341 Advanced Placement Calculus 12 AB H
This is a demanding college-level calculus course. Many colleges grant one semester's advanced placement credit to students who successfully complete the course and who score sufficiently high on the AB Advanced Placement Examination. This course covers all topics in the AB syllabus and fully integrates the content of previous math courses. It builds on the foundations of those courses, and students taking Advanced Placement Calculus will be expected to have fully mastered that content. Graphing calculators will be used.

Students enrolling in Advanced Placement Calculus AB must have successfully completed WHS' Pre-Calculus course at the honors level and should have a clearly demonstrated, high level of interest, motivation and achievement in all previous math courses. The ability to work independently and to learn math by reading and experimenting on one's own are expected of students in this course.

351 Advanced Placement Calculus BC 12 H
This is a rigorous college-level calculus course. The topics covered in this course are the equivalent of a full year of college calculus. Many colleges grant two semester's advanced placement credit to students who successfully complete the course and who score sufficiently high on the BC Advanced Placement Examination. This course covers all topics taught in Calculus AB plus additional topics in the BC syllabus. Details on the content are contained in the course description booklet published by the CEEB and ETS. Extensive use of graphing calculators will be made. Students taking this course will be expected to have successfully completed WHS' Pre-Calculus course at the honors level. The ability to work independently and to learn math by reading and experimenting on one's own are expected of students in this course.

361 Advanced Placement Statistics 12 H
This course is intended for students who have completed Analysis and have the interest and skill level to take an Advanced Placement course. Topics may include, but are not limited to: observing patterns and departures from patterns using exploratory data analysis; using random samples, blocks and stratification to plan a study; modeling using probability and simulation; and using statistical inference to confirm models. Students who take this course will be prepared to take the Advanced Placement Examination in statistics. Extensive use of graphing calculators will be made throughout the course. Students taking this course will be expected to have mastered fully the content of previous mathematics courses, especially Algebra and Advanced Algebra. This course is limited to seniors.

352 Discrete Mathematics 12 ACP
This course is intended for students who have completed Analysis or Pre-Calculus and is designed to supplement previous learning in mathematics. Topics may include but are not limited to: operations research through graph theory (network analysis), statistics (both producing and exploring data), combinatorics, probability, social choice mathematics (voting systems and apportionment), modular arithmetic, codes and check digits and consumer finance. There is a consistent emphasis on how math informs decision-making daily for the operations of organizations, businesses, and individuals. Students often use graphing calculators to aid in solving real world problems and are frequently asked to explain their solutions and ideas within the context of these real world problems.

371 Introduction to Calculus 12 H
This course provides an introduction to both differential and integral calculus. Applications of the derivative include related rates, optimization problems, and the calculus of rectilinear motion. The integral calculus includes applications to area, rectilinear motion, the accumulation of quantities given their rate function. Proficiency in calculating derivatives and integrals will also be emphasized. Students taking this course will be expected to have mastered fully the content of previous mathematics courses, especially Advanced Algebra and Pre-Calculus.

362-362L Introduction to Computer Programming 9
1.5 credits. Semester course, offered both semesters. Offered 2015-2016.
This course is for students who enjoy interacting with computers and are interested in learning some big ideas in computer science. No prior computer programming experience is required. Students must have a sound mathematical background and be capable of working independently and cooperatively. This course prepares students for the Advanced Placement Computer Science course that is based on the Java programming language.

363 Advanced Placement Computer Science 10 H
6 credits. Year course. Offered 2014-2015.
The goals of this course are comparable to those of a first-year course offered in college and university computer science departments. The course prepares students to take the Advanced Placement Examination, the results of which may result in advanced standing in college computer science courses. This course will be taught using the Java programming language and will include topics such as: class design, objects, methods, arrays, strings, sorting and searching algorithms.

367 Exploring Computer Science
3 credits, semester course.
This course is for students interested in investigating the many uses and effects of modern computing technology. Students work on projects and activities on topics including human-computer interaction, problem solving and computational thinking, web design, programming, data analysis, and robotics. Throughout the course, we will discuss the way computer science has impacted our society. The course assumes no background in computer science. *Pending Budget Approval and Staff Availability*

METCO PROGRAM

1090 METCO College Prep
METCO College Prep is designed to complement the Senior Guidance Seminar. The students are able to receive individual attention to further pursue their plans for college or other post-secondary endeavors.

PERFORMING ARTS DEPARTMENT

The Performing Arts Department provides experiences in the three allied arts; Music, Drama, and Dance. Through classroom, rehearsal and performance, students develop skills, techniques and knowledge that foster their intellectual, emotional and physical growth and development. Students of all levels are encouraged to participate. Students who have a serious vocational interest in music or drama can gain a solid foundation of pre-professional training through four years of study in the program area as well as through the intensive opportunity. Course meeting patterns and credits vary.

Required Concert Attire for Music Ensembles

Members of *Symphonia*, *Advanced Honors Ensemble, Concert Choir, Song Sisters, Brooks Brothers*, *Keynote Singers*, and *Rice Street Singers* are required to purchase standardized uniforms or dresses. These articles can be purchased as needed from POPS (Parents of Performing Students). Standardized tuxedo jackets (boys) will be provided by the department for a school year's usage. In addition, members of *Keynote Singers* and *Rice Street Singers* are required to purchase separate performance attire. *Concert Band* members wear department-issued red blazers with personally-owned black bow ties, black slacks, and white collared shirts in all public performances. Black dress shoes are required for all performers in all ensembles. A user fee is charged for tuxedo and band jackets to cover the cost of dry cleaning upon the return of these items after the final concert of the year. Fee subsidy is available in cases of need. *Jazz Band* members will wear uniform concert attire consisting of personally owned black dress shirt and black dress slacks.

"Intensive" Courses

Seniors who wish to experience more in depth study can apply and audition for admission into "Intensive" versions of selected courses offered by the department. Grades awarded for "Intensive" courses will be averaged into the student's Grade Point Average at Honors Level. Music seniors who have taken the prerequisite course, *901 The Complete Musician*, or its equivalent, who achieve a score of 75 or higher on the *Complete Musician* final exam, and who meet standards assessed by a pre-entry audition, exam, and interview will complete enrichment projects designed with the teacher in addition to the regular course assignments. Drama seniors desiring admittance to *Intensive Acting 12 H* must complete *Acting II* and interview/audition with the instructor. Intensive students who elect to do a Senior Project must continue to attend the meetings of the Intensive course and participate in public performances required for that course during the Senior Project term.
N.B. Course numbers ending in "A" indicate that an audition or interview is prerequisite to admission. Course numbers ending with other letters indicate combined ensemble options.