# UNIV 1301 Foundations of Engineering

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<th><strong>Semester Term and Year:</strong></th>
<th>Fall 2010</th>
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| **Professor:** | Instructor: Debra J. Little  
Office: M201B  
Office Hrs: M, T, W, R, 10:30 – 11:30 AM, or by appt.  
E-mail: djlittle@utep.edu  
Phone: 747-5351 |

| **Course Description:** | “Foundations of Engineering” is the Gateway to your engineering education at UT 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! You will develop:  
- Academic 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 |

| **Required Texts:** | **TITLE:** Keys to Engineering Success  
**AUTHORS:** Jill S. Tietjen, Kristy A. Schloss, Carol Carter, Joyce Bishop, and Sarah Lyman Kravits  
**PUBLISHER:** Prentice Hall  
**EDITION:** 2001 copyright |

| **Course Objectives:** | At the end of the semester, you, the student will:  
- Understand your role, opportunities and responsibilities as an engineering student that impact your success within the university context.  
- Have learned about and improved essential academic skills/tools for success in your college education and in lifelong learning.  
- Have started the building of a strong network of faculty, staff, and peer relationships and university resources to create a positive learning experience.  
- Understand your own interests, abilities and values in seeking your academic, career, and life goals.  
- Be regularly involved in UTEP and College of Engineering activities and campus resources |
| **Grading Breakdown:** (exams, papers, etc.) | Homework 10%  
Teamwork/class work 10%  
Quizzes & Projects (includes pre-professional experience) 25%  
Exam I & II 15% for each  
Final Exam/Presentation 25% |
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<td><strong>Teaching Method:</strong></td>
<td>Team learning/teaching and hands-on activities will be utilized. Our team members are you (the students), peer leaders, professors, librarians, academic advisors, and special resource individuals (guests &amp; speakers). In order for the team experience to be successful, you must come to class prepared to participate. This means that you must complete reading assignments, library or online research, writing assignments, surveys, self-assessments, homework, and other assignments BEFORE you arrive for class. As the instructor member of the team, I, along with your peer leader, am responsible for providing a positive learning environment, timely feedback about progress, communicating clear performance expectations, and establishing a supportive academic environment.</td>
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<td><strong>Brief Description of Course Content:</strong></td>
<td>The Foundations course is built on 4 content areas: Entering student success skills, mathematics applications, engineering concepts, and the engineering profession. Activities and assignments are based on 20 modules within these 4 content areas – all developed by the Foundations faculty.</td>
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