

Phone: 713-688-1361 Website: www.houstonisd.org/waltrip

ENGINEERING DESIGN AND PRESENTATION I

Excellence: Failure is not an option!

Instructor: Mr. Bain

Contact information: <u>fbain@houstonisd.org</u> ~ Office Phone 713-688-1361

Room: 1103

Conference Period: 4th

Prerequisite: None

Credit Hours: 1.0

Certification: SolidWorks (if eligible)

Tutorial Hours: Tue & Thurs 4:05pm – 4:40pm

Course Description

Engineering Design and Presentation I is a continuation of knowledge and skills learned in Principles of Applied Engineering. Students enrolled in this course will demonstrate knowledge and skills of the design process as it applies to engineering fields using multiple software applications and tools necessary to produce and present working drawings, solid model renderings, and prototypes. Students will use a variety of computer hardware and software applications to complete assignments and projects. Through implementation of the design process, students will transfer advanced academic skills to component designs. Additionally, students explore career opportunities in engineering, technology, and drafting and what is required to gain and maintain employment in these areas. Students shall be awarded one credit for successful completion of this course.

Textbook Reference

Principles of Applied Engineering Texas Edition, ISBN-13: 978-0134428017

Materials

Pen, Pencil, Paper, USB, Notepad, Laptop & Project Materials

Attendance Policy/Make Up/Late Work

Attendance and participation are required; new material is being presented daily as well as collaborative activity projects. In the event of an unexpected absence (i.e. illness, emergency, etc.), the student is responsible for ensuring that the absence is excused before assignments (available on the HUB) can be turned in and graded. Student will have three (3) days to turn in completed work. Students will be given at least one opportunity to submit late work following an absence. Grade penalties and the amount of time allowed to complete the assignment are as follows:

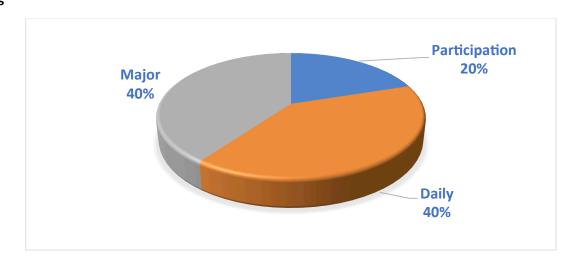
Late Work related to an absence:

3 days to turn in the assignment no points deducted full credit eligible

Late Work NOT related to an absence:

| 1 day late | -10 points | max 90 |
|-----------------|---------------------------------|--------|
| 2 days late | -20 points | max 80 |
| 3 days late | -30 points | max 70 |
| 4 days late | -40 points | max 60 |
| 5 days or later | zero assigned to the grade book | |

Grading



Behavior

All students must be courteous and respectful to other students and to any instructor. In addition, all students must be respectful of any decisions that instructor make. Respect is the key!

Course Expectations

- Be On-time, On-task, & Prepared to learn everyday
- Keep all personal electronics (cell phones) out of the way unless told to use.
- Be responsible for your own learning.
- Respect the Teacher, Classroom & other Students
- Trash goes in the trashcan

Assessment retake policy

A student will be permitted to retake any major test. The retest <u>must</u> occur <u>within five (5) school days</u> of the date the grade was received. The higher of the two test grades will be recorded. This does not apply to final exams. CSWA retakes must wait at lease 30days per SolidWorks policy.

Major course topics

- The Engineering Design Process
- Working on team and employment skills
- Modeling
- Sketching
- Measurement, Statistics, and Applied Geometry
- Presentation Design and Delivery
- Engineering Drawing Standards
- CAD Solid Modeling
- Consumer Product Design Innovation
- Marketing
- Engineering Ethics

^{*}Please note course topics are subject to change at any time due to unforeseen circumstances.

Please sign below indicating that you have received and understand the syllabus. This will be kept in the student's file along with any other work that is reviewed and signed by the parent. This information will be available for review at any parent/teacher conferences throughout the semester. If you have any questions, please contact us at the email address and/or phone numbers above. Please return this form by August 31st 2018.

| Student name: | Date: |
|---|-------------|
| PLEASE PRINT LEGIBLY | |
| Student signature: | - |
| Parent name: | Date: |
| PLEASE PRINT | |
| Parent signature: | - |
| ****************** | ****** |
| Parent Contact Survey | |
| Parent/Guardian Name: | |
| Telephone Number: | |
| Alternate Phone Number: | |
| Best Time to Call: | |
| Email Address: | |
| Best mode of communication: Phone call Text | Email |