

SUMMER 2008 BRIEF SYLLABUS
STS 2400--SCIENCE, TECHNOLOGY, AND SOCIETY:
INNOVATION AND ENVIRONMENT
STS 2400-001 9:00-11:40 AM Room: J-109

INSTRUCTOR CONTACT INFORMATION:

Instructor: Dr. Julie Newell

Office: J-305

Phone/Voice mail: 678-915-7481 Fax: 678-915-4949

email: jnewell@spsu.edu

Office Hours: 7:30 am-6:00 pm M-R; drop-ins welcome but I could be out of the office at a meeting; please feel free to make an appointment if you want to meet at a specific time

My Web Page: <http://www.spsu.edu/sis/newell>

Web CT Address: <http://www.spsu.edu/webct/>

PREREQUISITES: English 1101

REQUIRED COURSE MATERIALS:

Arthur Molella and Joyce Bedi, eds., *Inventing for the Environment* (ISBN Number 13-978-0262633284)

Access to a web browser or time on campus to use the computers here—participation on the class web site is required. **You will need to use WebCT VISTA and are responsible for all course material and information that appears there and in the full on-line syllabus.**

Campus regulations also require you to check your SPSU email regularly (ideally, every business day). I will presume you are doing this and may email critical information for which you are responsible.

Access to a typewriter or a computer and word-processing software. Be sure that you proofread all of your work (don't rely on software) and check to see that your printer or typewriter is not in need of a new ribbon or cartridge. **All written work in this course must be typed.**

CLASSROOM PHILOSOPHY:

Come: be in class every day, on time, and prepared. Stay for the whole class.

Commit: expect to spend significant time and effort on course assignments—half measures won't do. And that includes in-class activities.

Communicate: ask questions; share ideas and suggestions; participate in discussions and group assignments. Use the bulletin board in WebCT, too!

Collaborate: contribute to the creation of a learning community characterized by cooperation and mutual respect; learning isn't a competitive event—we all do better when we all do better.

SPECIFIC COURSE PHILOSOPHY:

STS 2400 is an interdisciplinary course, designed to introduce you to some of the interrelationships--historical and contemporary--of science, technology, and society. The depth of our dependence on complex technological systems, and the intensity of our emotional and financial investment in them, mean that such systems have wide social and cultural impact. The goal of the course is to get you to explore the broader implications of science and technology, of your major and, ultimately, of your chosen profession. Modern science and technology presents us with complex social, ethical, and cultural choices. This course is designed to get you thinking about some of them.

To participate as a citizen in an increasingly scientific and technological world, you must be able to evaluate information, form your own understandings and opinions, express those opinions both orally and in writing, and defend them with appropriate evidence and example. In this course you will be encouraged to do all those things.

Writing will be used extensively in this course. Writing is a critical skill not only for expressing what you think and know, but also for developing your knowledge and understanding.

Writing is a *process* and will be used in this course to help you figure out what you think, what you know, and what you *don't* know. Reading and writing are basic tools in this class.

COURSE GOALS:

Goal 1: You should be able to identify the ways in which science and technology are shaped by and help to shape society and culture.

Goal 2: You should be able to evaluate historical case studies and apply the knowledge gained from such case studies to evaluating contemporary issues.

Goal 3: You should be able to weigh evidence, construct arguments, evaluate arguments, and apply these skills to the debates concerning contemporary issues in science and technology.

Goal 4: You should be able to formulate and clearly express, both orally and in writing, your own position on contemporary issues in science and technology, supporting your position with evidence and example as well as logically consistent and fully developed argumentation.

ACHIEVING THE COURSE GOALS:

Goals 1 & 2: For most of you, much of the material in this course will be new. We will use reading, lecture, film, discussion, and group activities to explore examples--both historical and contemporary--and to develop the skills to identify and evaluate the choices, access limitations, risks, costs, responsibilities, and benefits associated with scientific and technological developments.

There is no substitute for coming to class *prepared*. You must do--and think about--the assigned work before you come to class--the summary assignments should encourage you to do this! And you must be present on a regular basis.

Goals 3 & 4: Discussion, papers, and class presentations will provide numerous opportunities to develop and practice these skills.

COURSE LEARNING OUTCOMES:

Students will be able to:

1. Identify and evaluate competing views and the information supporting them.
2. Formulate their own opinions on complex issues and to communicate their views clearly in both written and oral formats, and support their position with relevant evidence.
3. Recognize the ways in which science and technology have been shaped by, and have helped to shape, society and culture.
4. Apply STS concepts to the scientific disciplines and technologies relevant to their majors.
5. Participate effectively in multidisciplinary groups.

STUDENTS WITH DISABILITIES:

Students with disabilities who believe they may need accommodations in this class are encouraged to contact the counselor working with disabilities at 678-915-7244 as soon as possible to better assure that such accommodations are implemented in a timely fashion.

DISRUPTIVE BEHAVIOR AND ACADEMIC DISHONESTY:

Be sure you read the relevant section and know and understand the potential penalties in the University Academic Regulations in the current undergraduate catalog or on the campus web site. You would do well to read the document prepared by SPSU faculty members Bob Brown and Bob Harbort and supported by the School of Arts and Sciences. (Hot linked from electronic syllabus.) The penalty in this course for a *first offense* of academic dishonesty is a score of zero on the assignment in question and a written warning. Repeat offenders will receive a *course* grade of F.

ATTENDANCE / ON-TIME ASSIGNMENTS:

Participation in the give-and-take of class is an important part of this course. I expect you to be in class--on time, and stay until the end of the period, and participate while you are in class.

I will take attendance. If you arrive after attendance has been taken, it is your responsibility to sign in. Coming late or leaving early will affect your attendance score. We have only 10 class meetings, or 25 hours of in-class time.

You will be responsible for all material covered in class (lecture, film, and activities) and all material covered in the assigned reading whether or not you are in class. Use WebCT to see what you've missed and then feel free to come to me with questions or for additional information.

Late assignments will **NOT** be accepted for credit. Every assignment we do will be part of the preparation for the class meeting at which it is due, and having your work done is part of being prepared. Work turned in late may be evaluated to provide you with feedback, but will not be graded / given credit except in cases of documented emergency.

Assignments may be submitted electronically if you must be absent OR if you have a printer emergency, but they must still be submitted on time. If you must submit written materials electronically, you must submit them as Microsoft Word (.doc) or Rich Text Format (.rtf) files and send them as email attachments. (You can send attachments in WebCT or by regular email but be sure the attachment IS attached.) And you may not submit assignments electronically on a regular basis (i.e. my office is not to be used as a convenient printing center).

All written assignments are due by the scheduled start of class on the date specified. Electronic submissions must be sent by that time and in the specified format to be accepted.

Technology failure will almost never qualify as an "emergency."

HAZARDOUS WEATHER:

Please see the hazardous weather page on Dr. Newell's website. (Hot-linked from the on-line syllabus or Dr. Newell's homepage.) Your assignments are due on the posted due dates even if bad weather closes the university! Be sure you have read and understand the course policy on hazardous weather.

WRITING ASSIGNMENTS:

A. MR / NMR PAPERS (you must write 2 of these; approx. 2-3 pages each; total 50% of the paper component of your grade):

You must write one paper clearly related to your major (MR) and one clearly not related to your major (NMR). These papers are due at the beginning of the class period on the date for which you are scheduled.

Your paper must be headed with your name, the due date, the day's topic, your major, and NMR or MR as assigned. It must be typed, double-spaced, and contain few or no spelling or grammar errors. You must bring TWO copies to class--one to use and one to turn in AT THE BEGINNING OF CLASS. Failure to comply with these expectations will earn you negative points.

Your paper must focus on an innovation related to the day's topic and must be clearly related to (MR) or not related to (NMR) your major, depending on your individual assignment for the day. You must make the case that you have met these requirements. If you focus on an innovation covered in the reading, you must go significantly beyond the level of detail / understanding provided in the reading.

Your paper must clearly explain the nature and potential impacts (good and bad) of your chosen innovation.

Your paper must include 3-5 annotated citations for sources related to your focus; you must use at least three of these sources in your paper. All material must be properly attributed to source--please review the academic dishonesty section of your syllabus.

B. Corporate Profile Essays (approx. 3-5 pages not including bibliography; worth 50% of the paper portion of your grade)

This paper will be due at the beginning of last class meeting (June 19) and must be on the topic you originally chose.

Your paper must be headed with your name, the due date, and the name of your focus corporation. It must be typed, double-spaced, and contain few or no spelling or grammar errors. Failure to comply with these expectations will earn you negative points.

Your paper must begin with a clear thesis statement in which you clearly state the name of your corporation and your position on the following: to what degree is your corporation promoting innovation that will positively impact the environment?

Your paper must clearly explain what you consider "innovation" and the nature and significance of the environmental impact.

Your paper must provide sufficient evidence, example, and argumentation to support the position you have taken claims you make.

Your paper must provide 5-7 annotated citations including the web site of your corporation and books or articles discussing the environmental innovation record of your focus corporation; you must use at least five of these sources in your paper. All material must be properly attributed to source--please review the academic dishonesty section of your syllabus.

C. READING SUMMARIES (you must write 7 of these; together they are 25%):

For each of the three articles in a reading assignment you must do the following:

Your paper must be headed with your name, the due date, and the day's topic. It must be formatted as specified below. It must be typed, double-spaced, and contain few or new

spelling or grammar errors. You must bring TWO copies to class--one to use and one to turn in AT THE BEGINNING OF CLASS. Failure to comply with these expectations will earn you negative points.

For each of the three articles in the reading assignment, you must do the following:

- A. Identify the 3-5 main arguments.
- B. Summarize each argument in 2-5 complete, grammatical sentences. Each argument must be presented in a single-spaced paragraph. The argument must be clearly stated. You must provide enough explanation, evidence, and example to make sure the point is clear.
- C. You must have a separate section for each article, headed with the name of the article's author, and containing at least 3 single-spaced paragraphs (one for each argument you've identified). Leave a couple of blank lines between sections, but DO NOT start each one on a new sheet of paper.

GRADING:

Your final grade will depend on four equally weighted categories:

- attendance and participation (be in class, on time, stay to the end, and be actively involved in what we are doing) is 25% of your grade
- reading summaries (3 items x 7 weekly assignments) is 25% of your grade
- papers (three *short* ones!) is 25% of your grade
- presentation (overall score for the group presentation + quality of your evaluation of the group process + your contribution to the group process / project) is 25% of your grade

You may raise your final grade up to 10% with extra credit work.

Final Grades will be assigned as follows:

- 89.5% and up = A
- 79.5-89.4% = B
- 69.5-79.4% = C
- 59.5-69.4% = D

Additional Notes Relevant to Grading:

Following directions is a basic life skill. You are responsible for abiding by all directions and deadlines appearing in the printed syllabus, in the expanded on-line syllabus, or on the course WebCT site.

There will be limited extra-credit work available. All extra credit assignments are chosen based on their relevance to the course and their availability (at least in theory) to all students in the course. They occur periodically throughout the course and will be posted on WebCT. As always, if you want the credit, follow the directions carefully and turn your work in on time. Extra credit can raise your final grade a maximum of 10%.

I make every effort to grade and return assignments promptly. Once an assignment is returned, please bring any clerical errors to my attention promptly. For questions of interpretation or other more complicated issues, I ask that you wait 24 hours, think through the argument you want to make, and then please do come and discuss your concerns with me.

Please retain copies of all your graded work. I will periodically supply you with a copy of your scores as they appear in my computer. It is your responsibility to bring any recording errors to my attention, and you will need your graded work as documentation.

SCHEDULE FOR Summer 2008:

NOTE: Due to availability of speakers, the Assignments do NOT always come in the same order in which they appear in your book! ALWAYS check the schedule!

Class	Date	ASSIGNMENT DUE
1	5/20	Nothing to turn in! Review of course structure, assignments, and expectations.
2	5/22	Read: Preface, Introduction Due: come prepared to form a group for the final project and the dates/topics for your two papers
3	5/27	Topic: Thinking Differently Read: "On Nature and Technology" section and Conclusion Due: Reading Summaries for (1) White, (2) Pyne, and (3) Nash & Davidson Guest: Dr. Bow Van Riper, SPSU, SIS Department, STS Program
4	5/29	Topic: Landscape Read: "What Role Does Innovation Play in Urban Landscapes?" Due: Reading Summaries for (1) Davis, (2) Robinson, and (3) Davidson Guest: TBA
5	6/3	Topic: Cities Read: "How Do Innovations in City Planning Shape the Environment?" Due: Reading Summaries for (1) Molella & Kargon, (2) Rand, and (3) Davidson Guest: TBA
	6/4	Last Day to Withdraw with "W"
6	6/5	Topic: Building Materials and Techniques Read: "How Do Innovations in Architecture Affect the Environment?" Due: Reading Summaries for (1) Henderson, (2) Porter, and (3) Davidson Guest: Chris Welty, SPSU, Architecture Department
7	6/10	Topic: Alternative Energy Read: "How Can Innovation in Alternative Energy Sources Affect the Environment?" Due: Reading Summaries for (1) Volti, (2) Lovins, and (3) Davidson Guest: Mr. Scott Tippens, SPSU, ECET Department
8	6/12	Topic: H ₂ O Read: "How Are Technological Innovation, Public Health, and the Environment Related?" Due: Reading Summaries for (1) Melosi, (2) Gadgil, and (3) Davidson Guest: Kathy Nguyen, Georgia Assn. of Water Professionals & Cobb County Water
9	6/17	Topic Industrial Ecology Read: "How are the Principles of Industrial Ecology Applied to Benefit the Environment?" Due: Reading Summaries for (1) Rosen, (2) Allenby, and (3) Davidson Guest: TBA
10	6/19	Topic: Corporations Innovating (?) for the Environment Due: Group Presentations and Individual Corporation Papers We will also be doing course evaluations. YOU HAVE UNTIL NOON 6/19 to TURN IN FIELDTRIP WRITE-UPS (HARDCOPY TO DR. NEWELL); AND UNTIL MIDNIGHT 6/19 TO SUBMIT YOUR <u>TYPED</u> SELF-AND-TEAM EVALUATIONS AS EMAIL ATTACHMENTS

All of this schedule info AND whose paper is due when (you'll pick dates) will be available through the Calendar feature in WebCT Vista. Extra credit events will be posted there as well.