

Glen Lake<br>Secondary School

Middle School
Course Selection Guide
2023-2024

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## Middle School Essentials

The purpose of grade level essentials is to provide middle school students with exposure to various courses through hands-on, purposeful learning. Students will participate in grade level essential rotation each year participating in 4 nine-week courses. By the end of 8 th grade each student will have completed 12 hands-on, exploratory career pathway classes designed with the adolescent brain in mind.

In addition, Middle School students will be able to choose a year-long essential course that supports in depth learning in an area that they choose. (I.E. - Band, Choir, Spanish)

## Career Pathways

## Arts and Communication

## Business, Management, Marketing and Technology

## Engineering Manufacturing and Industrial Technology

## Health Sciences

Human Services
Natural Resources and Agriscience



## ENGLISH LANGUAGE ARTS

Course Description: The year-long middle school English Language Arts (ELA) course is guided by the philosophies of educators Penny Kittle and Kelly Gallagher. Development of the five main areas of language arts: reading, writing, speaking, listening and viewing will occur. The curriculum is aligned with the Common Core State Standards (CCSS) in English Language Arts and emphasizes a love for reading and writing. Students will also be taught the skills and practices needed in order to achieve college and career readiness.

## Language Arts 7

Grade: 7 Length: Year
Course Description: The year-long middle school English Language Arts (ELA) course is guided by the philosophies of educators Penny Kittle and Kelly Gallagher. Development of the five main areas of language arts: reading, writing, speaking, listening and viewing will occur. The curriculum is aligned with the Common Core State Standards (CCSS) in English Language Arts and emphasizes a love for reading and writing. Students will also be taught the skills and practices needed in order to achieve college and career readiness.

## Language Arts 8 <br> Grade:8 Length: Year

Course Description: The year-long English Language Arts (ELA) course is guided by the philosophies of educators Penny Kittle and Kelly Gallagher. Development of the five main areas of language arts: reading, writing, speaking, listening and viewing will occur. The curriculum is aligned with the Common Core State Standards (CCSS) in ELA and emphasizes a love for reading and writing. Students will also be taught the skills and practices needed in order to achieve college and career readiness.

## ESSENTIALS: (Semester-Long and Year-Long)

Intro. to Engineering - Middle School


#### Abstract

Discover the role of an engineer in taking an idea from the design process to manufacturing or production. Produce an incredible, working prototype of your project. You will work on projects, activities, and problems not only of interest to you, but that have global and human impacts. Work in teams to design and improve products, document your solutions, and communicate them to others.


## ART - Middle School

The course will focus on the principles of Art/Design. You will discover how to use the elements of Art to create quality compositions. Artists will have choice in the elements they use, and the media used to create each piece. You will improve each day through reflection and analysis.

## Choir - Middle School

A comprehensive course covering a performance-based exploration of a variety of genres and styles including classical, popular, jazz, and contemporary. Students are encouraged to explore their musical voice through a variety of solo and ensemble opportunities. Middle School Choir performs frequently and endeavors to allow students to build confidence through positive action. Out of Class Requirements: Attendance at scheduled concerts, festivals, field trips. Students are responsible for the care and maintenance of school owned instruments, uniforms, or music/supplies. Assigned homework may vary with performance season.

## Band 6

The 6th grade band meets every day and students work to build an amazing concert band that will compete in MSBOA competitions. Students participate in 3 performances throughout the school. This is a performance-based class, we ask for a year-long commitment. Students are required to attend after school rehearsals and performances.

## Band 7

Band 7 gives students the opportunity to learn and understand musical notes, symbols, and terms, and a chance to develop proficiency on their musical instruments which will benefit their performing and listening ability. Members of this group are expected to develop and refine those skills that will lead to advancement into the 8th grade band. All members are expected to practice regularly and give their utmost dedication to the group. Students are required to attend after school rehearsals and performances. Students participate in 3 performances.

## Band 8

Band 8 gives students the opportunity to learn and understand musical notes, symbols, and terms, and a chance to develop proficiency on their musical instruments which will benefit their performing and listening ability. Members of this group are expected to develop and refine those skills that will lead to advancement into the 8 th grade band. All members are expected to practice regularly and give their utmost dedication to the group. Students are required to attend after school rehearsals and performances. Students participate in 3 performances.

## Yearbook - Middle School

Members of the MS yearbook class design and create the Glen Lake Middle School yearbook using Pictavo, an online yearbook design software.

## Computer Science Discoveries - Middle School

Computer Science Discoveries is an introductory computer science course. The course takes a wide lens on computer science by covering topics such as problem solving, programming, physical computing, user centered design, and data, while inspiring students as they build their own websites, apps, animations, games, and physical computing systems.

## Strength and Conditioning - Middle School

Strength \& Conditioning is a course designed for you to incorporate exercise into your school day. Brief instruction will be used each day, so we maximize our time in the designed activity. Rules and tutorials that are more in depth will be available outside of class for your review if needed. Points of emphasis: lifting technique, running mechanics, self-management, and personal goals.

## ESSENTIAL ROTATIONS

## 6th Grade Essential Rotation

Grade: 6 Length: One Quarter (9 weeks each)
Cooperative Games - Students engage in strategy, collaboration, teamwork, and fun through games. They have to work together and against each other, learning to win and lose with grace. Students have fun learning new games, strategies, and foster positive relationships through games.

STEM Investigations - The STEM Investigations class is a fun and hands-on learning adventure. In this course, you will learn about 3D modeling, 3D printing, basic circuits, and engineering. We use these skills to create small robots. You'll design these robots on a computer, print them out with a special machine, and make them work with wires and circuits. It's like a mix of art and science! By the end of the class, you'll know a lot about STEM (Science, Technology, Engineering, and Math) and have cool robots to show for it.

Hug Your Brain - A class focusing on the structure of the brain, adolescent brain development, and executive functioning skills.

Music Exploration - Music Literacy - discussing content area as a whole.

## 7th Grade Essential Rotation

Grade: 7 Length: One Quarter (9 weeks each)
Healthy Living - This course covers healthy exercise and lifestyle.
Outdoor Activities - Outdoor activities class is about connecting with nature, your classmates, and yourself. We will go outside every day, rain or shine. Class activities include team building games, as well as games to help students learn about the natural world. Students will learn skills such as outdoor safety, setting up a camp, knot tying, fire building, and identifying plants/animals. Students will also learn about protecting our environment. Students will have weekly quiet time to reflect in journals. Outdoor activities involve a lot of physical activity and time spent in the forest, as well as learning and fun.

Social Media - This course is designed to allow students to learn how to find and use media responsibly. This means knowing how to search for information online, picking trustworthy sources, understanding how media can influence us, and being able to think critically about what we see and hear.

CAD 3D Modeling - The CAD \& Modeling curriculum is designed to give students an introduction to drawing mechanical and architectural drawings using computer aided software. The marking period will be broken into two equal parts of mechanical and architectural CAD modeling. Upon completion students will have a better understanding of how to read a set of working drawings as well as a set of floor plans. Students will develop the necessary skills to navigate CAD software to produce both mechanical and architectural drawings of their own.

## 8th Grade Essential Rotation

Grade: 8 Length: One Quarter (9 weeks each)
Mock Trial - Basic understanding of court trials. Students will assume the roles of those involved in lawsuits.

## ESSENTIAL ROTATIONS

## 8th Grade Essential Rotation - Continued

Grade: 8 Length: One Quarter (9 weeks each)


#### Abstract

Woodshop - The woodworking curriculum is designed to give students an introduction into the world of woodworking. Throughout this course students will learn proper safety associated with a woodshop, what the design process entails, proper layout techniques, and proper setup and shutdown procedures for several power tools. Students will learn all of these skills through a couple required projects that they will design, build, and be able to take home with them.


Theatre Performance - The Performing Arts Curriculum is designed to prepare students to not only enter higher level theatre and music programs, but to create an empathetic environment where students can explore the world as leaders, communicators and creative thinkers. Working as a team we will focus on topics related to public speaking and storytelling in our world today. We will also explore acting through scene work, games, and in class performances throughout the session.

Applied Digital Skills - This course is designed to build upon the knowledge and skills gained through taking the 6th Grade Computer Applications class.

## HEALTH AND PHYSICAL EDUCATION

Physical Education 6, 7, 8
Grade: 6, 7, 8 Length: Year
Course Description: Physical education and Health are a part of the total educational program in all grades at Glen Lake Community Schools. Students are encouraged and instructed to improve their personal health, skill performance, and leadership abilities. Students learn to appreciate and perform individual, group, and team activities, all of which they can use and enjoy, both in the present and future. Our goal for physical education class is to provide you with the skills and knowledge necessary for you to become a lifelong physically active person. We offer a variety of activities to get you moving and hope you enjoy it! Our goal for students' overall wellness is to learn how to keep our bodies and minds healthy. Topics and activities such as, but not limited to will include stress management and mental health, disease prevention, prevention of risky behavior, healthy nutrition, healthy relationships body changes, and basic first aid and CPR.

## MATHEMATICS

## Math 6

Grade: 6 Length: Year

Course Description: Students in Math 6 will use problem-solving strategies, questioning, investigating, analyzing critically, gathering, and constructing evidence, and communicating rigorous arguments justifying their thinking. Under teacher guidance, students learn in collaboration with others while sharing information, expertise, and ideas. The course helps students to develop multiple strategies to solve problems and to recognize the connections between concepts. The lessons in the course meet all the content standards and embed the "Mathematical Practices" of the Common Core State Standards released in June 2010.

## Math 7

## Grade: 7 Length: Year

Course Description: Math 7 focuses on 4 critical areas: (1) developing understanding and applying proportional relationships; (2) developing understanding of operations with rational numbers (decimals and fractions) and working with linear equations that include variables; (3) solving problems involving scale drawings and geometric constructions and working with 2- and 3-dimensional shapes to solve problems with area, surface area, and volume; and (4) drawing inferences about populations based on samples.

## Math 8

Grade: 8 Length: Year

Course Description: This course builds on the algebraic skills of simplifying and solving equations, and then incorporates the use of patterns to emphasize the multiple representations of linear relationships. It includes organizing data and representing bivariate relationships, as well as an introduction to solving a system of equations. Students will explore rigid transformations.

## Algebra I

Grade: 8 Length: Year

Course Description: Algebra 1 is the first course in a five-year sequence of college preparatory mathematics courses that starts with Algebra I and continues through Calculus. It aims to deepen and extend student understanding built in previous courses by focusing on developing fluency with solving linear equations, inequalities, and systems. These skills are extended to solving quadratic equations, exploring linear, quadratic, and exponential functions graphically, numerically, symbolically, and as sequences, and by using regression techniques to analyze the fit of models to distributions of data. On a daily basis, students in Algebra use problem-solving strategies, questioning, investigating, analyzing critically, gathering and constructing evidence, and communicating rigorous arguments justifying their thinking. Under teacher guidance, students learn in collaboration with others while sharing information, expertise, and ideas. Students will be involved in class discussions, technology investigations, pattern building, partner work, individual work, and projects.

## SCIENCE

## Science 6

Grade: 6 Length: Year
Course Description: Electricity and magnetism are fascinating physics phenomena to study. Students will measure the force of invisible magnetic fields, learn to build a circuit, design an electromagnet, and explain the energy transfers that make it all possible. The anchor phenomena for this course are force interactions and effects. The driving question for the course is what is the relationship between magnetic and electric forces?

In this course, students manipulate equipment to collect data about magnetic fields and electricity. They construct explanations based on observable patterns and develop models that define the cause-and-effect relationships of the forces and interactions they are measuring.
Life is a series of complex interactions. The anchor phenomenon for this course, the human body, is no exception. The basis of the human body is the cell. Associations of cells work together to form tissues, which form organs. Organs work together to perform specific functions in organ systems. And finally, the array of organ systems makes up a human body. We explore how organ systems interact to support each and every cell in the body. The driving question for the course is how do humans live, grow, and respond to their environment? What happens when the body is attacked by an invader, or an organ system malfunctions? How do cells get the resources they need to live? How do cells gain access to the energy stored in energy-rich compounds? How do systems support the human organism as it senses and interacts with the environment.

Human beings have used Earth's resources since prehistoric times. We made tools from stones. We mined raw materials to refine and manufacture into tools, utensils, shelters, ovens, and other useful items. We figured out how to extract precious metals from ores. We captured the energy of flowing streams behind dams and found numerous ways to put this power to use. We diverted water into channels for irrigation. And because it is human nature to try to explain everyday phenomena, we made up stories to explain how Earth was created.

We will exercise our inferential thinking to study Earth history. We will begin to grapple with Earth's processes and systems that have operated over geologic time. Students will make observations and do investigations that involve constructing and using conceptual models. We will generate questions for investigation, which may lead to new questions. Through our study of earth history, we will become more confident in our ability to ask good questions and to recognize and use evidence from the rocks to come up with explanations of past environments.

This course uses the anchor phenomenon of the Grand Canyon to engage students with the history of Earth and introduce them to the geologic history of a place. The driving question for the course is what we need to know to tell the geologic story of a place.

## SCIENCE

Science 7
Grade: 7 Length: Year
Course Description: The $7^{\text {th }}$ grade science year is broken up into four units. The first unit is called "Waves and Energy" and focuses on how waves are produced, and how they transfer energy when they interact with matter. We also discuss types of energy produced by the sun, and how the sun provides heat energy for processes on Earth. A second unit is called "Physical and Chemical Properties and Changes in Matter." The focus is investigating how matter is made up of atoms and molecules that can be represented by models. We identify chemical substances that make up other substances. We also identify the chemical and physical properties of substances and determine when chemical changes occur. The third unit is on "Structures and Processes of Living Things." The focus is on organisms being composed of one or many cells that exhibit growth and division. We investigate organisms as being composed of specialized cells and relate these to photosynthesis and reproduction. The last major unit is "Fluid Earth Systems and Human Activities." Key concepts discussed relate to the sun, the major source of energy for phenomena on Earth as well as the relationship of this energy to weather, climate, and the water cycle.

## Science 8

Grade: 8 Length: Year
Course Description: The $8^{\text {th }}$ grade science year is composed of 12 units. The first five relate specifically to Earth and its structure. We investigate principles of earth science, the interior of Earth, plate tectonics and earthquakes, and rock-forming processes. Several units will focus on hydrogeology, weather and climate, and climate change. Students will explore resources and environmental challenges within this group. Finally, the year concludes with units on the Sun, stars, and Earth's place in the universe.

## SOCIAL STUDIES

## Social Studies 6 <br> Grade: 6 Length: Year

Course Description: Social Studies 6 explores global issues in different regions of our planet, including Latin American, Southeast Asia, and the Middle East. Students will begin to develop a sense of each region's unique physical and human geography. Students will also learn about different economic and political systems and see connections between diverse places and people.

## SOCIAL STUDIES -

Social Studies 7<br>Grade: 7 Length: Year

Course Description: Social Studies 7 explores the beginnings of human society and investigates the causes of the Agricultural Revolution and the characteristics of early river valley civilizations (Mesopotamia, Egypt, India, China, and the Americas). Students consider concepts of historical cycles of continuity and change, the people of the earth, and cultural diffusion as they compare and contrast early civilizations. They investigate classical traditions and major empires of Greece and Rome and study factors that led to the rise and fall of these empires. They also examine the origins, expansions and fundamental beliefs of major world religions.

## Social Studies 8

Grade: 8 Length: Year
Course Description: Social studies 8 begins with a review of European powers in North America and factors that led to significant change among them including the French and Indian war, experiences with self-government and the American revolution. Students then investigate the foundations of the new nation including the articles of confederation and the U.S. constitution. They examine the challenges to the new nation including determining the power of the national government, political conflict, and America's place in the world. They explore the regional and economic growth of America, reform movements of antebellum America and the causes, course and character of the civil war. Students then focus on the reconstruction of the nation and investigate changes in America in the last half of the 19th century.

## WORLD LANGUAGE

## Spanish I <br> Grade: 8 Length: Year

Course Description: Students will learn basic vocabulary necessary to carry on a simple conversation in Spanish. They will learn grammatical concepts and use them with Spanish vocabulary. There is also an introduction to elements of culture found in Spanish speaking countries. All students will have the opportunity to earn high school credit by meeting the state achievement standard.

