



Course Description Guide 2018-2019

Perseverance Respect Integrity Discipline Excellence

Welcome to Liberty Middle School. The courses described in this booklet mirror the district mission statement: To inspire every student to think, to learn, to achieve and to care. Our goal is to build an academic program that will reach every student, ensuring their success in high school and beyond. Thank you for trusting us with the education of your child!

Contents

Special Programs (AIM, AVID, SAS)	2
Core Content Classes	4
Electives	6

Special Programs

AIM

The AIM program is designed to provide increased opportunities for students to engage in active questioning, analysis and the construction and communication of arguments. It is based on the higher order thinking skills from Bloom's Taxonomy and College Board. The premise of this program is to develop within academically able students the preparation and motivation to succeed in challenging courses in high school, including Advanced Placement classes.

Academically able students have advanced reading and writing abilities, strong task commitment and internal motivation. These characteristics allow them to independently acquire factual information at a rapid pace and apply this information at a higher level of thinking as well as demonstrate a higher level of skills. Students taking AIM courses can expect daily preparatory homework in all AIM subject areas. Advanced Placement preparation is the focus of AIM core subjects: reading, writing, science, and social studies. Grades in AIM classes will be weighted.

Students interested in participating in the AIM program must complete the AIM application which can be found on Liberty's website. Students may apply for the AIM program at each grade level, but placement is on a space-available basis.

Placement in AIM will be based on a body of evidence that will include any combination of the following data:

- Grades (3.5 or higher or 3's or better)
- PARCC/CMAS scores
- Historical MAP scores
- ACT ASPIRE scores
- AIM writing assessment



AVID

Advancement via Individual Determination

AVID is a semester elective class for 6th grade and year-long elective for 7th and 8th grades. Students will develop and reinforce attitudes, skills, and knowledge to successfully enter and complete a college prep academic program in high school.

Recommended Prerequisites:

- Between 2.0 and 3.5 GPA
- Average or above average standardized test scores
- Student application and interview for 7th & 8th grade
- High student motivation
- Positive attitude
- Desire to be in higher level classes
- Student/Parent contract

Major Goals:

Students will focus on the AVID curriculum and apply WICOR strategies into their core classes.

- Writing
- Inquiry
- Collaboration
- Organization
- Reading



Typical Activities:

- Cooperative group activities led by college tutors
- Student projects
- Reading and writing for understanding
- Listening and speaking activities
- Individual/group research
- Integration of supplemental readings
- Quick write
- Multimedia presentations (videos, slides, tapes, music)
- Binders/Agenda
- Cornell notes
- Tutorology

Proficiency Classes

Math Proficiency classes are provided for general education students needing additional support in math and take the place of a semester-long elective in his or her schedule. Students may be placed into a Proficiency class based on a body of evidence including CMAS and Aspire scores, grades, and/or teacher recommendations.

Student Achievement Services

Student Achievement Services (SAS) provides special education services to students who qualify under the Colorado Department of Education guidelines. SAS Staff include a department coordinator, learning specialists, a speech/language therapist, mental health support, nursing, and district support in the areas of hearing, vision, and fine and gross motor skills. This team assesses students who are referred and develops an Individual Education Plan (IEP) for students who qualify.

At Liberty Middle School, a continuum of academic support services is provided to accommodate each student's specific needs. This support may be in the form of co-taught literacy or math classes. In addition, academic support classes are offered for additional support in literacy and math. Each student's progress is monitored closely, and SAS staff collaborates with other teachers and families to ensure each student is as successful in the learning environment as he or she can be.

The SAS team also consults with other school staff and families regarding those students who do not qualify under the state guidelines.

Core Content Classes

Language Arts

Students will have two periods of Language Arts every day. In Reading class, students learn strategies to approach nonfiction reading as well as literature through novels, short stories, and poetry. Literary studies provide opportunities for students to engage in active questioning, analysis, and discussion. In addition, students will also be learning a variety of vocabulary to increase the skill of word choice and the ability to use context clues with any complex text they read. Writing class emphasizes writing in a variety of styles, to a variety of audiences, and for a variety of purposes. Students use the writing process to develop ideas, organize information, draft writing, and edit/revise writing. Throughout the writing experience, appropriate grammar and mechanics usage is targeted and developed. In both classes, note taking, public speaking, and critical thinking are embedded in all instruction.

Science

At the middle school level, the principle goals in each science classroom are to cultivate scientific habits of mind, develop students' capability for scientific inquiry, and to teach each student how to reason in a scientific context. As Liberty students progress from 6th through 8th grade, every science teacher plans rigorous lessons and labs to ensure that students become proficient in the following fundamental scientific practices by the time they reach high school:

- Asking questions and defining problems
- Developing and using models
- Planning and carrying out investigations
- Analyzing and interpreting data
- Using mathematics and computational thinking
- Constructing explanations and designing solutions
- Engaging in argument from evidence
- Obtaining, evaluating, and communicating information

6th, 7th, and 8th grade science classes learn a spiraling curriculum from elementary school. Spiraling curriculum is that which is repeated so that students build progressively more sophisticated explanations of natural phenomena throughout their CCSD education. Following are the curriculum topics for each grade level. Our general curriculum follows the CCSD middle school curriculum, which is aligned with the Colorado State Content Standards.

6th Grade

Overall Theme: Part to Whole

- Dynamic Earth
- Natural Resources
- Ecology
- Cells
- Human Body

7th Grade

Overall Theme: Change Over Time

- Earth's History
- Evolution
- Climate Change
- Photosynthesis & Cellular Respiration
- Structure & Properties of Matter

8th Grade

Overall Theme: Energy

- Weather
- Astronomy
- Chemical Reactions
- Energy
- Waves
- Forces & Motion
- Genetics

Social Studies

Social Studies is guided by the state standards in history, geography, civics, economics, and personal financial literacy while focusing on the Western Hemisphere in 6th grade, the Eastern Hemisphere in 7th grade, and United States history in 8th grade. Students are engaged in technology, hands-on activities, and authentic assessments that make history come alive and help all students effectively acquire information, including analysis of primary and secondary sources, and synthesize data.

6th Grade

Geography

Ancient Civilizations:

Maya, Aztec, Inca

Conquest of the America

7th Grade

Ancient Mesopotamia & Egypt

Ancient Greece and Rome

Ancient China

Ancient Africa

8th Grade

Revolution

Constitution

Western Expansion

Civil War

Mathematics

The mathematics program at Liberty Middle School focuses on preparing students to be able to do the following:

- learn to enjoy and value mathematics
- become confident in their abilities to learn mathematics
- become mathematical problem-solvers
- learn to reason and communicate mathematically
- make connections between mathematics and life

Liberty Middle School offers challenging mathematics courses at each grade level in order to meet the individual needs and abilities of our students.

Math 6

As students transition to middle school mathematics, they will build on their understanding of numbers from elementary school and begin to learn the abstract components of mathematics. In sixth grade, math content will focus on four critical areas, including (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) finishing understanding of division of fractions and extending the notion of numbers to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking. This work will lay the foundation for the focus on proportional relationships in seventh grade.

Math 6/7

Math 6/7 is part of a two-year compacted course sequence that provides three years of mathematics content in two years, preparing students for Algebra 1 in eighth grade. Math 6/7 students study all topics from Math 6 (see Math 6 course description), extending understanding of operations with rational numbers, working with expressions and linear equations and extending the concepts of ratio and rate from Math 6 to include proportional relationships from Math 7. The compacted nature of the course will require students to be comfortable and proficient learning math at an accelerated pace. Placement in Math 6/7 will be determined using a body of evidence to support students' readiness for success in this course.

Math 7

Seventh grade students will build on their work with rational numbers and algebraic thinking from sixth grade as they move into deeper and more complex math concepts. Math content will focus on four critical areas, including (1) developing understanding of and application of proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving geometric ideas of scale, area, surface area and volume with two- and three-dimensional shapes; and (4) drawing inferences about populations based on samples. This work will lay the foundation for the algebraic work with linear functions studied in eighth grade.

Math 7/8

Math 7/8 is the second half of a two-year compacted course sequence that provides three years of mathematics content in two years. Students who have successfully completed Math 6/7 will complete Math 7/8 in order to be prepared for Algebra 1 in eighth grade. Students will complete their study of Math 7 topics (see Math 7 course description) not covered in Math 6/7, including working with expressions and linear equations and the geometric study of two- and three-dimensional shapes. These concepts will be extended to the Math 8 topics of linear equations and the Pythagorean Theorem, respectively. The full content of Math 8 (see Math 8 course descriptions) will be studied in this course. The compacted nature of the course will require students to be comfortable and proficient learning math at an accelerated pace.

Math 8

In 8th grade, students begin a serious study of algebra with the learning of linear functions. With their study of number relatively complete, the focus shifts to the abstract application of their understanding of arithmetic. This content will focus on three critical areas, including (1) formulating and reasoning about expressions and equations, including modeling bivariate data with a linear equation, solving linear equations, and working with systems of linear equations; (2) developing and understanding the concept of a function, and using functions to describe quantitative relationships; and (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. This work will lay the foundation for success in a high school Algebra I course.

Algebra I

Algebra I provides a formal development of the algebraic skills and concepts necessary for students to succeed in advanced courses. In particular, the instructional program in this course provides for the use of algebraic skills in a wide range of problem-solving situations. Topics include: operations with real numbers, systems of linear equations and inequalities, relations and functions, polynomials, algebraic fractions, nonlinear equations, and statistics and probability. The course guides students in the development of critical thinking skills and algebraic problem solving skills which provide the foundation for real world problem solving. This is a fast pace rigorous course. The compacted nature of the course will require students to be comfortable and proficient learning math at an accelerated pace.

Electives

Full Year Courses:

World Languages

6th, 7th and 8th grades

Spanish A

This 6th or 7th grade course emphasizes communicative and proficiency-based activities for students in the target language. Students work through the first half of a textbook designed for a high school level I Spanish course. Along with a variety of other materials students will focus on cultural appreciation, listening comprehension, oral, reading and writing proficiencies. An important criterion for success in the Spanish classroom is a basic understanding of grammatical terms and rules in the English language.

Spanish B

This 7th or 8th grade course is a continuation of Spanish A. Students work through the second half of the high school level text started in Spanish A. Using a variety of materials, students will focus on cultural appreciation, listening comprehension, oral, reading and writing proficiencies. There is an increased emphasis on the Cherry Creek District World Language Proficiencies of listening, reading, writing, speaking, and culture. Completion of this course prepares students for Level II Spanish as an 8th or 9th grader.

Spanish II

This 8th grade course is the next level of Spanish after completing IA and IB. The content and pacing of this class is the same as a high school level two language class. Using a variety of materials, students will focus on communication and cultural proficiencies. There is an increased emphasis on the production of the language in the forms of reading, writing, listening and speaking. Completion of this course should prepare students for Level III Spanish as a 9th grader.

Vocal Music

7th and 8th grades

Select Choir (Liberty Bells)

Participation in this yearlong course requires having taken a semester of Choir as well as an audition and teacher selection. Students will continue to expand their choral knowledge through sight-reading, vocal technique, music theory, and performances. This course is designed to prepare students for high school choir as well as expose students to more difficult and varied repertoire. This group participates in four concerts throughout the year as well as other performance opportunities.

Band

6th, 7th and 8th grades

Development of the fundamental instrumental techniques and musical expressions is emphasized and practiced. Students are required to provide their own instrument and method book. (Some larger instruments are available through Liberty for a yearly fee.) Band instrumentation includes flute, oboe, clarinet, bass clarinet, alto saxophone, tenor saxophone, baritone saxophone, trumpet, French horn, trombone, baritone, tuba, and percussion (including bells). Information for rental/purchase of instruments will be given to students at an Instrumental Music night during the spring, and at the beginning of the school year. Concerts are scheduled throughout the year, primarily in the evening hours. Attendance is required for concerts and is included in the grading criteria.

Experience

Any level of experience or none at all
At least one full year of experience
At least two full years of experience

Course

Eagle Band (6th grade only)
Concert Band (7th grade only)
Symphonic Band (8th grade only)

Orchestra

6th, 7th and 8th grades

Development of the fundamental instrumental techniques and musical expressions is emphasized and practiced. Students are required to provide their own instrument and method book. (Some larger instruments are available through Liberty for a yearly fee.) Orchestra instrumentation includes violin, viola, cello, and bass. Information for rental/purchase of instruments will be given to students at an Instrumental Music night during the spring, and at the beginning of the school year. Concerts are scheduled throughout the year, primarily in the evening hours. Attendance is required for concerts and is included in the grading criteria.

Experience

Any level of experience or none at all.
At least one full year of experience
At least two full years of experience

Course

Eagle Orchestra (6th grade only)
Concert Orchestra (7th grade only)
Symphonic Orchestra (8th grade only)

Semester Courses:

Art

6th, 7th and 8th grades

Using a wide variety of media, this class focuses on developing both 2D and 3D art skills and techniques. Building on their knowledge and understanding from the previous year, students will learn visual art vocabulary for every medium studied. Additionally, in order to help students connect their work to the past, famous artists and the history of art are covered. A large part of this class is focused on planning and creating artwork that connects to the studied art vocabulary, processes, techniques and history of art in the unit. Students will observe, comprehend, and reflect upon different works of art as a tool to help them invent new ways to create art.

Choir

6th and 7th grades

This course is designed to allow students to work together as musicians in a performing choral ensemble. Students will explore different styles and genres of vocal music, gain knowledge of elements of music theory, and learn the value of teamwork through rehearsals and singing. Students will perform with all of the other choirs for a performance toward the end of the semester.

Guitar

7th and 8th grades

This class is designed for beginning guitar students or students who have played for years. Students will learn proper technique, note reading, rhythmic skills, fingerboard geography, musical style and interpretation, and performance etiquette. The end result of this class will inspire students to continue further study independently or seek private instruction. The knowledge gained in this class will set the foundation for individuals to be able to perform, read, and create music independently in the future.

Health and Wellness

6th, 7th and 8th grades

Health & Wellness 6

Students will develop skills necessary to become more responsible, self-reliant adolescents. They will learn the power and responsibility of making good choices and focus on modeling and promoting a healthy lifestyle. Class centers around student's social wellness, with content that focuses on study habits and organization, peer relationships, conflict resolution, appropriate technology and internet usage, and effective communication skills.

Health & Wellness 7

Students will spend the semester determining what is the best version of themselves. They will analyze physical and emotional wellness topics such as nutrition, sleep, body image, stress and anger management, and self-image and concept through the lens of their personal beliefs and values. They will then work on modeling and promoting these ideals, both inside and outside of the classroom.

Semester Courses (cont.)

Health and Wellness (cont.)

Health & Wellness 8

8th Grade Health and Wellness will focus on the skills and knowledge needed to become an independent and informed high schooler. Class content will center on topics such as lifetime fitness and nutrition, communicable and non-communicable diseases and prevention, first aid and emergency preparedness, navigating teenage relationships, positive social media usage, and substance abuse and prevention.

Photography

7th and 8th grades

This class will incorporate studies of the history, techniques, aesthetics, and practices of digital photography. Students will develop their visual thinking skills as they acquire an understanding of the principles and elements of art with an in-depth focus on composition and lighting. This is an introductory course which will cover not only the use of a digital camera but also the minor editing and manipulating of images to create fine art photographic prints.

Physical Education

6th, 7th and 8th grades

Physical Education 6

This course focuses on physical fitness, health, and lifelong sports. Students develop skills and understand rules and regulations as they participate in challenging games and team sports. During the semester, students also develop skills necessary to become responsible and self-reliant. They will learn the positive consequences for making healthy choices.

Physical Education 7

This course focuses on individual and team sports concepts as well as overall wellness. Students expend their energy in challenging games and understand rules and regulations related to exciting team sports on a daily basis.

Physical Education 8

This course is designed to help students realize a healthy lifestyle by emphasizing physical fitness, team sports, and group activities. Team sports align with seasonal sports. Students participate in activities that focus on the development of individual sports, skills and interests, and on issues dealing with being a lifelong learner and a physically active individual.

Technology and S.T.E.M.

6th, 7th and 8th grades

Engineering Technology

6th grade

During this semester-long course, you will explore topics & careers in Science, Technology, Engineering, and Mathematics (STEM). Students will design, build, and test their own physical & digital creations. Project topics include: Engineering (Civil, Environmental, Electrical, and Mechanical), Architecture, and Programming (Robotics). Students will use physical and digital tools such as LEGO Robotics, 3D printing, and Computer-Aided Design Software.

Tech Design and Engineering

7th and 8th grades

During this semester-long course, you will explore topics & careers in Science, Technology, Engineering, and Mathematics (STEM). Students will design, build, and test their own physical & digital creations. Project topics include: Engineering (Biomedical, Civil, Environmental, Electrical, and Mechanical), Architecture, and Programming (Robotics). Students will use physical and digital tools such as LEGO Robotics, 3D printing, Computer-Aided Design Software, and Arduino circuitry. This course offers new project experiences every year, and may be taken in both 7th and 8th grade. This class is encouraged for students wanting to take Engineering or Robotics courses at Grandview.

Tech Digital and Multimedia Production

6th, 7th and 8th grades

Multimedia production is a multi-level (beginner-advanced) project-oriented course, which allows students to communicate their unique perspectives using a variety of technological tools including professional grade software from the Adobe Creative Cloud Suite. Throughout this course, students will develop critical thinking skills while producing unique assignments directed towards an authentic audience.

Semester Courses (cont.)

Tech Web Graphics and Design

6th, 7th and 8th grades

This semester-long course will offer students the opportunity to investigate how scientists and software engineers design, build, and test the digital tools that power the 21st century. Course topics may include computer programming, mobile app development, website design, and game creation. This course offers new experiences every year, and may be taken in 6th, 7th, and 8th grade.

Theater Arts

6th, 7th and 8th grades

Students engage in the creation, production, and performance of drama. Basic stage directions, theater terminology and aspects of technical theater are integrated into the course. Through scene work and improvisation, students practice speaking in front of an audience, collaborating with others and creating characters. Students also participate in technical lessons that introduce them to theatrical design.

Theater Arts 6

Students will explore storytelling through theatre with units on pantomime, Ancient Greek mask, radio plays, and playwriting. Students will also create characters through improvisation exercises.

Theater Arts 7

Students will perform monologues and duet scenes. While producing those scenes, students will learn how to identify a character's objective, obstacle, and tactics. They will also explore improvisational theater and stage makeup.

Theater Arts 8

Students will perform longer comedy scenes and dramatic scenes. They will also learn about theatrical costumes, scene and monologue writing, and directing. Students continue practicing improvisation and tackle audition skills to prepare them for high school theatre.