



CONNELLSVILLE AREA MIDDLE SCHOOL

Course Descriptions 2019-2020 School Year GRADE 8

All students entering eighth grade in September are assigned four **CORE COURSES**: English Language Arts (ELA), Math, Science and Social Studies. Eighth grade students need to select three **ELECTIVE COURSES** to complete their school schedule. (*Note: Spanish counts as two electives.*)

A separate selection sheet will be provided to each student to establish their schedule for the 2019-2020 school year.

CORE COURSES

ENGLISH LANGUAGE ARTS

ELA 8

Students will read a variety of distinguished fiction and nonfiction pieces. The increased complexity of the text will allow students to incorporate insightful thoughts in analytic responses (TDA). Abundant writing opportunities to develop mastery of 8th grade language arts skills that include control of organization, grammar and word usage will be given. The course expectations will include a focus on higher-level thinking and critical problem solving skills as students engage in the process of research, using modern MLA guidelines to cite information, and oral arguments to strengthen their listening and speaking skills.

FOUNDATIONS of ELA 8

Students will read a variety of fiction including short stories, poetry, and drama as well as informational articles with a combined emphasis on reading skills and proficient writing. This course emphasizes reading comprehension, vocabulary development, and grammar as tools to master increasingly complex texts. Writing, speaking, and listening skills will be developed through journaling, discussion, and essays including those that demonstrate analytical thinking (TDA).

MATHEMATICS

ALGEBRA I

Algebra I focuses on linear relationships. Investigations will include expressions, equations, functions, linear equations, linear functions and linear inequalities. It will include a review of operations with rational and real numbers and focus on linear relationships based on data. Also systems of linear equations and inequalities, exponents and exponential functions, quadratic expressions and equations, radical functions, geometry and data and statistics will be explored.

ALGEBRA I – PART 1

Algebra I Part 1 focuses primarily on linear relationships. Investigations will include and emphasis on expressions, equations, functions, linear equations, linear functions and inequalities, and linear relationships based on data. Also geometry and data and statistics will be covered as well as including a review of operations with rational and real numbers.

SCIENCE

GRADE 8 SCIENCE

Science 8 expands on the interdisciplinary approach to the Biological, Environmental, Earth Space, and Physical Science disciplines begun in Science 6 and 7. Focused on scientific reasoning, scientific inquiry, data analysis, and critical thinking, students scientific concepts such as: earth's ecology, geology, the interconnected systems and how energy and matter flow throughout. Students, both independently and collaboratively, will study the effects of human involvement on these processes, along with the uses and effects of technology and engineering. All students will be required to complete one inquiry-based project to demonstrate their understanding of a specific concept of the course.

SOCIAL STUDIES – U.S. History

US History sequentially explores the historical interpretations and analysis of events that shaped the course of our nation's history. Students will develop an in-depth understanding of the historical significance of the development of our nation and events in the state of Pennsylvania from the time of settlement in the New World (circa 1500) to the early stages of the Progressive Era (circa 1910). Students will explore concepts through readings, student investigation, and projects and will include oral and written content topic reports, library research, and reading inside and outside of the classroom.

ELECTIVE COURSES

ART 8

Building on previous instruction and expanding on the student's knowledge of the elements of art, students will develop creative problem-solving and critical thinking skills while constructing both individual and group projects which utilize a variety of mediums. Through lectures and demonstrations, the students will experience art process, art history and gain a concept of aesthetics.

ADVANCED ART 8

Students in this course will obtain foundational knowledge of different artistic mediums and artists and discover techniques used in higher level art classes as they explore both 2D and 3D works and complete a number of detailed projects. By focusing on keeping an art journal, project completion and time management, the groundwork for incorporating aesthetic quality of work - a essential of higher-level classes - will become firmly established.

APP CREATORS

App Creators introduces students to computer science and the concept of creating interactive apps for computers, tablets, and cellular phones. Students will design, code, and test fun interactive games and other applications featuring a variety of media and animated objects. Through the creation of these mobile apps, students are challenged to be creative and innovative as they design, develop, and debug their product. The final lesson is open to students to create an app of their own choice and design.

CHORUS 8

Chorus 8 currently meets every other day for the entire school year. Members are selected by audition. Members are required to attend two mandatory concert performances at night and sing in small groups for singing tests. Members are required to sing and memorize various styles of music selected by the instructor

CS DISCOVERIES (COMPUTER SCIENCE DISCOVERIES)

Computer Science Discoveries (CS Discoveries) is an introductory computer science course that empowers students to create authentic programs, design products and engage with computer science as a medium for creativity, communication, problem solving, and fun. Computer science prepares all students to be active and informed contributors to our increasingly technological society whether they pursue careers in technology or not. A field trip to Google in Pittsburgh or another technology company in the area is another learning experience we hope to offer in this course.

DESIGN 8

The FabLab features advanced computer software and contemporary tools for cutting, milling, engraving, printing, and other processes of rapid and automated prototyping, allowing students to design, develop, fabricate and test objects. This course enables students to use their skills with software associated with each machine in the CAMS FabLab to create various independent projects. The Lab is designed to explore interests in graphic design, visual arts, business, computer-assisted design, physical and natural science, and mathematics, as well as engineering and other advanced technologies.

DIGITAL MEDIA PUBLICATIONS

Students will produce original media content for school news broadcasting and classroom projects. As they work with audio/visual technology to create original electronic media publications, students will gain knowledge and skill-sets in operating and troubleshooting video equipment including but not limited to: hand-held video cameras, electronic storage devices such as SD cards, Chroma-key editing software and various recording and editing platforms. In addition, students will utilize various manipulatives for stop motion animation and incorporate original graphic designs into their media publications. Through project-based learning activities, students will investigate and respond to authentic, engaging, and complex questions, problems or challenges as they anticipate tomorrow's world.

FAMILY AND CONSUMER SCIENCE

Students have the opportunity to refine the skills learned in foods 6 and 7 as they explore food and culture, nutrients as well as energy, and physical and chemical changes in food. The class will also include various computer modules that provide an introduction to child development, money & consumer skills, life and family skills, sewing, and heart fitness.

GIFTED*

The Gifted Program is intended to be a support system that addresses the emotional and social needs of the gifted learner by suggesting strategies for coping with life's situations. It is designed to challenge students to develop their interests and abilities through individual and group projects, extended challenges, and enriching experiences that emphasize higher-order thinking skills, and may include modifications to curriculum.

*Prerequisite - Students must be evaluated by the school psychologist to be included in the Gifted Program

SPANISH I**

Students will learn the foundations of communicating in Spanish by studying the basic grammar and vocabulary through reading, writing, listening, and speaking as they explore interesting topics and Spanish culture. In the end, students will become aware of the Spanish influence in real life settings.

**NOTE: THIS IS A YEAR-LONG COURSE - MEETING EVERY DAY. THE STUDENT MAY CHOOSE ONE MORE ELECTIVE.

INTRO TO ENTREPRENEURSHIP

This course provides students with a creative space to complete a multidisciplinary project, where students define a problem and use the design process to fix it. Students will explore topics of their own passion and utilize other spaces in the building to research and create new innovations. Student choice enhances student voice while also building important soft skills such as collaboration, peer review and problem-solving.

SYMPHONIC BAND

The Connellsville Area Middle School Symphonic Band is a performance-based instrumental music course that explores classical and contemporary concert band literature with a difficulty level of 3 to 4 on a scale of 1 to 6. In addition to the concert band repertoire, students will perform in a marching band setting. The small ensemble study portion of the course includes group lessons that will be offered using a pull-out rotational schedule.

TECH ED/ ROBOTICS 8

This course has two parts: Tech Ed and Robotics. While working in the CAMS FabLab, students demonstrate personal design and creativity as they build on previously mastered Tech Ed skills. Use of a laser engraver/cutter and a CND router to fabricate projects provides the student more flexibility in choosing and completing projects. In the Robotics segment of this course, students will learn advanced programming and problem-solving strategies by building a Lego EV3 robot. Students will be assigned challenges and tasks for the robot to accomplish as they work collaboratively to design, build, program, and document their progress.

WELLNESS

During the students' time in middle school, they will be exposed to the following individual and team sports on a three-year rotational schedule: jump rope, backyard games, individual aerobic/anaerobic and cardiovascular training, pickleball, badminton, hockey, speedball, football, soccer, basketball, volleyball, softball, ultimate frisbee and nitroball. Wellness will continue to use Fitnessgram® testing as students work toward their personal fitness goals. Human growth and development, personal hygiene, nutrition, drug awareness, and STD/HIV will be integrated into the wellness curriculum throughout the year.