FIRST YEAR SEMINAR COURSE PROPOSAL
UNIVERSITY OF MARY WASHINGTON

Use this form to submit **FSEM 100 topics** courses for review **or** any **other existing course** that you wish to have designated to meet the first year seminar requirement.

COURSE NUMBER:	**FSEM 100**			
COURSE TITLE:	**SCIENTIFIC CONTROVERSIES IN THE MEDIA**			
SUBMITTED BY:	Melanie Szulczewski	**DATE:**	Sept. 10, 2008	
This course proposal has the department's approval. (Put a check in the box to the right.)				**X**

NOTE: Click on the link for "first year seminar" at www.jtmorello.org/gened to see the criteria used to evaluate courses proposed to meet the first year seminar requirement. See the report entitled "General Education Curriculum as Approved by the Faculty Senate" for additional details.

COURSE DESCRIPTION. In the space below, provide a one to two sentence description of this class. The description will be entered in Banner, and will also be used in other publications about the first year seminar program (such as the "Eagle Essentials" booklet).

This course provides an overview of various principles of science that apply to contemporary social concerns. Using newspapers, magazines, television news, and the Internet as sources, students will critically examine media reports of controversial scientific issues while becoming active, scientifically literate citizens.

RATIONALE. Using only the space provided in the box below, **briefly** state why this course should be approved as a first year seminar course.

This course will provide students with an overall introduction to scientific issues and their role in our daily lives while meeting First Year Course goals. With knowledge of the science behind current controversial issues, students will learn to develop informed opinions as well as view media reports with a critical eye. Students will expand their skills in reading, writing about, and discussing scientific concepts as well as analyzing their presentation in the media. Each week will carry a theme, with assigned news articles as well as news items chosen by the students concerning the theme. Students will participate in class discussions centered around the weekly theme, defending their position as well as their critique of the media reports with their newly learned scientific knowledge. Groups of students will develop and present a CNN-style skit to the class on a particular controversial issue, and each student will write a research paper on some aspect of their chosen issue, synthesizing information from various academic and media sources. In addition, a field trip to Washington, D.C., to view the Koshland Science Museum (theme: encouraging adult scientific literacy) as well as the newly opened, state-of-the-art Newseum (theme: interactive museum of news) will expose students to other scientific and media perspectives. These activities as well as others detailed in the syllabus fulfill all of the FSEM objectives.

SYLLABUS. *Attach a course syllabus***.**

SUBMIT this form and attached syllabus electronically as one document to Warren Rochelle (wrochell@umw.edu) or Maya Mathur (mmathur@umw.edu). All submissions **must** be in electronic form.

FSEM 100 SCIENTIFIC CONTROVERSIES IN THE MEDIA

Tuesdays and Thursdays TBD
Spring 2009

Professors: Dr. Melanie Szulczewski

Office: Room 435A Jepson Science Center
Telephone: 540-654-1427
E-mail: mszulcze@umw.edu
Office Hours: Tuesdays/Thursdays 3:15-4:30pm, Wednesday s 2-4:30pm, and by appointment

Required Readings

- *Science Matters: Achieving Scientific Literacy*, Robert M. Hazen and James Trefil, Anchor Books, New York, 1992.
- Science news articles from newspapers, magazines, journals & the Internet
- Articles to read BEFORE each class in the Blackboard "Weekly Readings" folder
- Various readings posted in the Blackboard "Assigned Readings" folder

Course Description and Objectives

This course provides an overview of various principles of science that apply to contemporary social concerns. Using newspapers, magazines, television news, and the Internet as sources, students will critically examine media reports of scientific issues while becoming active, scientifically literate citizens. Instead of groaning at the mention of scientific topics, or, worse, believing everything you read in the newspaper or on the Internet, by the end of this course you should:

- ✓ gain a basic understanding of many areas of science;
- ✓ develop skills necessary to interpret and critically analyze scientific topics in the media;
- ✓ form a solid working knowledge about how science is done and its limitations;
- ✓ acquire tools necessary for effective oral and written communication;
- ✓ discover new personal interests in scientific fields.

General Policies

1. **Course philosophy.** This course is an overall introduction to scientific issues and their role in our daily lives. With your earnest effort and participation over the semester, you will be able to get a good grade in this course, as well as become scientifically literate.

2. **Attendance and participation.** Class preparation and participation are so important that they make up a part of the grade in this course. Please come to class prepared to discuss,

ask questions, and otherwise contribute to the exchange of ideas and information. If there are extenuating circumstances, please talk to me about it beforehand, or afterwards if there is a medical reason or other emergency.

3. **Analysis of news articles and media sources.** Each student will be expected to find, review, and contrast science articles and stories several times over the semester. The print media articles can be from magazines, newspapers, or reputable Internet news or science websites. Be sure to note the source and date of each article at the top of the analysis, which should be about two pages. Turn in a copy of the article(s) with each analysis. The science stories from alternative media can be from television, radio, advertisements, promotional materials, brochures, or Internet websites. Be sure to describe in detail any non-written report and to note the source and date of each report at the top of the analysis. See handout for more information on the required format. The grades of late assignments will be decreased by 10%, then 20% after 6 days.

4. **News story presentations.** Besides learning to read and critique science news stories, it is also important to orally present these viewpoints. Each week, several students will informally present and explain the subject of one of their analyses and comparisons of these science reports to the class. It is your responsibility to be sure that you volunteer to present *at least* 2 of your selected news stories over the semester. These presentations are worth 10 points each.

5. **Science literacy essay.** At the end of the semester you will look back over the semester and write a 2-3 page essay discussing any change(s) in your perception of science in the media and your own scientific literacy.

6. **Group Interaction.** During class time, small groups will often get together to discuss one of the assigned articles. Your main points and critiques will be shared with the class. You will also partake in several group/pair activities. Your participation, enthusiasm, and comments will contribute to your group interaction and participation grade.

7. **CNN News Skit Presentations and Research paper.** Small groups of students will investigate in-depth a current scientific issue of your choice. There will be TWO products to this effort. Each student will write an independent 4 page, well-referenced research paper on the selected scientific topic. Each part of the paper (proposal, bibliography, outline/draft, final paper) will be submitted by each student for review. In addition, you and your group members will create a skit in the style of a CNN news clip that will present the issue, background information, current controversy, etc. The 15-minute skit will be performed in front of the class. You will get more details on this assignment later.

8. **Open door policy.** You can discuss in person or through e-mail any question or concern you have regarding this course without worrying about it affecting your grade. I cannot promise instant e-mail replies, but usually we will get back to you within 48 hours.

9. **Common courtesy**. Please try not to be late for class. Please turn off cell phones during class; a ringing cell phone, texting, or instant messaging will lose you 10 points. Do not sleep in class; if you are that tired, you should be at home. Finally, respect each other and other opinions. Scientifically literate citizens look at all sides of the issue!

10. **Grading**

	# Assignments	# Points	Total Points
Paper Parts	3	Proposal 5 Bibliography 10 Outline 10	25
Final Paper	1	50	50
CNN Skit Presentation	1	50	50
News and Media Analyses	6	10	60
News Presentations	2	10	20
Group Interaction and Participation	Various	Various	60
Museum Review	1	20	20
Final Essay	1	20	15
Total Points			**300**

A mid-semester report of unsatisfactory (U) will be reported if you have a C- or lower in the course at mid-term.

11. **Disability Accommodations.** The Office of Disability Services has been designated by the University as the primary office to guide, counsel, and assist students with disabilities. If you already have an accommodations letter from the ODS for this class, make an appointment with me as soon as possible to discuss your approved accommodation needs. If you need accommodations and have not yet contacted the Office of Disability Services, their phone number is 540-654-1266.

12. **Honor Policy**

> UMW HONOR SYSTEM: The Honor System is fundamentally a code of personal integrity. It means that students of the University of Mary Washington accept the challenge to make their word of honor a pledge of absolute truthfulness in all matters that fall within the Honor Code. It is a commitment to a way of life characterized by loyalty to the highest ideals of individual and collective ethical responsibility.

Cheating and attempted cheating, plagiarism, lying, and stealing of academic work and related materials constitute Honor System violations. It is your responsibility to understand it and ask your professor for further explanation of any part you do not understand. It is important to understand the issue of plagiarism and how to avoid it.

Plagiarism means using ideas, opinions, factual information, or language from someone without giving that person appropriate credit. Plagiarism is intellectual robbery. Student writers are sometimes confused as to what should be cited. In addition to direct quotations, paraphrases and summaries of factual information not formerly known to the writer must also be cited. The exception to this rule is information termed general knowledge, or in other words, information that is widely known and stated in a number of sources. Determining what is general knowledge can be complicated, so it is wise to remember the adage, "When in doubt, cite." In academic work, credit should generally be given in an appropriate, consistent format, for example, the systems created by the Modern Language Association (MLA) or the American Psychological Association (APA), or the basic scientific format. All of these systems of documentation are explained in various books and websites.

It is very important to understand how to prevent committing plagiarism when using material from a source, any source. If you wish to quote verbatim, you must use the exact words and punctuation of the original and you must include quotation marks in your citation. If you want to paraphrase ideas from a source, you must do a thorough job of putting the ideas into your own language and you must still cite the source. If you ever have any questions, don’t hesitate to ask your professor.

FSEM 100 SCIENTIFIC CONTROVERSIES IN THE MEDIA
Spring 2009

Date	**Topics**	**Assignments Due**
Week 1	Introduction What is Scientific Literacy? Intro to Science News Critique	"Science Matters": Introduction
Week 2	Weather and Forecasts Critiquing Science News	Analysis of News Article I "Science Matters": Ch.1 pp.1-4, 14-19 & Ch. 14 Blackboard Weekly Readings
Week 3	Climate Change in the News	Analysis of Media Sources I "Science Matters": Ch. 18 pp. 267-276 only Blackboard Weekly Readings
Week 4	Disease in the News Group Selections	Analysis of News Articles II Blackboard Assigned Readings Blackboard Weekly Readings Preliminary Topic Proposals Due
Week 5	Science Museum Visit	Visit to the Koshland Science Museum and Newseum, Washington, DC
Week 6	Genetics in the News	"Science Matters": Ch. 15 & 16 Blackboard Weekly Readings Analysis and Reflection of Science Museum Topic Bibliographies due
Week 7	More Genetics in the News-Forensics	Analysis of Media Sources II Blackboard Assigned Readings Blackboard Weekly Readings Group Progress Report due
Week 8	Pollution and Contamination in the News	Blackboard Assigned Readings Blackboard Weekly Readings Research paper outline due

Date	**Topics**	**Assignments Due**
Week 9	Ecosystems and Biodiversity in the News	Analysis of News Articles III "Science Matters": Ch. 18 pp. 260-267 only Blackboard Weekly Readings
Week 10	Evolution in the News	Analysis of Media Sources III "Science Matters": Ch. 17 Blackboard Weekly Readings Group Skit Outline due
Week 11	Energy in the News	"Science Matters": Ch. 2 and Ch. 8 pp. 110-116 only Blackboard Weekly Readings Research Paper due
Week 12	Scientific Literacy Revisited Students Choice Vote	
Week 13	Students Choice CNN News Skit Presentations	Blackboard Weekly Readings CNN Presentation or Scientific literacy essay due Peer Reviews (in class)
Week 14	CNN News Skit Presentations (cont.) Conclusions and Evaluations	CNN Presentation or Scientific literacy essay due Peer Reviews (in class)