The University of Texas at El Paso  
Graphic and Design Fundamentals  
MECH 1305  
Fall 2018

**Course Description**  An introduction to solid modeling concepts and software, dimensioning, and basic computer-aided engineering.

**Instructors**  Angel Ortega, Monica Pinon Martinez, Charlie Sullivan

**Office Hours**  Friday in design studio next to machine shop (Hours TBD)  
OR  
by appointment (please give at least 24 hour notice)

**Email**  agortega@miners.utep.edu

**Course Content**  
2D Sketching  
3D Modeling  
Drafting  
Parts Assembly  
Simulation (stress/thermal)  
Rendering and animation  
CAM and 3D Printing  
Design Project

**Software**  
AutoCad Fusion 360  
AutoCad Sketchbook  
This course requires students to have a laptop with Windows operating software If you have an apple laptop you must go to ETC and setup a Windows partition on your hard drive. Exceptions will only be given from ETC recommendations.

**Available at**  ETC  
Monday to Thursday  8 AM - 7 PM, Friday 8 AM – 5 PM  
Located between the Engineering and Classroom buildings on the 3rd floor in suite E351
Grading

<table>
<thead>
<tr>
<th>Category</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exams (2)</td>
<td>200</td>
</tr>
<tr>
<td>Quizzes (4)</td>
<td>100</td>
</tr>
<tr>
<td>Projects (2)</td>
<td>200</td>
</tr>
<tr>
<td><strong>Total Points</strong></td>
<td><strong>500</strong></td>
</tr>
</tbody>
</table>

Grades

Your grade for this course will be assessed based on your performance in in-class quizzes (100 pts), 2 mid-term exams (200 pts), and 2 projects (200 pts). 4 in-class quizzes will be given throughout the semester. The content of a quiz could be the materials covered in previous sessions. There will be no make-up quizzes. Two exams will be given during the semester. Makeup exams will be given only for documented medical reasons or school-related travel, and quizzes missed for these same reasons will not be made up but the next quiz will count double the grade. These reasons must be highly credible no flat tire, sudden sickness, or suddenly family members become sick (on day of assignment).

The final grade will be calculated based on the points you have accumulated as follows:

- A: \( \geq 450 \)
- B: \( \geq 400 \) but < 450
- C: \( \geq 350 \) but < 400
- D: \( \geq 300 \) but < 350
- F: < 300

The instructor reserves the right to revise this grading plan. However, students will be informed of any changes during the semester.

Attendance:

Since in class room attendance is primarily optional, attendance will be calculated differently. If you do not submit 2 of the weekly modules on time, that will be seen as missing 2 full weeks of class and you will be dropped from the course.

Study Guide

Read the pages of the text as they are assigned and work on the examples provided on those pages even if they are not covered in class. This will help you learn the software further and get more practice with it and do better in class. To ensure you still get the chance at the twenty-five points extra credit, every time that class is mandatory you must wear an orange shirt. Expect to spend 10 or more after-class hours each week on the subject. Show up to class every class meeting, establish a good studying and practice habit to work out the examples at home and you will do very well in the class.

Reasonable Accommodation Policy

Any student in this course who has a disability that may prevent him or her from fully demonstrating his or her abilities should contact me personally as soon as possible so we can discuss accommodations necessary to ensure full participation and facilitate the student's educational opportunities.
Quiz and Exam Policy
On the scheduled dates of quizzes and exams, all students must arrive at the session’s starting time and be ready to present the assessment. To maintain the integrity of the assessments, students who arrive more than 15 minutes late to the class those dates will not be allowed to take the assessment and will receive a grade of zero. No exceptions will be made. All students taking online or other type of assessments must be present in the classroom.

Policy on Cheating
Students are expected to be above reproach in all-scholastic activities. Students who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and dismissal from the university. Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit of any work or materials that are attributable in whole or in part to another person, taking an examination for another person, any act designed to give unfair advantage to a student, or the attempt to commit such acts (Regents= Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22). Scholastic dishonesty harms the individual, all students, and the integrity of the university; policies on scholastic dishonesty will be strictly enforced.