

## WEBBER MIDDLE SCHOOL $7^{\text {TH }}$ 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, $7^{\text {th }}$ 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 Next Generation Science Standards and Poudre School District Content Standards for Science grades 6-8. The major topics covered in the Middle School Life Science standards include Cells, Genetics, Ecosystems, Biodiversity, Energy Transfer, and Natural Selection.

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, and Africa 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 singlevariable 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, teamwork, sportsmanship 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 fitness activities, drills, lead-up games, and game play. ***

Health 7: Health is a one semester standards-based class for seventh graders to learn about topics that relate to them. This class is an opportunity to learn about how the decisions you make affect your health. The following topics will be covered during the semester: Health and Wellness, Safety and Prevention, Fitness and Nutrition, Mental Health, Communication, Healthy Relationships, Bullying, Alcohol and Drugs, and Human Sexuality.

CONNECT - Advisor/Advisee Mentoring 7: Connect is a 20-minute class, three days a week. We will build authentic connections to others and within ourselves by focusing on social and emotional development. We will learn strategies for how to be a better friend, family member and student. We will learn to practice mindfulness and self-awareness so we can make better choices, no matter what challenges we face. We learn how to be a productive and respectful member of our Webber community, and we play lots of cool games to have fun and enjoy being together!

## 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 $2^{\text {nd }}$ and $3^{\text {rd }}$ 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 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 $2^{\text {nd }}$ and $3^{\text {rd }}$ 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 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 $2^{\text {nd }}$ and $3^{\text {rd }}$ 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 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.

Spanish 1: This course is intended for students interested in beginning to learn Spanish. If you are already a Spanish speaker, there will be courses in high school to further your knowledge. 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. ***

Game Programming Digital Technology: Take your knowledge of computers and programming to the next level with this course. Digital citizenship, multimedia and presentation, research, data collection and analysis, information literacy, online research, and computational thinking will be explored through creative projects. Computational thinking and logical problem solving are a focus throughout the course.

Web Design/Computer Animation: Incorporates $21^{\text {st }}$ 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 $\mathrm{K}-12$ 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. ***

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.

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 class offers a variety of activities to increase your BRAIN POWER. You'll learn how to complete a SUDOKU puzzle, learn the basics of playing CHESS and CHECKERS, compete in several tournaments for games you'll learn like SET, GENIUS SQUARE, and SPOT IT. You will also use your laptop to play different critical thinking/problem solving games on websites like PHYSICSGAMES.NET.

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: Do you love knowing what is happening in the city, country, and world? Do you want to feel like you actually understand how and why things are happening the way they are? If so, then this ELO is for you! We will dig deeper than Twitter or Instagram, looking at a wide variety of news sources to get a handle on current events. We also explore ways to be smart about how we get our news so you can feel confident and informed.

Environmental Education - The Green Class: This course is centered on the role we play in shaping, participating in, and understanding local and global environmental issues. We will take time each day to think about ourselves and how we can make Webber a greener, more environmentally friendly place. Additionally, we will broaden our scope of understanding to think critically about ways personal choices affect our immediate community and beyond, and how we can take positive steps each day. Students will explore the science behind our changing climate, Colorado ecosystems, and local environmental issues.

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.

Hunting \& Gathering: This class is organized around the principle of self-sustainability. Students will complete the Colorado Hunter Education class, which consists of 12 classroom hours of study, a written examination, and a hands-on safety evaluation. Following the conclusion of the Hunter Education aspect of the class, students will utilize and apply hands-on learning techniques in the study of various styles of gardening, including traditional soil-based, aquaponic and hydroponic styles.

Intro to Coding: Learn to create computer programs, develop problem-solving skills, and work through fun challenges! Make games and creative projects to share.

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 \& Crochet: Designed to teach students how to knit and crochet. Students will learn the basics of knitting: casting on, knit stitch, purl stitch, and casting off. Students will also learn the basics of crochet. After becoming proficient with these skills, students will make knitted/crocheted items to donate to family members or to keep for themselves. If you have previous knitting/crochet experience and want to move beyond the basics, you will have the opportunity to learn new techniques in this class. ***

Magic: The Gathering Academy: The world's original and most popular trading card game is coming to Webber. Playing magic is an excellent way to stimulate the mind, think creatively, and solve problems while improving linguistics, building social skills, and learning how to be respectful in competitive situations. This class is for anyone, whether they are learning to play or honing their skills. All supplies, including cards, will be provided for free thanks to MagiKids.org.

Marvelous Movies and the Art of Teaching: Do you ever wonder how we can know anything at all? Where does knowledge come from, anyway? Join this class to explore the wonderful world of education. We will watch videos and read scholarly articles from various subjects to see school from the inside out. We will plan activities, design tests, and discuss the great issues of how we learn. In addition, practical knowledge (financial literacy, necessary degrees, best institutions, etc.) to pursue your dream job.

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.

Panthers Produce: In support of student success, Panthers Produce 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 Panthers Produce. If you are selected into this class, you are expected to work on homework in a quiet and respectful manner. Teachers have the discretion to remove students from Panthers Produce who are not using their time effectively. Required application is available on the Webber Middle School website or in the counseling office.

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.

Space Science and Astronomy: Come explore the stars in this exciting project-based ELO! We will start off learning how stars form, how they live, and how they come to a (sometimes) catastrophic end. We will learn about the brilliant people who have contributed to this field of science throughout history and will hear from scientists who are actively doing this work today. We will have opportunities to observe the skies using telescopes and binoculars and will learn about contributing data to citizen science databases. We finish the semester with a brief exploration of aerospace technology and a project of your choosing.

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.

STEAM: Engineering \& Art Design: Using Science, Technology, Engineering, Art, and Mathematics to engineer and design solutions to real world problems. This is a hands-on class that will be using collaborative learning, teamwork and physical science concepts to come up with creative solutions to a real-world challenge. We
will be creating and testing animal prosthetics, designing plastic water bottle cars and much more! Students must be able to work effectively in a group with others.

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.

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. Students should plan on taking this class both semesters. Required application is available on the Webber Middle School website or in the counseling office.

