



## 8<sup>th</sup> Grade Curriculum Guide 2022-2023

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### Required Courses

#### 8<sup>th</sup> Grade Core Academic Classes

##### English:

**English:** Students will learn the elements of literature, vocabulary, language conventions, and writing development through the district's Amplify curriculum. This will be supplemented when able with units on poetry, novel studies, and project-based learning.

**Advanced English 8:** Students proceed at an accelerated pace to create time for exploring classic literature and additional project-based learning.

##### Mathematics:

**Mathematics:** Students begin eighth-grade math with an introduction to Algebra. Students evaluate algebraic expressions, solve one- and two-step equations, solve and graph inequalities, and graph functions. Instruction also includes areas such as integers, geometry, rational numbers, analyzing data, problem solving, perimeter, and area. All computational skills, such as operations with fractions, decimals, and percents, are reviewed throughout the course. Students must be prepared to enter Algebra in ninth grade.

**Advanced Math 8:** Advanced math proceeds at an accelerated pace. It is a pre-algebra course with an earlier introduction to Algebra. Students evaluate algebraic expressions, solve one- and two-step equations, solve and graph inequalities, and graph functions. Instruction also includes areas such as integers, geometry, rational numbers, analyzing data, problem solving, perimeter, and area. All computational skills, such as operations with fractions, decimals, and percents, are reviewed throughout the course.

**Algebra:** Algebra is a course for students showing innate talent and advanced mathematic skills. It is designed for students who have mastered arithmetic skills and who intend to pursue a four- or five-year "advanced track" math curriculum. Students in eighth grade Algebra are expected to maintain an average grade of "B". **Students take the Tennessee Algebra I End of Course Exam.**

**Geometry: Prerequisites: A minimum grade of B in Algebra I in the 7<sup>th</sup> grade.** This is a comprehensive course that covers plane, solid, and analytic geometry concepts with a strong emphasis on formal proofs. **Students take the Tennessee Geometry End of Course Exam.**

**Science:** This course consists of a survey of disciplinary core ideas in Physics, Earth Science, and Life Science. Topics in Physics include motion, forces, electricity, magnetism, waves, sound, light, and space. Topics covered in Earth Science are minerals, rocks, plate tectonics, mountains, earthquakes, and the Earth's interior. Topics in Life Science are natural selection, evidence for common ancestry, evolution, and how organisms are classified. Since the disciplinary core ideas taught in this course are intertwined with science and engineering practices, a strong lab emphasis is maintained through pre-lab discussions, laboratory experiences, and post-lab analysis in addition to working in a team or partner format.

**Social Studies - American History**: Eighth grade American History examines the development of the United States from the early colonial period to the late 19<sup>th</sup> century. Major units of study include Native American cultures, European exploration, colonization, the American Revolution, the United States Constitution and Bill of Rights, the Early National Period, Westward Expansion, Slavery, and the Civil War and Reconstruction periods. The history and development of Tennessee are also explored. The course includes research projects, presentations, lectures, debates, role play, map study and discussion of current events each with an emphasis on developing students' critical thinking and writing skills and their knowledge of American history.

**\*An optional four-day field trip to Charlottesville, Jamestown, Williamsburg, and Yorktown, Virginia is being planned for Spring Break, March 2022.**

## 8th Grade Rotational Classes

**Physical Education:** The physical education program is an instructional class that teaches students the fundamentals of team sports, the importance of regular physical fitness, and lifetime wellness activities. Emphasis is placed on activities that condition students in physical strength and endurance as well as the development of coordination and physical skills. Students are required to wear clothing that allows them freedom of movement. Tennis shoes are required every day for PE. Crocs, slides, boots, etc. are not acceptable shoes for PE. Students have the opportunity to be assigned a PE locker, which requires students to provide a combination lock. Students are required to dress in proper physical education clothes and participate to the best of their individual ability every day they have PE. **Students must have a written note from a physician to be excused from PE.**

### **Courses that Alternate with 8<sup>th</sup> grade P. E.**

7th grade students rotate Art, Digital Citizenship, STEM Designers, and Portrait of a Graduate throughout the school year, alternating with Physical Education.

**Art:** This class will be a continuation of many concepts that students learned in seventh grade art with an emphasis being placed on the structures found in a piece of art. During this grading period students will focus primarily on creating a three-dimensional artwork.

**Digital Citizenship (in Computer Applications):** 8<sup>th</sup> grade classes will rotate through the computer class for one nine -week period. During the nine weeks students will learn to manipulate the following programs: MS Word, Excel, and PowerPoint.

**STEM Designers (CO<sub>2</sub> Car):** This course teaches students to use their technology literacy skills that have been developed in 5th-7th grade Engineering by Design classes. Students use three-dimensional software skills (Autodesk Inventor) and after a bit of research, design and develop their own balsa wood CO<sub>2</sub> car. The last week of class the students will race their cars.

**Portrait of a Graduate (Focused on Critical Thinking for Careers):** This course is designed to assist students in practicing critical thinking skills necessary to excel in future coursework and occupations. Students will learn about existing high school, college, and career pathways, and how to successfully transition into them. In Oak Ridge schools we are implementing Project-Based Learning (PBL) as an engaging instructional approach for learning these 21st century career skills. Students will learn about the required coursework for graduation from Oak Ridge High School. Students will explore the courses that will be offered to freshman and beyond. This course will also help them in understanding how to create their schedule to best suit their needs. This course will emphasize academic learning goals and competencies that focus specifically on exercising critical thinking skills and problem-solving in careers.

## Non-Required Courses

### 8<sup>th</sup> Grade Elective Courses

**\*\*Attention: Elective courses are ONLY available if a student is not in the RTI (Response to Intervention) program for Reading or Math. If a student is placed in RTI, they will be removed from their elective until they have shown growth in the supported subject area. Should you have any questions concerning RTI, a student's placement, or how a student can move out of RTI, please contact Stephanie Hope or John Smith.**

**Advanced Vocal Ensemble:** The primary focus of this choir is performing advanced middle school choral literature in concert. Students will learn the basics of traditional choral performance skills, as well as more advanced skills such as a cappella singing and voicing for four or more parts. Both sacred and secular choral literature will be performed. As part of the course grade, students are expected to perform in concerts, some of which occur outside of school hours. Students may have the opportunity to perform in an out of town competition performance. Students are required to have black dress shoes; boys also need black dress pants. A few previously worn girls' shoes are available to borrow.

**\*The choral director's recommendation is required to take this course. 8<sup>th</sup> graders with no prior JMSChorus experience that are interested in joining Advanced Vocal Ensemble should contact the choral director, Ms. Amanda Wilson.**

**Art:** Art 8 includes art production, aesthetics, criticism, and art history. Students will also have the opportunity to broaden their appreciation for visual art through a trip to a local museum during the school year. Students exhibit their work in local, regional, and national exhibits and competitions. The year-long class is divided into media units: drawing, painting, sculpture, computer graphics, commercial art and printmaking. The art department sometimes provides an Artist-in-Residence program for 8<sup>th</sup> graders.

**Band:** Experienced Band members will prepare a wide variety of band music for evening concerts, school assemblies, and athletic events. Through these experiences, students will continue to develop their musicianship skills.

In addition to a band method book, each student is required to have black dress pants, black socks, and black dress shoes to complete the band uniform. Percussionists must have a prescribed set of mallets and accessories. As part of the course grade, students are expected to attend all scheduled band events. Students have the opportunity to participate in East Tennessee School Band clinics, solo-ensemble and concert festivals as well as an out of town competition performance.

**\*The band instructor's recommendation is required to take this course. Seventh graders with no prior band experience that are interested in joining band should contact the band director.**

**Career Exploration:** This class can only be taken once in 7<sup>th</sup> or 8<sup>th</sup> grade.

*Career Exploration* is designed to assist students in discovering their personal strengths and abilities, understanding the opportunities available to help them excel in different career areas. Students will develop technical career skills such as resume building and oral/written communications. Upon completion of this course, students will know and exhibit a wide range of soft skills such as teamwork, creative thinking, collaboration, and problem solving. Students will take a deeper dive into exploring high school, college, and career pathways, and how to successfully transition into them. This course utilizes Project-Based Learning (PBL) as an engaging instructional approach, placing equal emphasis on academic learning goals and the soft skills that employers across all industries have identified as essential for career success.

**Chorus:** The primary focus of Chorus 8 is performing choral music in concert. Students will learn the basics of singing in the traditional choral method, including reading and interpreting choral music notation, developing breath control, singing scales, sight singing, harmonizing, expanding vocal range, and maintaining vocal health. A wide variety of music is performed, including both sacred and secular choral literature. As

part of the course grade, students are expected to perform in concerts, some of which occur outside of school hours. Students may have the opportunity to perform in an out of town competition performance. Students are required to have black dress shoes: boys also need black dress pants. A few previously worn girls' shoes are available to borrow. **No prior choir experience is necessary; new students to chorus are welcome to enroll in this class.**

**Advanced STEM 1:** This is a year-long activity-oriented course. Students will explore drafting design skills which will be used throughout the course enabling the student to design and model their hands on projects which include building a paper roller coaster, designing and building a Rube Goldberg devise; design and model a city park, build a birdhouse of their own design and designing and building other small projects **Priority for this class will be given to students who have successfully completed the 7<sup>th</sup> grade Aeronautics class.**

**\*Students that successfully pass Aviation: Aeronautics in the 7<sup>th</sup> grade and Advanced STEM 1 in 8<sup>th</sup> grade can earn one high school credit with completion of both courses.**

**Geography and Geospatial Technologies** Students will learn physical landscapes, cultures, and current events through regional geography. Students will also learn how geographic information systems (GIS) are used in multiple STEM career fields and occupations. Using Google Earth, Google Maps, and ArcGIS Online (considered the world's GIS leader), students will create interactive digital maps. Students will create an original ArcGIS Online 'Story Map' that can be entered in the Tennessee Story Mapping Competition.

**Guided Study:** Designed to teach students various academic skills necessary for success at the middle school level, students can receive help in organization, note-taking, planning study time, active study strategies, and grade averaging. They are encouraged to take increasing personal responsibility for their own learning. Small group setting allows for individual problem solving and troubleshooting with everyday academic obstacles. Students are enrolled based on greatest academic need.

**Intro to Business, Marketing, and Careers in Aviation 7/8:** New elective offering which will incorporate all aspects of the Aviation industry. Students will learn about the science and history of flight through the use of aircraft simulators, construction of gliders/model airplanes, and how the Aviation industry correlates to real world business and marketing applications. Students will also gain an understanding of the various careers associated with Aviation as well as the training that is necessary to succeed in particular aviation fields. **\*High school credit is available for this course upon successful completion of an end of course assessment. Students may only earn one credit for this course either as a 7<sup>th</sup> or 8<sup>th</sup> grader.**

**Orchestra:** Orchestra is for students with some prior string instrument experience. Students learn bowing techniques, vibrato, shifting, good sound production and proper intonation. Students perform at school and in area concerts. Orchestra students participate in East Tennessee school orchestra events as well as travel to an out-of-state orchestra competition.

**\*The orchestra director's recommendation is required to take this class.**

**World Languages:** Students are able to enroll in **Spanish 1** or **French 1** for the 7<sup>th</sup> and 8<sup>th</sup> grade years, provided they are in strong academic standing and have received a teacher recommendation. The Level 1 course begins in 7<sup>th</sup> grade and finishes at the end of the 8<sup>th</sup> grade year\*. While this course spans two academic years, it is the same course and curriculum as Level 1 Spanish or French at Oak Ridge High School. This two- year program is designed for younger students to master Level 1 proficiency at a slower pace, while maintaining the rigors of a high school course.

At the end of the 8<sup>th</sup> grade year, students will take an End-of-Course exam. Passing the EOC exam and maintaining an A or B in the class will enable students to earn a high school Level 1 credit in Spanish or French\*\*. Choosing to accept credit is optional. If the student declines credit, the student will still be able to advance to the next language level at Oak Ridge High School, provided he/she has the recommendation of his/her World Language teacher.

- *Students are unable to enroll in 8<sup>th</sup> grade Spanish or French if they were not previously enrolled in the 7<sup>th</sup> grade Spanish or French class.*
- *Students need 2 high school language credits, of the same language as a graduation requirement. Students are highly encouraged to take more than 2 years of a language, especially if they are planning on attending college.*

**Student Aides** – Students that are interested in being a student aide will need to communicate with the teacher with whom they would like to aide. The teacher must send an e-mail to 7<sup>th</sup> and 8<sup>th</sup> grade school counselor. Grades and office referrals will be reviewed and determined if the class will fit in the student's schedule.

## Classes Recommended by Teacher for Extra Support

**RTI- (Response to Intervention)** is a multi-tier approach to the early identification and support of students with learning needs.

### **Tier 1: The Whole Class (every student is served at this level)**

In the general education classroom, the teacher measures everyone's skills. This is known as a universal screening that is given 3 times a year to the whole school (Fall, Winter and Spring) to determine the students that fall at the 25<sup>th</sup> percentile or below for extra Tier 1 support. If your child falls at or below the 25<sup>th</sup> percentile your child will be placed in a Tier 2 or Tier 3 class in the areas of Math or English to provide more support because they are performing below their grade level. The screening helps the teacher work with students in small groups based on their skill levels. The school will let you know if your child is struggling and will update you on his/her RTI progress. If your child scores at Tier 2 or Tier 3 level they will be taken out of one or both of their electives. This class is fluid throughout the year, which means your child can make their way out of the class by showing progress and gains above the 25<sup>th</sup> percentile. A goal is made for your child in their Tier 2/3 class an academic goal is developed in the progress monitoring software. On average, it takes approximately 6 weeks for the progress monitoring tool to show if your child is making progress on their goal.

During the intervention, the RTI team monitors students' progress to see who might need additional support. Many students respond successfully to Tier 1 support and achieve grade-level expectations.

### **Tier 2: Small Group Interventions (25<sup>th</sup> percentile-11<sup>th</sup> percentile)**

If your child isn't making adequate progress in Tier 1, he/she will start to receive more targeted help. This is *in addition* to the regular classroom instruction (Tier 1), not a replacement for it. Tier 2 interventions take place every day during a designated period and won't miss any core instruction in the classroom.

During these extra help sessions, he/she will be taught in small groups using a different method than in Tier 1 because the first method wasn't successful. The teacher may also ask you to work with your child at home on certain skills.

The school will monitor your child's progress so it's clear whether the Tier 2 intervention is helping through 4 ½ week progress reports sent by the school.

### **Tier 3: Intensive Interventions (at or below 10<sup>th</sup> percentile)**

If your child needs Tier 3 support, it will be tailored to his/her needs. Every day he/she will receive one-on-one instruction or work in very small groups. If he/she doesn't make adequate progress in Tier 3, it's likely that the school will recommend an evaluation for special education services. The school will monitor your child's progress so it's clear whether the Tier 3 intervention is helping through 4 ½ week progress reports sent by the school.

**Core Focus:** (English or Math) This class is for those students that score close to the 25<sup>th</sup> percentile or the teacher has identified will benefit from extra support with current core classes. Students will be able to work on homework intermittently during the week and may need re-teaching of Tier 1 instruction.