

**IDS 3143: ISSUES IN SCIENCE AND TECHNOLOGY- Debunking Myths**  
**CRN 81374**  
**Tuesday and Thursday 2:00-3:15**  
**HE 202**  
<http://ruby.fgcu.edu/Courses/ndemers/Scitech/Fall%2012/index.htm>

Have you ever wondered how much your childhood experiences shape who you become?

Were you a curious youngster? I sure was! I remember taking camping trips with the family in our Plymouth station wagon. The car was always full (unless you also have 9 other siblings you can only imagine how full). Of course, when I was real young I NEVER got a window seat. Dad had us play the typical road games- all our eyes closed and competing to see who could come closest to estimating when we went a mile. And there were the math games- 'Count in base 4'. That will keep you busy for a while on a thousands of mile road trip through Mexico! In between games, and sing-a-longs I would ask questions. Especially when I was older and had been bequeathed a window seat, the questions were endless. Why is that tree shaped like that? What kind of animal is that? It is no wonder I became a scientist; I have an insatiable curiosity.

I get to continue to feed that curiosity by 'teaching' this class. Each of you gets to select your own questions and fill your curious mind about issues in Science and Technology! I get the benefit of learning about all of it, and so do your fellow students. Let's get started and have some fun!

**Fall, 2012**

**Professor:** Nora Demers, Associate Professor of Biology and Interdisciplinary Studies  
PhD, Comparative Immunology

**Office:** Whitaker Hall room 218

**Happy Hours:** T/R; 11:00-12:15 W 1:00-1:45 by appt. at other times

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Please send me a note with corrections to syllabus and web pages (for extra credit).

**Issues in Science and Technology: IDS 3143, 3 credit hours, offered by the College of Arts & Sciences, Department of Philosophy and Communication:** Examines selected contemporary science/technology issues and problems and their intellectual histories through a variety of interdisciplinary perspectives and methods. Stresses critical, creative, and collaborative thinking and application of communication, information, and technological skills.

**Pre-requisites:** IDS 3300 Foundations of Civic Engagement

**Outcomes**

I am primarily interested in improving your abilities to think and reason in a scientific (skeptical) manner and improve your information and technological literacy. In this class you will take a stance on an issue in Science and Technology that you then go on to *attempt to disprove* by researching the wealth of resources available. By doing so you will challenge your beliefs and become more aware of the bias (point of view) of the resources you encounter. You will be expected to take advantage of the library databases in your inquiry. Please consider working with a team on this project.

**Students Will:**

- be able to *identify and explore in a scientific manner* pertinent issues in Science and Technology.
- be able to **integrate social, political, religious, historical and scientific** aspects of present issues in Science and Technology

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- use these multiple perspectives to **express**, in oral and written form, **opinions, with supporting evidence, about these topics.**
- be able to create a defensible position by formulating oral and written arguments about these topics considering **the future** implications.

Upon completion of this course, students should have gained experience and an increased proficiency in the following **Student Learning Outcomes**:

**Technological literacy.** Develop knowledge of modern technology: Process information through the use of technology. Collaborate with others using technology tools.

**Problem Solving.** Understand the multidisciplinary and interdisciplinary nature of knowledge. Apply critical, analytical, creative and systems thinking in order to recognize and solve problems. Work individually and collaboratively to recognize and solve problems.

**Information Literacy.** Identify and locate multiple sources of information using a variety of methods. Analyze and evaluate information within a variety of disciplinary and professional contexts. Participate in collaborative analysis and/or application of information resources.

**Effective communication.** Know the fundamental principles for effective and appropriate communication, including reading, writing, speaking & listening skills. Organize thoughts and compose ideas for a variety of audiences, using a full range of communication tools and techniques. Participate in collaborative projects requiring effective communication among team members.

In this course, your progress toward achieving the goals of **technological and information literacy** will be explicitly evaluated. We will focus on demonstrating your growth toward achieving these goals through the term.

The library **information literacy program** has a variety of resources that should help you improve your skills in technological literacy. Some assignments are derived from this program.

It is expected that the student demonstrate *more* highly refined ability to use the technology and access information during

the term.

#### **Texts**

There is no required text for this course.

Students will also be expected to identify and use a wide variety of resources available through the course web pages.

#### **Web Pages**

This is a web-enhanced course. A large amount of additional material and resources are available on the web pages. This material will help you understand assignments and grading criteria. I expect you to look at the web pages regularly to get information about the course. Please ask me for clarification whenever you want more information.

**We will use ANGEL only to submit assignments and keep track of grades.**

The following web page contains extensive instructions for this class- you should become intimate with it:

<http://ruby.fgcu.edu/Courses/ndemers/Scitech/Fall%2012/index.htm>

#### **Assignments and grading policy:**

93-100% A  
83-92% B  
73-82% C  
60-72% D

60% –Assignments  
10% –Oral presentation  
15% – Independent presentation - written  
5% – Summary discussions



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**60% Assignments/ Technological and Information Literacy**

Assignments are due at the beginning of the scheduled class meeting according to the schedule. If this is a problem, see me to make alternative arrangements. The WebPages have more detailed instructions and grading rubrics for these assignments.

It is your responsibility to consult the web pages for those instructions. Feel free to contact me for *additional* information.

<b>List of five Issues in Science and Technology (2%)</b>	
<b>Essay 1 (3%)</b>	
<b>Forming a Question/Making a Research Plan Worksheet (5%)</b>	<b>My Instructor (2%)</b>
<b>Mining resources (8%)</b>	<b>Data and Information on topic (with citations) to be used during the presentation (8%)</b>
<b>Pro/Con Website Evaluation (4%)</b>	<b>Outline (5%)</b>
<b>Annotated bibliography (8%)</b>	<b>First version (5%)</b>
<b>Timeline of Independent Topic (7%)</b>	<b>Peer review of draft (3%)</b>

**10% - Oral presentations (approximately 15 minutes depending on class size and group structure):** Ideally you will find a partner to work with and present an oral presentation showcasing the sides of the issue. Try to convince your audience to your cause by refuting nay-sayers claims.

**Your topic should be selected during the first weeks of the term.**

The bulk of the assignments have been designed to help you meet the following criteria, which will be used to evaluate your presentation. Here is a general guideline to show the relative importance of each component:

You should present a clear statement of your position on the issue, supported with coherent arguments. You must incorporate the range of issues and opinions about your topic. The percents listed here are to help you determine my expectations for the focus of your work.

(55%) begin the presentation by providing a brief summary of the **scientific and technological aspects** of the topic that are needed in order to provide an informed debate platform.

(40%) A debate of the cultural, governmental, legal, moral, religious and philosophical **aspects** of the topic.

(5%) Conclude with *future implications* of the issue and how we as a society might address the issue. Be specific in addressing what process and actions are necessary for you as engaged community members must take in order for your stance to be adopted.

- Note that **8%** of your final grade is for **data and information** (with references).
- Time limitations require that you select the most important and significant aspects to convince your audience of your position during the oral presentation.

**15% – Independent presentation – final written**

This project provides an opportunity for each student to demonstrate their understanding of Issues in Science and Technology, how they **relate to their interests or discipline**, and improve their ability to

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reason in a scientific (skeptical) manner. *All assignments and drafts are intended to help you meet the outcomes and improve your written and oral presentation skills. You may submit as many times as desired before the due date for feedback.*

**The written report** is expected to be a ***minimum*** of 8 pages of typed and double-spaced text (excluding figures). Use numerous figures and tables to support the text (the figures and tables are REQUIRED, but *not included* in the page minimum requirement). Written reports will be graded on the breadth and depth of issues you address; how well you make and support your argument, and how well they demonstrate information literacy. Of course, clarity, cohesiveness, grammar and writing style will also be considered.

***Extensive references cited within the text*** are expected in order to demonstrate the breadth and depth of your independent research into the topic.

**5%– Summaries and discussion:** Provide a brief summary of each presentation including your interpretation of the adequacy of the information provided. After completion of the presentations we will discuss the *non-scientific and non-technological* aspects of each of your selected issues. You will be graded on your participation and attendance for these days specifically.

**5% –Class participation and attendance**

I expect you to pay attention in class and participate in class discussions. The nature of this class requires sincere effort from all participants. Missing classes is to be avoided at all costs. ***Missing more than 5 classes will result in failure of the class. Arriving more than ten minutes late to class will count as a half an absence.***

- Attendance will be kept and used to help determine class participation. Coming late to class disrupts class, and will be noted and used to help calculate this 10% of your grade. Only one discussion should be occurring at a time in class. If you are having a side conversation with a classmate, it is more than likely that the entire class will benefit from the discussion.

If there is any reason you cannot attend class, it is your responsibility to make arrangements with me as soon as possible.

**5% –e-Portfolio**

**Academic Behavior Standards and Academic Dishonesty**

All students are expected to demonstrate honesty in their academic pursuits. The university policies regarding issues of honesty be found in the FGCU Student Guidebook under the ***Student Code of Conduct*** and ***Policies and Procedures*** sections. All students are expected to study this document which outlines their responsibilities and consequences for violations of the policy. The FGCU Student Guidebook is available online at <http://studentservices.fgcu.edu/judicialaffairs/new.html>

**Disability Accommodations Services**

Florida Gulf Coast University, in accordance with the Americans with Disabilities Act and the university's guiding principles, will provide classroom and academic accommodations to students with documented disabilities. If you need to request an accommodation in this class due to a disability, or you suspect that your academic performance is affected by a disability, please contact the Office of Adaptive Services. The Office of Adaptive Services is located in Howard Hall 137. The phone number is 239-590-7956 or TTY 239-590-7930

**Student Observance of Religious Holidays**

All students at Florida Gulf Coast University have a right to expect that the University will reasonably accommodate their religious observances, practices, and beliefs. Students, upon prior notification to their instructors, shall be excused from class or other scheduled academic activity to observe a religious holy day of their faith. Students shall be permitted a reasonable amount of time to make up the material or activities covered in their absence. Students shall not be penalized due to absence from class or other scheduled academic activity because of religious observances. Where practicable, major examinations, major assignments, and University ceremonies will not be scheduled on a major religious holy day. A student who is to be excused from class for a religious observance is not required to provide a second party certification of the reason for the absence.

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WEEK	DATE	TOPIC	DUE
1	Aug 21	Introductions	
	Aug 23	Defining Science / Issues chosen	<i>List of 5 issues</i>
2	Aug 28	Computer tutorial- advanced library research	<i>Essay #1</i>
	Aug 30	Discuss individual projects in groups.	
3	Sept 4	Computers and topic selection training II	<i>Research plan worksheet</i>
	Sept 6	Independent topics chosen	Topic titles- <i>take your stance be <u>very</u> specific</i>
4	Sept 11	outline expectations	
	Sept 13		<i>Outline</i>
5	Sept 18		<i>Mining resources</i> <i>Sign up for Presentations</i>
	Sept 20		<i>Pro/Con Websites Evaluation</i>
6	Sept 25	Discussion of timeline	
	Sept 27	Discussion	<i>Timeline</i>
7	Oct 2	Presentations discussed groups present timeline information	<i>Annotated bibliography</i>
	Oct 4	Presentation style/timing/ etc	<i>Data and Information</i>
8	Oct 9	Discuss	<i>FIRST VERSION of individual projects (bring copy to class)</i>
	Oct 11	WORK DAY no class scheduled	
9	Oct 16	Independent presentations	<i>My Instructor must be completed no later than this date</i>
	Oct 18	Independent presentations	
10	Oct 23	Independent presentations	
	Oct 25	Independent presentations	
11	Oct 30	Independent presentations	
	Nov 1	Independent presentations	<i>Written reports</i>
12	Nov 6	Independent presentations	
	Nov 8	Independent presentations	
13	Nov 13	Independent presentations	
	Nov 15	Independent presentations	
14	Nov 20	Independent presentations	
	Nov 22	<b>Thanksgiving Break</b>	
15	Nov 27	Discussion- Science and Society	<i>Summaries of Presentations</i>
	Nov 29	Class summary	
	Dec	Portfolio	Portfolio