

Science & Fiction

Science, Technology & Society

Professor Jan Potter

jcpotter@gmail.com or jpotter@spsu.edu

Office Hours: By Appointment

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www.scienceandfiction.org

Description:

Many scientists and engineers today graduate from college without good skills at the evaluation and presentation of information. The purpose of this course is to use science fiction literature as a springboard to the development of a methodology for both analyzing information and developing future presentation skills. The material presented will interweave science fiction (both current and historical), television, movies, the internet, and popular culture. Included will be a discussion on how to evaluate information in the information/internet age as well as a complete study of the techniques for the visual display of information. By the careful application of critical skills, the student will learn how to decide what is important in the evaluation of material presented in various mediums as well as the best possible method for conveying information to an audience.

Text Required: No text required. Readings will be assigned as needed. See Calendar for listings.

Policies:

Attendance: You are expected to attend class. This is essentially a discussion class and it is important that you be present for all discussions. Failure to do so will adversely affect your participation grade. Attendance will be taken. **Two (2) absences will be permitted without penalty. Each unexcused absence beyond 2 will result in 5 points being taken off your final grade for each absence. It is essential that you be on time for class. Each late entrance to class will result in a 1 point penalty. Leaving early will also incur a penalty. Please note that many classes BEGIN with a quiz which you will not be allowed to make up if you are late.**

Assignments: You are expected to complete all assignments when they are due. Late assignments will NOT be accepted for credit except in cases of documented emergency. If you are unable to attend class when assignments are due, email them to the professor on that date.

Plagiarism: Plagiarism will not be tolerated. Any copied material that is not properly sourced will result in a zero.

Students with Disabilities: If you require special assistance, please contact the counselor working with disabilities at 770-528-7244 so that any necessary accommodation can be made.

Cell Phones: All cell phones must be turned off or set to vibrate during class. If there is an emergency situation where that is not possible, please notify the instructor prior to the class. In NO situation will calls be taken during class. Failure to follow this rule will adversely affect your participation grade. In an emergency or job related situation, you can step out of class to take a call.

Laptop computers: No laptops can be open or in use during this class.

Classroom Behavior: This is primarily a discussion-based class. Please be aware that many of these topics could be considered offensive depending on your point of view. It is important that we maintain the rules of basic courtesy at all times. There will be only one person speaking at a time and there will be no side-bar conversations during the classroom discussion. The moderator and/or professor(s) have the right to terminate discussion at any time if inappropriate comments or behaviors are observed in any class member.

Pandemic Planning:

In the Event of a Declared Pandemic Emergency Situation, materials will be available on the www.scienceandfiction.org website with discussion questions, outside readings, video clips, etc. You will need to access the online WebCt (Georgia View Vista) System to participate. More information will be provided at that time.

Extra Credit: Opportunities for extra credit are shown on the calendar. Note that students must present extra credit material to the class.

Requirements:

Specific criteria for each paper/presentation can be found online at www.scienceandfiction.org

Critical Essay on Web Sites

Using a controversial topic, write a critical paper that evaluates websites on the topic. You must find websites representing more than one side of the issue. Paper must be a minimum of 5 pages, double spaced. This is an evaluation of online sources, NOT an evaluation of the topic itself.

Controversial Topic Paper

This paper will discuss a controversial topic that you will be presenting with others to the class. The paper will include multiple sides to the problem as well as your own side and documentation. This paper is done by each student individually. See specific instructions for this paper. This will include all background information, sides of the issue, and resources used.

Oral Debate/Moderated Discussion

Every student must participate in a debate and moderate a discussion with the class on a controversial topic. The presentation will be done by teams of 4+ students. Each team will present the “sides” of the issue. After the presentation, the team will monitor a discussion of the subject. Handouts and/or formal presentation materials will improve your grade. Since this class includes online and video presentation materials, the use of such materials is encouraged during your presentation.

The topics will be taken from class discussion. Please email the professor before the second class with your choice of topics. Please list your top 3 choices. Assignments to groups will be shortly thereafter. If a large number of students choose the same topic, they will be assigned on a first come/first served basis. If you do not provide a list of your top 3 choices by the third class, a topic will be assigned to you. **You must be prepared to argue either side of the argument.**

The day for presentations will be assigned on a random basis.

Note: All Material used for these assignments must be appropriate for a college classroom. Please avoid any offensive material in making any presentations. Feel free to use the internet (in class) or a VHS tape/DVD to show scenes of movies, etc.

Evaluation of your team presentation – due the next class after your presentation is given (a one page review answering specific questions). Each member of the team must complete (separately) a one page review after your presentation.

News Review Paper

Choose an article from the newspaper or a news or scientific magazine on a controversial topic **related to your major** and write a written review of the article or segment. The paper should be typed and 2-3 pages long. **You CANNOT use an online source for this paper. It must be a written (paper) document which you will turn in with the paper.** (It will be returned to you)

Final paper (which takes the place of a final exam) is due at the last class.

This paper is a final evaluation of presentations made in class.

Grading

Evaluation:

Participation in Class/Quizzes	25 points
Critical Web Essay	50 points
Controversial Topic Paper	50 points
Presentation/Debate	40 points
Presentation Review	10 points
News Review Paper	50 points
Final Paper	25 points
Total:	250 points

Grading System:

A:	225 to 250 points
B:	200 to 224 points
C:	175 to 199 points
D:	150 to 174 points
F:	Below 150 points

Course Calendar

Date	Subject	Assignment Due	
8/24	Introduction and Syllabus Paper and Presentation Format Evaluating Websites		
8/31	Introduction – History/ Themes in Science Fiction Frankenstein	Read and be familiar with the syllabus Read Chapter 4 (online): http://www.literature.org/authors/shelley-mary/frankenstein/chapter-04.html Email professor by this date with 3 top choices for presentation.	
9/7	Labor Day Holiday, no class	No Class	
9/14	Jules Verne, HG Wells and the Golden Oldies	Read Chapter 1 of 20,000 Leagues Under the Sea: http://www.gutenberg.org/dirs/etext94/2000011.txt Read Chapter 3 of The Island of Dr. Moreau: http://www.gutenberg.org/files/159/159-h/159-h.htm#intro	
9/21	Edgar Rice Burroughs and the Art of Fiction/ War and Science Fiction	Paper Due – Website Evaluation	
9/28	The Atom Bomb and Apocalyptic Fiction, From Asimov to Zelazny, the Golden Years of Sky Fi	Read “Operation Showdown” online at http://www.anjandesigns.com/doomsday.pdf	
10/5	Early TV Science Fiction, Women in Science Fiction, E.T. Phone Home and Close Encounters	Paper Due – News Topic Paper	
10/12	2001/A. I./Mad Max and Max Headroom and the Science of MacGyver	Extra Credit: bring in examples of how AI could negatively affect society	
10/19	Edward Tufte and the Art of Visual Explanation, How to lie with charts and graphs, Truman Show Media & Science/Fiction	Bring in examples of bad charts & graphs for extra credit or examples of how the media have effected scientific exploration/discovery Paper due – Controversial Topic Paper	
10/26	Medical Ethics, Medicine and Science Fiction	Read Article: http://content.nejm.org/cgi/reprint/358/1/1.pdf	
11/2	Fahrenheit 451 and Fahrenheit 9/11	Extra credit: Bring in articles on science and politics	
11/9	Dan Brown and the Science of Religion-Blade Runner/Matrix, The Singularity and the Future of Science	All Materials for Presentations are due this date. Extra Credit: Bring in articles on religion and science	
(Note: Presentation Review is due the week after you present)			
11/16	Student Presentations	Racial Issues	The Role of Government
11/23	Student Presentations	The Roll of Women	Artificial Intelligence
11/30	Student Presentations	Presentation Bias	Media Bias
12/7	Student Presentations	Medical Ethics	Religion

Final Paper is due at the last class. There is no Final in this course.

Ideas for Presentations

Racial Issues

Modern immigration practices
Reverse Discrimination cases
Health care for minorities (why are their health outcomes poorer?)
Gay Rights

The Role of Government

The Patriot Act
“Washboarding” or the use of torture
Mandatory vaccines
Pandemic Planning – Can they make you stay home?

The Role of Women

Abortion
Gender equity (like pay issues, for example)
Women in the Military (combat?)
The Rights of Nursing Mothers in the Workplace

Artificial Intelligence

The Pros vs. the Cons – is it possible to go “too far” with AI?
Should we enhance the brain or build a better machine?
Should it be regulated?
Cloning – Pros and Cons

Presentation Bias

Should the Internet be controlled?
What about copyright on the Internet?
Should we stop the publication of hate mail?
Should educational material move to the iPod platform?
Should we quit printing books?

Media Bias

How much does the television news affect what you know or think?
What will the impact of social media be on the future/politics/movies, etc?
Should children watch TV or Should we curtail violence on TV?
Video Games – Pro and Con

Medical Ethics

Dax Cowart and helping people who don't want help
Babies with no brain kept alive at enormous cost
Who do you save in a disaster? What do you do with the people who won't make it that are still alive?
If you catch something in a hospital, should the hospital be penalized?

Religion

The “fairness” of a transfusion to save a life
Refusing care for a child on religious grounds
Cultural practices that might impede modern medicine
The separation of church and state