

SLMS Course Descriptions

Southern Lehigh Middle School Course Descriptions **2026-2027**

*Please note the following important information regarding Middle School Courses:

1. There are no weighted courses at the Middle School. This includes Honors ELA and Advanced math courses. Students are recommended for the course that will best challenge them and assist them to be most successful moving forward.
2. Middle School students do not receive High School credits for any courses taken at the Middle school, this includes MS Algebra 1, MS Geometry, and 8th grade World Language Courses.

Core Academic Courses

Mathematics

7th Grade:

Math 1217 – Placement in this course is determined by student need and is an IEP team decision.

Grade 7 Mathematics 227 – focuses on five mathematical domains: (1) Ratios and Proportional Relationships, (2) The Number System, (3) Expressions and Equations, (4) Geometry, and (5) Statistics and Probability. Students will extend their understanding of ratios and develop an understanding of proportionality to solve single- and multi-step problems. They will develop an understanding of operations with rational numbers while working with expressions and linear equations. Students will solve problems involving scale drawings and informal geometric constructions, including working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume. Additionally, students will draw inferences about populations based on samples.

Extended Grade 7 Math 257- is an accelerated course that addresses mathematical content from Grade 7 and Grade 8. Instruction will focus on five mathematical domains of Grade 7 and 8 content. (1) Ratios and Proportional Relationships: Students will extend their understanding of ratios and develop understanding of proportionality to solve single- and multi-step problems. (2) The Number System: Students will develop an understanding of operations with rational numbers while working with expressions and linear equations. (3) Expressions and Equations: Students will focus on formulating and reasoning with expressions and equations. This will include modeling an association using a linear equation and solving linear equations. Students will build an understanding of a function and work with using functions to describe quantitative relationships. (4) Geometry: Students will solve problems involving scale drawings and informal geometric

constructions, including working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume. Additionally, two- and three-dimensional space and figures using distance, angle, similarity, and congruence will be explored. Students will also develop an understanding of and ability to apply the Pythagorean Theorem. (5) Statistics and Probability: Students will draw inferences about populations based on data samples. **Summer work is required for this course.**

Middle School Algebra I 247- is an accelerated course that addresses mathematical content from Grade 8 and High School Algebra I. Instruction focuses on developing students' skills and accuracy in algebraic techniques and their applications. This course is designed to develop understanding of the real number system. It includes a study of number properties, formulating and reasoning about expressions and linear equations and inequalities, as well as systems of equations and inequalities. Students will use functions to describe quantitative relationships and model an association in bivariate data. In addition, students will explore polynomials and work with quadratics. Additionally, two- and three-dimensional space and figures using distance, angle, similarity, and congruence will be explored. Students will develop an understanding of and ability to apply the Pythagorean Theorem. Emphasis is placed on the development of conceptual understanding, logical reasoning, problem solving, and procedural fluency. Concepts are developed through authentic applications. **Summer work is required for this course. This is a Keystone course where students are required to take the Keystone Algebra I exam at the end of the course.**

8th Grade:

Math 1218 - Placement in this course is determined by student need and is an IEP team decision.

Grade 8 Mathematics 228 – focuses on five mathematical domains: (1) The Number System, (2) Expressions and Equations, (3) Functions, (4) Geometry, and (5) Statistics and Probability. Students will focus on formulating and reasoning about expressions and equations. This will include modeling an association in bivariate data with a linear equation, and solving linear equations, as well as systems of linear equations. Students will build an understanding of a function and work with using functions to describe quantitative relationships. Additionally, two- and three dimensional space and figures using distance, angle, similarity, and congruence will be explored. Students will develop an understanding of and ability to apply the Pythagorean Theorem.

Middle School Algebra I 248 - is an accelerated course that addresses mathematical content from Grade 8 and High School Algebra I. Instruction focuses on developing students' skills and accuracy in algebraic techniques and their applications. This course is designed to develop understanding of the real number system. It includes a study of number properties, formulating and reasoning about expressions and linear equations and inequalities, as well as systems of equations and inequalities. Students will use functions

to describe quantitative relationships and model an association in bivariate data. In addition, students will explore polynomials and work with quadratics. Additionally, two- and three-dimensional space and figures using distance, angle, similarity, and congruence will be explored. Students will develop an understanding of and ability to apply the Pythagorean Theorem. Emphasis is placed on the development of conceptual understanding, logical reasoning, problem solving, and procedural fluency. Concepts are developed through authentic applications. **Summer work is required for this course. This is a Keystone course where students are required to take the Keystone Algebra I exam at the end of the course.**

Middle School Geometry 268 – focuses on developing an understanding of the attributes and relationships of geometric objects. This course is designed for students who have achieved high levels in math. It provides an integrated study of congruence, similarity, geometric transformations, geometric measurement and dimension, right triangles, introductory trigonometry, circles, parallelism, and spatial relationships. Both abstract and practical aspects of geometry are addressed. Throughout this course, inductive and deductive reasoning are emphasized in both mathematical and non-mathematical situations. The major principles of logic are emphasized, while developing the method and meaning of mathematical proof. Students will construct conditional statements, conjectures, and written justifications. Both direct and indirect proofs are used to provide an understanding of two- and three-dimensional relationships. **A scientific calculator and summer work are required for this course.**

English Language Arts

7th Grade:

Language Arts Courses:

Language Arts 1127 – Placement in this course is determined by student need and is an IEP team decision.

7th Grade Comprehensive Language Arts 117/17 - This course aims to improve students' writing and literature skills by integrating intervention strategies to foster personal language development, enhance text comprehension, strengthen content-area literacy, and refine analytical abilities. It is organized into a block of two class periods and replaces the previous combination of language arts and academic literacy. Placement in this course is determined by student data and current levels of proficiency relative to grade level standards.

Language Arts 127 – This course is an intense writing and literature course with an emphasis on personal language development, literature analysis, and conventions.

Honors Language Arts 137 – This course is a fast-paced, advanced writing and literature course. This course reaches beyond basic skills and focuses on higher-level tasks in both writing and literature. The ability to complete independent assignments is essential. Eligibility criteria must be met for placement.

Academic Literacy/Reading Courses:

Reading 1017 – Placement in this course is determined by student need and is an IEP team decision.

7th Grade Comprehensive Language Arts 117/17 – See description above under 7th grade Language Arts.

Academic Literacy 27 – an intense content area reading and writing course with emphasis on developing reading strategies and building research skills.

Honors Academic Literacy 37 – a fast-paced, advanced content area reading and writing course. This course reaches beyond basic skills and focuses on higher-level tasks. The ability to complete independent assignments is essential. Eligibility criteria must be met for placement.

8th Grade:

Language Arts Courses:

Language Arts 1128 – Placement in this course is determined by student need and is an IEP team decision.

Language Arts 128 – This course is a writing and literature course with an emphasis on personal language development, literature analysis, and conventions.

Honors Language Arts 138 – This course is a fast-paced, advanced writing and literature course. This course reaches beyond basic skills and focuses on higher-level tasks in both writing and literature. The ability to complete independent assignments is essential.

Reading Courses:

Reading 1118 – Reading course for students with IEPs who qualify. *This course replaces World Language in the 8th-grade schedule.*

8th Grade Comprehensive Language Arts 118 – This course is designed to enhance students' writing and literature skills while also incorporating intervention strategies to

foster independent language development, improve text comprehension, and enhance analytical abilities. Furthermore, students will benefit from curriculum enrichment, which reinforces literacy strategies tailored for content area academics. The course is structured as a companion to Language Arts 128. Placement in this course is determined by student data and current levels of proficiency relative to grade level standards. *This course replaces World Language in the 8th grade schedule.*

Science

7th Grade:

Grade 7 Physical Sciences 0307 – students will explore the nature and structure of matter and the characteristics of energy. Emphasis will be placed on the technological application of Physical Science principles. Major areas addressed within this course include the organization and use of the periodic table, physical and chemical changes, nuclear reactions, temperature and heat, sound, light, electricity and magnetism, and forces and motion. Throughout this course skills will continue to build using systematic investigation with a clear focus on variables and repeated trials. Students will plan and conduct research involving both classroom experimentation and literature reviews from written and electronic resources. The aforementioned concepts will be aligned with NGSS/STEELS standards.

8th Grade:

Grade 8 Earth and Space Science 308 - focuses on developing an understanding of the Earth, Sun, and Moon system, solar system, scale of the universe, and exploration of current theories of the formation of the universe. Topics will include structure of the Earth, rocks and minerals, plate tectonics, weathering and erosion, fossils, evolution and changes of life on Earth through the study of fossils, meteorology, and natural disasters. Throughout this course, students will also study human interactions with the environment including natural resources. Students will plan and conduct research involving both classroom experimentation and literature reviews from written and electronic resources. The aforementioned concepts will be aligned with NGSS/STEELS standards.

Social Studies

7th Grade:

Social Studies 407 - The study of geography, world cultures, and current events.

Social Studies Spanish Immersion 457 – Students must be enrolled in SL Spanish Immersion Program. The study of geography, world cultures, and current events.

8th Grade:

Social Studies 408 - A survey of United States history from colonial times through the US Civil War.

Social Studies Spanish Immersion 458 – Student must be enrolled in SL Spanish Immersion Program. A survey of United States history from colonial times through the US Civil War.

Related Arts Courses

Music Courses

7th Grade:

General Music 707 - Production (composing and arranging,) performance (bucket drums and guitar,) historical and cultural contexts (Western art music) and critical response to a variety of music styles/examples/genres.

Performance Music Choices:

Performance Music: Chorus 737 - Emphasis on singing, rehearsing and concert preparation. *Please note: students must have prior choral experience to choose chorus. If they do not, a current music teacher recommendation is needed.*

Performance Music: Band Brass 717B - Emphasis on brass instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Trumpet, French Horn, Trombone, Baritone, or Tuba. Students enrolled in Band lessons do not need to take General Music.

Performance Music: Band Percussion 717P - Emphasis on percussion instrument-specific technique, as well as preparing concerts and performances. This course is for students who currently play in the Percussion section. Students enrolled in Band lessons do not need to take General Music.

Performance Music: Band Woodwinds 717W - Emphasis on woodwind instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Flute, Oboe, Clarinet, or Saxophone. Students enrolled in Band lessons do not need to take General Music.

Performance Music: Orchestra Lower Strings 727L - Emphasis on string instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Cello or Bass. Students enrolled in Orchestra lessons do not need to take General Music.

Performance Music: Orchestra Upper Strings 727U - Emphasis on string instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the violin or viola. Students enrolled in Orchestra lessons do not need to take General Music.

**Please note: Instrumental Music courses also require attendance at large ensemble rehearsals, and all Performance Music courses require participation in scheduled performances. Large ensemble rehearsals meet once every 3 school days, during the school day. A minimum of two years' playing experience is recommended for Band and Orchestra courses.*

8th Grade:

General Music 708 - Production (composing and podcasting,) performance (piano and guitar,) historical and cultural contexts (rock music in US) and critical response to music/careers in the music industry.

Performance Music Choices:

Performance Music: Chorus 738 - Emphasis on singing, rehearsing and concert preparation. *Please note: students must have prior choral experience to choose chorus. If they do not, a current music teacher recommendation is needed.*

Performance Music: Band Brass 718B - Emphasis on brass instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Trumpet, French Horn, Trombone, Baritone, or Tuba. Students enrolled in Band lessons do not need to take General Music.

Performance Music: Band Percussion 718P - Emphasis on percussion instrument-specific technique, as well as preparing concerts and performances. This course is for students who currently play in the Percussion section. Students enrolled in Band lessons do not need to take General Music.

Performance Music: Band Woodwinds 718W - Emphasis on woodwind instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Flute, Oboe, Clarinet, or Saxophone. Students enrolled in Band lessons do not need to take General Music.

Performance Music: Orchestra Lower Strings 728L - Emphasis on string instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Cello or Bass. Students enrolled in Orchestra lessons do not need to take General Music.

Performance Music: Orchestra Upper Strings 728U - Emphasis on string instrument-specific techniques, as well as preparing concerts and performances. This course is for students who currently play the Violin or Viola. Students enrolled in Orchestra lessons do not need to take General Music.

**Please note: Instrumental Music courses also require attendance at large ensemble rehearsals, and all Performance Music courses require participation in scheduled performances. Large ensemble rehearsals meet once every 3 school days, during the school day. A minimum of two years' playing experience is recommended for Band and Orchestra courses.*

World Language

7th Grade:

Exploratory World Language Wheel: Spanish 517, Chinese 927, and French 597 – Students will experience each Language for a third of the year.

Advanced Spanish Immersion 557 – Full-year advanced Spanish course. Must be enrolled in the Southern Lehigh Spanish Immersion program to be in the course.

8th Grade:

Level one World Language Course that students will take for the full year:

Middle School Chinese I 928

Middle School Spanish I 518

Middle School French I 598

In Level I World Languages students will focus primarily on securing a Novice Low level of proficiency in interpretative, interpersonal, and presentational modes of communication (reading, writing, speaking, and listening). Students will also continue developing an understanding of the target language's speaking cultures. By the end of the course, students should be able to identify memorized and familiar words when they are supported by gestures and visuals in informational texts, fictional texts and conversations. With the help of gestures and visuals, students should be able to answer simple questions, express basic needs, and express feelings using memorized words and phrases.

Additionally, students should be able to introduce themselves, express likes and dislikes, and name familiar people, places, and objects. Throughout the course, students will develop the ability to show basic cultural awareness when communicating with others from the target culture.

Advanced Spanish Immersion 558 – Must be enrolled in Southern Lehigh Spanish Immersion program to be in course.

Other Related Arts Courses

7th Grade:

Physical Education 877 - Fundamentals of team and individual sports, cardiovascular fitness, adventure education and cooperative activities.

Health 887 – Topics include; Health triangle, stress, first aid, nutrition, fitness, digital citizenship, and drug education.

Family and Consumer Sciences 657 – Topics include; food and Kitchen Safety, Childcare and Development, Basic Skills, Family Studies, Food Preparation.

Art 807- Students will explore the power of visual communication through personal expression using a variety of various media.

Grade 7 STEM: Design and Modeling 657 - This course provides students opportunities to apply the design process to creatively solve problems. Students learn and utilize methods for communicating design ideas through sketches, solid models and mathematical models. Students work in teams to identify design requirements, research the topic, and engage stakeholders. Teams are provided design challenges throughout this course.

Study Skills 1507 – Placement in this course is determined by student need and is an IEP team decision. Will be taken in place of World Language wheel. Please contact your child's Special Education teacher for questions about this course.

8th Grade:

Physical Education 878 – Fundamentals of team and individual sports, team building and cardiovascular fitness.

Health 888 - Wellness, consumer health, personality types, nutrition, physical fitness, drug education, and human development.

Family and Consumer Sciences 658 – Food and Kitchen Safety, Responsible Use of Sugar/Nutrition, Financial Literacy, Project-Based Inquiry Unit, Food Preparation.

Art 808 – Students will explore the power of visual communication through personal expression using a variety of various media.

Grade 8 STEM: Automation and Robotics 758 -allows students to trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use a robotic platform to design, build, and program for real-world situations.

Career and Technology Exploration (CTE) 157- The CTE course consists of Career Exploration, Career Acquisition, and Career Day's Mock Interview. During the course, file management, word processing, and an introduction to spreadsheets are covered while creating career Portfolio artifacts. Proper Keyboarding speed and accuracy are developed throughout the course using a self-paced typing program.

Study Skills 1508 – Placement in this course is determined by student need and is an IEP team decision. This course may replace World Language or several related arts courses in the 8th grade schedule. Please contact your child's Special Education teacher for questions about this course.