

# Keck School of Medicine of USC

## TRGN 599 Special Topics in Translational Biotechnology

### Communicating Science: Speaking

**No. of Units:** 1  
**Term:** Fall 2018  
**Date/Time:** Wednesday, 10:30 am - 11:25 am  
**Location:** NRT 2508

**Instructor:** Llewellyn Cox, PhD  
**Office:** NRT 2506  
**Office Hours:** Wednesday 1 – 2 pm, or  
by appointment  
**Contact Info:** llewellc@usc.edu  
(323) 442-3237

#### Course Description

This course surveys the variety of communication modalities for verbal transmission of scientific information in the workplace. It covers internal and external communication skills necessary for successful careers in biomedical, healthcare, and related industries. This course covers both traditional and novel communication modalities. It discusses essential processes for the accurate transmission of scientific information to diverse stakeholders both within the enterprise and external to the scientific endeavor. Emphasis will be placed on the selection of key communication points, development of processes to package data for accurate dissemination, and optimization of spoken communication strategies to ensure data is conveyed accurately and effectively.

#### Learning Objectives

The objective is for students to understand the range of communication modalities and their application to key areas of data dissemination in the workplace. This will involve reading of diverse source materials in addition to lectures. After completing the course, students will be able to:

- Prepare and deliver effective scientific presentations to various audiences from across the spectrum of business, academia, and society
- Tailor presentations effectively to the audience's specific interests and level of scientific knowledge without diminishing or "dumbing down" the underlying science
- Use visual presentation aids effectively to enhance the educational value of the presentation

## Course Notes

This is a project-based course that demands active learning. Reading materials will be assigned for each class. Students should read the materials before attending class. Starting from the third week of the semester, the first half of each class is devoted to active speaking by students using skills learned from the previous week. Performance in these weekly presentations is graded and counts toward 65% of total grade.

## Required Readings and Supplementary Materials

This course does not require the purchase of any textbooks. Required reading materials will be distributed in class.

## Suggested Readings and Supplementary Materials

Additional suggested materials will be distributed in class. Below are resources that students are encouraged to refer to frequently.

- S. Morgan and B. Whitener. *Speaking about Science*. Cambridge University Press. ISBN 13: 978-0-521-68345-6
- G. Reynolds. *Presentation Zen: Simple Ideas on Presentation Design and Delivery (Voices That Matter)*. New Riders Press. ISBN 13: 9780321525659
- D. O'Hair, H. Rubenstein, R. Stewart. *A Pocket Guide to Public Speaking*. Bedford/St. Martin's. ISBN-13: 978-1457601842
- N. Duarte. *HBR Guide to Persuasive Presentations*. Harvard Business Press 9781422187104
- D. Carnegie. *Public Speaking for Success*. Penguin. ISBN 9781585424924
- M. Ward. 4 public speaking lessons from the class that changed Warren Buffett's life. CNBC. 3 Feb 2017.
- Y Combinator YouTube Channel. [https://www.youtube.com/channel/UCcfcZRL2oaA\\_uBNeo5UOWg](https://www.youtube.com/channel/UCcfcZRL2oaA_uBNeo5UOWg)
- TED YouTube Channel. <https://www.youtube.com/user/TEDtalksDirector>

## Description and Assessment of Assignments

Students are expected to participate actively in online and in-class discussions. Students will perform short projects to address each class's key area of focus. Final assessment consists of a public speaking portfolio that student assembled throughout the semester, including an executive summary and a reflective self-assessment.

## Grading Breakdown

- 65% Weekly presentations, 5% each for a total of 13 presentations
- 10% Midterm
- 25% Final assessment

## Assignment Submission Policy

Unless otherwise specified, all assignments are to be presented in person in class. Missing classes will incur grade penalties.

## Course Website: Blackboard

## Course Schedule: A Weekly Breakdown

Each week, the specific audience, their scientific literacy level and expectation will be discussed. Examples of good and poor oral communication of the particular modalities will be presented. Students will practice different modes of presentation using the subject area they choose during the first week of the semester. Starting from the third week of the semester, the first half of each class is devoted to active speaking by students using skills learned from the previous week. Final assessment consists of a public speaking portfolio that student assembled throughout the semester, including an executive summary and a reflective self-assessment.

Date	Topic and assignment
08/22	Introduction Assignment: Student will choose a specific subject area for all their speaking assignments.
08/29	Basics of public speaking: body, voice, and tone Assignment: 5 min. presentation of a new scientific discovery without using visual aids.
09/05	Preparing a script, visual aids, and PowerPoint Assignment: Visual aids for last week's presentation
09/12	Assessing audience & tailoring message Assignment: Week 3 presentation to a different audience
09/19	Tailoring technical language, defining terminology, and avoiding jargon Assignment: Week 4 presentation with technical specificities
09/26	Integrating speech, visuals, and video into an effective and seamless presentation Assignment: Week 5 presentation incorporating video and other embedded A/V
10/03	Recap of effective presentation skills and tools Assignment: Putting all together for a 15 min. presentation. Rehearsal required.
10/10	Mid-term Presentation Assessments Student presentations and peer feedback
10/17	Presenting to a scientific audience Assignment: 10 min. scientific conference talk. PowerPoint required.
10/24	Presenting to an industry audience Assignment: 10 min. "TED talk" style presentation. Visuals optional.
10/31	Collaborative / Team presentations, Panels, and Roundtables Assignment: Moderating a 5-person panel discussion
11/07	Public interviews & Q&A sessions Assignment: Student pairs interview each other
11/14	Webinars & Web conferencing Assignment: 10 min. webinar
11/21	No Class. Thanksgiving
11/28	Radio, TV, and Podcasts Assignment: 10 min. podcast, recorded and included in final portfolio.
12/10	Final Assessment. Portfolio, including an executive summary and a reflective self-assessment, is due on this date.

## 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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://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](http://dps.usc.edu)