Communication for Engineers: Syllabus

ENC 3246 // Fall 2013 // University of South Florida

Instructor: Lauren Cagle	Course Time: Tues/Thurs, 9:30-10:45
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Office Location: 301K	Office Hours: Wed, 1-4

Course Description

This course focuses on the writing concerns of engineers. We will deal with the content, organization, format, and style of specific types of engineering documents. The course also provides the opportunity to improve oral presentations. Through training in communication and a variety of communication assignments, the course addresses ABET learning outcomes focused on communication, ethics, and multidisciplinary work.

Course Objectives

In this course, you will:

- learn to communicate effectively (g), as individuals and across multidisciplinary teams (d), orally and in writing.
- increase your understanding of professional and ethical responsibility (f), especially as it applies to the analysis and interpretation of data (b) in visual formats.

Learning outcomes

To achieve the course objectives, you will:

- make arguments based on numbers and data. These arguments include technical reports, proposals, executive summaries, progress reports, and presentations
- practice syntactical strategies for communicating technical information clearly, efficiently, and concisely.
- create data displays, including tables and graphs, that accurately and ethically present data.
- present research informally and formally with supporting slides and other documents.
- **research ethics for engineers**, including codes from professional organizations and citation systems, and reflecting on how their communication intersects with those standards.

Required Texts

I advise you to rent your textbooks or buy them online [typically at a deep discount from Amazon or a used book seller (e.g. half.com, abebooks.com)]. No matter where you shop, PAY CLOSE ATTENTION TO THE EDITION YOU PURCHASE. It matters. You can search sites using ISBNs to make sure you find the exact books we're using.

1. A Guide to Writing as an Engineer
Author: David Beer & David McMurrey

Edition: 4

ISBN-13: 978-1118300275

2. Show Me the Numbers: Designing Tables and Graphs to Enlighten

Author: Stephen Few

Edition: 2

ISBN-13: 978-0970601971

Workload

Each week you will be completing a variety of in-class and out-of-class work, both individually and collaboratively. Plan on spending a **minimum** of 2 hours outside of class doing work for every hour we spend together. If you have difficulty with the material, the first question you should ask yourself is whether you are putting in your hours.

Our big projects (some individual and some teamwork, exactly like the work you'll likely do in your career) will be divided into stages and supported by smaller assignments to develop the skills you'll need to complete our work.

Assignment	Final Grade %	Description	
In-Class Work & Quizzes	10%	Individual. You will complete assignments in class to prepare for our larger projects. You will also complete regular in-class quizzes on the assigned homework reading.	
Syntax Drills & Data Visualization HW	15%	Individual. You will complete syntax drills and data visualization homework, either as Canvas quizzes or documents turned in to Canvas dropboxes before class on the day they are due. I will provide you with supporting information to complete syntax drills. Data visualization homework will be drawn from the course text Show Me the Numbers.	
Project Proposal	15%	Team. In a team, you will complete a project proposal for your semester-long project. All team assignments must be turned in with team minutes and team evaluations.	
Progress Report	15%	Team. In a team, you will complete a progress report which provides updates on your progress on the semester-long project. All team assignments must be turned in with team minutes and team evaluations.	
Presentation Slides & Handout	15%	Team. In a team, you will create a presentation on your semester-long project supported by slides and a handout. All team assignments must be turned in with team minutes and team evaluations.	
Technical Report	30%	Team. In a team, you will create a technical report as the final deliverable for your semesterlong project. All team assignments must be turned in with team minutes and team	

evaluations.

Due dates, available on our schedule, could change. Please see our online schedule for the most up-to-date dates. I will notify you in writing should any dates change.

Completing the Work and Submitting Documents

You'll receive credit for all of the work you do for our class, inside or outside, as long as you follow proper protocol for submission and submit your work on time. Submission protocol for each assignment is described on assignment sheets, our weekly schedule, and assignment dropboxes. Be sure to read the protocols carefully when submitting assignments. You will have to submit most of your work to Canvas dropboxes.

These drop boxes are automated and will close at the appointed times. The boxes will not re-open for any reason.

Grading Policy

Note: There will be no rounding up.

A+(97-100) 4.00	B+ (87–89.9) 3.33	C+ (77–79.9) 2.33	D+ (67–69.9) 1.33
A (94–96.9) 4.00	B (84–86.9) 3.00	C (74–76.9) 2.00	D (64-66.9) 1.00
A- (90-93.9) 3.67	B-(80-83.9) 2.67	C-(70-73.9) 1.67	D-(60-63.9) 0.67

Participation

Your active participation is crucial to effective learning for everyone in this course. Therefore, active and meaningful participation is required. Active and meaningful participation means that you are invested in the course, in your classmates, your course work, and your education.

As a teacher, I am committed to creating the most conducive learning environment possible. I believe strongly in the social construction of knowledge, so you will be expected to collaborate throughout the course, discussing ideas and articulating concepts. I avoid a banking model of education in order to create non-threatening spaces where students exchange ideas freely. In short, I promote a student-centered classroom and pedagogy.

I value what you say, and I am committed to making this course a positive learning experience. I will provide you with opportunities to learn; I will put you in positions to build on your prior knowledge; I will promote connections between this course and your future aspirations.

But you are responsible for your education.

Attendance policy

You are required to attend class meetings. If you must miss a class, you should contact a classmate to ask about the material you missed. I will not respond to questions about missed material if you have not spoken to classmates about it first.

If you are tardy and/or leave early 3 times, that counts as 1 absence.

If you have more than 3 absences unsanctioned by the university (i.e. university-sponsored activities or religious holidays), your final grade will drop by 1/3 for each missed class beyond those 3 absences (e.g. if you have an "A-" and you have missed 4 classes, your final grade is a "B+"). I do not distinguish between excused and unexcused absences.

You should come to class prepared, which means you have completed the readings and assignments with great care. If you are unprepared for class or if I ask you to leave class because you are disrespectful or disruptive, you will be counted absent.

Making Up Work

There is no way for you to "make up" missed assignments (including homework) or tests. Asking me repeatedly to make up work will not change this policy. If you do ask me, I'll refer you back to this syllabus. The drop boxes for assignments, big and small, close when the assignments are due. They won't be reopened for any reason. Missed coursework cannot be made up even if you are absent for very good reasons (e.g. illness, death in the family, work, and so on).

E-mail Policy

E-mail is the best and quickest way to reach me. I will answer all course e-mails submitted to me Monday through Friday. I will answer any e-mails sent over the weekend on the following Monday. You are responsible for checking your USF e-mail regularly to read course communications; I recommend at least twice a week. Please do not e-mail me for information I have already provided in the syllabus, in handouts, or verbally in class. If you miss class, you are responsible for checking blackboard and contacting a classmate to find out what you missed. I will only respond to e-mailed questions if you have already taken these steps.

Emergency Policy

In the event of an emergency, it may be necessary for USF to suspend normal operations. During this time, USF may opt to continue delivery of instruction through methods that include but are not limited to: Canvas, Elluminate, Skype, and email messaging and/or an alternate schedule. It's your responsibility to monitor Blackboard site for each class for course specific communication, and the main USF, College, and department Web sites, emails, and MoBull messages for important general information.

Academic Dishonesty and Disruption of Academic Process

Some behaviors are unacceptable in and outside the classroom. If any behaviors interfere with instruction, whether in the classroom or online, your instructor will then follow policies regarding your conduct from the USF Handbook.

Read <u>USF's policies on academic dishonesty and disruption of the academic process</u> (http://www.ugs.usf.edu/catalogs/0001/adadap.htm).

Accessibility Statement

Students in need of academic accommodations for a disability may consult with the office of Students with Disabilities Services to arrange appropriate accommodations. Students are required to give reasonable notice prior to requesting an accommodation. Students may request accommodations at any point during the semester. As accommodations are retroactive, any grades earned before a student requests accommodations will stand. Each student must bring a current Memorandum of Accommodations from the Office of Student Disability Services that is prerequisite for receiving accommodations. Accommodated examinations through the Office of Student Disability Services require two weeks' notice. All course documents are available in alternate format if requested in the students' Memorandum of Accommodations (see <u>faculty responsibilities</u> [http://www.asasd.usf.edu/faculty.asp]).

Syllabus is subject to change at instructor's discretion.

If I make any changes, I will provide them to you in writing in advance.