

General Education Review Committee Agenda

September 12, 2008
ADM 204
12:30 p.m. – 1:30 p.m.

I. Call to Order

Roll

() Erik Hirschman	Mat-Su/ UAB	Social Sciences
() vacant	UAB	
() Patricia Fagan	CAS	Humanities
() Robert Capuozzo	COE	
() Jack Pauli	CBPP	
() Jeane Breinig	CAS	Written Communication
() Len Smiley	CAS	Quantitative Skills
() Suzanne Forster	CAS/ UAB	
() Robin Wahto	CTC/ UAB	
() Walter Olivares	CAS	Fine Arts
() Tom Miller	OAA	
() Catherine Sullivan	CHSW/ UAB	
() vacant	SOE/ UAB	
() Doug Parry	CAS	Oral Communication
() vacant	CAS	Natural Science
() Karl Wing	USUAA	

II. Approval of Agenda (pg. 1)

III. Approval of Summary (pg. 2-3)

IV. Report from Assistant Provost Tom Miller

V. Chair's Report

VI. Course Action Requests

Add ENGL A478 Public Science Writing (3 cr) (3+0) (pg. 4-12)

VII. Old Business

A. Capstone Learning Outcomes Assessment Rubric (pg. 13-14)

VIII. New Business

IX. Informational Items and Adjournment

General Education Review Committee Summary

August 29, 2008
ADM 204
12:30 p.m. – 1:30 p.m.

I. Call to Order

Roll

(x) Erik Hirschman	Mat-Su/ UAB	Social Sciences
() vacant	UAB	
(x) Patricia Fagan	CAS	Humanities
(x) Robert Capuozzo	COE	
(x) Jack Pauli	CBPP	
(x) Jeane Breinig	CAS	Written Communication
(e) Len Smiley	CAS	Quantitative Skills
(x) Suzanne Forster	CAS/ UAB	
(x) Robin Wahto	CTC/ UAB	
(x) Walter Olivares	CAS	Fine Arts
(x) Tom Miller	OAA	
(x) Catherine Sullivan	CHSW/ UAB	
() vacant	SOE/ UAB	
() Doug Parry	CAS	Oral Communication
() vacant	CAS	Natural Science
() Karl Wing	USUAA	

Jeff Miller present for SOE

II. Approval of Agenda (pg. 1)

Approved

III. Approval of Summary (pg. 2)

Kathleen Sullivan was present

Approved

IV. Report from Assistant Provost Tom Miller

Working on hiring process in OAA

Working on Accreditation Efforts

Looking for feedback regarding Accreditation documents

V. Chair's Report

Need to determine Utpal Dutta's position in GER and whether or not he is able to represent SOE and UAB

MOTION (Suzanne): Still uses GER templates when reviewing courses, but no longer need to keep written record of GER templates.

2nd (Robin Wahto)

Approved

VI. Course Action Requests

Chg LING A101 The Nature of Language (3 cr) (3+0) (pg. 4-10)

Approved

Add ENGL A478 Public Science Writing (3 cr) (3+0)

No revisions received

Chg AKNS A101A Elementary Central Yup'ik Language I (4 cr) (4+0) (pg. 11-14)

Chg AKNS A101B Elementary Tlingit Language I (4 cr) (4+0) (pg. 15-18)

Chg AKNS A101C Elementary Alaska Native Language I (4 cr) (4+0) (pg. 19-23)

Chg AKNS A102A Elementary Central Yup'ik Language II (4 cr) (4+0) (pg. 24-27)

Chg AKNS A102B Elementary Tlingit Language II (4 cr) (4+0) (pg. 28-31)

Chg AKNS A102C Elementary Alaska Native Language II (4 cr) (4+0) (pg. 32-36)

Approved AKNS A101 ABC and A102 ABC

Chg AKNS A201 Native Perspectives (3 cr) (3+0) (pg. 37-42)
Approved

VII. Old Business

VIII. New Business

A. GER Updated List (pg. 43-46)

B. Update from GER summer capstone working group

Generated draft rubric and Tom in trying to integrate it into a single master model

Trying to come up with new model of institutional outcomes

Found that committee was not clear enough about what materials needed to be submitted

For the first year, everyone should be involved in Capstone assessment

Would not need to see samples from each section if taught by the same instructor

Student Names- should they be removed?

Faculty would submit an example of A paper, B paper, C paper

Possibly use percentages in template

C. GERC language in faculty handbook and membership list (pg. 47-49)

IX. Informational Items and Adjournment



Curriculum Action Request University of Alaska Anchorage

Proposal to Initiate, Add, Change, or Delete a Course or Program of Study

1a. School or College AS CAS		1b. Division AHUM Division of Humanities		1c. Department ENGLISH	
2. Course Prefix ENGL	3. Course Number A478	4. Previous Course Prefix & Number		5a. Credits/CEU 3.0	5b. Contact Hours (Lecture + Lab) (3+0)
6. Complete Course/Program Title Public Science Writing <small>Abbreviated Title for Transcript (30 character)</small>					
7. Type of Course <input checked="" type="checkbox"/> Academic <input type="checkbox"/> Non-credit <input type="checkbox"/> CEU <input type="checkbox"/> Professional Development					
8. Type of Action <input checked="" type="checkbox"/> Course <input type="checkbox"/> Program			9. Repeat Status No # of Repeats Max Credits		
<input checked="" type="checkbox"/> Add <input type="checkbox"/> Prefix <input type="checkbox"/> Course Number <input type="checkbox"/> Change <input type="checkbox"/> Credits <input type="checkbox"/> Contact Hours <small>(mark appropriate boxes)</small> <input type="checkbox"/> Delete <input type="checkbox"/> Title <input type="checkbox"/> Repeat Status <input type="checkbox"/> Grading Basis <input type="checkbox"/> Cross-Listed/Stacked <input type="checkbox"/> Course Description <input type="checkbox"/> Course Prerequisites <input type="checkbox"/> Test Score Prerequisites <input type="checkbox"/> Co-requisites <input type="checkbox"/> Other Restrictions <input type="checkbox"/> Registration Restrictions <input type="checkbox"/> Class <input type="checkbox"/> Level <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Other			10. Grading Basis <input checked="" type="checkbox"/> A-F <input type="checkbox"/> P/NP <input type="checkbox"/> NG		
			11. Implementation Date <small>semester/year</small> From: Spring/2009 To: 9999/9999		
12. <input type="checkbox"/> Cross Listed with _____ <input type="checkbox"/> Stacked with _____ Cross-Listed Coordination Signature					
13. List any programs or college requirements that require this course					
14. Coordinate with Affected Units: Philosophy, Geography and Environmental Studies, UAA Faculty Listserv Department, School, or College Initiator Signature Date					
15. <input checked="" type="checkbox"/> General Education Requirement <input type="checkbox"/> Oral Communication <input type="checkbox"/> Written Communication <input type="checkbox"/> Quantitative Skills <input type="checkbox"/> Humanities <input type="checkbox"/> Fine Arts <input type="checkbox"/> Social Sciences <input type="checkbox"/> Natural Sciences <input checked="" type="checkbox"/> Integrative Capstone					
16. Course Description Focuses on rhetorical issues at the intersections of discourse, science, and citizenry, issues involving citizens' understanding, awareness, and participation in science-based public policy. Traces historical efforts to define and develop scientific literacy and concentrates on the increasing dialogue and debate among scientists, the public, and policymakers.					
17a. Course Prerequisite(s) (list prefix and number) [ENGL A211 or ENGL A212 or ENGL A213 or ENGL A214]		17b. Test Score(s)		17c. Co-requisite(s) (concurrent enrollment required)	
17d. Other Restriction(s) <input type="checkbox"/> College <input type="checkbox"/> Major <input type="checkbox"/> Class <input type="checkbox"/> Level		17e. Registration Restriction(s) (non-codable) Completion of GER Tier 1 (basic college-level skills), junior standing, and 4 credits of Natural Science GER, including one lab credit (see attachment)			
18. <input checked="" type="checkbox"/> Mark if course has fees					
19. Justification for Action Response to a call from GER committee to develop additional general purpose capstone courses					

Initiator (faculty only) Date

Initiator (PRINT NAME)

____ Approved
____ Disapproved: _____
Department Chairperson Date

____ Approved
____ Disapproved: _____
Curriculum Committee Chairperson Date

____ Approved
____ Disapproved: _____
Dean/Director of School/College Date

____ Approved
____ Disapproved: _____
Undergraduate or Graduate Academic Board Chairperson Date

____ Approved
____ Disapproved: _____
Provost or Designee Date

Attachment to ENGL 478 CAR: Registration Restriction Clarification

Courses that will satisfy 4 credits of the Natural Science GER requirement include the following:

ASTR A103/L¹
ASTR A104/L
BIOL A102/A103L²
BIOL A111/L
BIOL A112/L
BIOL A115/L
BIOL A116/L
BIOL A178/A179L
CHEM A103/L
CHEM A104/L
CHEM A105/L
CHEM A106/L
GEOG A205/L
GEOL A111³
GEOL A115/L
GEOL A178/A179L
GEOL A221
LSIS A102
LSIS A201
LSIS A202
PHYS A123/L
PHYS A124/L
PHYS A211/L
PHYS A212/L

¹ When the “L” accompanies a single course number, students need to register concurrently in two corequisite courses, same number, one with an “L” to designate the lab section.

² When two course numbers are listed, the second with an “L”, the lecture course serves as a prerequisite to the lab. Students may take these courses concurrently or consecutively.

³ When a single course number appears, students register in a single course that includes a lab.

UNIVERSITY OF ALASKA ANCHORAGE
COURSE CONTENT GUIDE

I. Initiation Date: February 2008

II. Course Information

- A. College: College of Arts and Sciences
- B. Course Title: Public Science Writing
- C. Course Subject/Number: ENGL A478
- D. Credit Hours: 3.0 Credits
- E. Contact Time: 3 hours per week
- F. Grading Information: A-F
- G. Course Description:
Focuses on rhetorical issues at the intersections of discourse, science, and citizenry, issues involving citizens' understanding, awareness, and participation in science-based public policy. Traces historical efforts to define and develop scientific literacy and concentrates on the increasing dialogue and debate among scientists, the public, and policymakers.
- H. Integrative Capstone GER
- I. Lab Fees: Yes
- J. Coordination: Philosophy, Geography and Environmental Studies, UAA Faculty Listserv
- K. Prerequisites: [ENGL 211 or ENGL 212 or ENGL 213 or ENGL 214]
- L. Registration Restrictions: Completion of GER Tier 1 (basic college-level skills); junior standing; and 4 credits of the Natural Science GER, including one lab credit (see attachment).

III. Course Activities

- A. Lectures
- B. Reading Discussions (small and large groups)
- C. In-class debate
- D. Collaborative problem-solving
- E. Writing, peer response, and revision
- F. Guest panelists
- G. Participation in online media
- H. Student presentations

IV. Evaluation

Evaluation based on exams, discussion participation; a science essay; and a rhetorical analysis project. Project evaluation will assess knowledge integration, effective communication, critical thinking, and information literacy.

V. Course Level Justification

The interdisciplinary nature of public science writing, reinforced by guest speakers, invites students from different fields to analyze and debate perspectives of major

contemporary importance at both local and global levels by using methods of rhetorical analysis. It provides students with an historical perspective on the increasing significance of scientific literacy and scientific communications for democratic participation in public policy issues. A major research project completed by each student integrates concepts and perspectives, and further develops critical thinking, research, and communication skills.

VI. Outline

A. The Two Cultures Debate between the Sciences and Humanities in Higher Education

1. 19th Century: Arnold and Huxley
2. 20th Century: Leavis and Snow
3. 21st Century: The Third Culture

B. The Public Understanding of Science Movement (PUS)

1. Public: many publics
2. Understanding: defining and measuring scientific literacy
3. Science: how science works in deliberative forums

C. Branches of Oratory

1. forensic
 - a. perceptions of risk
 - b. levels of certainty
 - c. hedging language
2. epideictic
3. deliberative

D. Persuasive Appeals

1. ethos
2. pathos
3. logos
4. visual ethos, pathos, and logos

E. Models of Public Science Communication

1. deficiency model—top-down communication
2. rational choice model—what citizens need to know
3. context model—what citizens want to know in particular circumstances
4. webbed model—bottom-up and lateral communication

F. Rhetors, Audiences, and Issues of Authority

1. journalists and science information specialists
2. scientist experts
3. lay publics, lay experts
4. indigenous people and traditional knowledge

G. The Literature of Science

1. primary
2. secondary
3. tertiary
 - a. science narratives
 - b. writing style

c. publishing outlets

H. Science and the Media

1. priming
2. agenda setting
3. issue framing

I. Case Studies

1. Environment: climate change, mining, alternative energy
2. Health: biotechnology, genetic testing, stem cell research

VII. Instructional Goals and Defined Outcomes

A. Instructional Goals, Student Outcomes, and Assessment Methods

Instructional Goals	Outcomes	Assessment Methods
Lecture on the two cultures debate and the public understanding of science movement	Demonstrate knowledge of the historical two cultures debate as a framework for the ways that humanities and science scholars differ on the nature and value of language.	Exam/s In-class debate
Present rhetorical concepts and methods necessary to investigate the rhetoric of public science and the ways in which it is adapted for different audiences and contexts; and invite guest speakers with a wide range of disciplinary expertise on current policy issues	Access, evaluate, and compare a variety of readings and case studies; engage in questioning and discussion with invited speakers; and evaluate critically their own views in relation to these different fields of knowledge.	Discussion participation Exam/s
Integrate communication skills, critical thinking and analysis, and information literacy in assignments and classroom activities	Integrate information literacy skills, communication skills, and critical thinking skills by composing a science essay for a public audience.	Science essay
Demonstrate how rhetorical methods can be used to analyze and write about public science controversies	Evaluate the communication strategies used in a contemporary public policy controversy	Discussion participation Rhetorical Analysis project involving a science-based public policy controversy Classroom presentation
Demonstrate the differences between primary, secondary, and tertiary scientific literature, and present a variety of media outlets that allow public access to scientific information and the historical context for the increase in such access.	Analyze scientific communication models and distinguish logical and appropriate uses of information from specious and fallacious uses of information in various media.	Annotated bibliography Lay abstract of a primary research article Cognitive map of science communication Discussion participation

VIII. Suggested Texts

- Blum, D., Knudson, M., & Henig, R. M. (2006). *A field guide for science writers*. Oxford [England]: Oxford University Press.
- Gregory, Jane, and Steve Miller. (1998). *Science in public: communication, culture, and credibility*. Cambridge, Mass.: Perseus Publishing.
- Irwin, A. (1995). *Citizen science*. London and New York: Routledge.
- Irwin, A., & Wynne, B. (1996). *Misunderstanding science? The public reconstruction of science and technology*. Cambridge: Cambridge University Press.
- Kolata, G. B., & Cohen, J. (2007). *The best American science writing 2007*. New York: Harper Perennial. [Reading selections].
- Leach, M., Scoones, I., & Wynne, B. (2005). *Science and citizens: Globalization and the challenge of engagement*. London: Zed Books.
- Preston, R., & Folger, T. (2007). *The best American science and nature writing 2007*. The Best American series. Boston: Houghton Mifflin. [Reading selections].
- Snow, C. P. (2001). *The two cultures*. London: Cambridge University Press. Canto edition. Intro. S. Collini.

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- Bolles, E. B. (1997). *Galileo's commandment: An anthology of great science writing*. New York: W.H. Freeman.
- Brockman, J. (1996). *The third culture: Beyond the scientific revolution*. London: Simon & Schuster.
- Bucchi, M. (1998). *Science and the media: alternative routes in scientific communication*. London: Routledge.
- Burns, T. W., O'Connor, D. J., & Stocklmayer, S. M.. (2003). Science communication: A contemporary definition. *Public Understanding of Science*, 12, 183-202.
- Chittenden, D., Farmelo, G., & Lewenstein, B., Eds. (2004). *Creating connections: Museums and the public understanding of current research*. Walnut Creek: AltaMira Press.
- Collins, H. (1987). "Certainty and the public understanding of science: Science on television." *Social Studies of Science*, 17, 689-713.

- Dingwall, R., & Aldridge, M. (2006). Television wildlife programming as a source of popular scientific information: A case study of evolution. *Public Understanding of Science, 15*, 131-152.
- Einsiedel, E. F., Jelsøe, E., & Breck, T.. (2001). Publics at the technology table: The consensus conference in Denmark, Canada, and Australia. *Public Understanding of Science, 10*, 83-98.
- Epstein, S. (1995). The construction of lay expertise: AIDS activism and the forging of credibility in the reform of clinical trials. *Science, Technology, & Human Values, 20*, 408-37.
- Fuller, S., & Collier, J. H. (2003). *Philosophy, rhetoric, and the end of knowledge*. 2nd ed. Mahwah, NJ: Lawrence Erlbaum,. [ISBN: 0805847685]
- Gilbert, G. N., & Mulkay, M. (1984). *Opening Pandora's box: a sociological analysis of scientists' discourse*. Cambridge: Cambridge University Press.
- Golinski, J. (1992). *Science as public culture: Chemistry and enlightenment in Britain, 1760-1820*. Cambridge: Cambridge University Press.
- Gross, A. G. (1994). The roles of rhetoric in the public understanding of science. *Public Understanding of Science, 3*, 3-23.
- Harris, R. A., ed. (1997). *Landmark essays on rhetoric of science. Case studies*. Mahwah, N.J.: Hermagoras Press.
- Harrison, K., & Hoberg, G. (1994). *Risk, science and politics regulating toxic substances in Canada and the United States*. Montreal: McGill-Queen's University Press.
- Haynes, R. (2003). From alchemy to artificial intelligence: Stereotypes of the scientist in Western literature. *Public Understanding of Science, 12*, 243-253.
- Hellman, H. (1998). *Great feuds in science: Ten of the liveliest disputes ever*. New York: Wiley.
- Hilgartner, S. (1990). The dominant view of popularization: conceptual problems, political uses. *Social Studies of Science, 20*, 519-539.
- Hilgartner, S. (2000). *Science on stage: Expert advice as public drama*. Stanford: Stanford University Press.
- Hollander, R., & Mayo, D., eds. (1991). *Acceptable evidence: Science and values in hazard management*. New York: Oxford University Press.
- Irwin, A. (2001). Constructing the scientific citizen: Science and democracy in the biosciences. *Public Understanding of Science, 10*, 1-18.
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- Latour, B. (1999). *Pandora's hope: Essays on the reality of science studies*. Cambridge, Massachusetts, and London, England: Harvard University Press.
- Lynch, M., & McNally, R. (2003). 'Science,' 'common sense,' and DNA evidence: A legal controversy about the public understanding of science. *Public Understanding of Science, 12*, 83-103.
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- Miller, J. D. (1998). The measurement of civic scientific literacy. *Public Understanding of Science, 7*, 203-223.
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- Mooney, C. (2005). *The Republican war on science*. New York: Basic Books.
- Nelkin, D. (1987). *Selling science. How the press covers science and technology*. New York: Freeman & Company.
- Proctor, R. N. (1995). *Cancer Wars: how politics shapes what we know and don't know about cancer*. New York: Basic Books.
- Reilly, J., & Miller, D. (1997). Scaremongerer or scapegoat? The role of the media in the emergence of food as a social issue. In P. Caplan, (Ed). *Food, health, and identity* (pp. 234-251). London & New York: Routledge.
- Roth, W., & Lee, S. (2002). Scientific literacy as collective practice. *Public Understanding of Science, 11*, 33-56.
- Rzepa, H. (1999). The Internet as a medium for science communication. In E. Scanlon, R. Hill, & K. Junker (Eds). *Communicating science. Reader 1. Professional contexts* (pp. 141-149). London and New York: Routledge.
- Scanlon, E., Whitelegg, E. & Yates, S. eds. (1999). *Communicating science. Reader 2. Contexts and channels*. London & New York: Routledge.
- Stewart, L. (1993). *The Rise of Public Science: Rhetoric, Technology, and Natural Philosophy in Newtonian Britain, 1600-1750*. Cambridge: Cambridge University Press.
- Stocking, S. H. (1998). How journalists deal with scientific uncertainty. In S. Friedman, S. Dunwoody, and C. Rogers (Eds.). *Communicating uncertainty* (pp. 23-42). Mahwah, NJ: Lawrence Erlbaum Publishers.
- Sturgis, P., & Allum, N. (2004). Science in society: Re-evaluating the deficit model of public attitudes. *Public Understanding of Science, 13*, 55-74.

- Ungar, S., & Bray, D. (2005). Silencing science: Partisanship and the career of a publication disputing the dangers of secondhand smoke. *Public Understanding of Science*, 14, 5-23.
- Weaver, W. (1947). *The scientists speak*. New York: Boni & Gaer.
- Weinberg, A. (1972). Science and trans-science. *Minerva*, 10, 209-222.
- Weingart, P., Engels, A., & Pansegrau, P. (2000). Risks of communication: Discourses on climate change in science, politics, and the mass media. *Public Understanding of Science*, 9, 261-283.
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Draft Capstone Assessment Rubric

Draft Capstone Assessment Rubric				
	Learning Outcomes	Yes	No	NA
Knowledge Integration	Demonstrates the ability to access, judge, and compare two or more fields of knowledge			
	Evaluates critically their own views regarding these different fields of knowledge			
Effective Communication	Demonstrates communication skills necessary to function professionally in the twenty-first century			
Critical Thinking	Defines issues clearly, identifies problems accurately, and/or describes situations precisely			
	Applies material of appropriate relevance, depth, and breadth to issues, problems and situations			
	Analyzes logically and conceptualizes reasoned solutions to issues, problems, and situations			
Information Literacy	Practices the responsible legal and ethical uses of information and demonstrates a thorough understanding of the issues surrounding plagiarism and the canons of academic honesty			
	Distinguishes logical and appropriate uses of information from specious and fallacious uses of information in various media			
Quantitative Perspectives	Performs original and /or critiques published studies using the scientific method or standardized statistical practice			

Issues Identified Associated with Capstone Assessment

1. Levels: Is it adequate to identify evidence of learning outcomes in student artifacts as above, or should the rubric indicate three or more levels of accomplishment?
2. Student Privacy: Should student names and instructor comments be removed from student work to protect student privacy? Discussion favored leaving it up to individual instructors as to removal of student names. Assistant Provost Miller indicated that FERPA does not require the removal of student names for assessment purposes.

3. Assessors: Should individual faculty complete the rubric or should assessment artifacts be evaluated by a separate committee? And who should that committee consist of? If we agree that faculty should submit samples of graded work
4. Sample size: How large a sample size is necessary to effectively assess student work in a given class? Should the work be graded? Is it sufficient to require a single example of work at the A, B, C, and D level? (Initially, we seem to agree on 3 samples, one each of A, B, and C-level work).

An alternate model would be to identify the percentage of students who achieve at each level.

5. If multiple teachers are teaching the same course, should assessment artifacts be gathered from each instructor? We have agreed that faculty teaching more than one section of a capstone course can submit a single sampling from multiple courses.
6. Frequency: Do artifacts need to be assessed every semester, once per year, or on a two or three-year rotation?