Journey Middle School

217 Celtic Drive, Madison, Alabama 35758

STEM, 6th & 7th Grade

Ms. Kelly Brunson

Teacher Contact Information	**Email:** vkbrunson@madisoncity.k12.al.us **Classroom Phone:** 256-774-4695 ext: 84134
Classroom Digital Platforms	**Webpage Link:** https://www.madisoncity.k12.al.us/Domain/2882 **Schoology Link:** https://madisoncity.schoology.com/home
Textbook Information	• There is no required textbook for this course • There is no required reading for this course
Course Description	In this course, students will gain a foundational understanding of what engineers do. In this hands-on, project-based learning course, students will work in groups utilizing the engineering design process to propose student-created solutions to challenges. Examples of past projects include: STEM Animations, paper roller coasters/towers, design builds, computer-aided designs (CAD), assembly line construction, inventions/innovations, and MORE!
Prerequisite	None
Course Objectives/Goals	• Practice safety, teamwork, leadership, and communication in hands-on, collaborative settings. • Explore design thinking by creating and improving solutions through invention, innovation, and prototyping. • Develop precision and accuracy in measurement and apply these skills to technical tasks and quality control. • Use tools, materials, and digital technologies safely and effectively to build and assemble real-world projects. • Learn foundational concepts in electricity, circuits, and computing through experimentation and troubleshooting. • Apply basic programming and data analysis skills to solve problems and automate systems. • Evaluate products and processes based on cost, efficiency, sustainability, and impact on society.
Instructional Delivery Plan, Course Outline & Culminating Project	• Unit 1: Invent vs. Innovate I • Unit 2: Precision and Accuracy in Manufacturing • Unit 3: Design and Fabrication • Unit 4: Tools, Fasteners, and Assembly • Unit 5: Electricity and Fiber Optics • Unit 6: Sensors, Circuits, and Coding • Unit 7: Invent vs. Innovate II (culminating project) **This is subject to change.*
Credentialing	None
CTSO Integration ***(JMS Career Technical Student Organization is Technology Student***	Technology Student Association, TSA, is a career technical student organization and a fundamental part of this course. It is a national career and technical student organization of students engaged in science, technology, engineering, and mathematics (STEM). TSA is integrated into the program which includes competitions and leadership opportunities. TSA provides students with activities during their class time

Association)	and after school with our local TSA Chapter. Previous TSA based activities include but are not limited to: Coding Challenges, Career Prep, Cyber Security, Essays on Technology, Challenging Tech Issues. The exact project for STEM is TBD.
Embedded Numeracy Anchor Assignment **Kit 1: Invent vs. Innovate I – Lesson 3**	Standard: 6.D.1 – Interpret and compute quotients of fractions and solve word problems involving division of fractions by fractions. Connection: Students use proportional reasoning and spacing to construct a timeline of inventions and innovations, applying math concepts to organize and visualize historical sequences.
Embedded Literacy Anchor Assignment **Kit 1: Invent vs. Innovate I – Lesson 3**	Standard: 6.1 – Conduct experiments and analyze data to identify patterns related to force and motion. Connection: While analyzing innovations (like those by Newton or Edison), students reflect on how physical laws influenced inventions (e.g., lightbulbs, communication devices), linking scientific principles with engineering outcomes.
Embedded Science Anchor Assignment **Kit 1: Invent vs. Innovate I – Lesson 3**	Standard: ELA.6.27 – Present claims and findings, sequencing ideas logically and using pertinent descriptions, facts, and details to accentuate main ideas or themes; use appropriate eye contact, adequate volume, and clear pronunciation. Connection: Students develop public speaking and presentation skills through their digital avatar, organizing and presenting researched information clearly and persuasively.
CTE Lab Safety Guidelines	Each student in a CTE/PLTW/STEM course will be required to complete a lab safety exam and score 100% correct before being allowed to use any tools on projects. We expect students to responsibly and safely use the CTE equipment. Examples of equipment used in CTE/PLTW/STEM courses may include and are not limited to the following: scissors, hot glue guns, box cutters, power tools, hand tools, measuring tools, electronic equipment, computers, medical supplies, adhesives, robotics equipment, & food items (consumable and non-consumable).
Classroom Expectations	Classroom Expectations: ● Come prepared to learn everyday and follow all directions quickly. ● Try to limit your time outside of the classroom as much as you can. ● Try your very best every single day. ● Be kind and respectful to everyone. ● Keep your area clean ● Keep all personal electronics out of sight during class
Progressive Discipline Procedures ***(JMS Policy)***	**All progressive discipline will correspond with the Madison City Schools Code of Conduct regarding Class I and II offenses. Some Class II and all Class III offenses are a direct office referral.** ● Warning ● Conference with student with parent notification ● Parent Contact ● Detention ● Referral to administration for repeat Class I violations and initial Class II and III offenses---Consequences determined to be reasonable and appropriate by the school administration.
Electronic Communication Device Policy	Wireless Communication Devices A. Definitions 1. Instructional Day – • When school is open and in session: • During class time, lunch, transitions between classes, and any non-instructional periods; • Any time that students are required to store their Wireless Communication Devices under the Student Code of Conduct, or other school rules; or

	• Any other time, students are instructed to store their devices by school staff. 2. Wireless Communication Devices – Any portable electronic device that has the capability of exchanging voice, messaging, or other data communication with another electronic device, including, without limitation: • cellular telephones • tablet computers • laptop computers • pagers • gaming devices • smart watches • earphones or headphones (Air Pods, ear buds, over the ear headphones, etc., whether wireless or not) B. Possession of Wireless Communication Devices – Students are prohibited from bringing Wireless Communication Devices into school buildings and onto school grounds, except in compliance with this policy. The Board is not responsible for the theft, loss, or damage to any Wireless Communication Device brought onto campus by a student. C. Storage of Devices– At all times during the Instructional Day, students who possess a Wireless Communication Device on any campus or in any school must turn the device off and store the Wireless Communication Device off their person in a locker, car, backpack, purse, gym bag, or other storage location approved by school administrators. This storage requirement is subject to the exceptions set out in subsection D below. D. Prohibition on Use; Exceptions – Students are prohibited from using, operating, or possessing a Wireless Communication Device during the Instructional Day, except under the following limited circumstances: • The use, operation, and/or possession of the device is specifically included in the student's Individualized Education Plan (IEP), 504 Plan, or an Individualized Health Plan; • The use, operation, and/or possession of the device is for educational or learning purposes under the supervision of school personnel; and • The use, operation, and/or possession occur during an emergency threatening the life or safety of the student or another person. The Superintendent or designee is authorized to develop additional guidelines for implementation of these exceptions. E. Searches – School officials may read, examine, or inspect the contents of any wireless communication device upon reasonable suspicion that the device contains evidence of a violation of Board policy, the Code of Conduct, or other school rules, provided that the nature and extent of such reading, examination, and inspection shall be reasonably related and limited to the suspected violation. F. Disciplinary Action – Any violations of this policy may result in disciplinary action under the Student Code of Conduct. G. Additional Procedures Authorized – The Superintendent or designee is authorized to develop any additional rules necessary to carry out this policy.
Grading Policy ***(MCS Policy)***	**60%** = Assessments (Tests, Essays, Projects) **40%** = Daily Grades (Quizzes, Homework, Classwork, and Participation)
Late Work Policy	• Students present in class on the day of instruction are expected to turn in all in-class and out-of-class assignments on time. • Late assignments will be reviewed and considered on an individual basis. As CTE/STEM courses simulate real-world work environments and emphasizes project-based learning, timely completion of tasks is essential. However, if circumstances arise, students are responsible for communicating with the teacher emulating positive employability traits; each situation will be assessed fairly and thoughtfully.
Make-up Work/Test Policy	• Students are permitted to make up work, tests, and other assignments, activities, etc., when absences are excused. Under normal circumstances, it is expected that students will submit previously assigned work upon return to school after an excused absence. All work missed on the day(s) of excused absence(s) must be made up within three school days after returning to school. However, for extended excused absences when homebound services are not necessary, the teacher may grant additional time, but not to extend beyond two weeks past the return to school. It is the joint responsibility of student and parent to ensure a student makes up work following excused absences. Teachers may alter assignments, tests, work, activities, etc., as necessary to ensure an accurate evaluation of the student's performance after an excused absence.

	• Students will not receive credit for and will not be allowed to make up any assignments, tests, work, activities, etc., missed during unexcused absences.
Technology	Student laptops should not be hard-wired to the network or have print capabilities. Use of discs, flash drives, jump drives, or other USB devices will not be allowed on Madison City computers. Neither the teacher nor the school is responsible for broken, stolen, or lost laptops. Laptops and other electronic devices will be used at the individual discretion of the teacher.
Cheating/Plagiarism	A student who cheats will not receive credit for the work in question. If any other student has cooperated in cheating, that student is also considered to have cheated and will not receive credit. Cheating students will also be subject to disciplinary consequences in Section XXII of this CSC. Cheating is defined to include, but is not limited to: (a) copying someone else's work in or out of class and identifying and submitting it as your own (b) failing to quote and/or list appropriate citations for material derived from published sources (including the Internet) and identifying and submitting it as your own (c) the use of unauthorized notes, other materials, or assistance during the accomplishment of graded work in or out of class (d) any other situation in which the student attempts to or accepts credit for work not his or her own.
Artificial Intelligence Acceptable Use Policy ***(MCS Policy)***	Madison City Schools acknowledges that technology is ever-changing and has a tremendous impact on our global society, local community, and classrooms. Artificial intelligence (AI), including generative forms of AI, is becoming more a part of our everyday lives. It is our responsibility to educate and train students to utilize AI in an ethical and educational way. Therefore, Madison City Schools is not banning the student or teacher use of AI, but each student will need to be aware of the limitations and guidelines of its usage: a. Madison City Schools student email accounts and Chromebook access to specific open AI software, such as ChatGPT, are blocked due to data and security concerns. b. Any misuse of AI tools and applications, such as hacking or altering data, is strictly prohibited. c. Teachers may allow the use of AI for curriculum purposes. Access to specific websites will be granted on an as-needed basis, adhering to specific data and privacy guidelines regarding age restrictions and usage. d. College Board and Dual Enrollment college and university classes may have additional restrictions and limitations regarding the use of Artificial Intelligence. e. Students who use AI software with a personal device and/or personal credentials should do so at their own risk, acknowledging that each platform is collecting various forms of data. f. Students must acknowledge the use of AI in any capacity related to their schoolwork, including text, images, multimedia, etc. The use of AI could be subject to the Academic Dishonesty Policy. h. Students should acknowledge that AI is not always factually accurate, nor seen as a credible source, and should be able to provide evidence to support its claims.
Materials & Supplies	• Students are expected to have a pencil, charged Chromebook, & paper/notebook • Amazon Wishlist: https://www.amazon.com/hz/wishlist/ls/1MPFPVAY6KZGO?ref_=wl_share
Homework	• All assignments and projects will be completed during class time. • In the case that a student may not utilize time wisely or are absent from class they may be expected to complete this work at home.
Parent & Student Acknowledgment Form	*https://forms.gle/cUgGY2CGMG1FdkVVA*