

Memorial Course Descriptions

Mathematics

Mathematics Grade 6

Students in Grade 6 develop an understanding of important concepts, skills, procedures, and ways of thinking mathematically. Topics covered include factors and multiples; understanding rational numbers; two-dimensional geometry and measurement; fraction operations; and computing with decimals and percents, probability, and statistics.

Mathematics Grade 6 Honors

Requirements: "A" in Grade 5 mathematics; teacher recommendation; high standardized test scores

In addition to completing the work denoted above, students in the Spotswood Honors program cover the content in more depth and progress at a more rapid pace.

Mathematics Grade 7

Students in Grade 7 build upon the mathematical content covered in grade 6. Topics covered include an introduction to algebra; similarity; ratio, proportions, and percent; positive and negative numbers; linear relationships; three dimensional geometry and measurement; probability and expected value; and describing variability in data distributions.

Mathematics Grade 7 Honors

Requirements: a grade of A or B in Grade 6 Honors; a grade of A in Grade 6; teacher recommendation; high standardized test scores.

In addition to completing the work denoted above, students in the Spotswood Honors program cover the content in more depth and progress at a more rapid pace.

Mathematics Grade 8

Students in Grade 8 build upon the mathematical content covered in grade 7 and begin their transition to High School Algebra. Topics covered include linear and inverse variation; the Pythagorean Theorem; exponential relations; quadratic relationships, symmetry and transformations; algebraic expressions; quadratic equations; linear systems and inequalities; and data and statistics.

Grade 8 Honors Algebra I

Requirements: a grade of A or B in Grade 7 Honors; a grade of A in Grade 7; teacher recommendation; high standardized test scores

This course is identical to the *Algebra I* offered at Spotswood High School. After taking this course, students will have completed the requirements for *Honors Geometry* in Grade 9.

Science

The science program in grades 6 through 8 is an integrated program covering life, earth, and physical sciences. Students of all abilities develop skills that they can use in across the curriculum.

Grade 6 Science

Topics studied in grade 6 science include the following:

Earth Science: rocks, minerals, fossils, plate tectonics, earthquakes, volcanoes, the atmospheres, weather, and climate

Physical Science: waves, sound, and light

Life Science: the human body and systems

Grade 7 Science

Topics studied in grade 7 science include the following:

Earth Science: the flow of fresh water and the oceans

Physical Science: properties and states of matter, elements, compounds and mixtures, atoms and the periodic table

Life Science: bacteria and viruses, protists and fungi, plants, basic units of life, cells, heredity, genes, history of life on earth, classification

Grade 8 Science*

Topics studied in grade 8 science include the following:

Earth Science: stars, galaxies, and the universe; formation of the solar system; properties of the planets, space exploration

Physical Science: chemical bonding; chemical reactions, chemical compounds, atomic energy, matter and forces in motion; forces in fluids, work and machines; heat and heat technology

Life Science: interactions of living things, cycles in nature, the earth's ecosystems; energy resources

*Students who earn an A in this class may take *Honors Biology I* in Spotswood High School.

Language Arts/Literacy

Language Arts/Literacy Grade 6

Students in Grade 6 begin to use the formal writing process of writing, drafting, and revision to develop character sketches, short stories, literary response, and a research paper. In addition to reading contemporary novels, short stories, and poetry, students also enter the world of Shakespeare's *A Midsummer Night's Dream*. Students learn and use new vocabulary and prepare for the NJASK 6. Summer reading is required.

Language Arts/Literacy Grade 6 Honors

Requirements: Strong response to Grade 5 writing sample; teacher recommendation; high standardized test scores

In addition to completing the work denoted above, students in the Spotswood Honors program read more pieces and write more extensively about them. Grade 6 Honors students develop their own questions and search for their own answers through a process of inquiry that will lead them to make connections among different literary works and draw original conclusions. Summer reading is required.

Language Arts/Literacy Grade 7

Students in Grade 7 use the writing process – drafting, editing, revision – to write compare and contrast essays, research reports, original poetry, and biographies. In a cross-curricular unit, students explore the Titanic disaster and write a research paper about shipwrecks. In addition to reading classic and contemporary novels, students are engaged with Shakespeare's comedy *Much Ado About Nothing*. Students learn new vocabulary and prepare for the NJASK 7. Summer reading is required.

Language Arts/Literacy Grade 7 Honors

Requirements: A grade of A or B in Grade 6 Honors; a Grade of A in Grade 6; teacher recommendation; high standardized test scores

In addition to completing the work denoted above, students in the Spotswood Honors program read more pieces and write more extensively about them. Grade 7 Honors students read independently and learn to make connections among literary works and to write using specific vocabulary and research. Students make extensive use of educational technology. Summer reading is required.

Language Arts/Literacy Grade 8

Students in Grade 8 begin their transition to high-school level work by writing using specific detail and reading complex texts that require them to make judgments, evaluations, or predictions. Their full study of the life of Anne Frank through drama and nonfiction opens their minds to mature thought. Other readings that stress the role of justice, mercy, and moral choices allow students to begin the process of mature thought. Students also read Shakespeare's romantic play *The Tempest* in addition to learning new vocabulary and preparing for the NJASK 8. Summer reading is required.

Language Arts/Literacy Grade 8 Honors

Requirements: A grade of A or B in Grade 7 Honors; a Grade of A in Grade 7; teacher recommendation; high standardized test scores

Students in Grade 8 Honors begin their participation in the Spotswood High School Honors Vertical Writing plan by including in their portfolios pieces designed to lead to success on the Advanced Placement Test in Literature. They are beginning to form a collection of literary works among which they can make connections, analyzing themes and ideas. Summer reading is required.

World Languages

World Language Survey 6

This ten-week (one-marking period) course is designed to introduce students to the basics of Spanish, French, and German. Emphasis is placed on both language and culture, allowing students to expand their experience of the world.

World Language Survey 7

This ten-week (one marking period) course continues the basic experience of students in Spanish, French, and German with an emphasis on practical vocabulary and everyday conversation.

Spanish I

This full-year course is identical to the one offered at Spotswood High School. This is an academic class that sets the foundation for the further study and enjoyment of Spanish.

*Students who earn an A or B in this class may take *Spanish I Honors*; *Spanish II*, *French I* or *German I* when they enter SHS. They may not repeat this course. Please note that **two years** of World Language study is required for graduation from Spotswood High School.

Career Technical Education and Consumer, Family, and Life Skills

Computer Science Grade 6

The objective of this 5-week course is to establish the foundation necessary to complete projects in a word processing environment. Therefore, this course focuses on the Microsoft Office Suite with a major emphasis on Microsoft Word. An outcome of this course is a completed project that explores Microsoft Word in detail.

Computer Science Grade 7

The objective of this 5-week course is to establish the foundation necessary to complete projects in a spreadsheet and database environment. Therefore, this course focuses on the Microsoft Office Suite with a major emphasis on Microsoft Excel and Microsoft Access. An outcome of this course is a completed project that explores Spreadsheets and Databases as information gathering and analyzing tools.

Computer Science Grade 8

In this 5-week course students will create a Microsoft PowerPoint presentation and incorporate an edited movie using Microsoft Movie Maker to introduce their projects. This course also introduces students to computer programming with the outcome of creating an original animated program.

Keyboarding Grade 6

In this 5-week course, students learn to key by the touch method. This course promotes correct posture, accurate data input, and developing increased keying speed, while avoiding bad habits.

Keyboarding Grade 7

In this 5-week course, students apply a more advanced key by the touch approach. This course continues to promote correct posture, accurate data input, and developing increased speed, while avoiding bad habits. Furthermore, this course establishes a foundation in key boarding necessary at the secondary level.

Family Life Grade 7

This 10-week course explores several aspects of Family and Consumer Science such as the Family Unit, Caregiving, Design, Food Preparation and Nutrition. This course will develop the skills necessary for adolescents to care for themselves in a safe and healthy manner.

Financial Literacy Grade 8

This 10-week course will deal with ideas such as supply and demand, credit, budgets, banking, identity theft and numerous other concepts necessary for students to become financially responsible adults.

Music and Arts

Grade 6 Music

The Grade 6 music course is the culmination of the elementary music program. Students will learn to view music as a whole, incorporate singing, playing, composing, conducting, arranging, and movement. Study in notation, meter, intervals, form, harmony, musical vocabulary, and music history including the study of composers' lives and styles is continued and expanded.

Grade 7 Listening to Music

This course is designed to help students discover and experience the great expressive power of music. The students will be encouraged to express feeling and to be sincerely moved by music as a way of developing the ability to judge this art more critically. Ultimately, equipped with new listening skills and a newly found capacity for critical judgment, the student will move comfortably to the concert hall to listen to classical and popular music with equal facility and enjoyment.

Grade 8 Musical Theater

Students will study the development of musical theater, including opera, operetta, ballet, pantomime, minstrel, vaudeville, burlesque, extravaganza, review, musical comedy, and musical play. Students will also learn vocal production and technique. Through exploring history and listening, the student should be able to hear the word opera without fear and appreciate the rich heritage that leads to Broadway.

Memorial Band

The Memorial Band Program will emphasize the solidification of concepts learned in the elementary school band while developing essentially more advanced skills such as articulation phrasing, rhythm recognition, tone, and intonation. These and other skills taught at this level will provide the students with the ability to play more challenging and exciting music and prepare them for the level of music studied and performed in the high school concert band.

Grade 6 Visual Arts

Grade 6 Visual Arts is a cycle course which provides students with a variety of creative and analytical experiences. Students will engage in discussions about artists and their styles from various cultures, compare and contrast works of several artists, and participate in creation units such as clay mask making, weaving, etc. Additionally, students will use technology to research a variety of topics including careers involving design.

Grade 7 Integrated Arts

The Grade 7 program, a cycle course, is designed to broaden the students' awareness and appreciation of the visual arts. Students explore projects in both two (value drawing, portraits, etc.) and three dimensions (ceramics, landscape design, etc.) Students will develop the requisite skills necessary to effectively handle various media, learn art room safety procedures, design, plan, and execute projects from conception to completion. Creativity, problem solving, and craftsmanship are stressed as is the individual interpretation and critiquing of each project.

Grade 8 Integrated Arts

The Grade 8 program, a cycle course, is designed to review, reinforce, and extend skills acquired in both the elementary and the middle school programs. Students are exposed to a variety of stimulating projects designed to pique their interest in continuing their study of art as they transition into high school. The course helps students refine their emerging skills to enable them to be successful in such high school course offerings as Crafts, Drawing and Painting, or Ceramics and Sculpture. Value drawing, various drawing techniques, painting and water-color techniques, sculpture, and various craft making skills will be developed.