

ENAE 200 The Aerospace Profession II Lecture

I. Overview

The purpose of the lecture portion of ENAE200 is to assist aerospace students in developing their non-technical skills as professionals in the engineering profession. The Accreditation Board for Engineering and Technology (ABET) states that engineering programs must demonstrate that their students attain not only technical knowledge, but also:

- ◆ an understanding of professional and ethical responsibility
- ◆ an ability to communicate effectively
- ◆ the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- ◆ a recognition of the need for, and an ability to engage in life-long learning
- ◆ a knowledge of contemporary issues

II. Course Objectives

Specific Learning Objectives

By the end of this course, students will:

- Create a career portfolio for their future use as an upper class student
- Gain information on life-long learning opportunities
- Gain a better understanding of societal, global, and environmental issues in the aerospace profession
- Gain a better understanding of their ethical responsibilities in the engineering profession

III. Format and Procedures:

This course will be given through a 7-week series of lectures and special speakers, supplemented with reading and assignments. Students are expected to devote their full attention to all speakers throughout the semester. **Unless previously approved for use, students will be asked to put away any electronic devices during lectures and/or presentations.**

IV. Class attendance and participation policy:

Students are expected to attend each class and participate in classroom discussions. Due to the nature of this course, attendance (including tardiness) and participation will affect and be considered in the final grade. Attendance will be monitored by sign-in sheets. **It is the student's responsibility to make sure to sign in upon entering the classroom.** Each student may only sign in on his or her own behalf. Please pay special attention to section 1 (b) in the Code of Academic Integrity policy (link below) regarding fabrication as a form of academic dishonesty and keep this in mind when reviewing the attendance policy for this course.

The instructor is willing to work with any student who needs to miss class meetings if they conflict with religious practices. However, you must provide **advance notification in writing (email)** if this is the case. In cases of religious observation, the student must notify the instructor via email as soon as possible and no later than the end of the schedule adjustment period. Except during a major scheduled grading event, students may be excused from a single lecture for a medically necessitated reason. Students must make a reasonable attempt to inform the instructor of their illness prior to the class, and present a self-signed note or email attesting to the date of the illness. This note or email must include an acknowledgement: (a) that the information provided is true and correct, and (b) that the student understands that providing false information to University officials is a violation of Part 9(h) of the Code of Student Conduct.

V. Assignments:

Complete details (including grading criteria) regarding assignments are available on the course CANVAS site. Essay assignments must be submitted electronically on **CANVAS**. The Career Portfolio and Appointment with Career Services Advisor form must be submitted **via hard copy in class**.

Appointment with Career Services Adviser (form attached)

Meet with Career Services Advisor in the Engineering Co-op & Career Services Office (1131 Martin Hall) for a one-on-one resume critique. Have them complete and sign the form (end of syllabus)

- Worth 15 points
- If your last name begins with A-L, you must submit your completed appointment form by no later than March 6 or May 1. **Please contact Aileen as soon as possible if you need an extension.**
- If your last name begins with M-Z, you must submit your completed appointment form by no later than March 13 or May 8.

Career Portfolio

REMEMBER – you are creating a career portfolio so that when you go on job/internship interviews, and you hand the employer your career portfolio, they are so impressed that they hire you **ON THE SPOT!** Appearance of the portfolio should be taken into consideration and elements should be placed in a binder or nice folder and submitted **in class**.

Elements to include:

Cover letter

- Worth 15 points
- Written for current or recently advertised opportunity (co-op, internship, or job - full-time, part-time or summer) that you have, intend to, or would someday like to apply for
 - *Include copy of the advertisement/job description in portfolio behind cover letter*
 - *If you are applying for a position where there is no written advertisement/job description available (such as applying to work in a research lab), you must write your own job description and include it.*

Résumé

This should be your final draft which is updated to reflect any comments or changes recommended by the Career Services Advisor. You must also include your original draft (with comments from the Career Services Advisor).

- Worth 20 points
- Format – margins, heading, objective, sections;
- Appearance and proper content – neatness, spelling, action words, appropriate wording and content
- Will compare both drafts and look to see that you incorporated comments and made updates

Reference Sheet

- Worth 5 points
- Everyone **MUST** have a reference sheet with at least three references. These should include for example, someone from academic (high school or UMCP), work related (previous employer/manager), and other, such as coach, volunteer organization supervisor, etc. Please include their names, titles, contact information, and 2-3 sentences explaining your relationship with each reference.

Societal, Global, and Environmental Issues Essay (2 pages double-spaced)

Worth 15 points:

Write an essay explaining one of the following societal, global, and/or environmental issues in the aerospace profession such as:

- Greening of the aviation industry
- Economic exploitation of space
- Describing the societal impact of the National Transportation Safety Board (NTSB)
- Access to space policy in the United States
- Or a relevant topic of your choice (must be approved by instructor in advance)
 - There are some great ideas on the AIAA website under Issues & Advocacy

Please remember to cite sources on a separate page.

This assignment should be submitted on CANVAS.

Ethics Readings and Essay (2 pages double-spaced)

Worth 15 points:

Review the information on the following websites. Explain why you feel a Code of Ethics is important for aerospace engineers, then select the top 3 points from each Code of Ethics that stand out to you and explain why you selected these points and how they may relate to your role as an aerospace engineer.

AIAA Code of Ethics: <http://www.aiaa.org/Secondary.aspx?id=4324>.

NSPE Code of Ethics: <http://www.nspe.org/Ethics/CodeofEthics/index.html>

NSPE Engineers' Creed: <http://www.nspe.org/Ethics/CodeofEthics/Creed/creed.html>.

This assignment should be submitted on CANVAS

Class participation and attendance

- Worth 15 points

VI. Grading Procedures

All assignments must be turned in by the date indicated on the course syllabus. Points will be deducted for late assignments. All assignments must be typed.

- 40 points Career Portfolio
- 15 points Appointment with Career Services Advisor
- 15 points Essay on societal, global, or environmental issue
- 15 points Ethics Readings and Assignment
- 15 points Class participation and attendance

Total: 100 points

Grades from the CAD portion of class will be combined with the lecture portion of class to determine final grade.

Grade	Percent
A+	100
A	93-99
A-	90-92
B+	88-89
B	83-87
B-	80-82
C+	78-79
C	73-77
C-	70-72
D+	68-69
D	63-67
D-	60-62
F	59 and below

VIII. Academic Integrity

Students are expected to abide by the University of Maryland's Code of Academic Integrity. Any work submitted by a student for academic credit will be the student's own work. Should any violation of academic integrity occur, students will automatically receive a zero for the assignment. Penalty for violation of this Code can also be extended to include failure of the course and University disciplinary action.

IX. Accommodations for students with disabilities

In compliance with the University of Maryland's policy to provide appropriate accommodations for students with documented disabilities, the instructors are available to discuss appropriate academic accommodations that may be required. Requests for academic accommodations are to be made during the first week of the

class section, except for unusual circumstances, so arrangements can be made. Students are encouraged to register with Student Disability Services to verify their eligibility for appropriate accommodations.