

# Effective Science Communication: Presentations & Posters

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## Course Description:

The course aims to enhance doctoral students' communication skills and competencies required to communicate science and scientific research to a broad audience. The course will help students select the right content for their presentations and posters and consider the medium's inherent qualities.

## Prerequisites:

The course is designed for Ph.D. students who have little or no experience in public speaking in English. Learners should

- be engaged in research and have some results to report on
- have B2/B2+ (CEFR) level of English proficiency.

Learners can come from different discipline areas, as the objective of the course is to offer general guidance about public speaking in English.

## Objectives:

Participants will be able to:

- identify and understand a suitable target audience;
- use language that is appropriate for your target audience;
- identify the purpose and intended outcome of the communication;
- separate essential from non-essential factual content in a context that is relevant to the target audience;
- use a suitable mode and platform to communicate with the target audience;
- consider the social, political, and cultural context of the scientific information;
- use/consider style elements appropriate for the mode of communication (such as humor, anecdotes, analogy, metaphors, rhetoric, images, body language, eye contact, and diagrams);
- understand the underlying theories leading to the development of science communication and why it is important;
- promote audience engagement with the science;
- use the tools of storytelling and narrative;
- encourage a two-way dialogue with the audience;
- present research findings and other data using a poster.

## TERM: 1 (FALL)

### 1. Evolution of Public Speaking

- 1.1. Rhetoric - Aristotle's Logic.
- 1.2. Cicero's Five Cannons of Rhetoric.
- 1.3. Modern Elements of Public Speaking.
- 1.4. Styles of Speech.
- 1.5. Storytelling and Narrative.

## **2. Overcoming Fear of Public Speaking**

- 2.1. Psychology of Public Speaking.
- 2.2. Tips for Giving a Killer Speech.
- 2.3. Elements of Confident Body Language.
- 2.4. Effective Introduction and Conclusion.

## **3. Audience-Centered Approach to Speaking**

- 3.1. Target Audience: Understanding Audience Background, Attitudes, and Beliefs.
- 3.2. Tactics for Engaging a Target Audience.
- 3.3. Establishing Audience Control.
- 3.3. Audience Response Systems.

## **TERM: 2 (SPRING)**

### **4. Presentation**

- 4.1. Visual Rhetoric.
- 4.2. Designing Effective Slides (PowerPoint Tutorial).
- 4.3. Introduction to the Color Psychology. How Colors Influence Your Presentation Audience's Mood.
- 4.4. Best Presentation Software.

### **5. Poster Presentations**

- 5.1. Poster Presentations: Tips and Tricks.
- 5.2. Different Types of Posters.
- 5.3. Methods of Making Posters.
- 5.4. Using Posters to Communicate Research.

## **FALL SEMESTER ASSIGNMENTS**

The fall semester assignments must be submitted in the [exam folder](#). Submit all assignments and indicate the folder with your name (e.g., *Ivan Ivanovich Ivanov*).

**You will be notified about the assignments in due time.**

All assignments, unless otherwise indicated by the instructor, **must be completed in accordance with the calendar.**

Assignment #1: **11.10.2020**

Assignment #2: **01.11.2020**

Assignment #3: **22.11.2020**

Assignment #4: **06.12.2020**

Assignment #5: **20.12.2020**

**No assignments will be accepted after their deadlines. No exceptions. It is in the best interest of the student not to submit a late assignment.**

**Successful Completion:**

Students will be awarded a **Pass** when they meet/fulfill the following requirements:

- Complete all writing assignments as scheduled on the syllabus.
- Actively participate in classroom discussions when we meet via Zoom.
- Maintain satisfactory attendance in Zoom at or above **85%**. Attendance will be recorded at the beginning or end of each class meeting. **Zoom meetings will not be recorded.**

**Attendance Policy:**

Students are expected to attend class via Zoom regularly and on time. Be prepared to actively participate in class. This means leading discussions, asking questions, giving your informed opinions, and interactively listening to others. Be prepared to share your screen via the Zoom platform.

**Participant Code of Conduct:**

To promote a classroom environment conducive to learning, please do not distract others. This includes not using cell phones during class time unless condoned by the instructor. All students are expected to adhere to common courtesy guidelines.

**Scholastic Honesty:**

Scholastic honesty is expected and required. All work submitted for this class must be your own.

**Copying or representing the work of anyone else (in print or from another student) is plagiarism and cheating.**

You **MUST** identify and cite your sources whenever you use the following:

- Direct quotations
- Paraphrases and summaries of information not commonly known
- Borrowed ideas
- Facts that are not common knowledge

**TENTATIVE SCHEDULE, FALL SEMESTER**

**SEPTEMBER 14, 2020 - [zoom meeting for all groups \(10:45 - 12:15\)](#)**

**Group 1 (Monday, 09:00 - 10:25) – [ZOOM G1](#)**

**Group 2 (Monday, 10:45-12:10) – [ZOOM G2](#)**

**Group 3 (Saturday, 10:45 - 12:10) – [ZOOM G3](#)**

September 2020						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7 (Synchronous online learning) Zoom meeting for all groups	8	9	10	11	12
13	14 (Synchronous online learning) Zoom meeting for all groups	15	16	17	18	19
20	21 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	22	23	24	25	26 (Synchronous online learning) Zoom meeting for <b>G3</b>
27	28 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	29	30			

October 2020						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3 (Synchronous online learning) Zoom meeting for <b>G3</b>
4	5 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	6	7	8	9	10 (Synchronous online learning) Zoom meeting for <b>G3</b>
11 <b>Assignment #1 DEADLINE</b> all groups	12 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	13	14	15	16	17 (Synchronous online learning) Zoom meeting for <b>G3</b>
18	19 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	20	21	22	23	24 (Synchronous online learning) Zoom meeting for <b>G3</b>
25	26 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	27	28	29	30	31 (Synchronous online learning) Zoom meeting for <b>G3</b>

November 2020						
Sun	Mon	Tue	Wed	Thu	Fri	Sat
1 <b>Assignment #2 DEADLINE</b> all groups	2 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	3	4	5	6	7 (Synchronous online learning) Zoom meeting for <b>G3</b>
8	9 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	10	11	12	13	14 (Synchronous online learning) Zoom meeting for <b>G3</b>
15	16 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	17	18	19	20	21 (Synchronous online learning) Zoom meeting for <b>G3</b>
22 <b>Assignment #3 DEADLINE</b> all groups	23 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	24	25	26	27	28 (Synchronous online learning) Zoom meeting for <b>G3</b>
29	30 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>					

**December 2020**

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5 (Synchronous online learning) Zoom meeting for <b>G3</b>
6 <b>Assignment #4 DEADLINE</b> all groups	7 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	8	9	10	11	12 (Synchronous online learning) Zoom meeting for <b>G3</b>
13	14 (Synchronous online learning) Zoom meeting for <b>G1, G2</b>	15	16	17	18	19 (Synchronous online learning) Zoom meeting for <b>G3</b>
20 <b>Assignment #5 DEADLINE</b> all groups	21	22	23	24	25	26
27	28	29	30	31		

## Textbooks Consulted:

- Apps, & Judy. (2012). *Voice and Speaking Skills for Dummies*. John Wiley & Sons.
  - Becker, L. M. (2014). *Presenting your research: Conferences, symposiums, poster presentations and beyond*. Los Angeles: SAGE Publications.
  - Rowe, N. (2017). *Academic & Scientific Poster Presentation: A modern comprehensive guide*. Springer International Publishing. doi:10.1007/978-3-319-61280-5
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- Anderson, C. (2017). *TED talks: The official TED guide to public speaking*. Boston: Houghton Mifflin Harcourt.
  - Apps, & Judy. (2012). *Voice and Speaking Skills for Dummies*. John Wiley & Sons.
  - Berkun, S. (2011). *Confessions of a public speaker*. Farnham: O'Reilly.
  - Briscoe, M. H. (1996). *Preparing scientific illustrations: A guide to better posters, presentations, and publications*. New York: Springer.
  - Carnegie, D., & Esenwein, J. B. (2019). *The art of public speaking*. New York: Barnes & Noble.
  - Coleman, K. (2018). *Effective communication: Skills and strategies to effectively speak your mind without being misunderstood*. Place of publication not identified: Independently Published.
  - Ferguson, G. (2009). *How to give your best speech or presentation ever: A step-by-step manual for speaking in public*. Charleston, SC: Booksurge.
  - Gallo, C. (2015). *Talk like TED: The 9 public speaking secrets of the world's top minds*.
  - Hull, R. H., & Stovall, J. (2017). *The art of presentation: Your competitive edge*. Shippensburg, PA: Sound Wisdom.
  - Lucas, S. (2020). *The art of public speaking*. New York: McGraw-Hill Education.
  - Nihill, D. (2016). *Do you talk funny? 7 comedy habits to become a better (and funnier) public speaker*. Dallas, TX: BenBella Books.
  - Preston, K. (2014). *Out with it: How stuttering helped me find my voice*. New York: Atria Paperback.
  - Yazbeck, J. (2014). *No fear speaking: High-impact public speaking secrets to inspire and influence any audience*. Largo, FL: DocUmeant Publishing.