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Office Hours: Tuesday: 9-12 or by appointment.

Texts

Morgan, S. & Whitener (2006). *Speaking about science: A manual for creating clear presentations*. New York: Cambridge University Press.

Hayes, R. & Grossman, D. (2006). *A scientist's guide to talking with the media: Practical advice from the Union of Concerned Scientists*. Piscataway, NJ: Rutgers University Press.

Additional readings available online at Mansfield Library e-reserve.

Rationale for the Course

NSF has recently recognized the importance of communication in educating scientists and engineers to prepare them to meet the professional and disciplinary demands of the 21st century. As interdisciplinary scientists, you will be called upon to conduct laboratory research, work with colleagues in other disciplines, manage large projects, communicate results to the public, and advocate for the importance of your research. Your success as a scientist may depend as much on the quality of your interpersonal/team communication and management skills as it does on the quality of your research.

As such, in this course I'll instruct in relevant communication subjects that facilitate interdisciplinary scientific collaboration and promote the communication of scientific information to diverse audiences. Specifically, the class will focus on core competencies necessary for enhancing communication in the STEM disciplines. These competences include interpersonal communication; teamwork; audience adapted presentations; communicating with the media; and science communication. The class is designed to run concurrent with other MEID courses and to provide student groups with opportunities to critically examine and improve on their own collaborative performance.

Course Objectives

The general objective of this course is to focus on communication practices that facilitate interdisciplinary interactions and will make you more competent communicators. Specifically, by the end of the course you should be able to:

- a. recognize the changing nature of scientific work and how it now requires scientists to develop a broad set of interpersonal and organizational communication skills;
- b. construct presentations that adapt various messages to diverse audiences;
- c. develop awareness of your own interpersonal communication patterns and the skills to enhance your interpersonal interactions;
- d. understand group processes that influence decision making and conflict, and manage group and team communication productively;

- e. analyze how communication about science is socially framed and constructed;
- f. identify and influence the organizational communication processes that impact the work of scientists.

Course Requirements and Evaluation

The class will be graded on a credit/no credit basis. Satisfactory completion of all of assignments is necessary to get credit for the course.

Assignments:

1. Paper #1
2. Paper #2
3. Individual Presentation
4. Group Presentation
5. Class Participation

These projects are designed to assess your learning of course concepts.

Class participation is mandatory. You are expected to read assigned material prior to class and be prepared to discuss the readings. The course will be focused upon discussion. I'll expect you to do the following in your discussion:

1. show knowledge of reading and thinking about what you read;
2. argue effectively for your positions;
3. transfer the information in the readings to your own group experiences;
4. contribute to a lively discussion.

Adding/Dropping the Course

Note that this course is required of all M-EID Trainees. I will not recommend approval of late drops or changes in grading options except in EXTREME circumstances (see the UM catalog, page 19).

Academic Misconduct

All students must practice academic honesty. Academic misconduct is subject to an academic penalty by the course instructor and/or a disciplinary sanction by the University.

All students need to be familiar with the Student Conduct Code. The Code is available for review online at <http://www.umt.edu/SA/VPSA/index.cfm/page/1321>.

Course Content and Readings: TENTATIVE SCHEDULE**Fall Semester, 2008**

Date	Subject	Readings	Due
8/25	Groups and Teams	<i>Communicating in Groups and Teams</i> . Lumsden & Lumsden (2000)	
9/1	No Class—Labor Day Holiday		
9/8	Interpersonal Communication	Alder, Rosenfeld & Proctor, 2004: Chapter 3, Perception	
9/15	Conflict Management	Wilmot & Hocker, 2007: Chapt. 1	
9/22	Audience Adapted Presentations	Morgan & Whitener 2006 Chaps: 1-5	
9/29	Audience Adapted Presentations	Morgan & Whitener 2006 Chaps: 6-10	
10/6	Interdisciplinary communication	Daily & Ehrich, 1999 Lele & Norgaard, 2005 MacMynowski, 2007	
10/13	Interdisciplinary communication	TBA	
10/20	Social construction of science	Brown, 1990 Kirby, 1990	
10/27	Social construction of science	TBA	
11/3	Writing for science	Huff, 1999 Chaps. 1 & 2	
11/10	Communication with the Public and Media	Hayes & Grossman (2006) Chaps. 1-4	
11/17	Communication with the Public and Media	Hayes & Grossman (2006) Chaps. 5-8	
11/24	No Class: NCA Convention		
12/1	Organizational communication	Cheney et al. (2004)	

Reading List

Alder, R., Rosenfeld, L., & Proctor, R. (2004). *Interplay: The process of interpersonal communication*.

Brown, J. (1990). The social construction of invisible danger: Two historical examples. In A. Kirby (Ed.), *Nothing to fear: Risk and hazards in American society*. Tucson, AZ: University of Arizona Press.

Cheney, G., Christensen, L.T., Zorn, T.E., & Ganesh, S. (2004). *Organizational Communication in an Age of Globalization*. Prospect Heights, IL: Waveland Press.

Daily, G. & Ehrlich, P. (1999), *Managing Earth's ecosystems: An interdisciplinary challenge. Ecosystems*, 2. 277-280.

Hayes, R. & Grossman, D. (2006). *A scientist's guide to talking with the media: Practical advice from the Union of Concerned Scientists*. Piscataway, NJ: Rutgers University Press.

Huff, A. S. (1999). *Writing for scholarly publication*. Thousand Oaks, Ca: Sage.

Kirby, A. (1990). On social representations of risk. In A. Kirby (Ed.), *Nothing to fear: Risk and hazards in American society*. Tucson, AZ: University of Arizona Press.

Lele, S. & Norgaard, R. (2005). Practicing interdisciplinarity. *BioScience*, 55, 967-975.

Lumsden, G. & Lumsden, D. (2000). *Communicating in groups and teams: Sharing Leadership*. Belmont, Ca: Wadsworth.

MacMynowski, D. (2007). Pausing at the brink of interdisciplinarity: Power, knowledge at the meeting of social and biophysical science. *Ecology and Society*, 12: 1

Morgan, S. & Whitener (2006). *Speaking about science: A manual for creating clear presentations*. New York: Cambridge University Press.

Wilmot, W. & Hocker, J. (2007). *Interpersonal Conflict*. New York: McGraw Hill.

Wuchty, S., Jones, B. & Uzzi, B. (2007). The increasing dominance of teams in production of knowledge. *Science*, 316. 1036-1039.