

## Engr 116-501 -- Mondays & Wednesdays 10:30-11:20 in A126

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Instructor: Annette Hatch

Office: A123

Office Hours: STEM Center: T-Th 9:00-10:00 AM & MW 1:00-2:00 PM

A123: T 12:00-1:00 PM & MW 2:00-3:00 PM

OR by app't.

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Phone: 925-8642

**COURSE DESCRIPTION:** The purpose of Introduction to Engineering, Engr 116, is to help students decide whether they would like to pursue an engineering degree through a description of the engineering profession, orientation to engineering education and introduction to the engineering process and to foster a camaraderie amongst students with similar interests.

**COURSE MATERIALS:** Paper, pencil, scientific calculator, 3-ring binder or folder, and flash drive (These items may be shared with other classes.)

### GRADING SCALE:

A 90 – 100%

B 80 – 89%

C 70–79%

D 60–69%

F < 59%

CR Credit 72 – 100%

NC No Credit < 72%

<b>ATTENDANCE AND CLASS PARTICIPATION</b>	<b>40%</b>
<b>ASSIGNMENTS AND PRESENTATIONS</b>	<b>20%</b>
<b>PORTFOLIO</b>	<b>40%</b>

### IMPORTANT DATES with respect to this class:

Last date to drop without a grade: Friday, January 29, 2016

Spring Break: March 13-20, 2016

**Portfolio due: Wednesday, May 4, 2016** (There is no Final Exam.)

**ATTENDANCE POLICY:** If a student misses 2 classes in the first three weeks or 3 consecutive class periods, the student may be dropped from the class. The student bears full responsibility for the material and procedural information covered in class.

**SUPPORT SERVICES:** The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. The STEM Center offers tutoring at no cost to the student. For best results, schedule appointments for tutoring at (505) 925-8515. The Learning Center (925-8907) also offers tutoring at no cost to the student. The online tutor, Ryan Baltunis, can be reached at 925-8553 or found in LRC 118. Students who miss tutoring appointments may be denied future appointments.

**EXPECTATIONS:** Students are expected to conduct themselves in a polite, courteous, professional and collegial manner. Cell phones must be set on silent. Please step into the hall if you need to take a call during class.

In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered responsible employees. This designation requires that any report made to a faculty member, TA, or GA regarding sexual misconduct or gender discrimination must be reported to the Office of Equal Opportunity and the Title IX Coordinator. For more information on the campus policy regarding sexual misconduct, see: <https://policy.unm.edu/university-policies/2000/2740.html>

**DISABILITY STATEMENT:** If you have a documented disability, please provide me with a copy of your letter from Equal Access Services as soon as possible to ensure that accommodations are provided in a timely manner. The Equal Access Office can be reached at 925-8510.

**UNM EMAIL/BLACK BOARD LEARN ACCESS:** Beginning Fall 2015 semester, all UNM-Valencia students will need a UNM Net ID which can be created by going to: <http://it.unm.edu/accounts/>. UNM Net ID will give you access to the computer labs on campus, blackboard learn and UNM Email.

**COMPUTER LAB RESPONSIBILITY:** Please be advised that use of computer labs on UNM properties is governed by "Policy 2500: Acceptable Computer Use" which can be found at <http://policy.unm.edu/university-policies/2000/2500.html>. Food and drink are also prohibited in any computer lab on campus. Anyone violating these policies is subject to possible suspension and loss of computer lab privileges.

**UNM'S POLICY ON ACADEMIC HONESTY:** Each student is expected to maintain the highest standards of honesty and integrity in academic and professional matters. The University reserves the right to take disciplinary action, including dismissal, against any student who is found responsible for academic dishonesty. Any student who has been judged to have engaged in academic dishonesty in course work may receive a reduced or failing grade for the work in question and/or for the course. Academic dishonesty includes, but is not limited to, dishonesty in quizzes, tests or assignments, claiming credit for work not done or done by others; hindering the academic work of other students; and misrepresenting academic or professional qualifications within or outside the University.

#### **STUDENT LEARNING OUTCOMES:**

**With the successful completion of Engineering 116, a student will**

- Understand various engineering fields and the paths to pursue the same.
- Obtain basic skills, effective learning and life techniques essential for successful pursuit of an engineering degree.
- Have an awareness of the basic mathematics, physics concepts and calculations essential for successful pursuit of an engineering degree.
- Have gained experience giving multiple technical presentations.
- Have gained experience with group dynamics through participation in hands-on exercises.
- Have had opportunities to hear from persons who support engineering students and/or work in engineering fields and be made aware of opportunities for leadership, life-long learning and citizenship skills.

**PORTFOLIO\*:** At the last class of the semester, Wednesday, May 4, 2016, each student will submit a portfolio including:

- **Cover letter for work or scholarship application**
- **Résumé**
- **Request for a letter of recommendation**
- **Statement of academic goals**
- **Tentative course load for Fall 2016 and Spring 2017 (2 Semesters)**

Additional details will be provided as the semester progresses. Each part of the portfolio should appear on a separate page, typed and spell-checked. Late portfolio grades will be reduced by 10% per day. No portfolios will be accepted after Wednesday, May 11, 2016.

### **SELECTED INTRO TO ENGINEERING ACTIVITIES (Order varies)**

Engineering as a Profession PPT  
50 Uses of Duct Tape in the Worst PPT that Can Be Made  
Engineering Homework Set-Up  
Unit Conversions  
Excel & MATLAB Graphs  
Labeled Graphs  
Write It; Do It  
Measure Pi  
Mechanical Drawing  
3D Coordinates  
Density  
Reverse Engineering  
Library Engineering Research  
Reading Texts & Abstracts  
STEM Speakers  
3D printing  
Bread Boarding  
Ohm's Law  
Portfolio of resume, cover letter, etc.  
Interviewing for a Position