UNIV 1301: Foundations of Engineering

Fall 2020 │ CRN: 18884 │ TR 10:30-11:50am
*This is a synchronous, online course. There will be no on-campus meetings.

Instructor: Linda Vera
- TBA
- Blackboard Office Hours: TR 1:00-2:00pm or by appointment
- (915) 747-6779
- Use Blackboard email

Peer Leader: David Holguin
- TBA
- Office Hours: TBA
- (915) TBA
dholguin13@miners.utep.edu

Librarian: Debjani Mukhopadhyay
- Library 215
- Office Hours: M-F 8:00am-5:00pm by appointment
- (915) 747-6715
dmukhopadhyay@utep.edu

Required Text
Studying Engineering: A Road Map to a Rewarding Career │ 5th Edition
ISBN# 978-073809468-7
Bookstore

**Other required materials:**
- ✓ Scientific calculator.
- ✓ Electronic device for online course and test taking.
- ✓ One 3 ring binder or notebook for readings, class notes, and/or assignments

Course Description

“Foundations of Engineering” is the gateway to your engineering education at the University of Texas at El Paso and to the exciting profession of engineering. The foundations taught throughout the course are tools for developing skills that will enable you to become a successful student and engineering professional.

At the completion of this course you will begin to understand your role, opportunities and responsibilities that impact your success.
At the end of this semester, student will have achieved the following goals:

- Develop and apply elements of leadership through effective individual participation and meaningful team collaboration
- Examine the roles and responsibilities crucial for their success in college and beyond
- Identify, assess, and build on their strengths and experiences to develop academic and transitional strategies necessary for success in their academic, career, and life goals.
- Engage in research and critical thinking activities that demonstrate their ability to effectively integrate their learning within, across, and beyond academic settings
- Engage in campus and community activities to increase their sense of academic and social belonging

The UTEP Edge is our philosophy that acknowledges the many assets our students bring to the University. We provide a variety of high-impact experiences both in and out of the classroom through work of our faculty, staff, alumni, and community partners that build on these assets and talents.

**EDGE Activities & Advantages**

Many of the assignments and discussions in this class will further develop the talents you bring to this class such as developing your communication skills, teamwork, critical thinking, and problem solving. Participating in experiences such as research, civic engagement, student employment, and study abroad contribute to increasing your confidence, enhancing your personal and professional skills, and equip you with a competitive advantage for when you graduate and enter the workforce or pursue a graduate degree. It is this competitive edge that will prepare you for leadership and lifelong success.

**COVID-19 Precautions:**

You must STAY AT HOME and REPORT if you (1) have been diagnosed with COVID-19, (2) are experiencing COVID-19 symptoms, or (3) have had recent contact with a person who has received a positive coronavirus test. Reports should be made at screening.utep.edu. If you know anyone who should report any of these three criteria, encourage them to report. If the individual cannot report, you can report on their behalf by sending an email to COVIDaction@utep.edu.

For each day that you attend campus—for any reason—you must complete the questions on the UTEP screening website (screening.utep.edu) prior to arriving on campus. The website will verify if you are permitted to come to campus. Under no circumstances should anyone come to class when feeling ill or exhibiting any of the known COVID-19 symptoms. If you are feeling unwell, please let me know as soon as possible, and alternative instruction will be provided. Students are advised to minimize the number of encounters with others to avoid infection.
Wear face coverings when in common areas of campus or when others are present. You must wear a face covering over your nose and mouth at all times in this class. If you choose not to wear a face covering, you may not enter the classroom. If you remove your face covering, you will be asked to put it on or leave the classroom. Students who refuse to wear a face covering and follow preventive COVID-19 guidelines will be dismissed from the class and will be subject to disciplinary action according to Section 1.2.3 Health and Safety and Section 1.2.2.5 Disruptions in the UTEP Handbook of Operating Procedures.

Please note that if COVID-19 conditions deteriorate in the City of El Paso, all course and lab activities may be transitioned to remote delivery. UTEP does not want students returning to campus after the Thanksgiving break, so please plan accordingly.

**COVID-19 Accommodations:**

Students are not permitted on campus when they have a positive COVID-19 test, exposure or symptoms. If you are not permitted on campus, you should contact me as soon as possible so we can arrange necessary and appropriate accommodations.

Students who are considered high risk according to CDC guidelines and/or those who live with individuals who are considered high risk may contact Center for Accommodations and Support Services (CASS) to discuss temporary accommodations for on-campus courses and activities.

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**Course Start-Up Message from Instructor**

Dear Students,

All courses are designed to be a rich and rewarding experience, but it takes a little more work on everyone’s part than the one designated to class. The information in this post contains key elements that are important for your success in this class.

- **Begin building relationships right away.** Please make sure you read my introduction and post one of your own so that we can get to know each other. As others join the conversation, please read their introductions, too.

- **Have clear expectations.** University courses are a lot more flexible as far as class time, but they (often) take a lot more time than any other course you’ve taken before. The national consensus is that a three-credit course should take 6–9 hours of your time each week.

- **Students who set aside several short sessions throughout the week, at consistent times and days, have the most success in courses.** Brain research tells us that "all-nighters" and long cramming sessions are the least effective ways to learn and retain new information.

- **Presence and participation** are fundamental to your class success. It is recommended that you add major assignments to your calendar and work ahead on them a little each week, rather than try to knock them out all at once.

- **Read the syllabus and all course resource documents** (rubrics, major assignment descriptions, and so on).
**Ask questions.** Often time, the instructor can’t know your confusion or frustration unless you express it. If you are having a problem or any confusion, speak up sooner rather than later. Do not wait until an assignment is due to ask for clarification.

- **Make sure you have the books and other resources** you need (calculator, laptop, etc.).
- **Save all work** on a cloud storage system to prevent you from losing it; that way if your computer goes down you still have all your files and can work on a different computer.
- **Check your college email.** This is the way the college (and instructors) will communicate with you relevant information pertaining your academic life.
- **Download and save course resources you want to use often.** Download reading assignments posted in the Blackboard (BB) course, especially if you have unreliable internet or will be traveling — that way you can always do your assignment/reading.
- **Read all announcements** (BB Announcement Forum posts) in the course. These are messages from the instructor. They will often have notices of changes, hints, or preview upcoming assignments.
- **Use the “Help Board” question and answer forum** on BB. This forum allows you to get answers from the instructor and colleagues about general course topics.

I will pass along other hints as we go, but if you have any concerns, please ask… I am happy to help! It is my goal to make this the best course you have ever taken.

In short: Be prepared. Be organized. Be proactive.

Professor Vera

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### UNIV 1301 CLASS RESOURCES & SUPPORT

Student will receive considerable support during the course. UNIV 1301 will be taught by an instructional team consisting of an instructor, a Lower Division-Engineering Program Advisor, a student Peer Leader, and a university Librarian.

UTEP Resources, such as shown in the right table, will be recommended and incorporated for class activities and assignments.

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### COURSE ASSIGNMENTS & GRADING

<table>
<thead>
<tr>
<th>Grade</th>
<th>Assignment(s)</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>A</td>
<td>Homework/Assignments/quizzes</td>
<td>25%</td>
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<tr>
<td></td>
<td>Final 3D Design Project</td>
<td>20%</td>
</tr>
<tr>
<td>B</td>
<td>Attendance and class participation</td>
<td>15%</td>
</tr>
<tr>
<td>C</td>
<td>Presentations &amp; Research Reports</td>
<td>15%</td>
</tr>
<tr>
<td>D</td>
<td>2 Exams</td>
<td>15%</td>
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<tr>
<td>F</td>
<td>Mentoring and Final survey</td>
<td>10%</td>
</tr>
</tbody>
</table>

*Note: UNIV 1301 is part of the University Core Curriculum and requires a “C” grade or better in order to fulfill the core requirement and successfully complete the course.*
**Project:** Student will have to work on a team-based engineering design project. More information and deadlines about the project will be given at a later date. There will be no make ups for this project.

**Presentations:**
Student will have at least two presentations during the semester. These presentations will be team based, and there will be no make ups. The themes and guidelines of the presentations will be announced at a later date.

**Research:** There will be at least one research activity included in our class, which will require the use of the UTEP library and assistance of our librarian. More information and deadlines will be given at a later date.

**Homework & Assignments:**
Homework and assignments will be submitted using our Blackboard course shell. All assignments are due at the start of class at 10:30 AM on the deadline date, unless otherwise specified by instructor. Work can be submitted before the deadline in all instances. *Late work will NOT be accepted or graded.* If you are having an issue with Blackboard, email your work *before* the deadline to your instructor and let her know about the problem.

**Exams:** There will be two in-class (virtual) exams, focused on mathematical skills, textbook material, and assignments. Exams can only be made up for official university excused absences or with *prior* approval of the instructor. Additionally, validating proof of emergency will be required. Please check the undergraduate catalog for a list of official excused absences.

**Quizzes:** There will be several quizzes throughout the semester to provide you regular feedback on your performance in class, most of which will not be previously announced. **NO** make-up quiz will be given if you are late or absent for any reason.

**UNTV 1301 End-of-Semester Student Feedback Survey:**
You will receive a message to your UTEP email during the last 3 weeks of the semester. You are required to complete and return the survey. Doing so will count towards 10% of your final grade. This is a required assignment and I will get notified of the students that completed the survey; your answers will remain anonymous and not be disclosed.

**Mentoring:** During the semester, you will be meeting at least three times with the instructional team (instructor and peer leader). Additional meetings may be required to discuss academic progress and to explore options for improvement. This meeting(s) will count towards 10% of your final grade.

**Attendance:** Attendance will be monitored by your logging into Blackboard Collaborate Ultra for each class period (TR 10:30–11:50am). Students are expected to log in every class period, **be on time**, and be fully prepared each day with class material and activities. If you do not log in, you will be counted as Absent. Note that there are two types of absences (Excused and Unexcused). **Excused** absences are discussed in the **UTEP Undergraduate Catalog**, under the “Class Attendance” section. Absences which are not excused are deemed **unexcused**.
If you are absent, you must contact your peer leader and/or instructor prior to class for these to be properly documented. If you wish that your absence be counted as excused, then you should be prepared to present evidence to that effect when you contact your peer leader and/or instructor.

Unsatisfactory attendance consists of absences, tardiness, leaving the class early, or coming to class unprepared to participate (without texts or assignments). When a student has compiled a total of FOUR instances of unsatisfactory attendance, he/she may be dropped at the discretion of the instructor; before the drop date the student will receive a W, after the drop date the grade will be an F.

In the event of an absence or delay, it will be your responsibility to get all the lecture notes, assignments, and hand-outs you missed.

Class recordings: Lectures will be recorded. If you miss a class, please access the recording. You may access the recordings by following the step-by-step instructions that appear in the Appendix (Accessing Recordings).

Activities & Class participation:
Class functionality, assignments and activities rely heavily on your early understanding of expectations. This is NOT a self-paced course and the calendar must be followed. Online participation is REQUIRED. You are expected to complete the weekly modules by the posted due dates. Module completion will include discussions boards postings; completing assignments, tasks, and quizzes; and engaging with your peers via discussion groups. You are also required to respond to all emails and complete conferences with the Peer Leader and instructor.

As part of your homework, you will be required to attend at least 3 UTEP events for which you will show proof of attendance and a reflection page.

Class experts: During several class meetings, approximately 4 students will be chosen at random to be “class experts” and lead in-class group discussions. If you are not present and prepared on the day you are “a class expert” you will lose participation points.

Blackboard Discussion Boards: There will be Blackboard discussion boards throughout the semester. These will require an initial posting with a minimum of 150 words and a minimum of 50-word response to TWO of your fellow student’s postings. Responses must be posted by 11:00 pm on the due date for full credit.

Failure to complete at least 70% of the coursework at the end of any week will result in a drop. Exceptions will be made only for documented medical emergencies.

Neglect and Lack of Effort: UTEP defines “neglect” as not paying attention or caring and defines “lack of effort” as not meeting course requirements. In an online course “neglect” is not logging into the course consistently each week; “lack of effort” is not completing 70% of the coursework at the end of any week (as outlined above). Both neglect and lack of effort are considered non-exempt drops and count towards the six-course drop limit.
COURSE MANAGEMENT SYSTEM

Blackboard (BB) is the online course management system we will use throughout the semester. You can access BB through my.utep.edu. Blackboard must be checked daily as we will heavily use this course for:

- Virtual class meetings and class announcements.
- View and download syllabus, course calendar, assignments, and other supplemental material.
- Send e-mails to your instructor, peer leader or classmates.
- Participation in online discussion groups/boards with classmates.
- Submission of assignments and tests.

The Blackboard app is great for course announcements, emails, and discussions. However, a desktop or laptop computer is recommended for downloading and/or reading course materials, uploading documents or submitting assignments. If you need assistance with BB, please contact the Help Desk at helpdesk@utep.edu, 747-5257. Should BB go down for maintenance or other interruptions, email your instructor for assistance.

Please take time to review the Technology Support’s website for Classroom Tools for Blackboard so you are ready for online learning.

TECHNICAL REQUIREMENTS

✓ A computer with a stable internet access, a webcam, and a microphone. This course cannot be completed without access to a computer or the internet. Inability to complete an assignment due to the limitations of the Blackboard app on phones or tablets is not an acceptable reason to miss an assignment or to not follow deadlines or directions.

✓ Ensure your UTEP e-mail account is working and that you have access to a web browser that supports Blackboard, YouTube, TED Talks, Yuja, Kanopy, and other forms of media as needed throughout the course. Mozilla Firefox and Google Chrome are the most supported browsers for BB.

✓ You will need to download/update the following softwares: Microsoft (MS) Office, Adobe, FlashPlayer, Windows Media Player, QuickTime. Check that your computer hardware and software are up-to-date and able to access all parts of the course. Microsoft Office 365 or equivalent. Assignments must be submitted as a Word document (doc or docx) or PDF. Attachments in any other format will not be graded.

You can download a free copy of MS Office as a UTEP student here.

✓ When having technical difficulties, update your browser, clear your cache, or try switching to another browser. If technical difficulties persist beyond your scope of troubleshooting, please contact the Help Desk as they are trained specifically in assisting with technological needs of students.

✓ Check that your computer hardware and software are up-to-date and able to access all parts of the course.

SYLLABUS CHANGE

Except for changes that substantially affect the grading statement, this syllabus is a guide for the course and is subject to change with advance notice. It is your responsibility to be aware of all the policies and information in this syllabus. If there is anything you do not understand, ask your instructor.

UTEP Policies

Students with Disabilities: If you have or suspect a disability, the ADA requires that reasonable accommodations be provided for students with disabilities. Please contact CASS at 747-5148, Union East Building 106, or cass@utep.edu.

Student Conduct: [From the Handbook of Operating Procedures: Student Conduct and Discipline] Each student is responsible for notice of and compliance with the provisions of the Regents’ Rules and Regulations and The University of Texas System in the course of his or her authorized duties, and to observe standards of conduct appropriate for an academic institution.

Academic Integrity: [From the Handbook of Operating Procedures: Student Affairs] Any student who commits an act of scholastic dishonesty is subject to discipline. 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.

Copyright Statement: Some of the materials in this course are copyrighted. Violation of US copyright law can result in civil damages up to $100,000 for each work copied. Copying of textbooks is not “fair use” under the Copyright Act, which only permits non-commercial copying of part (in general, not more than 10%) of a copyrighted work. Do not bring a copied textbook to this class. Your cooperation is expected.
Always consider the audience. Remember that members of the class and the instructor will be reading any postings. Respect and courtesy must be provided to classmates and to instructor at all times.

Be respectful of other’s ideas, opinions, and beliefs. It’s fine to disagree with someone, but please respect their right to think differently. Do not attack or insult your classmates, peer leader, or instructor. No harassment or inappropriate postings will be tolerated.

When responding to posts, be sure to address the idea and not the person. You should never use insults or resort to name-calling, as neither are appropriate in an academic setting.

With that said, keep in mind that interacting online doesn’t allow for the use of facial expressions and other non-verbal cues to convey meaning; be cautious of the tone used in your posts and don’t assume an emoticon (😊) will convey your tone or intent.

All inappropriate posts/emails will be reported to UTEP’s Office of Student Conduct & Conflict Resolution office for review.

Blackboard is not a public internet venue; all postings to it should be considered private and confidential. Whatever is posted on in these online spaces is intended for classmates and professor only. Please do not copy documents and paste them to a publicly accessible website, blog, or other space. If students wish to do so, they have the ethical obligation to first request the permission of the writer(s).
<table>
<thead>
<tr>
<th>Week 1</th>
<th>Date</th>
<th>Class Topic (subject to change)</th>
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<tbody>
<tr>
<td>8/27</td>
<td>Syllabus Overview. UTEP Edge in-class activity.</td>
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<tr>
<td><strong>Week 2</strong></td>
<td>9/1</td>
<td>Ch. 1 Keys to Success in Engineering Study/GRIT</td>
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<td>9/3</td>
<td>Ch. 2 The Engineering Profession – CHOICES 360</td>
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<td><strong>Week 3</strong></td>
<td>9/8</td>
<td>Career Center Services – Resume Writing STAR Method</td>
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<td>9/10</td>
<td>1st Library Orientation Visit (Library room 204A)</td>
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<td><strong>Week 4</strong></td>
<td>9/15</td>
<td>Introducing the UTEP Edge</td>
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<td>9/17</td>
<td>StrengthsFinder Workshop</td>
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<td><strong>Week 5</strong></td>
<td>9/22</td>
<td>Leadership and Teamwork (6.7) – Engineering Design Process</td>
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<td>9/24</td>
<td>Fusion 360 &amp; 3DPrinterOS Training</td>
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<td><strong>Week 6</strong></td>
<td>9/29</td>
<td>Informational Session by Advisor &amp; Ch. 8</td>
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<td>10/1</td>
<td>Math Topic #1: Unit conversion &amp; Significant / Quiz</td>
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<td><strong>Week 7</strong></td>
<td>10/6</td>
<td>Ch. 4 Making the Most of How you are Taught</td>
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<td>10/8</td>
<td>Office of Student Conduct and Conflict Resolution (OSCCR)</td>
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<td><strong>Week 8</strong></td>
<td>10/13</td>
<td>Ch. 5 Making the learning process work for you</td>
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<td>10/15</td>
<td>EXAM I</td>
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<td><strong>Week 9</strong></td>
<td>10/20</td>
<td>2nd Library Visit (Library room 204B) – Research Topic</td>
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<td>10/22</td>
<td>WIX Training &amp; Guide for presentations</td>
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<td><strong>Week 10</strong></td>
<td>10/27</td>
<td>Counseling Center</td>
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<td></td>
<td>10/29</td>
<td>Student Tutoring/Support Centers presentations</td>
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<td><strong>Week 11</strong></td>
<td>11/3</td>
<td>Ch. 3 Understanding the Teaching and Learning Process</td>
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<td>11/5</td>
<td>COURI &amp; Ch. 6 Personal Growth &amp; Student Development</td>
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<td><strong>Week 12</strong></td>
<td>11/10</td>
<td>Undergraduate Research Opportunities</td>
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<td></td>
<td>11/12</td>
<td>Math Topic #2: Vectors / Quiz</td>
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<td><strong>Week 13</strong></td>
<td>11/17</td>
<td>SELC &amp; MineTracker Presentations</td>
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<td>11/19</td>
<td>Ch. 7 Broadening your education &amp; ESLC/Student Org. Presentations</td>
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<tr>
<td><strong>Week 14</strong></td>
<td>11/24</td>
<td>Study Abroad</td>
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<td></td>
<td>11/26</td>
<td>Thanksgiving Holiday – No Classes</td>
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<td><strong>Week 15</strong></td>
<td>12/1</td>
<td>Research Topic Presentations</td>
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<td></td>
<td>12/3</td>
<td>Research Topic Presentations</td>
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</tbody>
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**Week 16:** **FINAL PROJECT PRESENTATIONS**  
Day & Time TBA
Appendix (Accessing Recordings)

To access class recordings through BB Collaborate Ultra, please follow the steps below in our Blackboard course.

1. Log into BB and locate the “Online Course” link under our Course Content menu.

2. Click on the “Menu” button located in the upper left corner of the BB Collaborate Ultra page.
3. When the menu expands, click the “Recordings” link.

Appendix (Accessing Office Hours)

Your professor and Peer Leader will be hosting their office hours through Blackboard Collaborate Ultra. To access the office hours for your instructor or peer leader, please follow the steps below in our Blackboard course.

1. Log into BB and locate the “Online Course” link under our Course Content menu.
2. Under the BB Collaborate Ultra “Session” page you will find the recurring sessions for your Peer Leader and instructor’s office hours.

3. On the right side of the screen click the drop down button called “Show Occurrences”

4. This will show all occurrences of your Peer Leader or Instructor’s Office Hours during the semester, in chronological order.