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***Vision: To create an environment where our learners grow as individuals while gaining professional expertise and skills.***

***Mission: To offer inspiration through advanced instruction and authentic experiences.***

**Instructor:** Ms. Brandi Burns

 Email me at brandi.burns@henry.k12.ga.us Please allow 24 hours for a response.

Conferences can be scheduled via the counselors between 7:00 and 7:45 a.m.

**3D Modeling & Analysis**

Three-Dimensional (3D) Modeling and Analysis is a one-credit course that completes the pathway in Engineering Drafting and Design. Reverse engineering strategies are recommended for third level working drawings. Computer-aided design (CAD) is used extensively with each standard in the course. Focus is on employability strategies, career studies, applied math, fasteners, working drawings, and assembly drawings. The final culmination is a project that contains information mastered throughout the three courses. The prerequisite for this course is Survey of Engineering Drafting & Design.

**Course Objectives**

AAS 3D Modeling & Analysis associates will:

* Demonstrate industry-recognized employability skills.
* Abide by safety standards and properly use the tools and equipment in our lab.
* Identify the disciplines related to engineering graphics and engineering professions.
* Analyze applied math required by business and industry for engineering graphics.
* Demonstrate an understanding for fasteners and the correct application in engineering graphics and product design.
* Demonstrate an understanding for fasteners and the correct application in engineering graphics and product design.
* Produce a working drawing artifact that conveys all of the information needed to manufacture and assemble a design.
* Understand and properly execute procedures for file management.
* Present appropriate views of an object.
* Construct a 3D assembly model showing criteria, constraints, design, and quality of a final product by creating a presentation or capstone final project.

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| **Required Supplies** |
| * Pencil for sketches \*USB drive (optional)
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| **Expectations for Academic Success** |
| * Attend class on time daily.
* Be professional, productive and follow **all** class expectations.
* Be productive by actively working during class & turn in all work on time.
* Respect yourself and show respect for others.
* Actively communicate by asking questions, participating in class & following directions.
* Contribute new ideas.
* Save your work in the specified area using the correct naming format.
* Refer to our work ethics rubric and class expectations documents often.
* No hats, hoods or headgear of any kind are allowed to be worn in the building.
* No cell phone use in the classroom/lab. Phones are to be kept put away at all times.
* No dress code violations will be allowed in the classroom/lab.
* Associates and parents shall monitor Infinite Campus together and address concerns as they arise. This needs to be done at least weekly.
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**Grade Calculation**

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| **Summative Assessments = 40%** | **Formative Assessments = 40%** |
| * Authentic learning projects, performance assessments & presentations
 | * Work ethics scores, daily practice exercises, quizzes, employability skills
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| **Culminating Final Exam/Project = 20%** |
| All courses will have a culminating exam or project that assesses associate learning of the semester’s course content. This exam/project will be 20% of the overall course grade. |

**Attendance**

Your presence in class matters.

**Make-up Work**

Absent associates are required to contact the instructor for make-up work. The associate will have the same number of days as they were absent to complete the make-up work. Assignments are located in the Google Classroom.

**\*See Page 2 for remainder of syllabus**

**Late Work Policy**

All work is to be done when it is assigned and turned in on time. If you are present in class, but you are not working on your assignments, you will not be given an extension of time. This policy means that you will earn credit for what has been completed at the time work is due. If you are failing (3) three weeks from the end of the semester and you would like a chance to pass the class, a parent conference must be held and you will be assigned alternate assignments. These must be done at home since we do not have additional time in class to complete these assignments.

Deadline for all late work is 1 week (5 school days) after the due date, because assignments build upon each other and you need to be prepared for the next assignment. A penalty of 10 points per day will be assessed on late work.

**Career and Technical Student Organizations [CTSOs]**

In addition to course integration, we will have a once-per-month activity schedule where associates can participate in their CTSOs. SkillsUSA and TSA are two CTSOs that are available to students in this pathway. Please refer to the respective websites for a list of competitions as there are many to choose from. [www.skillsusageorgia.org](http://www.skillsusageorgia.org) [www.gatsa.org](http://www.gatsa.org)