

8th Grade Course Description Booklet

2020-2021



Silver Creek Middle School
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Course Offerings Booklet
2020-2021
Welcome to Eighth Grade

Registration

Building upon the knowledge and skills acquired in previous years, students are encouraged to pursue a rigorous program of studies based on their individual interests and abilities. The **2019-2020** Course Description Booklet contains information on the instructional program that will be offered. It is designed to be a guide for parents and students as they register for the next year.

The Course Description Booklet contains a complete listing of courses available, information on academic grouping and student placement criteria, descriptions for courses offered, and any specific course requirements. Some classes may require nominal laboratory, project, or materials fees. Please note: the classes offered next fall for **ELECTIVE COURSE OFFERINGS** are determined during the summer and **are based on student enrollment and staffing availability.**

Parents and students should give special attention to the selection of courses during registration. **The master schedule of classes and the allocation of staff is based on your initial registration. After the registration period, schedule changes will be made in exceptional cases only.** Requests for changes by a student or parent must be for educationally sound reasons and submitted in writing. A parent/counselor/ team meeting will then be scheduled to discuss the request. Course selections must be done with great care and preplanning.

Course Descriptions

~Mathematics~



Math 8

Curriculum 2.0 (C2.0) Mathematics 8 extends students' understanding of mathematical concepts developed in C2.0 Mathematics 6 and 7.

Instruction at this level will focus on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3)

analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. Students who successfully complete this course will be ready for C2.0 Algebra 1 in Grade 9.

Algebra 1A/B (High School Credit)

Algebra 1 is designed to analyze and model real-world phenomena. Exploration of linear, exponential, and quadratic functions forms the foundation of the course. Key characteristics and representations of functions—graphic, numeric, symbolic, and verbal—are analyzed and compared. Students develop fluency in solving equations and inequalities. One- and two-variable data sets are interpreted using mathematical models.

Hon Geometry A/B (High School Credit)

Honors Geometry formalizes and extends student' geometric experiences from the elementary and middle school grades. Student explore more complex geometric situations and deepen their understanding of geometric relationships, progressing toward formal mathematical arguments. Instruction at this level will focus on the understanding and application of congruence as a basis for developing formal proofs; the relationship between two- and three-dimensional objects and their measurements; exploration of geometric concepts in modeling situations.

~Language Arts: English, Reading, & ESOL~

Advanced English 8

Advanced English 8 is composed of two semester courses: Writing and Language 8A and Literature and Language 8B. In preparation for advanced high school English courses, students read challenging texts written in various time periods and rhetorical contexts, at times making interdisciplinary connections with historical events and concepts developed in their Historical Inquiry U.S. 8 class. Students develop their ability to express ideas with clarity and precision by writing increasingly complex compositions for a variety of purposes, including literary analysis, persuasion, and research.

Digital Literacy 3

The Digital Literacy 3 curriculum focuses on increasing critical and creative thinking through reading, writing, speaking, listening, and viewing through an integrated approach. Students will be introduced to a variety of social issues from various perspectives, examine the history of social movements and the impact on social and economic justice, explore their identity and understand the ways in which communities can respond to these complex issues. Students will explore social justice terminology in order to better advocate for a socially just society.

Middle School Reading Interventions

Silver Creek Middle School is committed to improving the reading ability of all students. Reading is the most basic skill that adolescents need to develop for success in school and in preparation for life. Reading interventions support and improve the performance of students who are reading below the proficient level. Students are placed into a reading course based on data and recommendations.



MS Read 180

READ 180 is an intensive reading intervention program designed to meet the needs of students whose reading achievement is below the proficient level. The program directly addresses individual needs through adaptive and instructional software, high-interest reading materials, and direct instruction in reading and writing skills. Students rotate among a small group, teacher-directed lesson, a computer station for reinforcement and practice, and an independent reading center where students read books at their reading level. The program is designed to rapidly accelerate student achievement with the goal of bringing students to grade level.

MS Academic Literacy

This course is for students who are reading below grade level and need to work on the critical areas of literacy - decoding, fluency, vocabulary, comprehension, and writing. Through direct, systematic instruction, in a standardized reading intervention, students use informational text to practice decoding skills, increase their fluency, and focus on vocabulary, comprehension, and writing. Students follow a consistent routine which allows them to prepare for reading by practicing decoding skills on multisyllabic words. Students increase their knowledge of Tier 2 and Tier 3 vocabulary words, which helps to increase their background knowledge. They develop close reading skills and enhance their critical thinking skills. This program teaches students to restate questions and include key vocabulary in short answers. It also teaches them to plan and then write a paragraph which includes evidence from text to support a claim. The lessons are all taught for mastery with the intention of bringing students up to grade-level.

Basic Reading 8

This course is for students reading far below grade level, who need to focus on phonemic awareness, phonics, decoding, and encoding. Basic Reading provides explicit and systematic instruction in a standardized reading intervention. The program used is aligned with the foundational reading skills in the Common Core State Standards. Students participate in small groups that follow a consistent routine which provides repeated practice and immediate corrective feedback. Students are assessed prior to the start of the program to determine which of the three levels they place into. Each level has its own unique focus, with the higher books incorporating skills from the lower books. Lessons are taught to mastery.

English for Speakers of Other Languages (ESOL)

The goal of the ESOL program is to have English language learners (ELLs) develop proficiency in the academic English needed to be successful in school, college, the work place, and as citizens.

Level 1

This course is designed to teach English as a new language to *Entering* ESOL students. The four skill areas of reading, writing, listening, and speaking are integrated as they practice oral and written language in an academic context. Students have various learning activities that emphasize vocabulary development and oral fluency. This course meets for a double period every day.

Level 2

This course is designed to teach English as a new language to *Emerging* ESOL students. Students continue to develop proficiency in four skill areas of reading, writing, listening, and speaking and are integrated as they practice oral and written language in a variety of academic contexts. Learning experiences are provided to support students as they read informational and literary texts. Students also learn to respond to factual questions and write paragraph summaries about their readings. This course meets for a double period every day.

Level 3

This course is designed to teach English as a new language to *Developing* ESOL students. The four skill areas of reading, writing, listening, and speaking are integrated as students practice oral and written language in an academic context. Students at this level of language proficiency understand basic vocabulary dealing with everyday home and school life. Students learn to analyze reading passages and respond to both factual and inferential questions as they read and discuss both literary and informational texts. Students practice speaking fluency, applying editing skills to their writing, and composing different types of paragraphs using grammatical structures that have been taught. This course meets for a single period every day.

Level 4

This course is designed to teach English as a new language to *Expanding* ESOL students. The four skill areas of reading, writing, listening, and speaking are integrated as students practice applying language using a variety of academic functions, academic vocabulary, and grammatical structures in context, both orally and in writing, for a variety of academic purposes in discourse. Students practice using various reading strategies while reading a variety of literary and informational texts. Students practice writing single-text and multiple paragraph essays. In this course, they review known text structures (problem and solution, sequence, main idea and detail, comparison and contrast); study text structure as a guide to increased comprehension; and focus on cause and effect as a structure. Students study poetry, its elements, and its interpretation as they read, analyze, and respond to poetry. They discuss and write comparisons of related ideas in two forms—poetry and prose. This course meets for a single period every day.



~Science~

Investigations in Science 8

Unit	Title	Content Focus
1	<p align="center">Forces, Motion, and Interactions</p> 	<p>Students will learn about kinetic and potential energy, describing motion, forces, and Newton’s Laws. Students will apply their understanding to design and create a model rocket.</p>
2	<p align="center">Earth, the Solar System, and the Universe</p> 	<p>Students will learn about Earth’s motions, the reasons for seasons, gravity, and characteristics of the solar system, galaxy, and universe. Students will apply their understanding to evaluate the potential for life on other planets.</p>
3	<p align="center">Weather and Climate</p> 	<p>Students will learn about geographical influences on climate, the water cycle, oceanic and atmospheric circulation, and climate change. Students will apply their understanding of these concepts to design and create “Green Homes” for different locations around the globe.</p>
4	<p align="center">Earth’s Materials and Systems</p> 	<p>Students will learn about Earth’s structure, continental drift, plate tectonics, minerals, types of rocks, weathering and erosion. Students will apply their understanding of these concepts to design and create Earthquake resistant structures.</p>

Welcome to Investigations in Science for grade 8. This curriculum is a unique problem/project based curriculum. The learning is student-centered with the teacher acting as a facilitator. Instruction is woven around one main problem within each unit of study, and students will be presented a request for proposals (RFP) at the start of each unit. Students engage in science, technology, engineering and mathematics (STEM) in order to propose solutions to identified problems. They will then use a design-folio throughout the quarter to research, develop, design and evaluate their proposal.

~Physical Education~

PE Grade 8

By the end of Grade 8, students should know and be able to do the following:



Health Related Fitness:

- Apply exercise principles to the health-related fitness components to develop, analyze, and refine a personal fitness plan.
- Apply and analyze methods for measuring target heart rate.
- Distinguish between nutritional needs that maintain the average healthy body and those for athletic performance.

Movement Skills and Concepts

- Apply and analyze concepts related to defense and offense in personal development and tactical game activities.
- Develop, perform, and analyze creative skill combinations.
- Create, analyze, and refine a personal movement plan based on a variety of feedback.

Personal and Social Responsibility

- Resolve conflicts and make healthy decisions that promote a sense of community and respect for others in physical activity settings.
- Apply, analyze, and refine effective time-management strategies to improve movement skills and fitness levels.

~Health Education~

Health Grade 8

The Grade 8 nine-week course includes the following five units of instruction: alcohol, tobacco, and other drugs; personal and consumer health; family life and human sexuality; safety and injury prevention; and nutrition and fitness.

Parents/Guardian of Grade 8 students will receive information about the family life and human sexuality unit of instruction prior to the start of classroom instruction. Information about components of healthy relationships, human reproduction, sexual limits and responsible decision-making, contraception methods, gestation, prenatal care and parenting skills are included in Grade 8 health education. Parent/Guardian who object to the content of this instruction will check “No” on the parent permission form and the child will be excused from the unit.



~ World Languages ~

The goal of the world languages program in Montgomery County Public Schools (MCPS) is to prepare students to be linguistically and culturally competent in languages other than English. The ability to communicate in a culturally appropriate manner with speakers of other languages is the key to success in the increasingly diverse global community of the 21st century. As

students develop proficiency in world languages and an understanding of the underlying values and beliefs of other cultures, they gain the skills that are essential to meaningful communication.

All world languages courses are **designated high school level courses**. Students are required to take quarterly assessment to determine their progress in speaking, reading, and writing in the target language they are studying. World language grades earned at Silver Creek Middle School will appear on student's high school transcript.

Students begin to learn to communicate orally and in written form about daily life. Emphasis is on vocabulary development, simple grammatical structures, and the basic culture of the people. Students are encouraged to use the language beyond the school setting and keep informed of current events in countries where the target language is spoken.

World Languages Course Offerings

Course Title
French 1A/B
French 2A/B
Honors French 3A/B
Spanish 1A/B
Spanish 2A/B
Honors Spanish 3A/B
Chinese 1A/B <i>Note: Students will be transported to B-CC HS for instruction</i>
Chinese 2A/B <i>Note: Students will be transported to B-CC HS for instruction</i>

Level 1A/B (Full Year Course)

Spanish, French, or Chinese

This is a high school credit-bearing course. Students begin to learn to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret basic information when listening and reading. Vocabulary and basic grammatical structures are taught within the context of these familiar topics. Culture is embedded throughout the course. Students who successfully complete both semesters of 1A/B earn one foreign language credit toward graduation.

Level 2A/B (Full Year Course)

Spanish, French, or Chinese

This is a high school credit-bearing course. Students expand their ability to communicate orally and in writing in a culturally appropriate manner about topics related to daily life. They interpret information when listening and reading. Vocabulary and grammatical structures are taught within the context of these topics. Culture is embedded throughout the course. Students who successfully complete both semesters of 2A/B earn one foreign language credit toward graduation.

Level 3A/B (Full Year Course)

Spanish or French

This is a high school credit-bearing course. Students continue to expand their ability to communicate orally and in writing in a culturally appropriate manner about a variety of familiar topics. They interpret detailed information when listening and reading. Vocabulary and more complex grammatical structures are taught within the context of these topics. Culture is embedded throughout the course. Students who successfully complete both semesters of 3A/B earn one foreign language credit toward graduation.

****Students who are native speakers of French, Chinese, or Spanish, or students who have received comprehensive instruction in one of those languages, may request a placement exam to bypass the initial level of a language course. On your registration card, place a check mark in the box where it says “Request Language placement test”.**





~Art/Music/Technology Electives~

The school reserves the right to change elective courses as staffing and enrollment needs require.

Middle School Art 3

Students in Grade 8 with prior visual art experience may continue with Level 3 in the visual art sequence. In Middle School Art Level 3, students will have the opportunity refine their skills and develop their personal artistic style while exploring how *INFLUENCE* may be communicated through art. Creativity, innovation, critical thinking, communication, and collaboration continue to be developed throughout the course.

Middle School Studio Art 3 (Semester course linked to MS Digital Art 3)

Students will develop a portfolio of work demonstrating proficiency in working with traditional 2D and 3D studio media and techniques including drawing, painting, printmaking, sculpture, ceramics, and crafts to create artworks. Level 3 also offers students opportunities to refine skills and master techniques in specific art media and creative processes.

Middle School Digital Art 3 (Semester course linked to Middle School Studio Art 3)

This course will provide students with active learning experiences related to computer animations and the use of animation software applications. Students will refine skills and utilize advanced vector and raster-based software techniques to create works of digital art and design. Level 3 also offers students opportunities to refine skills and master techniques in specific art media and creative processes.

Music

MS Chorus 3 (Full year course)

Students will create, perform, and respond to music in a variety of styles/genres. Students will continue to develop proper vocal technique and choral singing in relation to posture, breath control, tone, intonation, diction, blending, singing in harmony, music literacy, and sight-singing in multiple keys and parts.

Students will primarily sing state level 3 music. There will likely be a minimum of two school concerts as well as the opportunity to participate in other festivals/performances and



students are expected to participate in all performances. An audition and/or a prerequisite of MS Chorus 1 and/or 2 may be required.

MS Band 3/Orchestra 3 (Full year course)

Students distinguish between abstract and programmatic music and learn and discuss the social, intellectual, and historical influences on each. Students develop and refine their technical skills in order to perform music at the Grade 2 to Grade 3 Level of difficulty. In addition, students perform and historically categorize transcriptions of a variety of composers. This band or orchestra represents middle schools at public performances.

Prerequisite: Attainment of outcomes for Middle School Band II or Orchestra II. Students may also audition to qualify for this course or be placed by the instrumental music teacher.



Technology



Foundations of Computer Science TE A/B (FOCS) (Full year HS credit course)

This course provides an engaging introduction to computing concepts through a nationally developed curriculum, offered through a unique partnership with Code.org. The course focuses on the conceptual ideas of computing so that students understand why tools and languages are used to solve problems through a study of human computer interaction, problem solving, web design, programming, data analysis, and robotics. This is a high school credit course that also meets the MD state technology graduation requirement.

Introduction to Engineering Design A/B (IED) (Full year HS credit course)

This high school course is for Grade 8 students who have successfully completed Algebra 1. Students develop a design after using computer software to produce, analyze, and evaluate models of projects and solutions. Students study the design concepts of form and function, and then use state-of-the-art technology to translate conceptual design into reproducible products.

~Additional Courses~

Alternative 1 – *Placement is determined by individual need in consultation with student's grade level administrator, counselor, and teachers.*

The vision of Alternative 1 is to provide students with the skills necessary to achieve excellence in all areas of their personal and educational development, including attendance, behavior and academics. Alternative 1 provides a comprehensive program to meet the needs of the student in a secure emotional and physical environment, where each individual is treated with fairness, dignity, and respect. Students develop short and long term goals and learn to recognize the connection between their efforts in the present and their opportunities in the future.

~ Special Education ~



Resource Class - *Placement is determined by individual academic needs in consultation with student's grade level administrator, counselor and teachers or IEP team as appropriate.*

Students who need intensive support keeping up with grade level work may be recommended to take a resource class. The purpose of the class is to help students develop and improve education skills such as organization, study skills, and test taking strategies.

Placement determined by the Individualized Education Program (IEP) team.

The Special Education Department services students who are identified with an educationally related disability. Services are provided based on the IEP for each student. The main focus is to use the curriculum for each grade and subject to address goals and objectives. Classes are offered as a continuum of services including self-contained and inclusion classes. A variety of strategies and accommodations are incorporated into the program.

Hours – Based Model

The Hours Based Model program serves students who qualify for Special Education services for a variety of reasons including, Specific Learning Disabilities, Speech Language Impairments, or Other Health Impairments. Students in the program receive support in the setting that best meets their academic needs, including self-contained and/or inclusion classes. Special Education staff is trained in strategy based teaching and focus on incorporating the strategies as the students access the general education curriculum.