UNIV 1301: Foundations of Engineering
Spring 2020 | CRN: 26390 | TR 12:00-1:20pm

Instructor: Linda Vera
Engineering Bldg. E201B
Office Hours: M 1:00-2:00pm
W 11:30am-12:30pm or by appointment
(915) 747-6779
Use Blackboard email

Peer Leader: Ernesto Gamboa Tiscareno
UGLC Rm. 214
Office Hours: W 12:00-1:00pm, F 11:00-1:00pm
by appointment
(915) TBA
egamboatiscareno@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.
✓ One 3 ring binder or notebook for readings/handouts, class notes, assignments and/or discussions.

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

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.
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.

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.

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

The UTEP Edge

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EDGE Activities & Advantages

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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.

- Library
- Writing Center
- ACES
- Math Resource Center
- Miner Learning Center
- Career Services
- Computer labs
- Counseling & Psychological Services
Grading

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<thead>
<tr>
<th>Grade</th>
<th>Description</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>A</td>
<td>Final 3D Design Project</td>
<td>20%</td>
</tr>
<tr>
<td></td>
<td>Attendance and class participation</td>
<td>15%</td>
</tr>
<tr>
<td>B</td>
<td>Presentations &amp; Research Reports</td>
<td>15%</td>
</tr>
<tr>
<td>C</td>
<td>2 Exams</td>
<td>15%</td>
</tr>
<tr>
<td>D</td>
<td>Mentoring and Final survey</td>
<td>10%</td>
</tr>
<tr>
<td>F</td>
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*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 three 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 must be turned in at the beginning of the class on the due date. It should be stapled and flat (do not fold). Late homework will NOT be accepted, unless there is a case of illness or an emergency, in which case you are responsible for notifying your instructor or peer leader before class of the situation necessitating late submission of homework; validating proof of the illness or emergency will be required.

Some assignments will be submitted using our Blackboard shell. Specific instructions and due dates for assignments will be given either in class or through Blackboard. No late assignments will be accepted.

**Exams:**
There will be two in class exams, focused on mathematical skills, lecture material, and assignments. No retakes of the exams will be given without prior approval of the instructor. If you encounter an emergency and are unable to attend the exam you must notify us prior to the exam to be allowed to make it up. Additionally, validating proof of illness or emergency will be required.

Exams can only be made up from the day the exam is given in class to the next class day. Example: if the exam is on a Tuesday, you can take the exam on that Tuesday, Wednesday (the next day) and Thursday (prior to the class time).

**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.
Attendance:

Students are expected to attend every class, **be on time**, and be fully prepared each day for class material and activities. Unsatisfactory attendance consists of absences, tardiness, leaving the classroom 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, you must contact your instructor **prior** to class for these to be properly documented. Excused instances will be determined by instructor. It will be **your responsibility** to check with classmates to find out what you missed in class.

Absences for University-recognized activities (such as athletics, band/orchestra, conferences or field trips), religious holy days, or military leave, will be excused only if I am notified prior to the event.

Activities & Class participation:

There will be several group and individual activities throughout the semester. There will be no make up for any of the class activities. As part of your homework, you will be required to attend at least 2 UTEP events for which you will show proof of attendance (TBA).

Class participation will be tested in various ways during the course, which include Blackboard discussion boards, participation in group and in-class discussions, reflection paper, class experts etc. Thus, student must bring all reading material assigned to class. Failure to do so may result in lost participation points.

**Class experts**: During several class meetings, approximately 4 students will be chosen at random to be “class experts.” These students will be called upon to 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**: This will be a technologically enhanced course using Blackboard. If you need assistance with Blackboard, please contact the Help Desk. There will be Blackboard discussions throughout the semester. These questions will require an initial posting with a minimum of 150 words and a minimum of 50-word response to one of your fellow student’s postings. Responses must be posted by 11:00 pm on the due date for full credit.

**Survey**: Upon the end of the semester, you will receive an invitation through your UTEP email to complete a ESP Student Feedback Survey which 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 or not, your answers will remain anonymous and not be disclosed.

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

Except for changes that substantially affect the evaluation (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 me.

TECHNOLOGY DEVICES

Use of any type of technology device during class and examinations is completely prohibited. Cellphones should be in silent mode or turned off before coming to class. If a student is found using their cellphone or smart watch, or if phone is ringing, they will be asked to leave the class and will not be allowed to come back until next class considering this as an absence. Use of laptops and tablets will only be permitted if the professor requires it for class. Do not use web browser features on phones, laptops, or tablets while in class unless it relates to class material.

TECHNOLOGY ISSUES

Let’s face it: technology breaks. Servers go down, transfers time out, files become corrupt… the list goes on and on. These are not considered emergencies. They are part of the normal production process. An issue you may have with technology is no excuse for late work. You need to protect yourself by managing your time and backing up your work.

Academic integrity

Academic dishonesty is a very serious matter and will NOT be tolerated. Scholastic dishonesty includes, but is not limited to cheating, plagiarism, collusion, 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.

It is the official policy of the University that all suspected cases or acts of alleged scholastic dishonesty must be referred to the Dean of Students for investigation and appropriate disposition. Any student who commits an act of scholastic dishonesty is subject to discipline.

Student conduct

Students are expected to have courteous behavior during class interactions, either in-person or during on-line discussions. I expect everyone to respect others’ opinions, listen and respond politely to others’ ideas, remain sensitive to the feelings of other class members, and take responsibility for moving the class discussion forward by remaining on topic.

Please be aware that harassment is unacceptable in any professional environment. No offensive comments of sexual nature, religion, race, or gender will be tolerated. The student that uses harassment will be sent to the Dean of students for disciplinary action.

Each student is responsible for notice and compliance with the provisions of the Regents’ Rules and Regulations (50000: Student Issues) or in the UTEP catalog Policy (http://catalog.utep.edu/undergrad/academic-regulations/student-life-policies-and-procedures/).
Center for Accommodations and Support Services (CASS)

Please be aware that the Center for Accommodations and Support Services provides a program of support and advocacy services to students with disabilities. If you have or suspect a disability and need an accommodation you should contact Center for Accommodations and Support Services (CASS) at 747-5148, via email at cass@utep.edu, or go to Room 106 Union East Building.

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. The “fair use doctrine” 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.

IMPORTANT SPRING 2020 DATES

Jan 20  Dr. Martin Luther King, Jr. Holiday – University Closed
Jan 21  Spring classes begin
Feb 5  Census Day (Last day to drop without record on transcript)
Feb 7  Engineering & Science Career Fair, 9:00am-2:00pm, Union East, 3rd Floor

March – Advising Season... Get Advised!

Mar 13  🌸 TCM Day 2020! – tcm.utep.edu
Mar 16-20  Spring Break – No Classes
Mar 21  Midterm Grades Available
Mar 27  Cesar Chavez Holiday – University Closed
Mar 30  Summer/Fall 2020 Registration Begins
Apr 3  Course Drop Deadline (Last day to drop classes)
Apr 10  Spring Study Day – No Classes
Dec 5  Last day of classes / Last day to Withdraw

May 8 – UNIV 1301 End of semester survey Deadline

May 8  Dead Day – No Classes
May 9  Entering Students Research & Creative Projects Showcase
May 11-15  Final Exams
May 21  Final Grades Available
<table>
<thead>
<tr>
<th>Date</th>
<th>Class Topic (subject to change)</th>
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<tbody>
<tr>
<td>Week 1</td>
<td>1/21 Introduction. “Meet &amp; Build” in-class activity.</td>
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<td>1/23 Syllabus &amp; Blackboard overview. UTEP Edge in-class activity</td>
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<tr>
<td>Week 2</td>
<td>1/28 Ch. 1 Keys to Success in Engineering Study/GRIT</td>
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<td>1/30 Career Center Services – Resume Writing STAR Method</td>
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<td>Week 3</td>
<td>2/4 Introducing the UTEP Edge</td>
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<td>2/6 Ch. 2 The Engineering Profession – CHOICES 360</td>
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<td>Week 4</td>
<td>2/11 1st Library Orientation Visit (Library room 204A)</td>
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<td>2/13 StrengthsFinder Workshop</td>
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<td>Week 5</td>
<td>2/18 Leadership and Teamwork (6.7) – Engineering Design Process</td>
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<td>2/20 Fusion 360 &amp; 3DPrinterOS Training</td>
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<td>Week 6</td>
<td>2/25 Informational Session by Advisor &amp; Ch. 8</td>
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<td>2/27 Math Topic #1: Unit conversion &amp; Significant / Quiz</td>
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<td>Week 7</td>
<td>3/3 Ch. 4 Making the Most of How you are Taught</td>
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<td>3/5 Office of Student Conduct and Conflict Resolution (OSCCR)</td>
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<td>Week 8</td>
<td>3/10 Ch. 5 Making the learning process work for you</td>
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<td>3/12 EXAM I</td>
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<td>Week 9</td>
<td>3/17 <em>Spring Break – No Classes</em></td>
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<td>3/19 <em>Spring Break – No Classes</em></td>
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<tr>
<td>Week 10</td>
<td>3/24 2nd Library Visit (Library room 204B) – Research Topic</td>
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<td>3/26 WIX Training &amp; Guide for presentations</td>
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<td>Week 11</td>
<td>3/31 Student Tutoring/Support Centers presentations</td>
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<td>4/2 Counseling Center</td>
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<td>Week 12</td>
<td>4/7 Ch. 3 Understanding the Teaching and Learning Process</td>
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<td>4/9 Math Topic #2: Vectors / Quiz</td>
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<td>Week 13</td>
<td>4/14 COURI &amp; Ch. 6 Personal Growth &amp; Student Development</td>
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<td>4/16 Undergraduate Research Opportunities</td>
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<td>Week 14</td>
<td>4/21 SELC &amp; MineTracker Presentations</td>
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<td>4/23 ESLC/Student Org. Presentations &amp; Ch. 7 Broadening your education</td>
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<tr>
<td>Week 15</td>
<td>4/28 Study Abroad</td>
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<td>4/30 Research Topic Presentations</td>
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<td>Week 16</td>
<td>5/5 Review for Exam II</td>
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<td>5/7 EXAM II</td>
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<td><strong>Week 17: FINAL PROJECT PRESENTATIONS</strong></td>
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<td><strong>TUESDAY May 12th – 1:00pm-3:45pm</strong></td>
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