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|  | **John T Magee Middle School** |
| *[Design and Modeling]* |

**Instructor:** [Mr.Kamen

**Room #:** [10]

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**Email:** [jkamen@rlas-116.org]

**COURSE DESCRIPTION**

[Students engage in the design process for various activities solving real world problems for patients with cerebral palsy including therapeutic devices and toys to improve quality of life.]

**COURSE OBJECTIVES:**

[Students learn how to navigate Google Classroom and create Google documents to organize their creative processes. In addition, they learn how to draw and measure to scale front, top, and side views for their designs that they create based on research of real world problems. Students learn basic design work in AutoCad which leads to 3-D models produced by groups students on a 3-D printer.]

**REQUIRED TEXT**

[Course readings supplied by Project Lead the Way Design and Modeling.]

**SUPPLIES**

[pencils, agenda]

**CLASS POLICIES**

[Students discuss and vote on PBIS behaviors in our classroom environment under the categories of responsible, respectful, and safe that enhance their educational experiences]

**ASSIGNMENTS & LATE WORK**

**Daily Assignments**

Daily, in-class activities help the teacher monitor how well you are learning and provide a means of communication between you and your teacher about your learning needs. You should consider daily assignments and activities as an opportunity to “show what you know.”

[Creation of Google documents to organize the steps students take to design a project, measuring designs produced, front, top, and side view designs. Building designs based on drawings with various supplies.]

**Homework and Practice**

**All** assigned work is important and meaningful for your learning and therefore is expected to be completed in a timely manner. Your teacher must make adjustments to lessons based on what you and your classmates have learned and what you have yet to learn. Thus, homework and practice activities communicate to the teachers about *how you are doing in class*. Completion of homework or practice by the assigned due date is *critical* for you to get the greatest benefit from the work.

[Students will learn how to use measuring devices; such as rulers and calipers to measure projects created. Students practice their drawing skills with AutoCad 1-2-3.]

**Late Work**

To ensure success, it is important that you turn all of your work in on time. Any work turned in late will only be accepted up to a week before the end of the quarter in which it was assigned. Dates will be provided to you by the teacher.

**Work Habits**

Effective work habits in this class are critical both to enable and demonstrate your learning. Because student learning is our most important goal, regular attendance, timely arrival to class, proper time management, strong effort, positive attitude, and active participation are necessary for successful work habits. You will be required to evaluate your performance via a written self-assessment quarterly. After conferencing and/or providing feedback with you about your self-assessment, the teacher will summatively assess your performance. See the rubric the teacher provides for assessment criteria.

[Students work individually as well as in small groups of 3 or 4 to design and implement a model for projects created.]

**ASSESSMENTS**

**Diagnostic Assessments**

You will complete short diagnostic assessments at the beginning of each unit of instruction. The purpose of the diagnostic assessment is to determine what and how much prior knowledge you bring to each unit. Your teacher will use the information to make adjustments, if necessary to the unit of study. You, as a responsible student, are expected to use the results of the diagnostic assessment to evaluate what you know about the upcoming unit of study and to prepare yourself for the effort required to successfully master the required concepts and skills.

**Formative Assessments**

You will complete regular formative assessments throughout the unit of instruction. Typically, formative assessment occurs weekly. Formative assessments are designed as a “check-up” on your learning progress toward mastery of the concepts and skills in each unit of instruction (identified in “Course Objectives” above). Your teacher will use the information gained from the formative assessments to make adjustments, if necessary, to the unit of study. You will be expected to use the results of the formative assessment to evaluate your progress toward the learning objectives and to make adjustments to your learning efforts as a result of the information provided by the assessments.

**Summative Assessments**

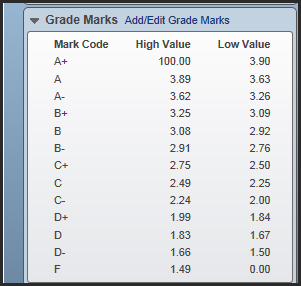
Each summative assessment provides the opportunity for students to demonstrate mastery of critical concepts and skills in the content area. Summative assessments are designed to be a final evaluation of what students have learned. Consequently, students’ grades are a reflection of their performance on the summative assessments.

[Students create a foot orthosis project, front, top, and side view designs, as well as a toy designed to improve the lives of those with Cerebral Palsy. In addition, students are assessed based on their ability to use various measuring devices with accuracy.]

**GRADING POLICY and GRADING SCALE**

**Grading Scale on Rubric**

Grades in [Applied Technology] will be assessed primarily using a four-point rubric. The conversion of the rubric to the standard grading scale is explained below:



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| *Each 4-point rubric will have the following categories:* |
| * **4 - Exceeds**   + Student has demonstrated both an excellent understanding of required concepts and mastery of essential skills. Student consistently displays a superior performance on course expectations. * **3 - Proficient**   + Student has demonstrated both a good understanding of required concepts and mastery of essential skills. Student consistently meets course expectations. * **2 - Basic**   + Student has demonstrated a basic understanding of required concepts and mastery of essential skills. Student generally meets minimum course expectations. * **1 - Below Basic**   1. Student infrequently demonstrates a basic understanding of course concepts and lacks mastery of essential skills. Student generally to regularly does not meet minimum course expectations. * **0 - Not Evident**   + Student demonstrates little to no evidence of a basic understanding of course concepts and little to no mastery of essential skills, and/or evaluation of student understanding of concepts and mastery of skills is not possible due to lack of evidence. Student regularly does not meet minimum course expectations. |