Syllabus
EL 4396 –Capstone Design II: Development & Evaluation
Spring 2024

COURSE INFORMATION
EL 4396 – Design Capstone II: Development & Evaluation
CRN: 23045
Term: Spring 2024
Delivery Method: In-person
Meeting Day and Time: Wednesdays 1:30 – 4:20 pm; Fridays 3:00 – 5:00 pm
Location: E-Lead Studios Classroom

INSTRUCTOR INFORMATION
Lori Houghtalen, PhD, Assistant Professor
Written Communication: Email
(lmhoughtalen@utep.edu)
Phone Number: (915)747-6031
Office Location: Engineering Education and Leadership Dept Office
Office Hours:
• “Open Door” policy – if door is open, you may come in
• By appointment via calendly.com/lmhoughtalen

Roger V. Gonzalez, PhD, PE Chair and Professor
Written Communication: Email
(rvgonzalez@utep.edu)
Phone Number: (915)747-5909
Office Location: Engineering Education and Leadership Dept Office
Office Hours:
• “Open Door” policy – if door is open, you may come in
• By appointment via calendly.com/rvgonzalez

TA INFORMATION
Guillermo Beckman
Written Communication: Email (gabeckmann@miners.utep.edu)

COURSE DESCRIPTION
This course is the second semester of a two-semester capstone course. Engineering Leadership skills are applied to execute a successful real world project.
Pre-requisite: EL 4395

Updated 01/17/2024.
COURSE OBJECTIVES
By the end of the course, students will be able to:

- Accomplish the general scope and feasibility of the design and complete it with full documentation
- Demonstrate that the design has met objectives by developing and executing an appropriate evaluation plan
- Understand the impact of engineering solutions in a global and societal context
- Understand one's professional and ethical responsibility

REQUIRED MATERIALS
There are no required materials for students to acquire prior to the course. Selected readings may be assigned by the instructors and the industry mentor.

GRADE COMPONENTS AND DISTRIBUTION

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<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>SCRUM reports</td>
<td>5%</td>
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<tr>
<td>SCRUM presentations (2)</td>
<td>10%</td>
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<tr>
<td>Team Final Design Report</td>
<td>20%</td>
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<tr>
<td>Final Presentation</td>
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<tr>
<td>Mentor Evaluation</td>
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<tr>
<td>Final Project Video and Poster</td>
<td>10%</td>
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<tr>
<td>Friday components</td>
<td>25%</td>
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<td>Homework</td>
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<td>Quizzes</td>
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100-90% = A  89-80% = B  79-70% = C  69-60% = D  59% and Below = F

TECHNOLOGY REQUIREMENTS
Some course content is delivered via the Internet through the Blackboard learning management system. Ensure your UTEP e-mail account is working and that you have access to the internet and a stable web browser. Google Chrome and Mozilla Firefox are the best browsers for Blackboard; other browsers may cause complications. When having technical difficulties, update your browser, clear your cache, or try switching to another browser.

You will need to have access to a computer/laptop. You will need to download or update the following software: Microsoft Office, Adobe Acrobat Reader, Windows Media Player, QuickTime, and Java. Check that your computer hardware and software are up-to-date and able to access all parts of the course.

If you do not have word-processing software, you can download Word and other Microsoft Office programs (including Excel, PowerPoint, Outlook and more) for free via UTEP’s Microsoft Office Portal. Click the following link for more information about Microsoft Office 365 and follow the instructions.
IMPORTANT: If you encounter technical difficulties beyond your scope of troubleshooting, please contact the UTEP Help Desk as they are trained specifically in assisting with technological needs of students. Please do not contact me for this type of assistance. The Help Desk is much better equipped than I am to assist you!

COURSE COMMUNICATION:
Here are the ways we can keep the communication channels open:

- Office Hours are best scheduled through an appointment, see page 1 for information
- Email: UTEP e-mail is the best way to contact us. We will make every attempt to respond to your e-mail within 24 hours of receipt. When e-mailing us, be sure to email from your UTEP student e-mail account. In the body of your e-mail, clearly state your question. At the end of your e-mail, be sure to put your name.
- Announcements: Check Blackboard and your UTEP email frequently for any updates, deadlines, or other important messages.

ATTENDANCE AND PARTICIPATION
Attendance in the course is determined by participation in the learning activities of the course. Your participation in the course is important not only for your learning and success but also to create a community of learners. Participation is determined by the completion of the following activities:
  - Reading/Viewing all course materials to ensure understanding of assignment requirements
  - Participating in engaging discussions with your peers
  - Other activities as instructed.
Because these activities are designed to contribute to your learning each week, they cannot be made up after their due date has passed.

ILLNESS PRECAUTIONS
Please stay home if you have symptoms of a communicable illness. If you are feeling unwell, please let us know as soon as possible, so that we can work on appropriate accommodations.

EXCUSED ABSENCES AND/OR COURSE DROP POLICY
We will not drop you from the course. However, if you feel that you are unable to complete the course successfully, please let us know and then contact the Registrar’s Office to initiate the drop process. If you do not, you are at risk of receiving an “F” for the course.

DEADLINES, LATE WORK, AND ABSENCE POLICY
Assignments

- All assignments will be given a due date. No late work will be accepted if the reason is not considered excusable.

Absence Policy

- Attendance will be taken every class period. Every 2 unexcused absences constitute a letter grade (10%) deduction from your FINAL course grade (e.g., 4 absences is a 20% final grade deduction). Being Late for class, even by one second (per time.gov), without
extenuating circumstances, as determined by the professor, will be counted as an absence.

MAKE-UP WORK
Make-up work will be given only in the case of a documented emergency. Note that make-up work may be in a different format than the original work, may require more intensive preparation, and may be graded with penalty points. If you miss an assignment and the reason is not considered excusable, you will receive a zero. It is therefore important to reach out to me—in advance if at all possible—and explain with proper documentation why you missed a given course requirement. Once a deadline has been established for make-up work, no further extensions or exceptions will be granted.

ALTERNATIVE MEANS OF SUBMITTING WORK IN CASE OF TECHNICAL ISSUES
We strongly suggest that you submit your work with plenty of time to spare in the event that you have a technical issue with the course website, network, and/or your computer. We also suggest you save all your work in a separate Word document as a backup. This way, you will have evidence that you completed the work and will not lose credit. If you are experiencing difficulties submitting your work through Blackboard, please contact the UTEP Help Desk. You can email us your backup document as a last resort.

ACCOMMODATIONS POLICY
The University is committed to providing reasonable accommodations to students with documented disabilities. Students who become pregnant may also request reasonable accommodations, in accordance with state and federal laws and regulations and University policy. Accommodations that constitute undue hardship are not reasonable. To make a request, please register with the UTEP Center for Accommodations and Support Services (CASS). Contact CASS at 915-747-5148, email them at cass@utep.edu, or apply for accommodations online via the CASS portal.

SCHOLASTIC INTEGRITY
Academic dishonesty is prohibited and is considered a violation of the UTEP Handbook of Operating Procedures. It includes, but is not limited to, cheating, plagiarism, and collusion. Cheating may involve copying from or providing information to another student, possessing unauthorized materials during a test, or falsifying research data on laboratory reports. Plagiarism occurs when someone intentionally or knowingly represents the words or ideas of another as ones' own. Collusion involves collaborating with another person to commit any academically dishonest act. Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. All suspected violations of academic integrity at The University of Texas at El Paso must be reported to the Office of Student Conduct and Conflict Resolution (OSCCR) for possible disciplinary action. To learn more, please visit HOOP: Student Conduct and Discipline.

GUIDANCE ON ARTIFICIAL INTELLIGENCE
AI is allowed only with prior written permission from the instructor
Use of AI technologies or automated tools, particularly generative AI such as ChatGPT or DALL-E, is only allowed with PRIOR WRITTEN approval from the instructor BEFORE being used. Without permission, you will be expected to think creatively and critically to complete course-related 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 or deliverable must be included.

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).

PLAGIARISM DETECTING SOFTWARE
Some of your coursework and assessments may submitted to SafeAssign, a plagiarism-detecting software. SafeAssign is used to review assignment submissions for originality and will help you learn how to attribute sources correctly.

STUDENT RESOURCES: Where you can go for assistance
UTEP provides a variety of student services and support. Please refer to the QR code below for a listing of campus resources.