EL1402: Fundamentals of Engineering, Design, and Leadership

Spring 2024 Syllabus (DRAFT)  CRN: 25738

Teaching Team

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Course info

Location  
E - Lead Studios - CRBL 103  
Office Location  
Department of Engineering Education and Leadership (E-230)  
Office Hours  
TBA via Blackboard and email

About E-Lead & Course Goals
In this course, we will take nature & the environment, an important source of inspiration and understanding, as a theme and develop sustainable ideas into functional prototypes. Our focus is on the general principles and methods that shape the practice of engineering design. Students complete individual and team projects in an environment where we seek to develop a shared practice and understanding of engineering design. Students to gain experience in visualization, experimentation, estimation, fabrication, and presentation as they relate to designing. This class is fast-paced, and thus requires time management and organization in order to stay on top of assignments.

Grade distribution

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attendance and Participation</td>
<td>15%</td>
</tr>
<tr>
<td>Homework</td>
<td>20%</td>
</tr>
<tr>
<td>Project 1: Non-Profit</td>
<td>25%</td>
</tr>
<tr>
<td>Project 2: Board Game</td>
<td>40%</td>
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</tbody>
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Attendance & Participation Policy
Attendance is required in every class period. Participation requires that you are active in class and listen to instructions. In the event that you must miss class, contact one of the members of the teaching team in advance letting them know you will not be able to attend. If you fail to do so or are missing class for reasons not approved by the University (religious holidays, illness, etc.), it will be counted as an unexcused absence. More than three unexcused absences will result in a 10% drop in your final grade. Every three late arrivals are counted as one absence.

COVID 19 Statement
Please stay home if you have been diagnosed with COVID-19 or are experiencing COVID-19 symptoms. If you feel unwell, please let us know as soon as possible, so we can work on appropriate accommodations. If you have tested positive for COVID-19, you are encouraged to report your results to covidaction@utep.edu, so that the Dean of Students Office can provide you with support and help with communication with your professors. The Student Health Center is equipped to provide COVID-19 testing.
Special Accommodations
If you would like to request special accommodations due to a disability, we can certainly work that out. Please contact the Center for Accommodations and Support Services via their website http://sa.utep.edu/cass/.

Academic Integrity
Academic Dishonesty: students are encouraged to collaborate throughout the semester, but all graded materials must represent the student's individual work. (When in doubt, ask!) Academic dishonesty is the attempt to present the work of somebody else as his or her own work or attempting to pass any assignment by improper means. It is a serious offense and will not be accepted. Any misconduct will be handled according to the current university policy and reported in accordance with university regulations. For more information visit the Dean of Students or http://studentaffairs.utep.edu.

AI Policy
AI allowed only with prior permission from instructor
Use of AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, is only allowed with approval from the instructor BEFORE being used. Without permission, you will be expected to think creatively and critically to complete assignments without assistance from these tools.
If given permission to use any of these tools, students must properly cite and give full credit to the program used upon submission of every relevant assignment. For example, text generated using ChatGPT must be cited:

Chat-GPT (version). Date of query (year/month/day). "Text of your query."
Generated using OpenAI. https://chat.openai.com/

A short paragraph describing how the tool(s) was/were used for the assignment must be included.

AI allowed with proper acknowledgement
Use of AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, is only allowed with proper attribution given for its use.

Students must properly cite and give full credit to the program used upon submission of every relevant assignment. For example, text generated using ChatGPT must be cited:

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Using AI for brainstorming
Some AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, can be beneficial during the early brainstorming stages of an activity, and you are welcome to explore them for that purpose. However, keep in mind that AI-generated ideas are not your own and may hinder your ability to think critically and creatively about a problem. It is also important to remember that these technologies often "hallucinate" or produce materials and information that are inaccurate or incomplete—even providing false citations for use.
That said, you are not allowed to submit any AI-generated work in this course as your own. If you use any information or materials created by AI technology, you are required to cite it like you would any other source.
Consider how this will affect your credibility as a writer and scholar before doing so. Any direct use of AI-generated materials submitted as your own work will be treated as plagiarism and reported to the Office of Student Conduct and Conflict Resolution (OSCCR).
Additional Campus Resources

Counseling and Psychological Services (CAPS):
The University Counseling Center is dedicated to providing high quality mental health services that support students' ability to benefit from their experience at the University of Texas at El Paso. To this end the center provides career counseling, psycho-educational workshops, individual and group counseling, crisis intervention, and professional training experiences that are responsive to the individual, cultural, and demographic diversity of our students.

https://www.utep.edu/student-affairs/counsel/

Career Center:
The University Career Center has as its mission the career development of the students and alumni of The University of Texas at El Paso (UTEP); to assist in relating their knowledge, interests, and skills to meaningful career options; to inculcate in them the sense of professionalism required for success; to aid them in their search for pre-professional and professional employment; to ease their transition from the University to a productive career; and to assist them as they navigate the world of work.

https://www.utep.edu/student-affairs/careers/students-alumni/student-services.html

Math Resource Center for Students:
MARCS provides in person and online tutoring for all undergraduate level mathematics courses. When attending, please remember to bring your student ID in order to sign in.

marcs@utep.edu

For schedule information, please visit:
https://www.utep.edu/science/math/marcs/