WRIT 340

Disciplinary Grand Challenges in Berlin and Los Angeles: Cities, Citizens, and Engineering

Section 668XYZ
FALL 2021
Tuesdays and Thursdays, 3:30-4:50
GFS ROOM

Harly Ramsey, PhD
OHE 106
Office Hours: by appointment and
TTh 1:00-2:00 (in office) and 6:20-7:20 (location TBD)
Phone: (213) 740-4488
hramsey@usc.edu
http://ewp.usc.edu

COURSE DESCRIPTION

This special version of WRIT 340, Advanced Communication for Engineers, will examine the Grand Challenges of Engineering from a global perspective and explore the multi-faceted relationships between Cities, Citizens, and Engineering.

This course has two parts: a two week "Fall lead" will be taught in Berlin and the remainder of the semester will be taught at USC. Although the Grand Challenges of Engineering were developed by the (American) National Academy of Engineering, engineers worldwide agree with their urgency. To that end, Global Grand Challenges Summits have been held not only in the United States, but also in China and the United Kingdom. Spending the initial introductory portion of the semester abroad underscores the international cooperation needed to successfully meet these Challenges.

The course opens in Berlin with an overview of all 14 Grand Challenges of Engineering, and the four categories into which they fall—health, joy of living, sustainability, and security. In this context, we will experience some of Berlin's unique approaches to infrastructure, digitalization and design through company visits, museum and factory tours and historical exploration. Students will understand the importance of Berlin as a hub for innovation and policy. Exploration of the city and companies will highlight the key role that German history plays in Berliners' approaches to current and future engineering problems.

Upon returning to Los Angeles, students will continue to examine local and global perspectives on the Challenges as they complete individual and collaborative assignments. These assignments will draw upon the Berlin component and reinforce the global nature of engineering and the crucial social role of engineers.

CATALOG DESCRIPTION

WRIT 340X Advanced Writing (3-4, FaSpSm): Instruction in communicating research findings to various audiences using different forms of communication, including written, verbal, and electronic. *Prerequisite*: WRIT 130, WRIT 140 or WRIT 150. *Required*.

COURSE OBJECTIVES

Our course goal is to improve communication skills, both written and verbal, within the context of engaging with current disciplinary grand challenges. Students will research the "wicked problems" within their fields of study and communicate their significance, ethical implications, and possible solutions in a variety of forms. Emphasis will be placed on writing articles and reports, giving oral presentations, and learning to present data visually to various audiences.

WRIT 340 will provide you:

- A variety of professional and academic communication skills.
- Proficiency in writing for academic, public, and professional audiences.
- Flexibility in communicating for a variety of purposes.
- The ability to prepare effective written documentation both individually and collaboratively.
- The skills required to create and deliver effective oral presentations.
- An awareness of the ways your discipline affects broader society on a global scale.
- An understanding of ethics within disciplinary practice.
- The ability to engage in rigorous critical analysis.
- The ability to give and receive critical feedback.

COURSE OUTCOMES

At the end of WRIT 340 you should be able to:

1. Write for academic, public, and professional audiences.
2. Demonstrate research and documentation abilities at the upper-division level.
3. Identify and analyze pressing ethical issues within a discipline.
4. Consider the impact of engineering solutions in global, economic, environmental, and societal contexts
5. Revise and edit to advanced academic and professional standards.
6. Prepare and give professional oral presentations for a variety of audiences and purposes.
7. Utilize visual aids in both written and oral communications.
8. Articulate the impact your discipline has on everyday life.
9. Work collaboratively to research, write, and present information and ideas.
10. Write accurate, precise technical prose.

TEXTS

The National Academy of Engineering. *The Grand Challenges of Engineering* (available free online and posted on Blackboard)
Douglas, Papadopoulos, and Boutelle. *The Citizen Engineer*, selected chapters (available free online and posted on Blackboard)
Joseph Williams. *Style: 10 Lessons in Clarity and Grace*, portions posted on Blackboard
Additional handouts will be distributed throughout the course.

ASSIGNMENTS

Detailed prompts for each assignment will be provided. Ample warning will be given of any changes.

Written Assignments

Ethics Paper (200 points)
You will write a position paper inspired by an ethical issue pertaining to a grand challenge in your discipline.

Article for a Lay Audience (200 points)
You will write an article for Illumin Magazine (http://illumin.usc.edu) per a call for papers. Your goal is to communicate an aspect of your grand challenge to a public readership primarily but not exclusively interested in technology.

Collaborative Written Report (150 points)
In teams, you will write a researched case study about a topic related to Cities, Citizens, and, Engineering. This is for potential publication on the website Viterbi Conversations in Ethics.

Technical or Analytical Description (150 points)
This will be a precise technical description of an object or an analytical description of a place or a process.

Portfolio (150 points)
You will revise your Ethics and Illumin papers and resubmit them as a final portfolio.

Oral Assignments

Collaborative Oral Report (150)
Multiple teams will each create a podcast episode on an aspect of a Disciplinary Grand Challenge as related to Cities, Citizens, and/or Engineers.

Participation (100 points)

One hundred (100) points will be dedicated to class participation (see below).

GRADING AND ATTENDANCE

Final grades will be assigned based on your point total. The total of the above points is 1,000.

There is no grading curve; grades will be assigned by a submission's own merits. I will do my best to make my expectations for the various assignments clear and to evaluate them as fairly and objectively as I can. We will review the requirements for good writing in class throughout the semester, and you can refer to the rubric common to all 340 classes at USC. **All assignments must be completed to pass the course.**

All assignments will be graded according to this rubric and assigned point values according to the following ranges:

- 90-100% (A)
  (Your supervisor would be very impressed and remember your work.)

- 80- 89.99% (B)
  (Your supervisor would be satisfied with the job, but not impressed.)

- 70- 79.99% (C)
  (Your supervisor would be disappointed and ask you to revise or rewrite sections before allowing the document to be distributed.)

- 60- 69.99% (D)
  (Your supervisor would be troubled by the poor quality of the work and would advise you that your position might be in jeopardy.)

- 0- 59.99% (F)
  (Your supervisor would begin looking for your replacement because the work wasn't submitted or did not meet even minimum specifications.)

Pluses and minuses equal the top and bottom 2% of each grade category (i.e., 88 to 89.99% = B+ and 80-81.99% = B-).

Participation and Engagement
You are expected to be an active contributor to the class, not a passive listener. Active contribution includes volunteering answers to questions; asking questions; requesting clarification; challenging me or other students in productive ways; contributing useful and relevant comments; engaging fully in any workshop-type activities.

A particularly important contribution you'll make to the class is critiquing other students' work in our rough draft workshops. Our in-class workshops are crucially important, and *you must attend them*. If you do not, you will lose professionalism points as well as points on the assignment itself.

You will also, during the course of the semester, provide other feedback to your classmates and brainstorm with them. You also will be expected to get together with others outside of class to share work and give/get feedback.

The following will also impact your participation points: evidence of preparation for class, including having completed any reading; quality of otherwise non-graded work; quality of contribution to workshop activities; quality of e-mail correspondence; quality and quantity of participation in individual conferences; and quality and quantity of interaction with community partners.

The following behaviors will cost you significant professionalism points: leaving cell phones and pagers on in class or during conferences; leaving your area messy at the end of class; whispering with those around you; and sleeping or reading or doing other homework during class.

I consider this classroom to be a place where you will be treated with respect, and I welcome individuals of all ages, backgrounds, beliefs, ethnicities, genders, gender identities, gender expressions, national origins, religious affiliations, sexual orientations, ability—and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming and inclusive environment for every other member of the class.

A note regarding email: Your email represents you as much as any other written or oral communication does. Take care to make it professional. That means applying all of the rules of good writing that we're discussing in class to your email. This includes, but is not limited to, using good grammar, spelling, and punctuation; employing a direct and concise writing style; and organizing the document to further its purpose.

Lateness and Mechanics
Any paper turned in late will receive half credit as a starting point. Any paper, in-class or take-home, not turned in will receive an "F".   No exceptions.

Mechanics on written assignments are a given. Spelling, punctuation, or grammatical errors will lower both the effectiveness of the written communication and the possibilities of the grade.

It is assumed you are available for all classes. If you do miss a class, you are responsible for missed information and any assignments given. You should also arrange for a classmate to deliver any assignments due that day. If you are more than 15 minutes late you will be marked as absent.

PLAGIARISM:

All cases of plagiarism will be addressed with utmost seriousness. Students found to plagiarize will fail the course and be referred to the Student Conduct Board. **The USC Viterbi School of**

Engineering adheres to the University's policies and procedures governing academic integrity. Students are expected to be aware of and to observe the academic integrity standards described in SCampus. These standards will be enforced in this class on all assignments.

Plagiarism

Plagiarism is the unacknowledged and inappropriate use of the ideas or wording of another individual . . . [It] is considered a grave violation of academic integrity and the sanctions against it are correspondingly severe. (**University sanctions range from a grade of F in the course to suspension from the university.**) Most simply, plagiarism can be characterized as 'academic theft.'

> As defined in the University Student Conduct Code (published in the current *SCampus*), plagiarism includes:
>
> - 'The submission of material authored by another person but represented as the student's own work, whether that material is paraphrased or copied in verbatim or near verbatim form;
>
> - 'The submission of material subjected to editorial revision by another person that results in substantive changes in content or major alteration of writing style;
>
> - 'Improper acknowledgment of sources in essays or papers.'
>
> The Student Conduct Code applies these standards to any written work submitted by a student, whether a draft or a final version.
>
> Because of the serious penalties for plagiarism, you should insure that any writing you submit represents your own assertions and abilities and incorporates other texts in an open and honest manner . . . In academic assignments, writing is assumed to be the original words and thoughts of the student unless [the reader is] told otherwise (i.e.: material from other sources is clearly and properly cited).
>
> > From *Trojan Integrity: Guide to Avoiding Plagiarism*
> > (USC Office for Student Conduct, rev. Fall 2000, pp. 2-3)

In WRIT 340, we encourage peer review, since it's almost always helpful to have "another set of eyes" take a look at your paper and offer comments and suggestions. But where should you draw the line? According to the Writing Program,

> The Writing Program encourages collaboration with your instructor, with Writing Center Consultants, and with your classmates; such interactions constitute one of the most important and effective means by which writing is taught. In undertaking collaborative interactions, however, remember that you are finally responsible for

guaranteeing that the resulting text represents your abilities and authority and not those of the persons assisting you, however well-meaning they may be. A simple guideline may help: Never allow someone else to construct a section of your text longer than one or two sentences that you would not be able to produce on your own, and never allow anyone to copy-edit more than the first page of your paper.

<div align="right">From Writing 150 Course Book</div>

Statement on Academic Conduct and Support Systems

Academic Conduct:
Plagiarism – presenting someone else's ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, "Behavior Violating University Standards" policy.usc.edu/scampus-part-b. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, http://policy.usc.edu/scientific-misconduct.

Support Systems:
Student Counseling Services (SCS) – (213) 740-7711 – 24/7 on call
Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. engemannshc.usc.edu/counseling

National Suicide Prevention Lifeline – 1 (800) 273-8255
Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. www.suicidepreventionlifeline.org

Relationship and Sexual Violence Prevention Services (RSVP) – (213) 740-4900 – 24/7 on call
Free and confidential therapy services, workshops, and training for situations related to gender-based harm. engemannshc.usc.edu/rsvp

Sexual Assault Resource Center
For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: sarc.usc.edu

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086
Works with faculty, staff, visitors, applicants, and students around issues of protected class. equity.usc.edu

Bias Assessment Response and Support
Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. studentaffairs.usc.edu/bias-assessment-response-support

The Office of Disability Services and Programs
Provides certification for students with disabilities and helps arrange relevant accommodations. dsp.usc.edu

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. studentaffairs.usc.edu/ssa

Diversity at USC
Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. diversity.usc.edu

USC Emergency Information
Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible. emergency.usc.edu

USC Department of Public Safety – UPC: (213) 740-4321 – HSC: (323) 442-1000 – 24-hour emergency or to report a crime.
Provides overall safety to USC community. dps.usc.edu

Please feel free to ask me any questions you might have throughout the semester I want you to get as much out of this class as possible.

WEEK	GENERAL SUBJECT	DUE
1 BERLIN	Introduction to Course Discussion of assigned readings Introduce Technical or Analytical Description Introduction to Team Assignment Team formation Field trips connected to various Challenges Guest lecture, TBD	Assigned readings: Grand Challenge booklet, Citizen Engineer Chapter 1, United Nations Sustainable Development Goals
2 BERLIN	Discussion of themes of Cities, Citizens and Engineers In-class writing assignment Team workshop Field trips connected to various Challenges Guest lecture, TBD	
3 USC	Introduction to USC library databases Team workshop: 2) drafting case studies Informal presentations to class	
4	Ethics paper introduced Ethics workshop—topics from Berlin and Los Angeles	Technical and Analytical Descriptions DUE
5	Team workshops and Individual Conferences for Ethics paper	
6	Ethics writing skills: crafting position statement and development through counter argument	Team Case Studies DUE
7	Exercises on clarity and concision Rough draft peer editing	

8	Introduce Illumin Article assignment Rhetorical strategies for engaging a general public audience	Ethics paper DUE
9	Analyze 3 Illumin articles Audience analysis workshop	
10	Visuals: introduction and workshop Data visualization writing assignment	
11	Individual Conferences on Illumin paper Peer editing worhshops on Illumin paper	
12	Introduce Podcast Assignment and discussion of required readings Formation of Podcast Teams	Illumin paper DUE
13	Podcast workshop 1 with Coaches Introduction of Portfolio requirement Portfolio workshop 1	
14	Podcast workshop 2 with Coaches Individual Conferences for Portfolio	
15	Portfolio peer editing workshop Podcast Team conferences	Portfolio DUE
FINAL EXAM PERIOD		Team Podcasts DUE