ENGR 150 Course Syllabus

Introduction to Engineering (1 Unit)
Time: M-W 4:20 – 6:PM
Room: ET A126

Instructor: Dr. Zanj K. Avery, Ph.D.
Office: ET A214
Office Hours: M-Th 12:30 pm -1:20; 4:pm -5:pm
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Text: *Studying Engineering: A Road Map to a Rewarding Career, 4th Edition* by Raymond B. Landis

Objective of Course: The components of this course are designed to assist you in making a successful transition to the university and college while enhancing your success as an individual and student engineer. The following course objectives will assist this transition:

- Examine existing attitudes and behaviors that may impede your success at the post-secondary level as a student engineer.
- Modify your existing attitudes and behaviors to achieve pre-established academic, personal, and professional goals for this quarter and beyond.
- Introduce S.T.E.M. concepts and principles that are fundamental to engineering design and problem-solving applications.
- Enhance your interpersonal communication, leadership, and team-building skills through cooperative learning models.
- Identify and increase your knowledge of core engineering, computer science, and technology fields and their impacts on individuals and society.
- Become familiar with campus resources available to you provided by the university and the ECST College.

Supplies Needed: Please purchase a composition notebook (binded) that will be used to document:

1. Notes taken in class
2. S.T.E.M. concepts and principles
3. Design notes and sketches
4. Course activities and assignments
5. Questions, issues, or perspectives you gained from the reading and would like to raise in class

Evaluation/Grading: In addition to completing all assignments, you are expected to attend and participate in all class activities. This is a Credit/No-credit (C/NC) course. You must earn 800 points (80%) or more to receive credit for this course.

Grading: The course will be based on the following:

1. Attendance and participation 100   10%
2. Hero's Journey Project   300   30%
3. S.T.E.M. Fundamentals   200   20%
4. Exams   200   20%
5. Final project   200   20%

                                  1000 points   100%

The total number of points earned will determine whether you receive credit for this course.

"I" – Incomplete Grade   An "I" grade will be assigned only if *all of the following conditions are met*: (a) the student requested such a grade before the final class meeting, (b) the student has completed all but one or two of the assignments, (c) the student can provide some compelling reason for your request for an "I" (with documentation, if requested by me), and (d) the student has missed no more than three class meetings over the entire quarter.

     NOTE: A GRADE OF "NO CREDIT" WILL BE GIVEN IN THE CASE OF MORE THAN TWO UNEXCUSED ABSENCES

Attendance   Excused absences will be considered based on existing University Policy. Students missing more than two classes will not receive credit for the course.

Participation   It is important to read prior to class so that you can engage in class discussions and activities. Class discussions will involve group brainstorming exercises and role playing activities.

Hero's Journey Project You will employ *Joseph Campbell's Monomyth*, or the *Hero's Journey*, as a model for patterning your life situation with respect to the achievement of goals. You will be required to: 1) Establish three goals (academic, personal, and professional), 2) Develop a plan of action, and 3) Execute your plan of action. Your grade for this project will be based on three presentations: 1) Proposal, 2) Status Report, and 3) Final Outcome.

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Exams There will be four exams that will be based on readings from the course text. Each exam will cover two chapters at a time.

S.T.E.M. Fundamentals and Final Project The S.T.E.M. fundamental activities/labs will cluster into a final project that will provide an opportunity for you to demonstrate: a) An ability to apply knowledge of mathematics, science, and engineering, and b.) An ability to design and conduct an experiment, as well as to analyze and interpret data, c) An ability to function on an interdisciplinary team, d) An ability to communicate effectively.

Final Exam: There will be no written final exam.

Student Responsibilities: It should be clearly understood that each student has responsibilities:

- Attend all scheduled class meetings
- Obtain all information and/or notes when absent or late
- Have a Cal State L.A. Network Information Services (NIS) account to access all campus technology resources (i.e., Library computers and databases, campus wireless network, myCSULA student portal, WebCT, remote Internet connections, classroom and Open Access Lab computers)
- Regularly monitor your email account for course-related communication. Messages sent to students' Network Information Services (NIS) e-mail accounts from administrative offices, colleges, and faculty will be considered official University communications.
- For information on having university email forwarded to a person email account: http://www.calstatela.edu/its/docs/pdf/fwemail.pdf
- Turn in all assignments *when due*
- Assignments are due on the date indicated per schedule.
- If an assignment is due and you are unable to attend class, it is the student's responsibility to be sure that it arrives no later than the due date.
- Late work will be accepted only until the end of the class period following the due date (and all late work will be penalized 10% of total point value). Absolutely no late work accepted after that time.
- No assignments will be accepted after the end of the last class meeting.
- Work cooperatively and professionally
- Comply with all University policies and procedures (*University Catalog)*
- If a student has any questions about these policies or the contents of this syllabus that are not resolved during class, please discuss them with me in a timely manner during office hours.
- All take-home written assignments must be typed, double-spaced, and *proofread*.

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- Proofreading means, at a minimum, using a spell check program on your word processor and correcting spelling, grammar, and punctuation errors. If you are unsure how to do this, please consult me or a tutor in the computer lab.
- Papers with frequent errors in spelling, punctuation, or grammar, or that include writing problems so severe as to obscure the author's intent, will not be assigned credit.
  - Plagiarism and all other forms of cheating will, on first infraction, result in a grade of 0 for the assignment; a second infraction will result in failure for the entire course. If you are not sure what constitutes plagiarism or cheating, please consult me or the Student Handbook. Note that *all* instances of cheating will be reported to the University's Judicial Affairs Office.

Reasonable Accommodation: College of Engineering, Computer Science, and Technology faculty fully support the Americans with Disabilities Act (ADA) and will provide reasonable accommodation to any student with a disability who is registered with the Office of Students with Disabilities (OSD) who needs and requests accommodation. Please contact the Office for Students with Disabilities for assistance in such matters and then inform me as soon as possible. The faculty may wish to contact the OSD to verify the presence of a disability and confirm that accommodation is necessary. The OSD will arrange and provide for the accommodation.

Reasonable accommodation may involve allowing a student to use an interpreter, note taker, or reader; accommodation may be needed during class sessions and for administration of examinations. The intent of the ADA in requiring consideration of reasonable accommodation is not to give a particular student an unfair advantage over other students, but simply to allow a student with disability to have an equal opportunity to be successful.

Additional Notes: