

University of Texas at El Paso
Foundations of Engineering
UNIV 1301
Fall 2018

Course Information:

Classroom: Liberal Arts Building (LART) 207

CRN: 17992

Class Time: TR 7:30 am - 8:50 am

INSTRUCTOR:	Eric Galvan
OFFICE:	E325 - Engineering Building
PHONE:	TBD
EMAIL:	egalvan4@miners.utep.edu
OFFICE HOURS:	TR 11:00 am - 12:00 pm or by appointment
PEER LEADER:	Fernando Gonzalez Chavez - fugonzalezc@miners.utep.edu Office: UGLC 214 Office Hours: MW 10:30 am – 11:30 am
ADVISOR:	Patricia Mendoza - pamendoza@utep.edu
LIBRARIAN:	Debjani Mukhopadhyay - dmukhopadhyay@utep.edu
TEXT:	Studying Engineering: A Road Map to a Rewarding Career, 4 th Edition, by Raymond B. Landis (2013). Los Angeles: Discovery Press.

Other materials needed:

One 3 ring binder or notebook for readings/handouts, class notes, assignments and/or journal entries.

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. You will have the opportunity to make meaningful connections to the magic of engineering and to contribute to the UTEP legacy of leadership in developing outstanding students and career professionals. The Foundations **you** build will enable you to be a successful student and a successful engineer!

The foundations are tools for developing:

- Academic skills and personal growth skills
- Engineering skills in critical thinking and problem solving
- Mathematical tools and applications for engineering
- Connections with the engineering profession and opportunities to appreciate the world of engineering

At the end of the semester you will:

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

The Center for Accommodations and Support Services (CASS):

Students who have or suspect a disability and need an accommodation, must contact the CASS office and provide their instructor with the proper documentation at the beginning of the semester. CASS office may be contacted at 747-5148, cass@utep.edu or go to Room 106 Union East Building.

Grading:

Attendance	10%
3 Exams	30%
Projects, Presentations, Research and Reports	30%
Homework, Quizzes, Class Participation, In-Class and Outside Activities, and Final Survey	20%
Mentoring (both Professor and Peer Leader)	10%

Project: The project will be a team design engineering project. More information and deadlines about the project will be given at a later date.

Presentation: The presentation will be about the project you designed. It will be a fifteen-minute presentation using power point. All of the team members are required to present.

Homework: The homework must be turned in at the beginning of the class by the due date. As part of your homework, you may be required to have at least 1 mentoring session and attend some UTEP events.

Quizzes: The quizzes will be given at the beginning of the class. No make-up quiz will be given if you are late or absent without valid reason.

Class Participation and Activities:

There will be many in class group and individual activities. In order to get a grade for them you must participate in the activity. There will be no make up for any of the class activities.

Survey: There will be an end-of-semester survey. Your participation is important and it will count as a homework and class activity.

Grading Scale:

A	100-90%
B	89-80%
C	79-70%
D	69-60%
F	59-0%

Attendance:

You are required to come to class and be on time. Attendance is very important since during class you will be given the tools needed to successfully complete this class. You must contact your peer leader and/or instructor if you know you will be absent either by phone or email. It is your responsibility to get all the lecture notes, assignments, and hand-outs you missed. An excused absence will only be given as described in the undergraduate catalog. Please keep in mind that you will be dropped after 6 unexcused absences. However, if you want to be dropped at any time, you must contact your professor and peer leader.

Mentoring:

You will be meeting, on a one-to-one basis, with your peer leader and your instructor at least once during the semester.

Missing assignments and exams:

- You will be allowed one make up homework assignment during the course of the semester. 20 points will be deducted for each week the assignment is late.
- 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). However, 30 points will be deducted from your actual grade for missing an exam without valid reason

Academic Conduct:

Scholastic dishonesty will not be tolerated. 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. If you are found to be cheating or plagiarizing, you will be subject to disciplinary action, per UTEP catalog policy (<http://www.utep.edu/dos/acadint.htm>).

Cell Phone:

All cell phones must be turned off before the beginning of the class. If a student forgets to turn it off, he/she will have to leave the classroom and may only return with the instructor's permission.

Harassment:

Please be aware that harassment is unacceptable in the classroom. Members of the UTEP community are protected from discrimination and harassment by State and Federal Laws. Jokes, comments of sexual nature, as well as racist comments will not be tolerated. The student that violates this rule will be sent to the Dean of students for disciplinary action.

The instructor reserves the right to make any changes to the syllabus during the term of the semester. Any changes made to the syllabus will be notified to the students by the instructor prior to the lecture week.

I welcome you to a new semester and hope that you will make the effort to learn as much as you can. I know each one of you has the potential to make an A.

Important Fall 2018 Dates:

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| • Labor Day – No classes | September 3 |
| • Census Day | September 12 |
| • Homecoming Week | September 30-October 6 |
| • Drop/Withdrawal deadline | November 2 |
| • Thanksgiving – No classes | November 22 – 23 |
| • Dead Day | December 7 |
| • Entering Student Research and Creative Projects Showcase | December 8 |
| • Final Exams | December 10 – 14 |
| • Final Grades are posted to student records | December 19 |

Important Fall 2018 College of Engineering Dates:

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| • Gold Rush | September 5 |
| • ACES Ninjaneer Nacho Night – come learn about service opportunities | September 12 |
| • ESLC General Meeting (1:30 @ ACES) | September 14 |
| • Career Expo; ACES closed | September 20 & 21 |
| • ACES Video Game event | October 17 |
| • ACES Costume Contest | October 31 |
| • ACES Bike Ride (get ready for finals 12pm) | November 14 |
| • NSPE-TX Engineering Mixer for Professional Engineers | November 15 |

Tentative Course Lecture Calendar:

Date		Class Topic <i>(subject to change)</i>	Homework
Week 1	08/28	Introduction. Syllabus. Talk About High Impact Practices (UTEP Edge). In Class activity.	Buy Textbook. Read Prologue and bring exercise next class
	08/30	BOOK-CHAPTER 1-Keys to Success in Engineering Study. Group Discussion. Leadership in Class Exercise #1	Book Homework & Leadership Skills Inventory -Due Next Class
Week 2	09/04	BOOK-CHAPTER 2- The Engineering Profession. Activities.	Assignment on ENGR Career-Due Next Class
	09/06	In-class activity using Choices 360 to clarify their career goals and write a journal entry reflecting on them	Homework on Choices 360 & Assignment on Long and Short-Term Goals Bring current resume or resume draft-Due Next Week Library Modules-Due Before Next Class
FIRST LIBRARY VISIT			MUST HAVE FIRST LIBRARY VISIT
Week 3	09/11	First Library Visit- Orientation	Scavenger Hunt
	09/13	Resume Writing/STAR Method/Resume Worksheet	Revised Resume -Must Include STAR Statements- Due Next Week
Week 4	09/18	BOOK-CHAPTER 3-Understanding the Teaching and Learning Process	Book Homework -Due Next Class
	09/20	Math/Engineering skills development (Units and conversions) Send Students to CAREER EXPO	Homework – Math in Engineering Group Presentation - Due Next Week CAREER EXPO Homework
Week 5	09/25	BOOK-CHAPTER 4-Making the Most of How you are Taught.	Book Homework-Due Next Class
	09/27	Math/Engineering skills development (Math in Engineering Presentation)	Homework – Write Summary of Math in Engineering Presentations - Due Next Class
ADVISOR PRESENTATION			
Week 6	10/02	Compliance. Advisor Presentation. Degrees. Catalog. Policies. GPA Calculation. Leadership In-Class Exercise #2	Write About Event/Experience Leadership Assignment 2-Due next week
	10/04	BOOK-CHAPTER 5-Making the Learning Process Work for You. Review Exam 1.	Book Homework-Due Next Class Study for Exam
Week 7	10/09	Exam 1.	
	10/11	Mentoring. Talk to students one on one	
OCCCR PRESENTATION			

Week 8	10/16	OCCCR Presentation & Case Studies	Reflection on Presentation-Due Next Class
	10/18	BOOK-CHAPTER 6 -Personal Growth and Student Development.	Book Homework-Due Next Class
Week 9	10/23	Project-lab training. Assign Final Project Teams and Topics.	Summary of lab training -Due Next Class
	10/25	Math/Engineering skills development (2D Vectors)	Group work and quiz
SECOND LIBRARY VISIT COUNSELING CENTER PRESENTATION			MUST HAVE SECOND LIBRARY VISIT
Week 10	10/30	Second Library Visit. Assign Research Project Teams and Topics.	Use Lib Guide to find research topic sources
	11/01	Counseling Center.	
Week 11	11/06	Math/Engineering skills development (Intro to Linear Equations)	Homework -Due next class
	11/08	Math/Engineering skills development (Linear Equations Continuation)	In class group quiz
Week 12	11/13	Money Management. Review Exam 2.	
	11/15	Exam 2	
Week 13	11/20	Research Project Presentations	In-class peer evaluation of presentations-Due at the end of class
		End-of-Semester Survey is Available	
	11/22	THANKSGIVING HOLIDAY NO CLASSES	
Week 14	11/27	BOOK-CHAPTER 7 - Broadening Your Education. Global Engineering Programs (Study Abroad)	Book Homework-Due Next Class
	11/29	BOOK-CHAPTER 8 - Orientation to Engineering Education.	Book Homework-Due Next Class
Week 15	12/04	Working on Presentations. Review Exam 3	Book Homework-Due Next Class
	12/06	Exam 3. End-of-Semester Survey must be submitted	Complete and Submit End-of-Semester Survey
Week of Finals			
Week 16	12/13	Students' Presentations	Time of Final Exam
		Final Exams	7:00 am - 9:45 am