Gull Lake Middle School
Curriculum Guide
2023–2024

GLMS: Growing Learners, Becoming Leaders
Making Sense of Middle School Curriculum

Education continues to change at an accelerated rate. As we gather information on changes, we generate and implement ideas to improve the education of our students. These changes stem from various places including district, state, and federal guidelines. To stay compliant with the guidelines, we review our curriculum each year and make changes that we believe will help our students be college and career ready. Here is some information that we believe will assist you as your child takes courses at Gull Lake Middle School.

The Michigan Department of Education with assistance from many educational organizations developed a system of learning goals for students from kindergarten through twelfth grade in many subject areas. The state of Michigan requires learning standards to be taught in public schools with an assessment administered to measure the student level of attainment. Not only do we make sure that we follow the state and federal guidelines for education, but also give our students opportunities to explore various topics that may inspire them to pursue a field of interest. We also provide a middle school curriculum designed to fully prepare our students to meet the academic rigor at the high school.

Core Courses
All students must take English/Language Arts (ELA), math, science, and social studies throughout their time at GLMS.

Elective Courses
All students will have the opportunity to take elective classes. Our goal is for students to experience fine arts (i.e. visual art or music), physical education, health, STEM (science, technology, engineering, mathematics), writing, and Spanish for at least a trimester sometime in their 6th or 7th grade experience. 8th grade allows for more individual specialized elective options that expand on the skills learned in the foundational courses experienced in the first two grades at Gull Lake Middle School.

Interventions
We gather data on all students including grades, state and local assessment scores to determine their academic progress. When students show the need for support, we offer interventions to help them improve in the areas specifically in math, literacy, and resiliency which are the foundational skills in our curriculum.

Accelerated Courses
Students who meet certain requirements are eligible to take additional challenging courses in ELA and math through our Academically Talented Youth Program offered through a partnership with Western Michigan University or accelerated classes at the middle school. Some math, Spanish, and STEM classes will allow eighth graders to receive a high school credit. Additionally, we are able to offer virtual course opportunities for particular student needs or interests on an individual basis.

This guide provides a list of courses that we offer at the middle school. Our courses are reviewed and revised each year to ensure that our students get the best possible education at Gull Lake.
# Gull Lake Middle School Course Offerings

## 6th Grade ~ 2023-2024

**Required core classes:**
ELA, Math 6 or Math 6/7, Science

<table>
<thead>
<tr>
<th>Option 1 - Band Rotation:</th>
<th>Option 2 - Choir Rotation:</th>
<th>Option 3 - Other Rotation:</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Band (full year)</td>
<td>● Choir (full year)</td>
<td></td>
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<tr>
<td>● Spanish A, Authors Workshop, PE</td>
<td>● Spanish A, Authors Workshop, PE</td>
<td>● Design &amp; Modeling, Art, PE</td>
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<td>● Spanish A, Authors Workshop, PE</td>
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## 7th Grade ~ 2023-2024

**Required Core Classes:**
ELA, Math, Social Studies, Science

**GLMS provides all 6th and 7th graders elective experiences in the following categories:**
Physical Education, Fine Arts, STEM, and Foreign Language courses.

All students will have 2 elective classes per trimester.

<table>
<thead>
<tr>
<th>Option A</th>
<th>Option B</th>
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</thead>
<tbody>
<tr>
<td>For this option your student will have band or choir for the entire school year. In addition, your student will select a 2nd rotation of trimester electives. This rotation of electives are each for one trimester.</td>
<td>For this option your student will have the following electives over the course of the school year: <em>Health, Design and Modeling, Physical Education 7, and Art</em>; In addition, your student will have a choice of 2 additional trimester electives.</td>
</tr>
</tbody>
</table>

**Select one of the following electives:**
- Band *(3 trimesters)*
- Choir *(3 trimesters)*

**Select one additional rotation of trimester electives:**
- **OPTION 1:**
  - Art *(1 trimester)*
  - Design and Modeling *(1 trimester)*
  - Health *(1 trimester)*
- **OPTION 2:**
  - Physical Education 7 *(1 trimester)*
  - Design and Modeling *(1 trimester)*
  - Health *(1 trimester)*

**Select two of the following electives:**
- Career Readiness *(1 trimester)*
- Flight in Space *(1 trimester)*
- Intro to Innovation *(1 trimester)*
- Spanish B *(1 trimester)*
- Virtual* *(1 trimester)*
- Virtual* *(1 trimester)*
# Required Core Classes: ELA, Math, Science, Social Studies

GLMS provides all 6th and 7th graders elective experiences in the following categories: Physical Education, Fine Arts, STEM, and Foreign Language courses.

All students will have 2 elective classes per trimester.

<table>
<thead>
<tr>
<th>Check 6 trimester electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 1 and Band are both a full year course and must be checked for all 3 trimesters.</td>
</tr>
<tr>
<td>Intro to Computer Science is a 2 trimester class and must be checked for 2 trimesters.</td>
</tr>
<tr>
<td>Jazz Band- Band is a required course in order to take Jazz Band</td>
</tr>
</tbody>
</table>

Other classes that are listed multiple times can be taken for multiple trimesters.

- Band (must check 3 trimesters)
- Band (must check 3 trimesters)
- Band (must check 3 trimesters)
- Choir (can check up to 3 trimesters)
- Choir (can check up to 3 trimesters)
- Choir (can check up to 3 trimesters)
- Jazz Band (can check up to 3 trimesters)
- Jazz Band (can check up to 3 trimesters)
- Jazz Band (can check up to 3 trimesters)
- Art (1 trimester only)
- Physical Education 8 (can check 1-2 trimesters)
- Physical Education 8 (can check 1-2 trimesters)
- Guitar (1 trimester only)
- Robotics (1 trimester only)
- Medical Detectives (1 trimester only)
- Virtual (can check 1-3 trimesters)
- Virtual (can check 1-3 trimesters)
- Virtual (can check 1-3 trimesters)
- Intro to Innovation (1 trimester only)
- Flight and Space (1 trimester only)
- Spanish 1 (must check all 3 trimesters)
- Spanish 1 (must check all 3 trimesters)
- Spanish 1 (must check all 3 trimesters)
- Intro to Computer Science (must check for 2 trimesters)
- Intro to Computer Science (must check for 2 trimesters)

Elective combinations will be based on enrollment and teacher availability & certification.

Lab/intervention courses will be offered to students qualifying for those courses and serve as elective courses.
CORE CLASSES

ENGLISH

English Language Arts 6
This course will target students’ growth in the areas of reading, writing, listening, speaking, discussion, and reflection. Reading strategies, critical thinking skills, and vocabulary building comprise the main elements of reading instruction. Through fiction and non fiction reading, students will practice reading strategies and comprehension skills. The focus of writing will be on narrative, informational, and argumentative writing. The overall goal of the class is to increase the literacy, writing ability, active listening, and critical thinking of all students.

English Language Arts 7
Students are going to be involved in a year of activities centered on reading, writing, speaking and listening at a more complex level. Specifically, students may read short stories and novels, both in and outside of class time and may share their reading in a variety of ways. This course includes two novel studies: The Giver by Lois Lowry and The Cage by Ruth Minsky Sender. One of the year’s highlights includes a class trip to the Holocaust Museum in Farmington Hills. The research process and writing is also a large focus. Narrative writing and poetry may also be included throughout the year. As students share their reading and writing, they may be required to present to a partner, a small group, or to the whole class. In addition, there may be an emphasis on the continued development of lifelong skills, such as active listening and critical thinking.

English Language Arts 7/8
English 7/8 is an accelerated course that combines the skills, strategies, and essential components of both 7th and 8th grade language arts. Students are expected to master basic materials at a faster speed in order to develop a higher level of application and evaluation of key concepts. Students may read various short stories, The Pearl by John Steinbeck, The Giver by Lois Lowry, and The Boy on the Wooden Box by Leon Leyson. Developing stronger writing skills is a large focus throughout the year. Students may write up to four formal essays focusing on theme, use of evidence, and research. Students may also give numerous presentations both formal and informal, both collaboratively and independently. One highlight of the year will feature a novel study of a Holocaust memoir, which will prepare students for the annual 7th grade field trip to the Holocaust Museum in Farmington Hills. This course is designed for ambitious, self-motivated, and high-achieving English students who seek to be challenged in this condensed format of thought, interpretation, and creation of the equivalent 7th and 8th grade curricula. 
Prerequisite: Qualifying MAP test scores, 80% or better grade average in ELA 6 (both 1st and 2nd trimester), and potential placement test.

English Language Arts 8
Eighth Grade English Language Arts students are expected to strengthen their academic writing, public speaking presentation skills, and collaborative communication. Students will read a variety of short stories and novels, including The Pearl by John Steinbeck, A Monster Calls by Patrick Ness, Unwind by Neal Shusterman, A Long Walk to Water by Linda Sue Park, and possibly Symptoms of Being Human by Jeff Garvin and A Christmas Carol by Charles Dickens. Over the course of the year, students will be expected to write two formal essays, give one formal speech, participate in a media literacy unit focused on analyzing advertisements, as well as complete various projects and assignments to show their understanding of and connection to the literature we read. Most units include a focus on vocabulary improvement as well as connecting to a variety of literary elements. Oral communication skills are strengthened as students read, respond, and evaluate through both self and peer feedback techniques in both discussions and writing. In addition, the eighth grade student will work to develop independence of thought and action, while gaining maturity in communication skills.

English Language Arts 9 (For High School Credit)
This course will meet the state requirement for an English 9 high school credit. This course has rigorous homework and in-class workload. The expectation is high for quality work. This course will include reading, vocabulary study, and writing assignments and projects related to literature. In this course students will read various short stories, a novel of their choice, as well as Of Mice and Men by John Steinbeck, Animal Farm by George Orwell, Romeo and
Math including representing also including solving linear similarity. Students will rational negative) and proportionality, (both developing understanding and applying geometry, Specific such given course allows Math Prerequisite: numbers. express expressions, solve learn Students will study problems. They will understand fractions algebraic numbers explore of to solve will multi-digit They understand concepts use and This focuses Math Time discussion cross-curricular writing for opportunities, is Sixth A u t h o r ' s grades/progress reading habits, students when them classes are then R e a d programs Social Rewards Rewards S i x - M i n u t e Studies), such the the comprehension through fluency variety research to enhance of opportunity of ELA students to has Each groups while focusing ELA texts Dean and Walter Homer. include may trimesters in test successfully in 10. Prerequisite: Qualifying MAP test scores and 80% or better grade average in ELA 7/8 (both 1st and 2nd trimester).

ELA Lab
ELA Lab allows students to work in small groups while focusing on reading and/or ELA skills. Each student has the opportunity to enhance fluency and comprehension skills through a variety of research based intervention programs such as Rewards, Rewards Plus (Science or Social Studies), Six-Minute Solution reading strategy or the Read to Achieve program. All strategies are modeled and practiced in a variety of ways. As the strategies become habits, the students are then encouraged to use them in other classes when reading or writing in order to find more success with the content in core subjects. Prerequisite: Students who qualify for the class have demonstrated the need for additional assistance based on reading scores on the M-STEP or MAP standardized tests, fluency and comprehension assessments, and grades/progress in current and prior ELA classes.

Author’s Workshop
Sixth graders will take a trimester writing course in addition to their year long ELA course. The goal of the course is to enhance student writing skills in order to produce concise, coherent, and fluent writing. A variety of writing opportunities, including expository, narrative, persuasive, and creative, are employed to showcase standard English writing skills of organization, use of effective transitions, and precise word choice. Time is allocated for cross-curricular writing with math, science, and social studies in addition to content area writing. Brief periods of discussion are interspersed at appropriate times throughout the writing process in order to facilitate launching and analyzing student work. Time dedicated to writing followed by collaboration with peers and teachers supports the further development of writing growth.

MATH

Math 6
This course focuses on proportional reasoning, the number system, expressions & equations, and geometry. Students will understand and use ratio concepts to solve problems. They will compute multi-digit numbers and apply their understanding of numbers to fractions and decimals. Students will explore algebraic expressions and solve one-variable equations and inequalities. They will solve real-world problems involving area, surface area, and volume and will begin to develop an understanding of statistical variability.

Math 6/7
This course covers all of the Common Core 6th Grade Math Curriculum, in addition to parts of the 7th grade Common Core Curriculum. This course will extend understanding of proportional reasoning to solve real-world mathematical problems. Students will also increase their understanding of fractions to add, subtract, multiply, and divide rational numbers. Students will also study algebraic expressions, solve problems using algebraic equations, and learn to graph functions on coordinate planes. This class moves at an accelerated pace. Prerequisite: Qualifying MAP test scores

Math 7
This course allows students the opportunity to explore the concepts of numbers & operations, algebra, measurement, geometry, and data & probability. Specific attention will be given to topics such as understanding all operations of rational numbers (both positive and negative) and developing an understanding of and applying proportionality, including similarity. Students will also be analyzing and representing linear functions, including solving linear equations.

Math 7/8
This course covers all of the Common Core 7th Grade Math Curriculum not covered in Math 6/7, in addition to the majority of the 8th Grade Common Core Curriculum. Topics will include, transformations, solving equations and inequalities, linear functions, Pythagorean Theorem and Volume. This class moves at an accelerated pace.

**Prerequisite:** Qualifying MAP test scores, 80% or better grade average in Math 6/7 (both 1st and 2nd trimester)

**Math 8**
This course focuses on the number system, expressions & equations, functions, geometry, and statistics & probability. Students will relate rational numbers to irrational numbers. They will explore integer exponents, understand connections between proportional relationships, lines, and linear equations, analyze and solve linear equations, as well as evaluate functions. Students will understand congruence & similarity, the Pythagorean Theorem, and will solve real-world problems involving volume.

**Algebra (For High School Credit)**
This course will meet the state requirement for an Algebra I credit. Topics will include, linear functions, exponential functions, quadratic functions, power and polynomial functions and other topics to meet the state requirements.

**Prerequisite:** Qualifying MAP test scores, 80% or better grade average in Math 7/8 (both 1st and 2nd trimester)

**Math Lab**
Math Foundations is a Title I funded program. It is a class that focuses on building basic math skills, vocabulary, and problem solving skills. This is a supplemental math class for students designed to allow for increased small group instruction as well as one-on-one support. Each grade level has specific learning targets based on individual student data in addition to studying current grade level topics.

These targets include:
- 6th Grade: Evaluating expressions, multiplying & dividing multi-digit whole numbers, and all fraction operations.
- 7th Grade: Evaluating & simplifying expressions, translating expressions, solving one-step equations, finding coordinate points on a plane, and multiplying & dividing fractions.
- 8th Grade: All operations involving negative numbers, expanding & factoring expressions, adding & subtracting expressions, solving multi-step equations, and calculating slope from a given graph.

**Prerequisite:** Students who qualify for math foundations have demonstrated the need for additional assistance based on M-STEP scores, math screening scores (MobyMax), and overall trimester math grades.

**SCIENCE**

**Science 6**
Students will investigate physical, earth, and life sciences. Students will develop questioning techniques and use the scientific method to conduct experiments. Through the activities, students will develop solutions to problems through reasoning and observations. The topics are aligned with the Next Generation Science Standards (NGSS). Topics studied in this course include weathering and erosion, plate tectonics and earthquakes, minerals, rocks, force and motion, ecology, and environmental issues. As part of the course, students will have the opportunity to raise and release salmon.

**Science 7**
Seventh-grade science begins with a chemistry unit that explores the dynamics of matter: how to classify matter, how matter changes, and how changes in matter relate to students’ lives and other areas of scientific study. In the second and third trimester, students will learn concepts of life science through inquiry-based activities and investigations. Coursework emphasizes a complex understanding of relationships in the living world, cellular organization and the role of genetics in creating generational change in populations. Throughout the course, students will develop inquiry skills that include organization and mathematical analysis of data, manipulating experimental variables, and identifying sources of experimental error. Science process skills and experimentation are a significant focus of the curriculum.

**Science 8**
Students will investigate science topics including basic Science Processes, Matter and Energy, Astronomy, Ecology and Decomposition. Students will continue to refine their skills in questioning, observing, and problem-solving through hands-on experiments and the scientific investigation process. Students are expected to embrace the struggle of solving complex real world problems. This class will provide a heavy emphasis on the application of both quantitative and qualitative data in order to prepare students for the Gull Lake High School science curriculum.

**SOCIAL STUDIES**

**Social Studies 7**
Gull Lake utilizes TCI’s online *History Alive! Ancient World Program* to transform the middle school social studies class into a multi-faceted learning experience. Lessons start with a big idea — Essential Question — and incorporate graphic note taking, group work, and step-by-step discovery. Students are the center of instruction that taps a variety of learning styles, allowing students of all abilities to learn and succeed. We introduce students to the beginnings of the human story. As they explore the great early civilizations of Egypt and the Near East, India, China, Greece, and Rome, students discover the secrets of these ancient cultures that continue to influence the modern world. We will also look at the geography of North and South America, as well as a small economics unit.

**Social Studies 8**
Gull Lake utilizes TCI’s online *History Alive! The United States through Industrialism Program* to transform the middle school social studies class into a multi-faceted learning experience. Lessons start with a big idea — Essential Question — and incorporate graphic note taking, group work, and step-by-step discovery. Students are the center of instruction that taps a variety of learning styles, allowing students of all abilities to learn and succeed. This interactive program immerses students in a powerful journey through the history of the United States from its earliest foundations to the age of industrialism. Students will explore how the founding fathers continue to have an impact on America today.

**SPECIAL & ELECTIVE CLASSES**

**MUSIC**

**Band 6**
This is a beginning band class where the basics of learning how to play an instrument and read music are taught. This class is a performance based class which lasts for the entire school year. Students will meet every day and will study music theory, music history, and instrumental technique. In addition, they will learn team building, leadership, listening, and creative thinking skills; etiquette of working together to create a finished project; confidence, perseverance, and high work ethic skills. The skills gained from this class will guide students to become leaders in the workforce. Each student will have the opportunity to perform in an ensemble and as a soloist. It is a requirement of the class to attend all performances.

**Band 7**
This is the second year of band and is a performance based class which lasts for the entire school year. Band meets every day and is composed of those students wishing to further their ability in, and knowledge of, instrumental music. Students will study music theory, music history, and instrumental technique. In addition, they will learn team building, leadership, listening, and creative thinking skills; etiquette of working together to create a finished project; confidence, perseverance, and high work ethic skills. The skills gained from this class will guide students to become leaders in the workforce. Each student will have the opportunity to perform in an ensemble and as a soloist through our home concerts, District Solo & Ensemble Festival, and District and/or State Band Festival competition. It is a requirement of the class to attend all performances.

**Prerequisite:** Successful completion of 6th grade band and/or performance audition.

**Band 8**
This is the third year of band and is a performance based class which lasts for the entire school year. Band meets every day and is composed of those students wishing to further their ability in, and knowledge of, instrumental
music. Students will study music theory, music history, and instrumental technique. In addition, they will learn team building, leadership, listening, and creative thinking skills; etiquette of working together to create a finished project; confidence, perseverance, and high work ethic skills. The skills gained from this class will guide students to become leaders in the workforce. Each student will have the opportunity to perform in an ensemble and as a soloist through our home concerts, District Solo & Ensemble Festival, and District and/or State Band Festival competition. It is a requirement of the class to attend all performances.

**Prerequisite:** Successful completion of 7th grade band and/or performance audition.

**Jazz Band (8th Grade)**
This is an accelerated instrumental music class designed for 8th grade band students who have an interest in pursuing jazz studies. Students will learn basic jazz scales, styles, chord structures, and improvisational skills. In addition, they will learn team building, leadership, listening, and creative thinking skills; etiquette of working together to create a finished project; confidence, perseverance, and high work ethic skills. The skills gained from this class will guide students to become leaders in the workforce. Each student will have the opportunity to perform in an ensemble and as a soloist. It is a requirement of the class to attend all performances.

**Prerequisite:** Successful completion of 7th grade band and/or performance audition and participation in 8th grade band. Students must be proficient on their instrument and able to successfully play through their Bb, Eb, Ab, F, C and Chromatic scales at the end of their 7th grade band year.

**Choir 6 & Choir 7/8**
This is an all year class focused on experiencing music and developing musical skills necessary to perform in a vocal music ensemble. Includes understanding of basic music terms and symbols and their use, and more advanced vocal technique and health. Preparation for performances is a key element, and students are required to perform in both in-school and evening events. Learning basic team etiquette and mutual effort, perseverance and continued focus on a learning task, and confidence and social awareness are all major aspects of this course.

**Music 6**
This is a one trimester survey class that explores a wide variety of topics in music. Basic music symbols and terms are defined and experienced through development of musicianship skills like sight-reading. There are units on African Drumming and Rhythm, Melody and Harmony, singing and the science of the voice, History of Western music and culture, and Modern American genres. A wide variety of assessment tools are used including online presentations, sight-reading and performance, and composition. Learning basic team etiquette and mutual effort, perseverance and continued focus on a learning task, and confidence and social awareness are all major aspects of this course.

**Beginning Guitar**
This class is an introductory class into learning and playing guitar. We focus on a folk and rhythm style of playing, but also cover the basics of lead guitar and melody playing. We learn the basics of musical rhythm reading to apply to song arrangement and composition for a solo performer or group setting. Working as a team, we will study play, and sing music from different time periods and styles of popular music, including the Beatles, Jason Mraz, and Bob Marley, just to name a few. Guitar will help a student to build confidence in performing, perseverance learning a new physical skill, and social team building.

**WORLD LANGUAGE**

**Spanish A**
This 12-week course will introduce students to basic vocabulary and simple grammar structures in the Spanish language. Students will learn to discuss likes and dislikes, personality traits, forms of the verb ser, and pronouns through songs, video, games, and interactive activities. In addition, students will study cultural topics, art, and holidays.

**Spanish B**
This 12-week course is a continuation of the Spanish A course. Through song, art, video, games, interactive activities, and Spanish conversation students will continue to expand their vocabulary and verb usage. Students will
learn vocabulary related to school schedules, interests, and locations. They will also compare and contrast shared cultural experiences between the US and Spanish-speaking countries. Students will finish the class by presenting in Spanish. The presentation will demonstrate their development in the language through both A/B courses.

**Prerequisite:** Successful completion of Spanish A or the equivalent

**Spanish I (For High School Credit)**
The purpose of this class is to familiarize the student with the Hispanic culture and to help students gain mastery of the fundamental building blocks of the Spanish language. In Spanish 1, students will learn to read, write, speak and comprehend the present tense and past tense. Frequent speaking opportunities and assessments are incorporated so that students can confidently hold conversations in predictable situations. Spanish culture is introduced in each lesson and is further emphasized through various media and student projects. Spanish 1 is a high school course and a full year commitment. Students will be delivered the same content, assessments and amount of work that a high school student is given.

**Prerequisite:** Qualifying MAP test scores and 80% or higher grade average for Spanish A and 7th grade ELA or equivalent.

**HEALTH & PE**

**Health**
Students will learn skills and information needed to apply the decision making process to make choices that promote health and improve communication in and outside of the classroom. This course focuses on the different aspects of physical, mental, and social health and how they affect each person’s overall well being. Units of study are designed to increase student knowledge and skills in the areas of overall health and wellness, healthy relationships, hygiene, values, making healthy choices, decision making, growth and reproduction, BSE/TSE, HIV/AIDS education, alcohol, tobacco and drugs, safety, refusal skills, CPR, body image, eating disorders and nutrition

**PE**
In this class, students will be taught the rules, techniques and strategies of various sports and physical activities. Upon completion of this course, the student will be equipped to be physically active as part of a healthy lifestyle. Most units cover approximately one week of class and are concluded with a skills test and a written quiz. Units may include: volleyball, soccer, basketball, football, recreational games, frisbee, floor hockey, track and field, pickleball and badminton, lifetime fitness activities. Most units cover approximately one week of class and are concluded with a skills test and a written quiz.

**6th Fitness & Sports**
6th Grade Fitness and Sport will focus on grade appropriate fitness knowledge, and health based fitness improvement. This will be an activity class that will also allow students to learn and practice and refine sport skills and strategies.

**STUDIO ART**

Middle School art classes offer two and three-dimensional projects that encourage creativity, exploration and skill building. With projects in drawing, painting, printmaking, digital art, clay, and mixed media and design, students learn how visual arts are an effective form of personal expression. The Elements & Principles of Art, Color Theory and connecting to other artists will be applied throughout the course.

**STEM/PLTW**
Design & Modeling
Students will explore engineering skills while completing a variety of hands-on projects. They will discover a Design Thinking Process used by engineers and problem-solvers to meet needs and improve lives. Students will use what they have learned to design a therapeutic toy for a child who has cerebral palsy.

Automation and Robotics
Students will trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, gear mechanisms, and computer control systems. Students will use the VEX Robotics® platform to design, build, and program real-world objects. Students will learn how to create a design brief and matrix in order to vote on projects using their own criteria. Students will learn to code and program motors using the RobotC program.
Prerequisite: Successful completion of Design & Modeling

Flight and Space
Students will use creative thinking and problem solving to explore how scientists and engineers make traveling around the globe and beyond possible. Students practice engineering skills as they design, prototype, and test models to learn about the science of flight and what it takes to travel and live in space. Problem based activities include solving real-world aviation and space challenges and planning a mission to Mars.
Prerequisite: Successful completion of Design & Modeling

Medical Detectives
Students will play the role of real-life medical detectives as they analyze genetic testing results to diagnose disease and study DNA evidence found at a “crime scene.” They will solve medical mysteries through hands-on projects and labs, investigate how to measure and interpret vital signs, and learn how the systems of the human body work together to maintain health.
Prerequisite: Successful completion of Design & Modeling

Intro to Computer Science (For High School Credit)
The Introduction to Computer Science course is meant to give students foundational skills in app development and programming. MIT App Inventor will be used to program Android based apps and Python programming will be learned using a program called Canopy. We are using Project Lead The Way Learning Management Systems as a guide and will add additional projects as time allows. “Designed to be the first computer science course for students who have never programmed before, ICS is an optional starting point for the PLTW Computer Science program. Students work through paired programming to create simple apps for mobile devices using MIT App Inventor. Students explore the impact of computing in society and the application of computing across career paths and build skills and awareness in digital citizenship and cyber security. Students model, simulate, and analyze data about themselves and their interests. They also transfer the understanding of programming gained in App Inventor to learn introductory elements of text based programming in Python to create strategy games.”(PLTW)
Prerequisite: Successful completion of Design & Modeling

STEM Extensions
Students will use a Design Thinking Process to complete projects in the GLMS Innovation Lab. Makerspace experiences include 3D printing, laser cutting, electric circuits, block coding, and robotics. Technology will be used to Connect, Collaborate, Create, Communicate, and think Critically in ways that are Safe, Appropriate, Valuable, and Engaging. Projects will be showcased to invested stakeholders (peers, parents, GLCS employees, community members).
Prerequisite encouraged: Successful completion of Design & Modeling

OTHER COURSES

Advisory
Every student will be assigned to an advisory class. This is a short period of time in which teachers establish connections with their group of students and mentor them throughout the year. Teachers review their student’s
academic performance and also present a character development and social emotional learning curriculum through Positivity Project.

Books and Movies
Along with books, movies can be used to encourage and develop students’ critical thinking. Students in this class will explore matching texts (books and the movies adapted from them) to grow their analytical strategies. Focus will be on reading, watching, and discussing various similarities and differences between the two. Students will be asked to predict, record observations, and give immediate reactions. They will analyze what happened between multiple viewpoints while reading and watching. Students will analyze the two versions (book and movie) and hone in on the differences, discussing the effect of each adaptation on the story. Students will be encouraged to decide if the differences have positive or negative effects on the original story. Casual debates will occur and students will be held accountable for citing specific examples in their arguments.

LINKS (7th and 8th Grade)
This class is a trimester elective course designed to facilitate awareness of individuals with special needs, the systems they require for placement in general education classes, and the benefits of peer-to-peer support in the least restrictive environment. LINKS students will be supporting students with autism spectrum disorder in a variety of settings at the teachers’ discretion.
Prerequisite: Application & interview

Podcasting
Podcasting is the perfect medium for students to work with. There are millions of podcast episodes at students’ fingertips and with new ones being released all of the time, it is clear that podcasting is relevant today. This podcasting class will help students connect with each other across the building. This class will allow students voice and choice while trying podcasting with a real, authentic audience. The skills of a podcaster include writing, editing, speaking, recording, interviewing, researching, and even designing. This podcasting class will further our building’s work on reading, writing, and speaking with purpose. Through this project-based learning course, students will have the opportunity to listen and respond to a variety of podcasts. They will brainstorm, plan, create, and record their own podcasts. They will share their podcasts with the school at large.

Resiliency for Growing Learners (7th & 8th Grade)
Resiliency for Growing Learners teaches lessons that provide simple, hands-on solutions to help students increase academic success. The curriculum utilizes a variety of methods to gain an understanding of each student and to teach and practice important life skills and executive functioning skills (decision making, healthy friendships/relationships, self-advocacy, self-concept, motivation, emotion regulation, prioritization, etc). Students will become mindful of these positive behaviors that push them towards success for both inside and outside of the classroom. This will be through completion of the Why Try Curriculum, weekly agenda, and in class completion of academic work.