



WEBBER MIDDLE SCHOOL 7TH GRADE COURSE DESCRIPTIONS

REQUIRED COURSES

English/Language Arts 7: The seventh-grade English program is designed to help students express themselves more easily and effectively through writing and speaking. The course includes study of the fundamentals of grammar, correct usage, literature (short stories and the novel), and the process of writing (narration, description, and exposition). Students focus on writing a unified, coherent paragraph which logically supports a topic sentence by using specific details. Students also have opportunities to write creatively.

English/Language Arts 7 Honors: This course is recommended for the gifted and talented student who seeks additional information and depth in literature and writing. The curriculum follows the guidelines of the required English 7, adding materials and projects for highly motivated students. Students are offered opportunities to explore a variety of reading and writing and to pursue areas of interest in depth.

Reading Literacy 7 (English/Language Arts 7 Strategic): Designed for students who may have difficulty with middle school textbook reading assignments and state Reading Proficiency tests. Emphasis is on reinforcement of basic reading skills, including phonics, vocabulary knowledge, comprehension, and study-reading skills. Skill work will include pronunciation fluency, reading for factual details, reading for themes and main ideas, summarizing, using text information to draw conclusions and find supporting details, reading to form critical opinions, and reading for recreation.

The Colorado Basic Literacy Act requires special service in reading for students who have not been proficient or advanced in prior years of CMAS state testing. In accordance with that law, 7th graders whose test records indicate a need for such instruction will be registered for Reading Literacy 7. The small group class will provide diagnosis and instruction aimed at improving reading fluency and comprehension, in preparation for our state CMAS reading tests. If spring CMAS reading tests indicate growth to a proficient level, an adjustment in the student's schedule will be made.

Science 7: This course is designed for all students and is the second of three courses that meets the Colorado State and Poudre School District Content Standards for Science grades 6 - 8. The major topics covered in the 7th grade is: Forms and Transfer of Energy - Waves - Light and Sound Energy; Properties of Matter - Atomic and Molecular Structure; Living Systems - Classification, The Cell, and Genetics; Earth Systems - Atmosphere, Weather, and Water.

Social Studies 7: This course will teach students how to organize and to analyze information about several world cultures. The course content emphasizes both physical geography skills and a knowledge of the cultural components of each area studied. Specific cultures from the Middle East, Asia, Europe, Africa, and South America will be investigated.

Math 7: In this course, students will gain an understanding about and be able to apply rational numbers. Students will explore ratios and proportions to develop an understanding of linear functions and be able to solve single-variable equations. They will compare data distributions and be able to compare differences between populations. Finally, students will analyze geometric figures, calculating area, surface area, and volume. Content is organized into four critical areas, or units. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Math 7/8: This course differs from the 7th Grade course in that it contains content from 8th grade. While coherence is retained, in that it logically builds from the 6th Grade, the additional content when compared to the 7th Grade course demands a faster pace for instruction and learning. Content is organized into four critical areas, or units. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations.

Algebra 1: The fundamental purpose of this course is to formalize and extend the mathematics that students learned in the middle grade. Because it is building on the middle grades standards, this is a more ambitious version of Algebra I than has generally been offered. The critical areas, called units, deepen and extend understanding of linear and exponential relationships by contrasting them with each other and by applying linear models to data that exhibit a linear trend, and students engage in methods for analyzing, solving, and using quadratic functions. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. **This is a high school credited course.**

Physical Education 7: A semester long course where students are reintroduced to a variety of activities with a focus on skill development and pursuing preferences for life-long fitness. The variety of core activities include soccer, volleyball, flag football, basketball, softball, racquet skills, aerobics, fitness testing, track and field, and dance. Skills will be developed through drills, lead-up games and game play. ***

Health 7: A semester course which covers an overview of the human body, disease, personal wellness, family and peer relationships, bully proofing, drug use and abuse, and growth and development of the adolescent.

ELECTIVE CHOICES - YEAR-LONG

Concert Band: Continuation of fundamentals such as technical ability, style, and tone production is explored. A large quantity of band literature of varying genres and difficulty is studied. Opportunities for student leadership and chamber groups are a part of the course curriculum. Attendance at school concerts is required as part of the student's grade. This is an intermediate level course. Enrollment is by instructor approval or upon successful completion of Beginning Band. ***

Concert Orchestra: Emphasizes and builds upon fundamentals such as the study of technical skills, style, more advanced bow strokes, and tone production. Students will learn intermediate level skills on the violin, viola, cello, bass, or harp and will study orchestra literature of varying genres and difficulties. Opportunities for student leadership and chamber groups are a part of the course curriculum. Attendance at school concerts is required as part of the student's grade. This is an intermediate level course. Enrollment is by instructor approval or upon successful completion of Beginning Orchestra. ***

Concert Choir: A non-select mixed choir with no audition required. Choral literature of appropriate difficulty is performed in preparation for advanced musical study in select groups. This is a performing group and attendance at school concerts is required as part of the student's grade.

Jazz Winds: Open to all 2nd and 3rd year flute, oboe, clarinet, saxophone, bassoon and bass clarinet players. Low brass is also accepted by director approval. Trap, bass, piano, and guitar players are also accepted by audition. Students must also be enrolled in concert or symphonic band class. A variety of jazz literature is explored, including (but not limited to) rock, funk, ragtime, blues, swing, contemporary, pop, and spirituals. Student must obtain instructor approval for entry into class. This class meets on red days during zero hour. Concerts are required and combined with regularly scheduled band performances and may also include festival and studio sessions during the day.

Jazz Band: Open to 2nd and 3rd year players by audition only. Students must also be enrolled in concert or symphonic band class. Instruments include all saxophones, trumpets, trombones/baritones, tuba, electric guitar and electric bass, trap/percussion, and piano. A variety of jazz literature is explored, including (but not limited to) ragtime, blues, swing, contemporary, pop, Latin jazz, rock, funk, and spirituals. This class meets on black days during zero hour. Concerts are required and combined with regularly scheduled band performances and may also include festival and studio sessions during the day.

Jazz Orchestra: Open to 2nd and 3rd year violin, viola, cello, string bass and harp players by audition only. Trap/percussion players also accepted by audition, and string players may also play piano on some songs as ability allows. Students must also be enrolled in Concert Orchestra or Symphony Orchestra class. A variety of jazz literature is explored, including (but not limited to) ragtime, blues, swing, pop, Latin jazz, rock, and funk. This class meets on either red or black days during zero hour. Concerts are combined with regularly scheduled orchestra performances and may also include festival and studio sessions during the day. Attendance at all concerts is required.

German 1: Students are introduced to vocabulary and structures. Activities include dialogs, novice readings, listening selections, and written communication. Students experience language through the study of cultures, while making connections and comparisons to their native language and developing communication skills in the target language. The study of a world language prepares students to compete in a global community! **This is a high school credited course.**

Spanish 1: Students are introduced to vocabulary and structures. Activities include dialogs, novice readings, listening selections, and written communication. Students experience language through the study of cultures, while making connections and comparisons to their native language and developing communication skills in the target language. The study of a world language prepares students to compete in a global community! **This is a high school credited course.**

ELECTIVE COURSES - SEMESTER

Art 1: Develops the elements of art and principles of design. A wide variety of art activities are designed to increase the student's knowledge of art media, techniques, terminology, and appreciation of aesthetics and art styles. Critical thinking skills are emphasized as students do drawings, paintings, sculpture, and printmaking. ***

Pottery & Sculpture: Students will be introduced to three-dimensional methods of creating art. Students will pursue individual interests in working with clay, glazes, and other sculptural media. The elements and principles of three-dimensional design will be studied as they apply to functional and non-functional works of art. ***

Photography 1: Instruction in the art of creating and manipulating digital images. Students will explore aspects of composition in capturing quality photographs based on elements of art and principles of design. A variety of software applications will be used to produce desired artistic effects. Graphic applications as well as career paths will also be studied. ***

Web Design/Computer Animation: Incorporates 21st century skills in a web design environment. Students will work collaboratively to design and create innovative digital works. Units will include: web site design, graphics, animation, data analysis, and marketing. Careers and life-long learning opportunities will be explored.

Exploring Technology & Engineering Concepts: Explores the development of technology and how it is changing our world. Students learn to use "tools of our time", including computers, shop tools and equipment, transportation systems, production equipment, robots, wind tunnels and many other exciting high-tech items. They explore the topics of invention, design, manufacturing, Lego robotics, transportation, communication, and work on a different project related to the topic of study. ***

Robotics: Robotics Engineering 1 is a semester long class designed to introduce the basics of robotics as it teaches science technology engineering and mathematics (STEM). Students will learn how to use information from sensors, applied mathematics and measurement to program their robot to perform in a series of environments. They will have the opportunity to complete multiple investigations involving guided research, problem solving, working in teams and documenting what they've learned as they investigate how robots make decisions to navigate their environment. As students become familiar with the programming and the NXT hardware, they may progress at their own pace allowing for differentiation in student abilities and learning styles. Interactive, hands-on learning is the structure of this class. This course is a pre-cursor to the high school robotics program and a part of the K-12 robotics articulation. ***

3D Modeling and Design: This elective allows students to learn how the design process works through engineering and design activities. Drafting, both manual and computer-aided, will be examined. Using the fabrication lab, the learner will design and build projects. We will experiment with aerodynamics while designing balsa wood race cars and calculate the distance and velocity. By learning how to use a variety of drafting and modeling programs, students will produce plastic models using a state of the art three-dimensional printer. ***

Creative Foods: This hands-on course develops skills in nutrition and wellness as well as food preparation. Areas of study will include: food safety and sanitation, kitchen safety, food production, nutrition and wellness, meal planning, and practical application with food labs. This course includes career exploration in the food and hospitality industry. ***

Sew Creative: This elective allows students to learn how the design process works through sewing/textile construction and design activities. They will experiment with fiber types and understand their uses. They will apply knowledge of the elements of art and principles of design and apply these attributes to their projects. Students will pursue individual interests in fabric construction using different textiles, fibers and technology. This course includes career exploration in the design and visual arts industry. ***

Outdoor Living: For students who enjoy and appreciate outdoor activities. Topics include Safe Outdoor Living/Survival Skills, Environmental Ethics (Rules), Preparations for Outdoor Living, Recreational/Leisure Choices, and Career Resources. Class activities will encourage the student to develop new interests for leisure time. There is a fee for this class. ***

Hunter's Education Certification and Outdoor Living: For students who enjoy and appreciate outdoor activities. Topics include Safe Outdoor Living/Survival Skills, Environmental Ethics (Rules), Preparations for Outdoor Living, Recreational/Leisure Choices, and Career Resources. Class activities will encourage the student to develop new interests for leisure time. This course includes Hunter's Education Certification. There is a fee for this class. ***

Introduction to Drama: Introduces students to basic performance skills in creative dramatics. Basic skills include improvisation, interpersonal group interaction, character analysis and interpretation, expressive script reading, memorization, and preparation. Development of these skills will culminate in a one-act performance. Attendance at one dress rehearsal and performance after school is required.

Musical Theater Production: An interdisciplinary class designed to develop skills in various aspects of producing a major musical. It is open to students with a variety of interests including singing, acting, and dancing. ***Students must be willing to sing solo material.*** Two dress rehearsals and one performance are required as part of the student's grade.

***There is a fee for these classes.

EXTENDED LEARNING OPPORTUNITIES - SEMESTER

Anthropology: The chief objective of Anthropology is to increase the students' awareness of and appreciation for the rich diversity of human behavior and beliefs. The course examines the physical and cultural origins and development of the human species taking us back in time some three million years. Students will investigate the techniques and evidence used to formulate theories about prehistoric and modern people who possess lifestyles dramatically different from our own. Anthropology is taught from an evolutionary perspective. With a special emphasis on Archaeology, students will participate in a Field School dig on campus.

Blogging, Vlogging, and Podcasts: Star in, write and produce the new Webber Report blog, vlog and podcast. Learn how to record, edit and mix video and sound. Segments will include Webber Sports Update; This Panther Life, stories about life as a Webber student; Top 5, the top 5 songs for a specific theme; and anything else we think of that is fun or informative.

Book Club: For those who love books, love to read books, and want to talk about books. The group will vote on books to read, prepare reflective writing, and discuss the books. Students will be expected to read daily, either the book club selection or their own personal book choice.

Brain Builders: This course provides students with complete understanding of the intricacies, aesthetics, and cultural elements of the world of "gaming" through critical play, analysis, and discussions. A variety of game formats will be considered in the course, including board games and card games. The main focus will be on historical and economic games which reinforce social studies and mathematic standards.

Creative Writing: Designed to help students improve their ability to express themselves through imaginative use of the language. Students focus on improving their sense of observation in narrative and descriptive writing by creating their own original short stories and poems.

Current Events: Assists students to understand current local, state, national, and international issues and their historical background. This understanding will provide an opportunity to develop reasoned opinions. The student will develop an awareness of positions held by individuals and groups affected by issues.

Entrepreneurs: This is your opportunity to learn the skills and habits it takes to start your own business. We will choose a problem or issue facing our community and students will develop ideas to creatively solve/address that problem or issue. Students will then pitch their idea and the class will choose one idea to pursue. We will partner with businesses to try to make the solution a reality. Through this process, students will learn how to use their creativity to solve problems, plan and budget for a business, and confidently and successfully pitch their ideas to potential funders.

Environmental Education - The Green Class: Centered on making a positive difference in ourselves and our Webber community. The purpose is to take time each day to think about ourselves and how we can make Webber a greener, more environmentally friendly place. Explores how our own personal choices affect our immediate community and how we can take positive steps each day. Students will have the knowledge and skills to go out into their own world and become leaders for change. Focus will be centered on redirecting Webber's organic waste stream by utilizing Vermiculture (worm-based composting) and hot composting. This course explores aspects of proper nutrition and the role of exercise and active consumerism as a basis of a healthy lifestyle.

Geo Caching 101: Students will learn the basics of geocaching. They will participate in locating local geocaches and engage in creating a geocache and tracking its activity.

History of Rock and Roll: An introduction to the evolution of rock styles, contributions of important performers, and musical techniques involved in the creation and performance of rock music. Students will be introduced to the history of rock and roll music through current music influences, as it evolved in the United States and spread throughout the world.

Intro to Coding: In this course, you will learn the concepts of the **JavaScript** programming language and the cool functions you can use with it in the **ProcessingJS** library. You will learn how to use these concepts to create stories, drawings, games and animations. Other sites used include Scratch and Hour of Code.

Advanced Coding: In this class, we will learn to program Arduino microcontrollers to make programmable circuits. Students will learn C++ to program a variety of tasks from things as simple as blinking a light to as complicated as playing a song. Previous experience with programming is recommended.

Jr. Forensics (Speech & Debate): A first semester only class designed to prepare students to compete in Webber's Junior Forensics Team. Students will be introduced to all areas of Junior Forensics competition including debate, interpretive drama, humor, poetry and impromptu events in area tournaments. The National Honor Society sponsors Junior Forensics, and students who chose to compete will travel to monthly tournaments and will have the opportunity to gain points which can be transferred with them as they continue at the high school level.

Learn to Knit for Others: Designed to teach students how to knit and do a service-learning project all in one. Students will learn the basics of knitting: casting on, knit stitch, purl stitch, and casting off. After becoming proficient with these skills, students will make knitted items to donate to local families in need. If you have previous knitting experience and want to move beyond the basics, you will have the opportunity to learn new knitting techniques in this class. ***

Military History and Technology: This class will encompass the following: military customs and courtesies and tactics, world and US military history timelines, National Guard versus active duty, military leaders and other significant individuals, significant military campaigns and events, military careers and opportunities, and military technology (timelines and reasons why technology is used). If possible, a field trip to CSU for the ROTC program or to Warren AFB in Cheyenne may be appropriate. Projects may include research of periods, battles, leaders, and significant events, followed by presentations or role playing. We will make connections to cultures, impacts on families, communities, and individuals. We will also explore why and when military is used, what is right or wrong about those choices.

Panther PRIDE - Self Defense: This class is designed to build self-confidence and awareness, respect, and character all through martial arts and self-defense. Expect to work and train your mind and body in a disciplined environment with an instructor who has 20 years of experience and a 2nd-degree black-belt.

Science Olympiad: The course is modeled after the nationally recognized Science Olympiad competition. This course will allow students to explore all areas of science. Sample topics may include astronomy, crime solving, trajectory, egg drop, and orienteering. Students should plan on taking this class both semesters.

Smart Fit Girls: This class teaches adolescent girls how to love their bodies by embracing their own strength. During the program, girls participate in exciting activities aimed at improving their self-esteem and are introduced to resistance training exercises in a fun, group environment. Girls who participate in this class will need exercise clothes, comfortable athletic shoes, and of course, a good attitude!

Sports Analytics: Sports are all about stats. Learn how coaches, GMs and journalists analyze data and make decisions about which players to play and how to plan for an opponent. We will review key statistics in all the major sports (baseball, basketball, football, soccer, hockey). We will focus on the NFL. Each week we will look match-ups and make predictions for which teams and players will perform the best. After the games are played, we will analyze what happened and reassess our rankings.

Sports Reading: Uses the medium of sports to engage students in reading and writing activities. The students will concentrate on improving their reading and writing skills using a variety of materials including newspapers and magazines, short stories, novels and biographies. Students also learn about the history of sports, careers in sports, and the impact of sports on society. Some physical activity may be incorporated into the class.

Study Hall: In support of student success, study hall will provide class work time; planner checks; grade checks; assistance with work; reading for assignments; and retaking tests or redoing assignments. We will have limited space in study hall for the 2015-16 school year. If you are selected into a study hall, you are expected to work on homework in a quiet and respectful manner. Teachers have the discretion to remove students from study hall who are not using their time effectively. **Required application is available on the Webber Middle School website or in the counseling office.**

Underwater Robotics: The Underwater Robotics Program (SeaPerch) provides students with the opportunity to learn about robotics, engineering, science, and mathematics (STEM) while building an underwater Remotely Operated Vehicle (ROV). During the process of building an ROV, students follow an established curriculum to completely assemble the ROV, test it, and then participate in launching their vehicles. Students are encouraged to compete in a culminating event, the SeaPerch Challenge and/or maneuver an obstacle course at a local pool. Students should plan on taking this class both semesters.

Velocity - Select Choir: Participation requires high-level performance skills. The choir performs a variety of significant choral literature representing several stylistic periods. This advanced group performs concerts in the school and community. Students must be concurrently enrolled in Concert Choir. **Placement is based on an audition** and attendance at school concerts is **required** as part of the student's grade.

WEB TV: Students will learn the basics of video production. Our task will be to learn the art and science about how to make engaging, attention-grabbing videos. Through video announcements, we will work with all the tools of the trade including cameras, microphones, lighting and green screens. Student filmmakers will write, direct, and star in their own productions. We will make professional-quality videos designed to showcase the best of Webber to our students, parents and the Fort Collins community. ***

World Cultures: Explores the five themes of geography (location, place, human environment interaction, movement, and region). Students will be involved in an in-depth study of the background of major historic and artistic sites, basic economics, geography, language, foods, music, traditions, religions and current events of countries students want to visit or to be visited on a spring and/or summer trip.

Yearbook: This yearlong course covers all phases of yearbook production. Students learn to design layouts, write copy, organize materials, select photographs, and function as a cooperative member of a publications staff. **Required application is available on the Webber Middle School website or in the counseling office.**