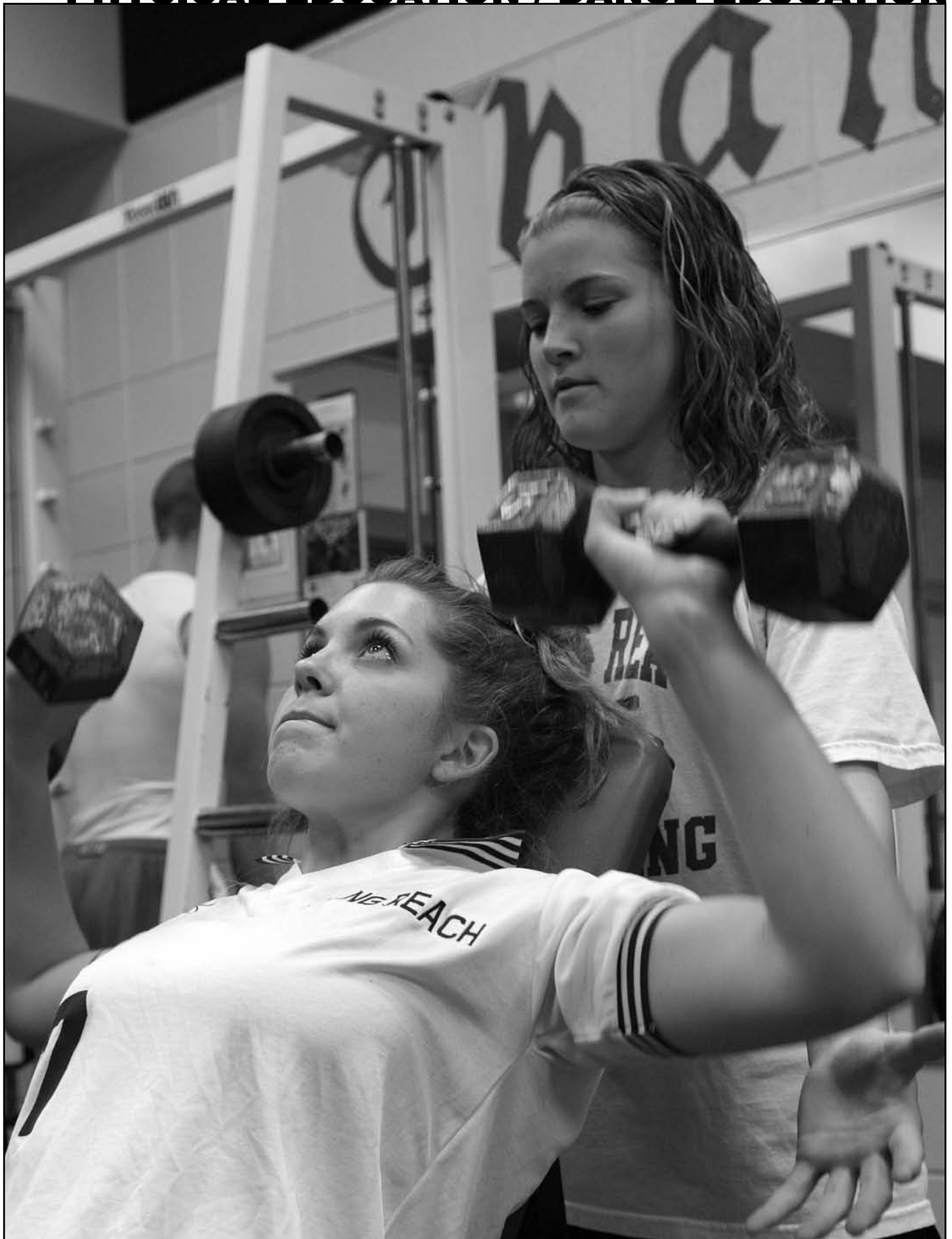
Music Technology

Grades 9, 10, 11, 12

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.

PHYSICAL EDUCATION / DANCE 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.

Semester I - 7000

Semester II - 7002

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 the ninth grade.

7016

Weight Training 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

Weight Training II

Grades 10, 11, 12

1 credit

Prerequisite: Weight Training I

This course reinforces the concepts taught in Weight Training 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.

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 a variety of activities including 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.

7014

Advanced Weight Training and Conditioning

Grades 11, 12

1 credit

Prerequisite: Weight Training 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 weight training and advanced conditioning. Physiology of exercise and kinesiology will be introduced, as well as power lifting and plyometric activities.

Semester I - 7031

Semester II - 7032

Year - 7030

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.

Semester I - 7021
Semester II - 7022
Year - 7020

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.

DANCE EDUCATION

7120

Introductory Dance

Grades 9, 10, 11, 12

1 credit

This Fine Arts course provides a basic working knowledge of performance concepts that students can apply to all dance forms. Experiences are based on modern dance principles and techniques and are integrated with aspects of ballet 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.

7121

Intermediate Dance

Grades 9, 10, 11, 12

1 credit

This Fine Arts course builds working knowledge of performance concepts that students will apply to all dance forms. Experiences are based on further developing modern dance principles and techniques and are integrated with aspects of ballet, jazz, and tap 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.

7123

Advanced Dance

Grades 9, 10, 11, 12

1 credit

Prerequisites: Introductory Dance and Intermediate Dance

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.

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.

712M

Dance Company

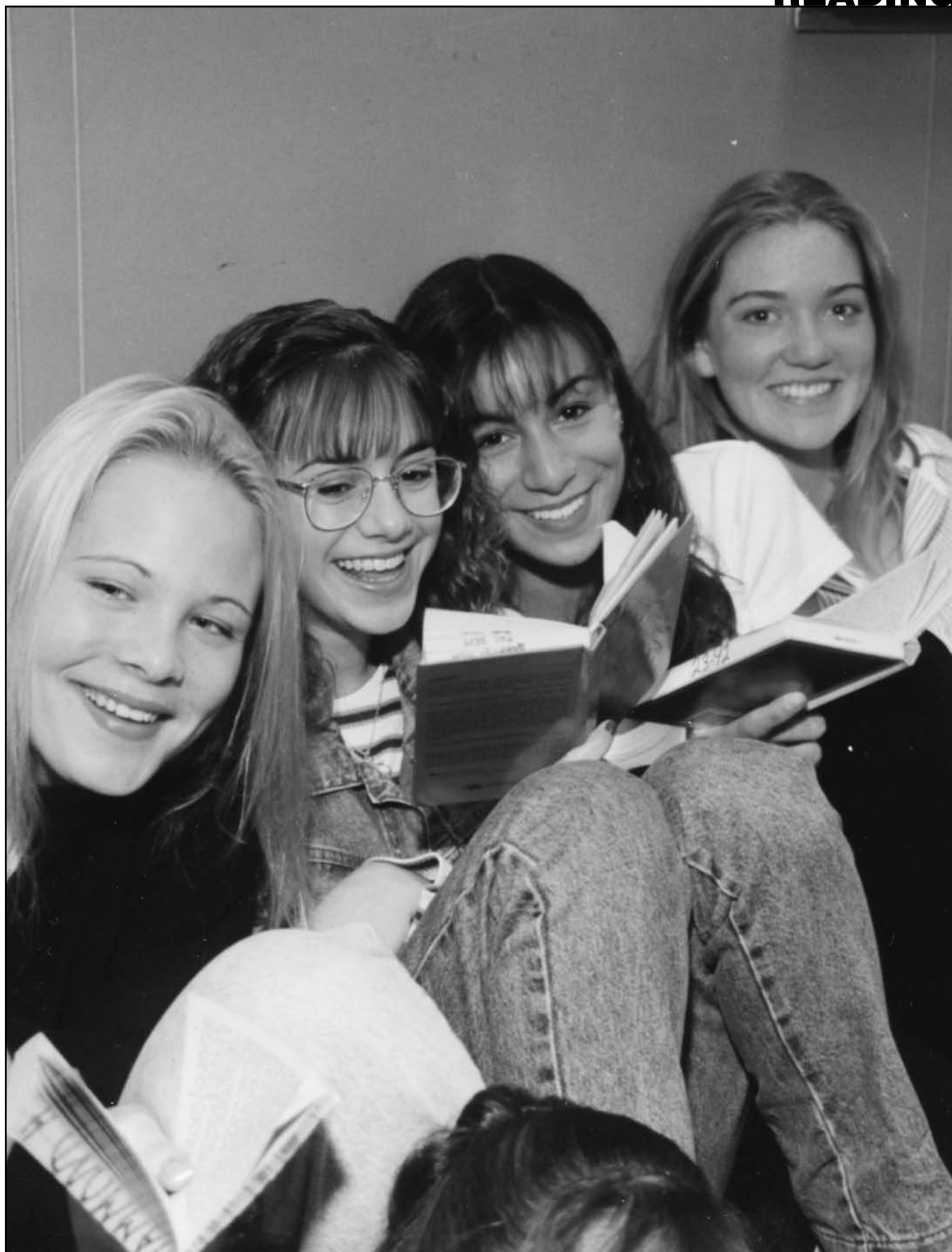
Grades 10, 11, 12

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.

READING



READING

The Reading Acceleration Program (RAP) emphasizes instructional strategies that will accelerate reading growth. The Academy of Reading, a computer-based training program, provides individualized instruction to students in phonemic awareness, decoding, and reading comprehension. In addition, teacher-directed instruction and activities address the essential curriculum in a small group setting.

1007

Reading Acceleration Program (RAP), Part I

Grades 9, 10, 11, 12

1 credit

This course is designed to provide students with skills, strategies, and techniques that will enable them to be successful in high school and beyond. Areas of study include strategic reading related to content area materials, study skills, activities to support comprehension, and written responses. The student will participate in the Academy of Reading Program, a computer-based training program designed to help students develop effective reading skills.

1008

Reading Acceleration Program (RAP), Part II

Grades 9, 10, 11, 12

1 credit

Prerequisite: Reading Acceleration Program Part I; teacher recommendation

The RAP II course follows the same units as RAP Part I, including strategic reading, study skills, activities to support comprehension, and written responses. Emphasis is placed on literary and informational texts and content area materials. The student will participate in the Academy of Reading Program, a computer-based training program designed to help students develop effective reading skills. Students enrolled in RAP II take the course with the recommendation of the Reading Acceleration Program teacher.

1009

Academic Literacy

Grade 10

1 credit

This course provides students with extra reading support in order to pass the English 10 HSA. Academic Literacy is designed as a yearlong inquiry into content area reading, with teachers as master readers and students as their apprentices. Students will explore high level, strategic reading and how proficient readers construct meaning when they read, through such units as Reading Self and Society, Reading Media, Reading History, and Reading Science and Technology.

7306

Resource Reading

Grades 9, 10, 11, 12

1 credit

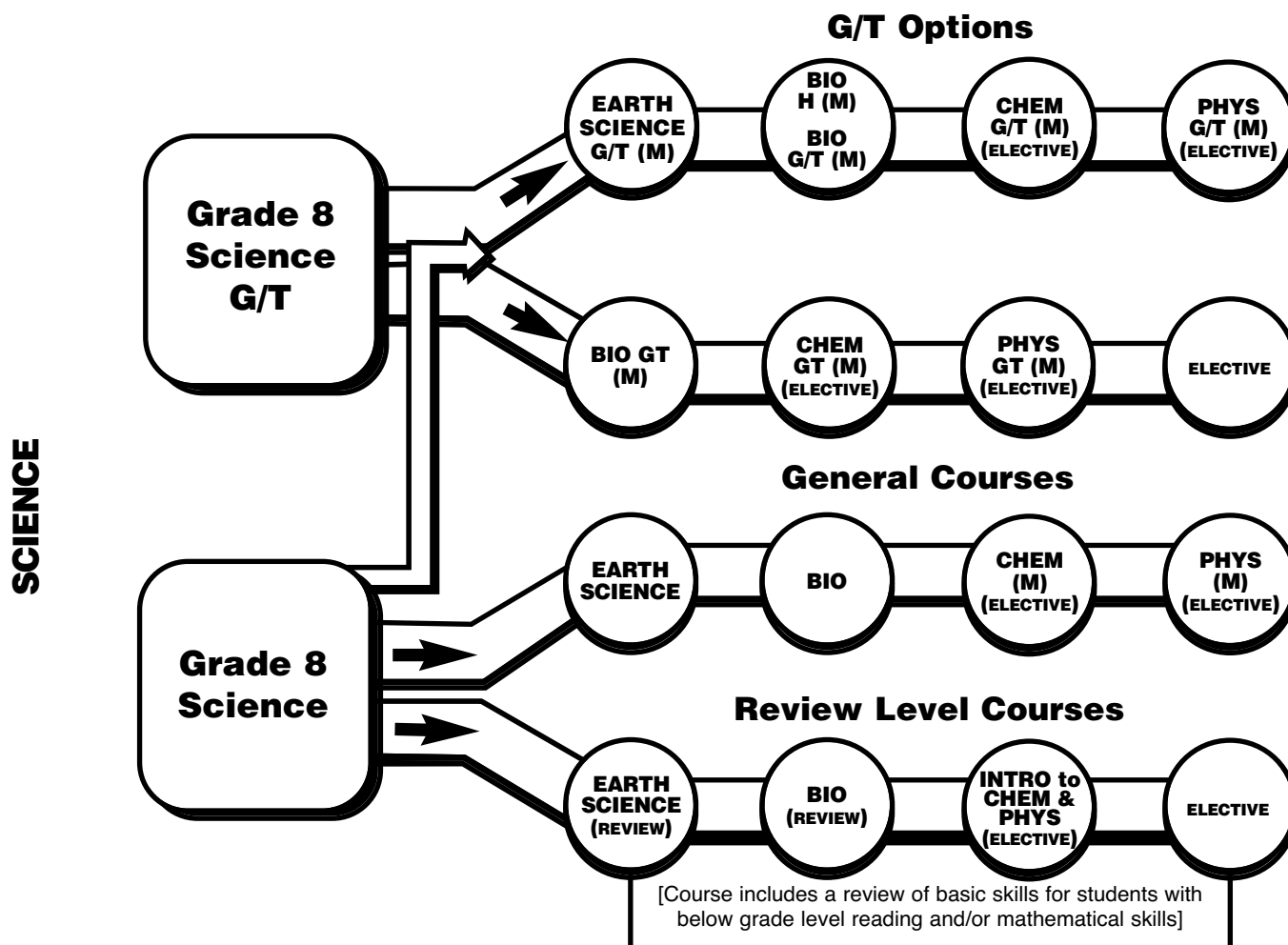
This elective course is designed to provide specialized reading instruction to students with needs in decoding and comprehension. The course incorporates a multi-sensory approach and uses reading programs such as Wilson or Project Read to meet the needs of students.



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 credits. Students who entered ninth grade in 2005 or later must pass the High School Assessment in Biology (or earn a combined passing score on the Algebra/Data Analysis, Biology, English 10, and American Government assessments) in order to graduate. One credit must be in Biology, the state-assessed course. Two additional credits may be earned in any combination of earth, life, and physical science. Colleges recommend courses where laboratory experiences are an integral component.



4000

Earth and Space Science – Review level

Grades 9, 10

Prerequisite: Teacher recommendation**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

Prerequisite: Concurrent enrollment in or completion of Introduction to Algebra/Data Analysis is recommended.

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.

400M♥★

Earth and Space Science – G/T

Grades 9, 10

1 credit

Prerequisite: Grade of B or better in previous science course; concurrent enrollment in or completion of Algebra I/Data Analysis

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.

4100●

Biology * – Review level

Grades 10, 11

1 credit

Prerequisite: Teacher recommendation

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. ** Animals may be dissected in this course. Alternatives to dissection are available.*

4101★●

Biology *

Grades 10, 11

1 credit

Prerequisite: Concurrent enrollment in or completion of Geometry is recommended.

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.

** Animals may be dissected in this course. Alternatives to dissection are available.*

Semester I 4102

Semester II 4103

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

Prerequisite: Grade of B or better in previous science course. Concurrent enrollment in or completion of Geometry is recommended.

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. ** Animals may be dissected in this course. Alternatives to dissection are available.*

411M♥★●

Biology * – G/T

Grades 9, 10

1 credit

Prerequisite: Grade of B or better in previous science course. Concurrent enrollment in or completion of Geometry G/T is recommended.

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.

** Animals may be dissected in this course. Alternatives to dissection are available.*

412M★

Anatomy and Physiology *

Grades 10, 11, 12

1 credit**Prerequisites:** Completion of Biology; concurrent enrollment in or completion of Chemistry

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. * *Animals may be dissected in this course. Alternatives to dissection are available.*

413M♥★

Biology * - Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisites:** Grade of B or better in Biology; completion of Chemistry; Concurrent enrollment in or completion of Physics is recommended.

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. Students enrolled in the course are expected to take the Advanced Placement examination in Biology. * *Animals may be dissected in this course. Alternatives to dissection are available.*

420M★

Chemistry

Grades 10, 11, 12

1 credit**Prerequisite:** Concurrent enrollment in or completion of Algebra II is recommended.

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.

421M♥★

Chemistry - G/T

Grades 10, 11

1 credit**Prerequisite:** Grade of B or better in previous science course; Completion of Algebra II is recommended.

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.

423M♥★

Chemistry - Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisite:** Grade of B or better in Chemistry; Concurrent enrollment in or completion of Physics is recommended.

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. Students enrolled in the course are expected to take the Advanced Placement examination in Chemistry.

4400★

Environmental Science

Grades 10, 11, 12

1 credit**Prerequisite:** Biology and Earth Science are recommended.

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. They will also be given the opportunity to explore environmental careers.

446M♥★

Environmental Science - Advanced Placement G/T

Grades 11, 12

1 credit

Prerequisites: Grade of B or better in Biology; completion of Chemistry; Completion of Earth Science and concurrent enrollment in or completion of Physics is recommended.

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 and field investigations will emphasize detailed observation, data recording, data interpretation, and statistical analysis. Enrolled students are expected to take the Advanced Placement examination in Environmental Science.

415M★

Marine Science *

Grades 11, 12

1 credit

Prerequisite: Earth and Space Science and/or Biology; concurrent enrollment in or completion of Chemistry is recommended.

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. ** Animals may be dissected in this course. Alternatives to dissection are available.*

4200★

Introduction to Chemistry and Physics

Grades 11, 12

1 credit

Prerequisite: Concurrent enrollment in or completion of Algebra I/Data Analysis

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.

4201★

Forensic Science*

Grades 11,12

1 credit

Prerequisites: Completion of Biology and Introduction to Chemistry and Physics, or completion of Biology and concurrent enrollment in or completion of Chemistry

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. ** Animals may be dissected in this course. Alternatives to dissection are available.*

430M★

Physics

Grades 11,12

1 credit

Prerequisite: Algebra II

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.

431M♥★

Physics - G/T

Grades 10, 11, 12

1 credit

Prerequisites: Grade of B or better in previous science course and at least concurrent enrollment in Pre-calculus

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.

432M♥★

Physics - Advanced Placement G/T

Grades 11, 12

1 credit

Prerequisites: Grade of B or better in physics and concurrent enrollment in or completion of calculus

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 and electricity and magnetism using algebra, trigonometry, and calculus. Advanced Placement Physics concepts will be explored in the laboratory. Students enrolled in the course are expected to take the Advanced Placement Physics C examination in mechanics or in electricity and magnetism if possible.

433M♥★

Physics - Advanced Placement G/T

Grades 11, 12

2 credits

Prerequisites: Grade of B or better in physics and completion of Calculus

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 engineering majors. The course covers Newtonian mechanics and electricity and magnetism using algebra, trigonometry, and calculus. Descriptive and experimental laboratory investigations will emphasize detailed observation, data recording, data interpretation, and statistical analysis. Students enrolled in the course are expected to take the Advanced Placement Physics C examinations in mechanics and in electricity and magnetism.

440M★

Astronomy

Grades 11, 12

1 credit

Prerequisite: Concurrent enrollment in or completion of Algebra II; Earth and Space Science is recommended.

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 investigations that stress detailed observation, data recording, data interpretation and statistical analysis.

4499

Laboratory Assistant - Science

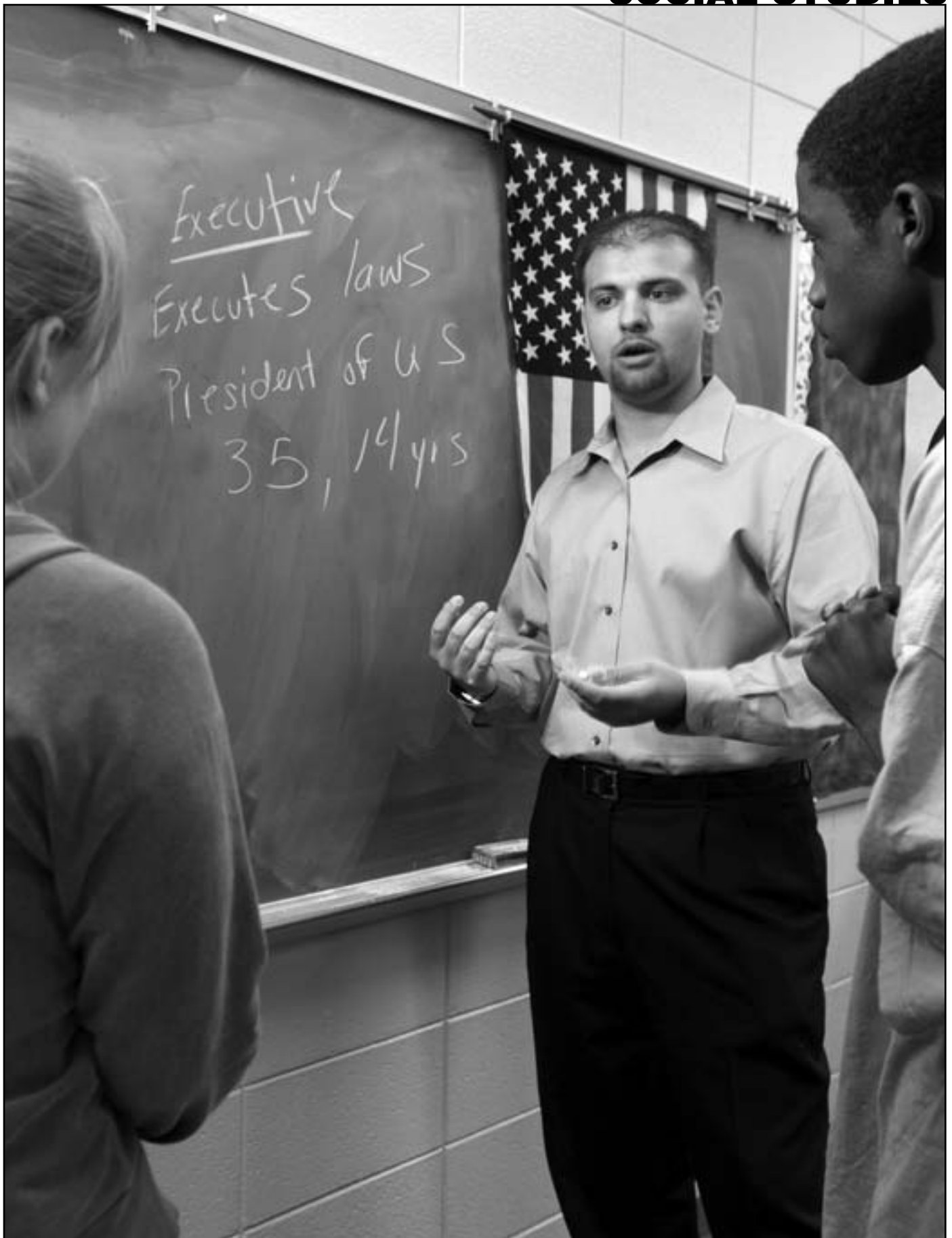
Grades 11, 12

1 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, 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). Students who entered ninth grade in 2005 or later must pass the High School Assessment in American Government (or earn a combined passing score on the Algebra/Data Analysis, Biology, English 10, and American Government assessments) in order to graduate. 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 and Advanced Placement G/T World History may be substituted for the American Government and World History graduation requirement. Both Advanced Placement G/T Government and Politics and Advanced Placement G/T World History may be taken as electives beyond the American Government and World History graduation requirement.

Social Studies Course Sequence

9th Grade	10th Grade	11th Grade	12th Grade
U.S. History	American Government	Modern World History	Social Studies Elective
U.S. History (H)	American Government (H)	Modern World History (H)	Social Studies Elective
U.S. History (GT)	American Government (AP)	World History (AP)	Social Studies (AP) Elective

SOCIAL STUDIES

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 course work.

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.

219M♥★

United States History–Honors

Grades 9, 10, 11, 12

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course presents a comprehensive study of United States history from 1877 to present. This course is recommended for students who have demonstrated success in doing challenging and demanding work as indicated by previous social studies course work. Specific objectives and recommended teaching activities help to accelerate instruction in this class.

220M♥★

United States History – G/T

Grade 9

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course presents a comprehensive study of United States history from 1877 to present. This course is recommended for students who have demonstrated success in doing challenging and demanding work as indicated by previous social studies course work. Specific objectives and recommended teaching activities help to accelerate instruction in the United States History G/T classes.

213M♥★

United States History–Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course prepares students for the Advanced Placement examination as it examines United States history through a chronological approach that emphasize 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.

2110●

American Government–Review level

Grades 10, 11

1 credit**Prerequisite:** Staff recommendation

This course presents a comprehensive study of national, state, and local government. Additional topics of study include law, economics, and current issues. This course is recommended for students who have demonstrated a need for skill improvement as indicated by previous social studies course work and staff recommendations.

2111★●

American Government

Grades 10, 11

1 credit

This course presents a comprehensive study of national, state, and local government. Additional topics of study include law, economics, and current issues. This course is designed for the general student population.

211M♥★●

American Government–Honors

Grades 10, 11

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course presents a comprehensive study of national, state, and local government. Additional topics of study include law, economics, and current issues. This course is recommended for students who have demonstrated success with challenging and demanding work in previous social studies courses. Specific objectives and recommended teaching activities help to accelerate instruction in this class.

Semester I 2112

Semester II 2113

Government High School Assessment (HSA) Mastery

Grades 10, 11, 12

1/2 elective credit

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

223M♥★●

Government and Politics–Advanced Placement G/T

Grades 10, 11, 12

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course prepares students for the Advanced Placement examination, as it 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.

2012

Modern World History–Review level

Grades 11, 12

1 credit**Prerequisite:** Staff recommendation

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. Emphasis is placed upon the mastery of basic skill areas, including study habits, reading for comprehension and interpretation, and written and oral expression. This course is recommended for students who have demonstrated a need for improved basic skill development based upon previous coursework.

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**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

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 recommended for students who have demonstrated success with challenging and demanding work in previous social studies courses. Specific objectives and recommended teaching activities help to accelerate instruction in this class.

205M♥★

World History–Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course is designed to prepare students for the Advanced Placement examination. The instructional 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 be used to meet the World History graduation requirement. Students electing this course may be given summer or pre-course readings.

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.

224M♥★

Comparative Government and Politics–Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course prepares students for the Advanced Placement examination. 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.

230M♥★

European History–Advanced Placement G/T

Grades 11, 12

1 credit**Prerequisite:** Grade B or better in previous social studies courses or staff recommendation

This course is designed to prepare students for the Advanced Placement examination. 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.

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.

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.

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.

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 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.

280M♥★

Economics-Advanced Placement G/T

Grades 11, 12 **1 credit**

This course is designed to prepare students for the Advanced Placement examination(s). Students receive in-depth instruction in both macroeconomics and microeconomics. 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.

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-Advanced Placement G/T

Grades 11, 12 **1 credit**

This course is designed to prepare students for the Advanced Placement examination. The instructional purpose 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.

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.

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.

286M★ - Semester I
 287M★ - Semester II
 285M★ - Year

Law and the Citizen

Grades 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.

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.

206M♥

Human Geography-Advanced Placement G/T

Grades 11, 12

1 credit

This course is designed to prepare students for the Advanced Placement examination. It 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.

281M♥

Humanities I G/T (Social Studies)

Grade 9

1 credit

Prerequisite: Teacher recommendation

Corequisite: 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 G/T (Social Studies)

Grade 10

1 credit

Prerequisites: Recommendation from GT English and Social Studies

Corequisite: 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. 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 and the High School Assessment for American Government.

283M♥

Humanities III G/T (Social Studies)

Grade 11

1 credit

Prerequisites: Recommendation from GT English and Social Studies

Corequisite: 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 prepared to take the Advanced Placement Examination. 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

Prerequisites: Recommendation from GT English and Social Studies

Corequisite: 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. This class prepares students for the Literature and Composition AP Examination. Because students are concurrently enrolled in 184M, they receive 2 credits, one for English and one elective credit for Social Studies.

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.

Special Education 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 parallels that which 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
--------------------	--------------------------

All diploma-seeking students must earn one Algebra/Data Analysis credit, one Geometry credit, and a third mathematics credit in order to meet graduation requirements.

Resource Social Studies

7340 Resource World History	1 credit
7341 Resource American Government	1 credit
7342 Resource U.S. History	1 credit

Resource Science

7343 Resource Earth and Space Science	1 credit
7344 Resource Biology	1 credit
7345 Resource Environmental Science	1 credit
7346 Resource Introduction to Chemistry & Physics	1 credit

Resource Braille

7305	1 elective credit
------	--------------------------

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 IV Tutorial

7328 - Semester I	1/2 elective credit
7329 - Semester II	1/2 elective credit
7314 - Year	1 elective credit

Prerequisite: Students must have an IEP, a 504, and/or an academic action plan.

This elective 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.

Special Education Academic/Life Skills

Students who are identified as being in need of special education services and who are recommended for an Academic/Life Skills program may be referred to the home high school or local high school(s) where these services are offered. Services are provided for the implementation of the Individualized Educational Program and least restrictive environment determinations. Students may earn credits toward a certificate of completion as designated by the IEP.

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

7335

Special Education Peer Assistant/Tutor

Special Education: Grades 11, 12	1 credit
----------------------------------	-----------------

(Fulfills Student Service Learning Requirement)

Prerequisites: Successful completion of all courses taken previous year; permission of Special Education Instructional 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.

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 structured, supervised, hands-on experience in a community-based setting. Students are introduced to a variety of half-day training sites beginning in the third year of high school. Many students do not pursue postsecondary education but rather enter directly into the work world, as competitive employment is the primary goal. Students engage in activities related to IEP goals and objectives and in transition activities in employment, independent living, and community access.

THEATRE ARTS



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.

1690

Theatre Arts I

Grades 9, 10, 11, 12

1 credit

Theatre Arts 1 is a performance-based course which offers students a general introduction to the theatre. Students will explore Theatre Arts by participation in performance, production, and appreciation. Students will develop skills in self-expression, verbal communication, collaboration, and aesthetic criticism. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

1691

Theatre Arts II

Grades 10, 11, 12

1 credit

Prerequisite: Theatre Arts I

With primary emphasis on performance, students continue to enrich and expand their knowledge of areas emphasized in Theatre Arts I. This course delves more deeply into acting, theatre history, and careers in theatre. Students will further develop skills in acting styles, textual and performance analysis, and leadership. Students in all advanced levels of Theatre Arts are expected to participate in some way in the performances offered by the Theatre Arts department. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

169M

Theatre Arts III

Grades 11, 12

1 credit

Prerequisite: Theatre Arts II

With primary emphasis on performance, students continue to enrich and expand their knowledge of the areas emphasized in Theatre Arts 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. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

170M

Theatre Arts IV

Grade 12

1 credit

Prerequisite: Theatre Arts III

With primary emphasis on performance, students continue to enrich and expand their knowledge of the areas emphasized in Theatre Arts III. Students in all advanced levels of Theatre Arts are expected to participate in some way in the performances offered by the Theatre Arts department. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

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. Technical theatre studies and experiences may include constructing scenery, props, and costumes; designing sets, lighting, sound, costumes, props, make-up and publicity. The number of after-school hours is significant and determined by the Theatre Arts teacher and the needs of the school's co-curricular production schedule.

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 after-school hours is significant and is determined by the Theatre Arts teacher and the needs of the school's co-curricular production schedule.

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 after-school hours is significant and is determined by the Theatre Arts teacher and the needs of the school's co-curricular production schedule.

1721

Musical Theatre I

Grades 10, 11, 12

1 credit**Prerequisite:** Drama I

In this performance-based course, the student receives training in the specialized skills of performing and producing Musical Theatre. The areas of study include choreography, vocal technique, and history of the American Musical. Students in all advanced levels of Theatre Arts are expected to participate in some way in the performances offered by the Theatre Arts department. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

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. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

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. An expectation is that students will attend live theatrical productions during after-school hours (a maximum of 10 hours).

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.

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

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 including exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, locating places around town, identifying personal possessions, and choosing foods in a café. Students explore the francophone world with a focus on the geography of France and examine the differences and similarities between francophone and American cultures.

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 events, both present and past. Topics include comparing school subjects, preparing meals, shopping for clothing, highlighting after-school and weekend activities, and describing professions. Students continue to study francophone culture through reading, lectures, discussions, and the use of media and technology. There is a focus on the scope of the francophone world emphasizing Paris, Senegal, Canada, and Louisiana.

5020♥★

French II-Honors

Grades 9, 10, 11, 12

1 credit

Prerequisite: Grade of B or better in French I / French I Honors or staff recommendation

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. Topics include describing rooms of a house, outlining daily routines, describing clothing, talking about cars and safe driving, dining out, and discussing television and film preferences. Study of the francophone world emphasizes provinces and towns in France, the Caribbean islands, and Morocco.

504M♥★

French III–Honors

Grades 10, 11, 12

1 credit**Prerequisite:** Grade of B or better in French II Honors or staff recommendation

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. Topics include requesting services, discussing chores, describing objects, handling health care situations, making travel plans, and negotiating travel in the francophone world. There is review of key grammar structures, expanding on pronouns, compound tenses, and the subjunctive mood. 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:** Grade of B or better in French III Honors or staff recommendation

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–Advanced Placement G/T (Language)

Grade 12

1 credit**Prerequisite:** Grade of B or better in French IV Honors or staff recommendation

The French V class in Advanced Placement French Language is a rigorous course which develops the individual student's interest and competencies in French literature, history, politics, civilization, and culture. These content areas provide the context for developing advanced proficiency and refining communication skills in the language in preparation for the Advanced Placement examination.

508M♥★

French V–Advanced Placement G/T (Literature)

Grade 12

1 credit**Prerequisite:** Grade of B or better in French IV Honors or staff recommendation

The French V class in Advanced Placement French Literature introduces students to representative literary selections and to develop their ability to read, write, and speak critically and intelligently about literary works. The course provides students the opportunity to identify and interpret the relationship among elements of the composition of a literary text, where they acquire a fuller understanding and appreciation of the art and meaning of a selection in preparation for the Advanced Placement examination.

509M♥★

Intermediate Special Topics in French

Grades 10, 11, 12

1 credit**Prerequisite:** French III

Intermediate Special Topics in French is designed for the continuing study of French through 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. While advanced reading, listening, speaking, and writing skills are developed in Intermediate Special Topics, this elective course supplements but does not replace French IV and V AP G/T.

510M♥★

Advanced Special Topics in French

Grades 11, 12

1 credit**Prerequisite:** French IV or Intermediate Special Topics in French or staff recommendation

Advanced Special Topics in French is designed for the continuing study of French through 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. While advanced reading, listening, speaking and writing skills are developed in Advanced Special Topics, this elective course supplements but does not replace French V AP G/T.

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 including exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather and seasons, locating places around town, shopping for clothing, outlining meals, and identifying household chores. 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 events, both present and past. Topics include comparing school subjects, discussing leisure-time activities, describing holidays and celebrations, outlining daily routines, describing clothing, shopping in specialty stores, sharing childhood memories, ordering in a restaurant, and making travel plans. 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:** Grade of B or better in Spanish I / I Honors or staff recommendation

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. Topics include discussing health care, describing accidents, outlining good nutrition, discussing television and film, critiquing artwork, projecting future technological trends in, arranging travel, and comparing urban and country living. 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:** Grade of B or better in Spanish II Honors or staff recommendation

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. Topics include serving the community, protecting the natural environment, investigating mysteries of the Spanish-speaking world, and making travel plans. There is review of key grammar structures, expanding on pronouns, compound tenses, and the subjunctive mood. 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.

546M♥★

Spanish IV – Honors

Grades 11, 12

1 credit**Prerequisite:** Grade of B or better in Spanish III Honors or staff recommendation

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 – Advanced Placement G/T (Language)
Grade 12 **1 credit****Prerequisite:** Grade of B or better in Spanish IV Honors or staff recommendation

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 in preparation for the Advanced Placement examination.

548M♥★

Spanish V – Advanced Placement G/T (Literature)
Grade 12 **1 credit****Prerequisite:** Grade of B or better in Spanish IV Honors or staff recommendation

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 in preparation for the Advanced Placement examination.

549M♥★

Intermediate Special Topics in Spanish
Grades 10, 11, 12 **1 credit****Prerequisite:** Spanish III

Intermediate Special Topics in Spanish is designed for the continuing study of Spanish through 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. While advanced reading, listening, speaking and writing skills are developed in Intermediate Special Topics, this elective course supplements but does not replace Spanish IV and V AP G/T.

550M♥★

Advanced Special Topics in Spanish
Grades 10, 11, 12 **1 credit****Prerequisite:** Spanish IV, Intermediate Special Topics in Spanish, or staff recommendation

Advanced Special Topics in Spanish is designed for the continuing study of Spanish through 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. While advanced reading, listening, speaking and writing skills are developed in Advanced Special Topics, this elective course supplements but does not replace Spanish V AP G/T.

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 including exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather and seasons, outlining meals, 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 about various events, both present and past. Topics include discussing leisure-time activities, describing people, shopping in specialty stores, ordering in a restaurant, camping, hiking, staying in youth hostels, navigating a city, and arranging travel. Students continue to study the German-speaking world through readings, lectures, discussions, and the use of media and technology. Focus is on the countries of Switzerland and Austria.

5111♥★

German II – Honors
Grades 10, 11, 12 **1 credit****Prerequisite:** Grade of B or better in German I / German I Honors or staff recommendation

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 present, past, and future tenses. Topics include discussing health care, using the metric system, shopping in open-air markets, describing holidays, arranging travel, describing a house, and protecting the environment. Students study cultures of the German-speaking world through readings, lectures, discussions, and the use of media and technology. Focus is on Liechtenstein and the European Union.

515M♥★

German III – Honors

Grades 11, 12

1 credit**Prerequisite:** Grade of B or better in German II Honors or staff recommendation

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, such as expanding on pronouns, compound tenses, and the subjunctive mood. The study of culture emphasizes the history, literature, and fine arts of the German-speaking world.

514M♥★

Advanced Special Topics in German

Grade 12

1 credit**Prerequisite:** German IV or staff recommendation

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 – Advanced Placement G/T (Language)

Grade 12

1 credit**Prerequisite:** Grade of B or better in German III Honors or staff recommendation

The German IV class in Advanced Placement German Language develops the following competencies: a strong command of vocabulary and structure; understanding spoken German in conversational situations; reading periodical

articles, fiction, and non-technical writing without using a dictionary; fluently and accurately expressing ideas orally and in writing. Instructional content reflects interests shared by the students and teacher, providing context for developing advanced proficiency and for refining language skills in preparation for the Advanced Placement examination.

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 about various topics including exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, locating places around town, identifying personal possessions, and choosing 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.

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 about various events, both present and past. Topics include comparing school subjects, preparing meals, describing daily routines, highlighting after-school and weekend activities, and identifying family members. 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:** Grade of B or better in Italian I / I Honors or staff recommendation

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 present, past, and future tenses. Topics include discussing health care, shopping in specialty stores, shopping for clothing, discussing preferences in film and television, arranging travel, identifying the parts of a car, and discussing safe driving habits. 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:** Grade of B or better in Italian II Honors or staff recommendation

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

Italian IV continues to refine and expand communication skills. Topics include reflecting on teenage life, discussing dating and marriage customs, critiquing film and television, predicting future trends in technology, and protecting the environment. There is review of key grammar structures, such as expanding on pronouns, compound tenses, and the subjunctive mood. The study of culture emphasizes the history, literature, and fine arts of the Italian-speaking world.

525M♥★

Italian IV-Advanced Placement G/T (Language)

Grade 12

1 credit**Prerequisite:** Grade of B or better in Italian III Honors or staff recommendation

The Italian IV class in Advanced Placement Italian Language develops the following competencies: a strong command of vocabulary and structure; understanding spoken Italian in various conversational situations; reading

periodical articles, contemporary fiction, and non-technical writing without using a dictionary; fluently and accurately expressing ideas orally and in writing. Instructional content reflects interests shared by the students, providing the context for developing advanced proficiency and for refining language skills in preparation for the Advanced Placement examination.

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 about various topics including exchanging greetings, identifying classroom objects, describing family members, telling time, describing weather conditions and seasons, locating places around town, identifying personal possessions, and choosing 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 about various events, both present and past. Topics include comparing school subjects, preparing meals, describing daily routines, highlighting after-school and weekend activities, and identifying family members. 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:** Grade of B or better in Russian I / I Honors or staff recommendation

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. Topics include describing meals, comparing the school systems, highlighting leisure-time activities, discussing preferences in film and television, making travel plans, and shopping. 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:** Grade of B or better in Russian II Honors or staff recommendation

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. Topics include reflecting on teenage life, highlighting holidays and celebrations, describing religious diversity and practices, and outlining daily routines. There is review of key grammar structures, such as expanding on pronouns, compound tenses, and the subjunctive mood. The study of culture emphasizes the history, literature, and fine arts of the Russian-speaking world.

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 grammar, including participles, ablative absolute, and the subjunctive mood. It seeks to develop increased facility in translation and knowledge of Roman history.

5261♥★

Latin II – Honors

Grades 10, 11, 12

1 credit**Prerequisite:** Grade of B or better in Latin I / I Honors or staff recommendation

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

In alternate years, Latin III-IV makes use of the first six books of the Aeneid and of Cicero's speeches and essays. In studying the Aeneid, the aim is toward increased facility in translation, as well as an appreciation of the poem itself, its story, and its use of poetic techniques. Students should acquire knowledge of Roman mythology and an appreciation of Latin poetry. The study of Cicero develops knowledge of Roman history and culture.

526M♥★

Latin III – Honors

Grades 11, 12

1 credit**Prerequisite:** Grade of B or better in Latin II Honors or staff recommendation

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 – Advanced Placement G/T [AP Latin Literature]

Grade 12

1 credit**Prerequisite:** Grade of B or better in Latin III Honors or staff recommendation

Latin IV Advanced Placement 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 in preparation for the Advanced Placement examination.

529M♥★

Advanced Special Topics in Latin

Grade 12

1 credit**Prerequisite:** Latin IV or staff recommendation

Advanced Special Topics in Latin is designed for the continuing study of Latin through 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.

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.

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.

Sign Language

5350★

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. World language credit is not awarded for this course.

5360★

Sign Language II

Grades 10, 11, 12

1 credit**Prerequisite:** 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. World language credit is not awarded for this course.

Four Year High School Plan

GRADUATION REQUIREMENTS			
English	4 Credits	Program Choice: World Language (2 Credits) OR Advanced Technology (2 Credits) OR Career and Technology Education Completer Career Academy or Career Research and Development (4 Credits)	Additional Requirements • Service Learning • Career Preparation • High School Assessment Requirements
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		

GRADE 9	
English 9	
U. S. History	
Mathematics	
Science	
Health	
Fitness for Life	
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	
Credits Earned	

CAREER ACADEMY DECLARATION

Student Name _____ **Date** ____/____/____
 (First) (Middle) (Last)
Date of Birth ____/____/____ **Race** (circle one) African-American Asian Caucasian Hispanic Indian **Gender** (circle one) Male Female
Parent/Guardian Name _____ **Student Social Security #** _____
 (First) (Middle) (Last)
Address _____ **City** _____ **Zip** _____
Telephone (Home) _____ **Telephone Parent/Guardian (Day)** _____
Parent/Guardian E-mail Address _____ **Student E-mail Address** _____
Current School _____ **High School** _____ **Graduation Year** ____

I intend to pursue coursework in the following Career Academy*: (Choose one only)

Biotechnology & Health Services

- ☐ Allied Health Academy
- ☐ Biotechnology Academy
- ☐ Certified Nursing Assistant Academy
- ☐ Emergency Technician/Paramedic Academy

Multimedia Arts & Technology

- ☐ Computer Networking Academy
- ☐ PC Systems Academy
- ☐ Visual Communications Academy
- ☐ Computer Programming Academy **

Architecture & Engineering

- ☐ Construction Technology Academy
- ☐ Architectural Design Academy **
- ☐ Pre-Engineering Academy **

Energy, Power & Transportation

- ☐ Energy, Power & Transportation Academy
- ☐ Automotive Technology Academy

Culinary Arts & Hotel Management

- ☐ Hotel & Restaurant Management Academy
- ☐ Culinary Science Academy **

Business & Entrepreneurship

- ☐ Academy of Finance
- ☐ Accounting Academy **
- ☐ Business Management Academy **
- ☐ Marketing Academy **

Education Cluster

- ☐ Child Development Academy **
- ☐ Teacher Academy of Maryland **

* The Department of Education reserves the right to make curricular or administrative changes at any time, which may affect a student's 4-year program.

** These academies are offered in the home schools.

Participation in the Career Academies of the Howard County Public School System provides students the following benefits:

- In addition to the Maryland State High School Diploma, graduates receive a "Career Academy certificate" which documents the completion of a rigorous academic and technical program.
- Students demonstrate a broad range of problem-solving, critical thinking, and presentation skills, culminating in the design and completion of a senior project, work experience, or other capstone project.
- Each Career Academy is closely articulated with post-secondary educational and training programs. Graduates may earn advanced standing in post-secondary institutions.
- Most Career Academies offer an opportunity to sit for an industry certification exam. These exams certify that the student has mastered practical skills identified by the specific career area for employment.
- Each Career Academy will offer additional benefits such as business mentors, student conferences, advisory meetings on career opportunities, and other experiences in the career academy area.

If I am enrolled in a Career Academy, I agree to the following conditions:

- 1) I must pass all requirements listed for my selected Career.
- 2) I understand that successful completion of a Career Academy Program requires additional coursework beyond the 21 credits required to earn a diploma in Maryland.
- 3) I will have completed the necessary prerequisite courses prior to entering a career academy.
- 4) I will abide by all rules and standards of conduct as determined by Howard County Public School System policies or I may be withdrawn from the Career Academy by administrative decision.
- 5) I understand that field placements, which are part of the academy, will require that I meet standards of the work site. I am responsible for providing my own transportation to field placement sites.

Student Signature

Parent/Guardian Signature

Student I.D. # _____	
Counselors: Please complete the following information	
Individualized Education Plan	
504	<input type="checkbox"/> Yes <input type="checkbox"/> No
IEP	<input type="checkbox"/> Yes <input type="checkbox"/> No
_____ Home School Guidance Counselor's Signature	
_____ Date	

Return top 2 copies of this form to your guidance office with registration forms.

DIVISION OF INSTRUCTION

Sandra Erickson, Deputy Superintendent

DIRECTORY OF HIGH SCHOOLS

Atholton High School
6520 Freetown Road
Columbia, MD 21044
Marcia Leonard, Principal
www.hcpss.org/ahs
410-313-7065 (O)
410-313-7068 (G)

Centennial High School
4300 Centennial Lane
Ellicott City, MD 21043
Scott Pfeifer, Principal
www.centennialonline.org
410-313-2856 (O)
410-313-2857 (G)

Glenelg High School
14025 Burnt Woods Road
Glenelg, MD 21737
Karl Schindler, Principal
www.hcpss.org/ghs
410-313-5528 (O)
410-313-5535 (G)

Hammond High School
8800 Guilford Road
Columbia, MD 21046
Sylvester Burke, Principal
www.hammondhs.org
410-313-7615 (O)
410-313-7620 (G)

Howard High School
8700 Old Annapolis Road
Ellicott City, MD 21043
Gina Massella, Principal
www.hcpss.org/hhs
410-313-2867 (O)
410-313-2871 (G)

Long Reach High School
6101 Old Dobbin Lane
Columbia, MD 21045
Edmund Evans, Principal
www.hcpss.org/lrhs
410-313-7117 (O)
410-313-7412 (G)

Marriotts Ridge High School
12100 Woodford Drive
Marriottsville, MD 21104
Patrick Saunderson
www.hcpss.org/mrhs
410-313-5568
410-313-5446 (G)

Mt. Hebron High School
9440 Route 99
Ellicott City, MD 21042
David Brown, Principal
www.mthebron.com
410-313-2880 (O)
410-313-2883 (G)

Oakland Mills High School
9410 Kilimanjaro Road
Columbia, MD 21045
Frank Eastham, Principal
www.hcpss.org/omhs
410-313-6945 (O)
410-313-6950 (G)

Reservoir High School
11550 Scaggsville Road
Fulton MD 20759
Adrianne Kaufman, Principal
www.hcpss.org/reservoir
410-888-8850 (O)
410-888-8860 (G)

River Hill High School
12101 Clarksville Pike
Clarksville, MD 21029
William Ryan, Principal
www.hcpss.org/rhhs
410-313-7120 (O)
410-313-7400 (G)

Wilde Lake High School
5460 Trumpeter Road,
Columbia, MD 21044
Restia Whitaker, Principal
www.hcpss.org/wlhs
410-313-6965 (O)
410-313-6968 (G)

SPECIAL SCHOOLS AND CENTERS

Homewood School
10914 Route 108
Ellicott City, MD 21042
Tina Maddox, Principal
410-313-7081

Applications and
Research Laboratory
10920 Route 108
Ellicott City, MD 21042
Mary Day, Principal
410-313-6998

Central Office
10910 Route 108
Ellicott City, MD 21042
410-313-6600

CENTRAL OFFICE PERSONNEL

Robert O. Glascock
Assistant Superintendent
Curriculum, Instruction,
and Technology

Linda Wise
Assistant Superintendent
School Administration

Clarissa B. Evans
Executive Director
Secondary Curricular
Programs

David A. Bruzga
Director
Secondary School
Administration

Daniel J. Michaels
Director
Secondary School
Administration

A. Diane Martin
Director
Student, Family, and
Community Services

James M. Walsh
Director
Special Education

Pamela Blackwell
Director
Student Services

Lisa Boarman
Facilitator
School Counseling

BOARD OF EDUCATION OF HOWARD COUNTY

Joshua Kaufman
Chairman

Diane Mikulis
Vice Chairperson

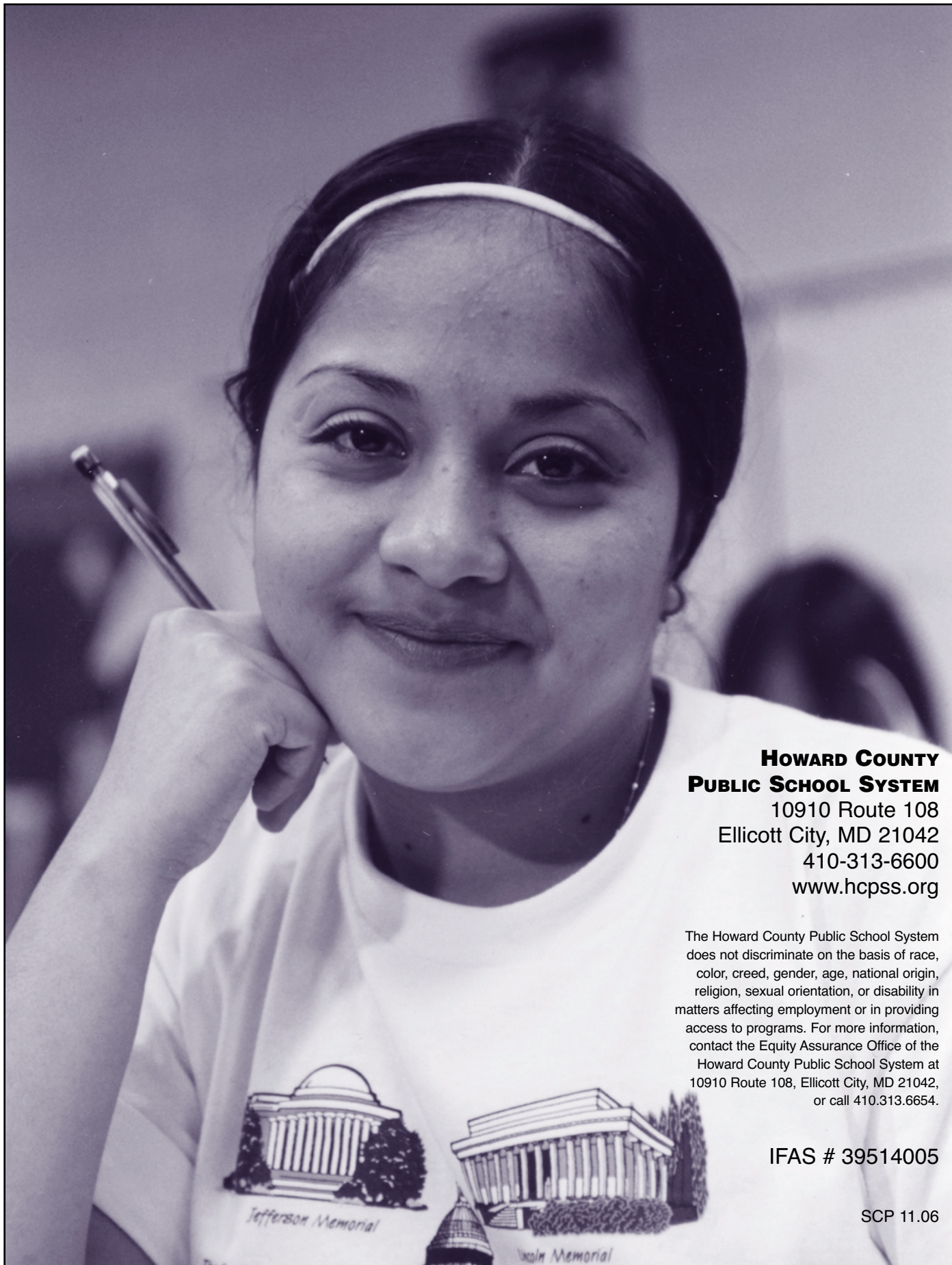
Patricia S. Gordon

Mary Kay Sigaty

Courtney Watson

Sydney L. Cousin
Superintendent
of Schools

© October 2006
The Howard County
Public School System
10910 Route 108
Ellicott City, MD 21042
410-313-6600
www.hcpss.org



**HOWARD COUNTY
PUBLIC SCHOOL SYSTEM**

10910 Route 108
Ellicott City, MD 21042
410-313-6600
www.hcpss.org

The Howard County Public School System does not discriminate on the basis of race, color, creed, gender, age, national origin, religion, sexual orientation, or disability in matters affecting employment or in providing access to programs. For more information, contact the Equity Assurance Office of the Howard County Public School System at 10910 Route 108, Ellicott City, MD 21042, or call 410.313.6654.

IFAS # 39514005

SCP 11.06