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

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Office: A123 Phone: 925-8642

Office Hours: Learning Commons: Mondays 11:30 – 1:30; Tuesdays & Thursdays 8:50 – 10:20

A123 Wednesdays 11:30 - 1:30

or by appointment.

**COURSE DESCRIPTION:** The purpose of Introduction to Engineering, ENG 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% CR Credit 72 - 100% B 80 - 89% NC No Credit < 72% C 70 - 79%

D 60–69% F < 59%

ATTENDANCE AND CLASS PARTICIPATION 40%
ASSIGNMENTS AND PRESENTATIONS 20%
PORTFOLIO 40%

### **IMPORTANT DATES with respect to this class:**

No Class on Monday, January 16, 2017 (MLK Day)

Last date to drop without a grade: Friday, February 3, 2017

Spring Break: March 12 -19, 2017

Portfolios Due: Wednesday, April 26, 2017 Final Presentations: Wednesday, May 3, 2017

**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.

**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. Cell phones must be turned off during exams.

**SUPPORT SERVICES:** The Valencia Campus Library provides a quiet atmosphere for study and is an excellent resource for supplementary materials. Audiotapes and videotapes are available for student use through the library. The new Learning Commons (925-8907) and STEM Center (925-8515) offer math & science tutoring at no cost to the student. The Writing Center can provide free help with all written assignments. (For Writing Center appointments email <a href="mailto:gillikin@unm.edu">gillikin@unm.edu</a> or call 925-8513.) Students who miss tutoring appointments may be denied future appointments.

<sup>\*</sup>Students not receiving at least an 80% on the final portfolio are not eligible for an A.

**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.

**DISABILITY STATEMENT:** Please contact Equal Access Services (925-8510) as soon as possible to ensure that documented disability accommodations can be provided in a timely manner.

**TITLE IX:** In an effort to meet obligations under Title IX, UNM faculty, Teaching Assistants, and Graduate Assistants are considered "responsible employees" by the Department of Education (see pg 15 - http://www2.ed.gov/about/offices/list/ocr/docs/qa-201404-title-ix.pdf). This designation requires that any report of gender discrimination which includes sexual harassment, sexual misconduct and sexual violence made to a faculty member, TA, or GA must be reported to the Title IX Coordinator at the Office of Equal Opportunity (oeo.unm.edu). For more information on the campus policy regarding sexual misconduct, see: https://policy.unm.edu/university-policies/2000/2740.html

**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.

**PORTFOLIO\*:** On Wednesday, April 28, 2017, each student will submit a portfolio including:

- Cover letter for work or scholarship application
- Résumé
- Written request for a letter of recommendation in an email format
- Statement of academic goals
- Tentative course load for Fall 2017 and Spring 2018 (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 Monday, May 1, 2017.

#### 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.

# **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