UNIV 1301: Foundations of Engineering
CRN: 22596, MW 10:30-11:50am
Course Syllabus
Spring 2019

Instructor
Linda Vera
Phone: 747-6779
Email: lsvera@utep.edu
Office: Engineering Bldg. E201B
Office Hours: T 10:30am-12:00 pm or by appointment

Peer Leader
Priscila Balanzar Almazan
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Office: TBA
Office Hours: MW 12:00-1:00pm or by appointment

Librarian
Debjani Mukhopadhyay
Phone: 747-6715
Email: dmukhopadhyay@utep.edu
Office: Library 215

Required Text:

Other materials needed:
✓ 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

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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 instructor) 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.

**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.

**Resources and 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 the Library, Writing Center, Math Resource Center, ACES, Miner Learning Center, Computer labs, Career Services, and Counseling Center will be recommended and incorporated for class activities and assignments.

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- Download and save course resources you want to use often. Download reading assignments posted in the Blackboard (Bb) course shell, especially if you will be traveling or have unreliable internet — 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 challenges, 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
### Grading

| 100%-89% | A  | 2 Exams | 15% |
| 88% -78% | B  | Final 3D Design Project | 20% |
| 77% -67% | C  | Presentations & Research Reports | 15% |
| 66% -56% | D  | Homework/ Assignments/quizzes | 25% |
| 55% - 0% | F  | Attendance and class participation | 15% |

*MNote: 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.

### Presentation:
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 as soon as possible (*before class*) of the situation necessitating late submission of homework; validating proof of the illness or emergency will be required. Some assignments may 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, you must provide proof for the reason of being absent.
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. Unavoidable absence that are properly documented may be excused at the discretion of the instructor.

In the event of an absence or delay, you must contact your instructor prior to class. 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 100 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.
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.

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 examinations is completely prohibited. Set your phone to mute or silent mode before coming to class. Do not answer incoming calls, make outgoing calls, or text message. Use of cellphones or smart watches is not acceptable during class. If a student is found using his/her cellphone or smart watch, 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/#IllegalSubstances).

**Center for Accommodations and Support Services (CASS)**

Please be aware that the Center for Accommodations and Support Services (Union East, room 106, 747-5148) 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 2019 Dates

Jan 21  Dr. Martin Luterh King, Jr. Holiday – University Closed
Jan 22  Spring classes begin
Feb 6   Census Day (Last day to drop without record)

February – Advising Season... Get Advised!

Feb 8   Engineering & Science Career EXPO, 9:00am-2:00pm
Mar 18-22 Spring Break – No Classes

Mar 15  🌷 TCM Day! – tcm.utep.edu
Mar 27  Internship & Part-Time Job Fair, 9:00am-1:00pm
Mar 29  Cesar Chavez Holiday – University Closed
Apr 5   Course Drop Deadline (Last day to drop classes)
Apr 19  Spring Study Day
May 9   Last day of classes / Last day to Withdrawal
May 10  Dead Day – No Classes

May 10 - UNIV 1301 End-of-semester survey Deadline

May 11  Entering Students Research & Creative Projects Showcase
May 13-17 Final Exams
May 23  Final Grades Available
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<thead>
<tr>
<th>Date</th>
<th>Class Topic (subject to change)</th>
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<td>Week 1</td>
<td>1/21 Martin Luther King Jr. Day – University closed</td>
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<td>1/28 Syllabus &amp; Blackboard overview.</td>
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<td>1/30 Ch. 2 The Engineering Profession – CHOICES 360</td>
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<td>2/04 Career Center Services – Resume Writing STAR Method</td>
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<td>Week 3</td>
<td>2/06 Ch. 1 Keys to Success in Engineering Study/GRIT,</td>
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<td>2/11 1st Library Orientation Visit (Library room 204A)</td>
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<td>2/13 Introducing the UTEP EDGE</td>
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<td>2/18 Strengths’ Finder</td>
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<td>2/20 Leadership and Teamwork (6.7) – Engineering Design Process</td>
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<td>Week 4</td>
<td>2/25 Fusion 360 &amp; 3DPrinterOS Training</td>
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<td>2/27 Ch. 4 Making the Most of How you are Taught</td>
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<td>3/4 Math Topic #1: Unit conversion &amp; Significant Figures</td>
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<td>3/6 Engineering Info Session &amp; Ch. 8</td>
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<td>3/20 Spring Break – No Classes</td>
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<td>Week 6</td>
<td>3/25 Movie Maker &amp; Guide for presentations</td>
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<td>3/27 2nd Library Visit (Library room 204A) – Research Topic</td>
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<td>One-on-one meeting with Instructor</td>
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<td>Week 7</td>
<td>4/1 Office of Student Conduct and Conflict Resolution (OSCCR)</td>
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<td>4/3 Student Tutoring/Support Centers presentations</td>
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<td>4/8 Counseling Center – Project Design Report Out</td>
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<td>4/10 Ch. 3 Understanding the Teaching and Learning Process</td>
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<td>Week 9</td>
<td>4/15 Math Topic #2: Linear Equations</td>
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<td>4/22 Ch. 6 Personal Growth and Student Development</td>
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<td>4/24 SELC &amp; ESCC Presentations</td>
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<td>Week 11</td>
<td>4/29 Ch. 7 Broadening your education</td>
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<td>5/1 Research Topic Presentations</td>
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<td>5/8 EXAM II</td>
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<td>Week 13</td>
<td>Week 17: FINAL PROJECT PRESENTATIONS FRIDAY May 17th – 10:00am-12:45pm</td>
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