## **SOPHOMORE ENGINEERING CLINIC II - SPRING 2011**

# Sophomore Clinic Team

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# **Summary of Sophomore Clinic Sections**

Section	Place	Meeting Times	Instructor
01	Hawthorn 204	R 6:30 – 9:00 pm	Bingham
02	Hawthorn 204	TR 8:00 – 9:15 am	Benavidez
03	Hawthorn 204	TR 12:15 – 1:30 pm	Benavidez
04	Hawthorn 104	TR 12:15 – 1:30 pm	Bingham
05	Hawthorn 204	TR 1:45 – 3:00 pm	Benavidez
06	Hawthorn 104	TR 1:45 – 3:00 pm	Bingham
07	Hawthorn 204	W 6:30 – 9:00 pm	Lazzaro
LAB	Rowan Auditorium	M: 12:15 – 3:00	Engineering faculty

### **Catalog Description**

This course, the fourth in the 8-semester engineering clinic series, provides expanded treatment of the practice of engineering through applications drawn from engineering disciplines and industry. The communication component is designed to help students prepare and present messages in public speaking contexts. In addition to engineering design, the course emphasizes oral presentation skills, as well as critical thinking, listening and organizations skills.

#### **Course Goals**

The two main goals of Sophomore Engineering Clinic II are to provide the foundation necessary for students to become:

- 1. effective engineering communicators, and
- 2. effective engineering designers.

Accordingly, during the semester each student will complete one or more design projects (see below). As in all engineering design projects, oral technical communication is integrated throughout.

### **Technical Objectives**

After successful completion of this course, all Rowan Engineering students will be able to:

- Research, design and deliver an effective informative, technical and persuasive speech.
- Adapt technical information to a non-technical audience.
- Adapt speech content and delivery based on audience analysis.
- Recognize the different purposes and structures of informative and persuasive speeches.
- *Synthesize* and *incorporate* research for use in individual and group oral presentations.
- Recognize and utilize effective visual aids for presentations, as well as graphical strategies for communicating information in reports.
- Recognize the need, identify the customer, assess the market, and define the goals, objectives and constraints for a design problem.
- Generate multiple engineering design solutions using various brainstorming techniques.
- *Perform* appropriate engineering analyses and *choose* the optimal solution based on these results.
- Apply technical writing skills effectively to describe and validate design decisions.

### Required and Optional Texts & Supplies

- **Sections 1-6 Textbook**: Stephen E. Lucas, *The Art of Public Speaking*, Boston: McGraw Hill, any edition.
- Section 7 Textbook: Beebe, S.A., and Beebe, S.J. (2009). Public Speaking: An Audience-Centered Approach. (7th ed.). Boston: Allyn & Bacon. (ISBN 13:978-0-205-54301-4 or 10:0-205-54301-4)."
- (optional) Engineering lab notebook (e.g. Boorum #09-9088)
- (optional) Engineering paper
- (optional) Three ring binder
- Note cards
- Sections 2, 3, 5 and 7: A USB storage device (flash drive) with at least 2G of memory to record speeches

### Assignments and Grading Scale:

This course is only offered for grade credit. The grade is determined by evaluating the following deliverables and class participation:

Speech of Introduction	(2-3 min.)	P/F
Informative Speech	(5-7 min.)	10%
Technical Speech	(6-8 min.)	15%
Persuasive Speech	(8-10 min.)	20%
Tests	(2 @ 10% each)	20%
Section Grade/Participation		5%
Lab Deliverables and Components	(multiple items)	25%
Professionalism		5%
	TOTAL	100%

All of the deliverables must be completed to pass the course. For credit, work is due at the beginning of the class period and must be presented in a professional manner.

#### Grading Scale

Final grades for the course will be determined based on input from both the section and lab components of the course. Grades will correspond to the following absolute grading scale:

Α	93+	C	73-76
А-	90-92	C-	70-72
B+	87-89	D+	67-69
В	83-86	D	63-66
В-	80-82	D-	60-62
C+	77-79	F	59-

All written assignments must be typed unless otherwise noted. Students must complete all graded assignments to receive credit in the course. Furthermore, students must achieve a passing average on the portion of the class from the sections (individual speeches, participation and tests) to pass the course.

#### Late Work

Your public speaking instructor will provide you with late submission guidelines.

### **Attendance Policy**

The success of this course results, in large part, from the establishment of learning communities in which all members participate. Contribution to such learning communities requires attendance and involvement in class meetings. Furthermore, the particular classroom experiences in writing and laboratory courses cannot be duplicated. Public speaking is participatory in nature so your attendance at section is imperative. To be an effective speaker you must also be an effective listener. Watching other speeches will help your performance. Therefore, Sophomore Clinic has established the following attendance policy, in accordance with university policy (see the Rowan Student Information Guide).

#### Maximum Number of Absences

You cannot earn credit for Sophomore Engineering Clinic if you are absent EITHER from more than THREE LAB PERIODS, or if you are absent from more than SIX 75-MINUTE LECTURE PERIODS.

#### **Excused Absences**

Absences for the following reasons can be excused **IF verifiable documentation** is provided:

- Religious observances
- > Official University activities
- > Illness
- Death of a family member or loved one
- > Inclement weather

In the case of religious observances or official University activities, you **must** inform your instructor **in advance** of your absence for it to be excused.

In the case of illness, death of a family member or loved one, or inclement weather, you must inform your instructor as soon as possible after the fact. Faculty are under no obligation to make special provisions for students who are absent for reasons other than those listed above.

If the events described above lead to your exceeding one of the allowable limits of THREE LAB absences or SIX LECTURE absences, you must withdraw from the course. Normally, you will receive a WF on your transcript; however, you may appeal to the Dean of Students to have this changed to a simple W if warranted.

#### Unexcused Absences

Unexcused LAB absences will be treated as follows:

One absence: no automatic grade penalty

Two absences: final course grade lowered by 1/3 letter grade (B would become a B-, etc.) Three absences: final course grade lowered by one full letter grade (B would become a C, etc.)

Four or more absences: Final course grade F

Unexcused LECTURE absences will be treated as follows:

Zero to three absences: no automatic grade penalty

Four to six absences: final course grade lowered by 1/3 letter grade for each absence above three.

Seven or more absences: Final course grade F

If you are late to class or miss a significant portion of a class period, the instructors can, at their discretion, count it as an absence. In addition, if you miss graded assignments or activities due to lateness or absence, you will be given no opportunity to make them up if the absence is unexcused.

### **Participation**

The success of this course depends upon your active participation. This portion of your grade will be based on your contributions to the section, including class discussions, responses to speeches, and the timely and professional completion of assignments, including homework and in-class activities. Other forms of participation that help the course run smoothly will be considered (such as time-keeping and setting up equipment). Your section instructor will provide you with additional expectations regarding participation.

#### **Professionalism**

Professional conduct is expected in all laboratories and lectures. It is expected that all students in class display a professional attitude, conduct and behavior in interactions with faculty, laboratory technicians, vendors, guest speakers, university personnel, and other students. Following is a list of guidelines reflecting such expectations:

- 1. Consistent attendance is expected (See Attendance Policy for laboratory and public speaking sections). Students are expected to be on time for class.
- 2. Students pay tuition for the right to attend class. Carrying on conversations or engaging in behavior that disrupts the learning environment for other students is extremely discourteous to everyone in the class.
- 3. Safe conduct during laboratory periods is required. Students who do not exhibit safe conduct may lose project laboratory privileges.
- 4. Working in teams is fundamental to engineering practice. All students are expected to make substantial contributions to team assignments.
- 5. Students are expected to treat all individuals with respect and exhibit professional behavior when engaging in activities related to sophomore clinic.

The baseline for this portion of your grade is your performance in the class. In some cases, based on the perceptions of the faculty, your professionalism grade will be adjusted up or down based on your level of professionalism. Excellent professionalism grades will be reserved for students who exhibit leadership, foster outstanding team environments, demonstrate respect for others, diligence, and appropriate behavior.

### **Engineering Design Projects**

In Sophomore Engineering Clinic II each student will take part in a design project involving a multidisciplinary theme. These projects will be described in detail during the first laboratory session on Monday January 24<sup>th</sup>. Design teams will be assigned grades based on its performance on the Design Project Deliverables. Your individual grade for team-based deliverables may be raised or lowered from the team grade based on peer evaluations. Additional information regarding the design lab grades will be presented once the semester begins.

#### Accommodation

Your academic success is important. If you have a documented disability that may have an impact upon your work in this class, please contact me. Students must provide documentation of their disability to the Academic Success Center in order to receive official University services and accommodations. The Academic Success Center can be reached at 856-256-4234. The Center is located on the 3<sup>rd</sup> floor of Savitz Hall. The staff is available to answer questions regarding accommodations or assist you in your pursuit of accommodations. We look forward to working with you to meet your learning goals

#### **Academic Honesty**

The vitality of any academic program is rooted in its integrity. It is essential to Rowan University that the grades awarded to students reflect only their own individual efforts and achievements. Each segment of the academic community, i.e., faculty, students and administration, is responsible for the academic integrity of the University. Academic dishonesty, in any form, will not be tolerated. Students found to have committed an act of academic dishonesty may be subject to failure in the course, suspension from the University, or both.