

Journey Middle School

217 Celtic Drive, Madison, Alabama 35758

Green Architecture

Kaleb Hood

| Teacher Contact Information | Email: <u>kdhood@madisoncity.k12.al.us</u> Classroom Phone: 256-774-4695 |
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| Classroom Digital Platforms | Webpage Link: <u>Webpage link</u> Schoology Link: <u>https://madisoncity.schoology.com/home</u> |
| Textbook Information | There is a digital textbook for this course which is accessed via a login and password assigned to us from PLTW. We use Schoology as our lessons and activities organizer And PLTW as our curriculum resource. Please ensure your student brings their MCS Chromebook charged and ready for class each day. |
| Course Description | Students learn how to use architectural scales and rulers to read and apply the concept of scale to drawings of rooms and floor plans. Students apply the concept of sustainability to the fields of architecture, interior design, and construction by exploring dimensioning and computer-aided design architectural software. Students build an off-the-grid home model that solves real world problems such as a renewable energy source, an agricultural system, and a local hazard such as tornadoes or earthquakes. This is a great class for students that enjoy designing and building. |
| Course Objectives | K1 – Identify the systems required in a residential home, including electrical, plumbing, heating, ventilation, and air conditioning. U7 K2 – Describe the three areas of a house and the rooms that belong to them. U7 K3 – Identify common roof styles. U7 K4 – Describe the working triangle and its purpose. U7 K5 – Identify and use appropriate symbols in a basic floor plan for a residential home. G1 – Demonstrate an ability to identify, formulate, and solve engineering problems. G2 – Demonstrate an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability. G3 – Demonstrate an ability to design and conduct experiments, as well as to analyze and interpret data. G4 – Demonstrate an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice. |
| Course Outline | -Unit 1: Architectural Basics |
| | -Unit 3: Architectural Challenge |
| | *This is subject to change. |

| Classroom Expectations | Be in the classroom, in your assigned seat, when the bell rings Be prepared to start class, when the bell rings (have pencil,notebooks, etc. ready) Follow directions the first time they are given Be respectful of your teacher, classmates, and the building itself |
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| Progressive Discipline (JMS Policy) | All progressive discipline will correspond with the Madison City Schools Code of Conduct regarding Class I and II offenses. 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 offensesConsequences determined to be reasonable and appropriate by the school administration. |
| Cell Phone Policy | Cell phones and earbuds/headphones will not be allowed to be used during classroom instruction time. Phones and earbuds/headphones will be put away in a location designated by the teacher and placed in silent mode. In secondary schools, students will have access to their phones and earbuds/headphones outside of classroom instruction time, such as between classes and during lunch, but devices should be put away when students are in the lunch serving line. Failure to follow these procedures will result in a disciplinary referral to the office. |
| Grading Policy (MCS Policy) | 60% = Assessments (Tests, Essays, Projects) 40% = Daily Grades (Quizzes, Homework, Classwork, and Participation) |
| Late Work Policy | Late work in CTE/STEM classes will not be accepted due to the brief nature of the classes. Students are expected to follow up with teachers upon return from an excused absence. Students present in class on the day of instruction are expected to turn in all in-class and out-of-class assignments on time. |
| Make-up Work/Test Policy | Students with excused absences will be allowed to make-up all work within three days of returning to school. It is the student's responsibility to ask for make-up work. Students can get with a classmate or ask the teacher for help. Work that is not made up will become a zero (including quizzes/tests). Many times, missed quizzes and tests can be made up during school. |
| Technology | Student laptops should not be hard-wired to the network or have print capabilities. Discs, flash drives, jump drives, or other USB devices are not 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 teacher's individual discretion. |
| 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 the consequences in the 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. |
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| CTSO Integration (LMS Career & Technical Student Organization is TSA.) | 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 and after school with our local TSA Chapter. TSA Based Activities relevant to STEM include but are not limited to: Lab Safety Posters, Career Prep, Essays on Technology, Challenging Tech Issues, CAD Foundations, Inventions & Innovations, Problem-Solving, Technical Design, and Video Game Design. TSA INVENTIONS & INNOVATIONS is our CTSO project for this course. |
| Embedded Numeracy Anchor Assignment | Students will be able to accurately measure and calculate the square footage of a residential property by selecting appropriate measuring tools, creating a detailed floor plan, measuring the dimensions of each room, calculating the area of both rectangular and irregularly shaped spaces, summing the total square footage of finished, habitable areas while excluding non-habitable spaces, and documenting their measurements and calculations clearly, all while understanding the local standards and practices related to square footage measurement in real estate. |
| Embedded Literacy Anchor Assignment | Students will develop architectural literacy through critical reading, comprehension, and analysis of Textbooks, articles, case studies related to green building practices, sustainable design principles, and environmental stewardship in architecture. |
| Embedded Science Anchor Assignment | Students will comprehend fundamental scientific concepts underlying green architecture, including energy transfer, material properties, and ecological systems and recognize the environmental impact of various building materials and construction methods. |
| CTE Lab Safety Guidelines | Each student in a CTE/PLTW course will be required to complete a lab safety exam and score a 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 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, robotics equipment, food items (consumable and non-consumable). |
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| Materials & Supplies | Pencils/Pens Paper Notebook Ruler Fee: \$10 |
| Homework | If a student is unable to complete an in-class assignment, the student will complete the assignment at home. Occasionally, students may have small homework assignments. All such assignments will be due the next school day. |
| Parent & Student Acknowledgment Form | Student form: https://docs.google.com/forms/d/e/1FAIpOLSej0cjhcJhhrRpnCMAuZSK35oKc_Uulh6jmdVVkYUPGOS srMg/viewform?usp=sf_link Parent form: https://docs.google.com/forms/d/e/1FAIpQLSeb4SBpprWe8Keeo1ZK-67DURU57M77hVbGtJCnkux9gt 4xGw/viewform?usp=sf_link |