

Technical Communication and Writing 科技溝通與寫作, Spring 2019

Institute of Applied Mechanics, National Taiwan University

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Class Hours: Thur. 2:20-5:20pm

Purpose: This course is designed to develop students' ability in essential research communication skills in English. These skills include oral & written communication in both informal and formal settings.

Approach: This class will be conducted in various format –lecture, small group discussion, and student presentation – designed to ensure maximum learning of the material. Since each student is in a various stage of development in the skills described, equal emphasize will be placed on an individual's progress as well as towards a “set standard.”

Prerequisites: Students taking the course is expected to be in involved in various stage of research. Fundamental topics – e.g. research method, literature search, etc. – will not be covered.

Content (draft): Tentative content of the course includes the following.

Week	Content	Skills to be developed	Assignments (tentative)
9/12	Course logistics, individual assessment of various skills, research communication – an overview, the publication process	Develop a mindset of the importance of research communication; set benchmark of initial skill level.	
9/19	Basics of Informal writing; basics of informal conversation	Comfortable in basic verbal and email technical communication.	Weekly record
9/26	Out of town – no class		Weekly record; email communication
10/3	How to write a paper? Elevator talk	Basic skills of writing; deliver short (1 min.) answer on “what is your research about?” to a broad audience	Weekly record; email communication; elevator talk write-up; read p. 20-89 in <i>Writing up Research</i>
10/17 (10/10 holiday)	Deliver elevator talk; <i>Writing up Research</i> : manuscript writing – introduction (Ch. 2-4).	Deliver short (1 min.) answer on “what is your research about?” to a broad audience; skill in writing an introduction	Weekly record; read p. 90-159 in <i>Writing up Research</i>
10/24	Manuscript writing – method (Ch. 5), materials (Ch. 6), results (Ch. 7)	Formulation & presentation of results.	Weekly record; read p. 160-197 in <i>Writing up Research</i>
10/31	Manuscript writing – discussion (Ch. 8), abstract (Ch. 9), wrap-up	Detail and vivid discussion of results. A superb abstract.	Weekly record.
11/7	Writing an extended abstract; writing ethics; graphics	Skills in extended abstract; solid understanding of ethical issues; and graphics	Weekly record; sketch a drawing of your work using Illustrator. .
11/14	Graphics; poster, oral presentation basics	Graphic skills for publication and presentation; poster; basics of oral presentation	Weekly record; correction on graphic; write out your presentation.
11/21	Oral presentation & critique – graphics presentation	Well design poster. Advanced skills in effective oral	weekly record

		presentation.	
11/28	Oral presentation & critique	Advanced skills in oral presentation.	Weekly record; correction on presentation
12/5	Oral presentation & critique	Advanced skills in oral presentation.	

Assessment: In order to chart the progress of a student initial skills in various aspects must be assessed. Skills in research related communication that will be assessed include: verbal communication, technical writing, and graphics.

Grades: Each student is expected to complete a set amount of tasks before the end of the course. These tasks include the following:

1. Weekly Record: (30%)
2. Oral:
 - (20%) Informal: informal technical communication - e.g. short talk (elevator talk), chat during conference reception/banquet, etc.
 - (10%) Formal: Powerpoint presentation.
3. Written:
 - (20%) Informal – email correspondence: request for info., thank you note, etc.
 - (10%) Formal – abstract

Individual Improvement: 10%

Note: each student will have to pass an acceptable level of performance. Repeated attempts might be required if one falls below that standard.

Text for the course:

Buker, S. and Weissberg, R., *Writing up Research- Experimental Research Report Writing for Students of English*. Prentice Hall Regents, 1990.

Office hours: Immediately after class, or by appointment.

Language: English