

October 29, 2008

TO: The General Studies Council  
FROM: Nicholas Alozie *NOA*  
Head, Social and Behavioral Sciences  
RE: STS Courses Submitted for General Studies Review

Earlier this year the ABOR approved the B.S. degree program in Science, Technology, and Society for the Polytechnic campus (see attached memorandum from Provost Capaldi). Science, Technology, and Society (STS) is a social science discipline that investigates the interrelationship of science/technology and human systems. Typically, issues concerning the impact of science/technology on globalization, reproductive technology and human values, information technology and human relations, and science/technology and public policy and governance all come under the general domain of studies in STS. All of the STS courses included in this review are *required* to support this new degree program. These courses have all gone through the ACRES process and have received final approval (see attached front sheet from ACRES).

**ASU**  
ARIZONA STATE UNIVERSITY

March 28, 2008

TO: David Schwalm, Dean  
School of Applied Arts and Sciences

FROM: Elizabeth D. Capaldi  
Executive Vice President and Provost of the University *Becky*

SUBJECT: B.S. in Science, Technology, and Society

This is to notify you that on March 25, 2008, the Academic Affairs Committee of the Board of Regents approved the request for authorization to implement the B.S. in Science, Technology, and Society.

You may proceed to implement the proposal effective immediately. The following plan code has been established in OASIS, effective fall 2008: ECSTSBS

XC: Maria Allison  
Bridgot Allcott  
Jill Andrews  
Nancy Dickson  
Melinda Gebel  
Jennifer Glawson  
Heather Hoffart  
Cecilia Hook  
Glenn Irvin  
Nancy Kiernan  
Phyllis Lucie  
Linda Pedersen  
Julie Ramsden  
Adrian Sannier  
Gini Sater  
David Young  
Nicholas Alozie  
Lisa Frank

**EXECUTIVE VICE PRESIDENT AND PROVOST OF THE UNIVERSITY**

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300 EAST UNIVERSITY DRIVE  
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**New Course Curriculum Form**

Arizona State University

E STS 332 Global Issues in Science and Technology 3.0 - Spring 2009 | CL: None

**Originator:** Silvia Llamas-Flores **Status:** Approved **Department:** Social and Behavioral Sciences (Polytechnic)**Date Created:** 05/13/2008 **Submitted:** 05/13/2008 **Completed:** 10/20/2008 **To ACETS:****Campus:** E**College:** Applied Arts and Sciences**Subject:** STS**Number:** 332**Title:** Global Issues in Science and Technology**Abbreviated title:** Global Issues Science and Tech**Semester hours:** 3.0**Effective semester:** - Spring**Summer justification:** N/A**Effective year:** 2009**Catalog description:** Examines contemporary international debates in science and technology and how those issues impact globalization.**Primary component:** Seminar**Graded component:** \*Same as primary component**Additional component(s):****Optional component(s):****Cross-listing:** | CL: None**Cross-listed course (s):****Enrollment Requirements?:** Yes**Prerequisite(s):** STS 101, 301, or instructor approval**Conditional prerequisite(s):****Corequisite(s):****Pre-/corequisite(s):****Repeat for credit:** No**Total hours allowed:****Total completions allowed:****Multiple**

**ARIZONA STATE UNIVERSITY EAST/TEMPE CAMPUS**  
**GENERAL STUDIES PROGRAM COURSE PROPOSAL COVER FORM**

Courses submitted to the GSC between 2/1 and 4/30 if approved, will be effective the following Spring.

Courses submitted between 5/1 and 1/31 if approved, will be effective the following Fall.

**(SUBMISSION VIA ADOBE.PDF FILES IS PREFERRED)**

DATE 10/31/2008

1. ACADEMIC UNIT: ASUP SOCIAL AND BEHAVIORAL SCIENCES
2. COURSE PROPOSED: STS 332 Global Issues in Science and Technology (3)  
(prefix) (number) (title) (semester hours)
3. CONTACT PERSON: Name: Sherrie Loomis Phone: 480/727-1984  
Mail Code: 0180 E-Mail: sherrie.loomis@asu.edu

4. ELIGIBILITY: New courses must be approved by the Tempe Campus Curriculum Subcommittee and must have a regular course number. For the rules governing approval of omnibus courses, contact the General Studies Program Office at 965-0739.
5. AREA(S) PROPOSED COURSE WILL SERVE. A single course may be proposed for more than one core or awareness area. A course may satisfy a core area requirement and more than one awareness area requirements concurrently, but may not satisfy requirements in two core areas simultaneously, even if approved for those areas. With departmental consent, an approved General Studies course may be counted toward both the General Studies requirement and the major program of study.

Core Areas

- Literacy and Critical Inquiry-L   
Mathematical Studies-MA  CS   
Humanities and Fine Arts-HU   
Social and Behavioral Sciences-SB   
Natural Sciences-SQ  SG

Awareness Areas

- Global Awareness-G   
Historical Awareness-H   
Cultural Diversity in the United States-C   
(Note: one course per form)

6. DOCUMENTATION REQUIRED.  
(1) Course Description  
(2) Course Syllabus  
(3) Criteria Checklist for the area  
(4) Table of Contents from the textbook used, if available
7. *In the space provided below (or on a separate sheet), please also provide a description of how the course meets the specific criteria in the area for which the course is being proposed.*

CROSS-LISTED COURSES:  No  Yes; Please identify courses: \_\_\_\_\_

Is this a multisection course?:  No  Yes; Is it governed by a common syllabus? \_\_\_\_\_

NICHOLAS ALOZIE  
Chair/Director (Print or Type)

N. Alozie  
Chair/Director (Signature)

Date: 10/29/2008

**Syllabus**  
**Arizona State University Polytechnic Campus**  
**School of Applied Arts and Sciences**  
**Social and Behavioral Sciences**

**STS 332 Seminar: Global Issues in Science and Technology**

Fall, 2008

Schedule Line Number:

Satisfies General Studies:

Venue: Santa Catalina Hall 133

Time: 2:00PM – 3:15PM

Days: Monday and Wednesday

Meeting Dates: 8/25/2008 – 12/9/2008

Class Format: Lecture/Discussion

Professor: Dr. Nicholas Alozie

Office: Santa Catalina (SANCA) 252M

Tel.: (480) 727-1395

E-Mail: [Alozie@asu.edu](mailto:Alozie@asu.edu)

Office Hours: Mondays & Wednesdays  
12:00pm-1:30pm, and by appointment.

**Course Description:**




This seminar focuses on science and technology issues that are global in nature, which are discussed and debated in the global arena. 'Global goods' is a term which refers to the elements which we all need that transcend borders, such as clean air, clean water, a safe environment, ecosystems, etc. 'Global bads' is a term which refers to the less desirable elements we, on earth, share, such as environmental damage and change, the proliferation of nuclear weapons, global crime, and global terrorism. Science and technology are key variables in both of these sides of the coin. How can policies that have a global impact be made when individual nation-states control their own science and technology policies, as well as foreign policy. What attempts have been made by international organizations to address these issues? How affective are they? These are some of the questions that we will discuss as we explore the most significant and current global issues and their relationship to science and technology. As the name seminar implies, the central method of instruction in the course will be student and faculty discussions, and student writing, based on assigned readings and individual research.

**The following topics will be treated in the course:** Introduction to global issues and international relations; Interaction between global issues and national interests; Science, technology and international law (treaties, agreements, norms); Science, technology and international organizations and regimes; Impact of regional integration on science and technology policy: case of the European Union; Global issues: trade, access to science and technology and global terrorism; Global issues: science and technology management and environmental degradation and sustainability; Global issues: proliferation of weapons of mass destruction; Global issues: global crime and information technology; Global issues: and international trade, pharmaceuticals, and disease.

**The objectives of the course are that you will:**

- Understand the main themes and trends of current global issues relating to and influenced by science and technology.
- Understand the complexity of national versus global interests.
- Articulate various viewpoints on these critical issues, and develop your own perspective based on the research.
- Research and analyze a particular issue related to the themes of the class and write two short papers.

**Required course texts:**

-  De La Mothe, Joh, ***Science, Technology and Global Governance***, Routledge, 2002
-  Lyall, Catherine, ed., ***New Modes of Governance: Developing an Integrated Policy Approach to Science, Technology, Risk and the Environment***, Ashgate, 2005
-  Harf, James E., ***Taking Sides: Clashing views on Controversial Global Issues***, McGraw-Hill, 2004

**Requirements:**

Attendance is expected in class and participation counts for 25% of the final grade. It is essential that students complete assigned readings in time for class to maximize fruitful discussion. The participation grade includes leading a discussion at least once. There are also two written assignments, each worth 25% of the grade, plus a written essay final exam worth 25%. Each week there will be in class discussions, where a topic will be discussed within small groups and/or as a class, based upon the assigned reading for that week. Towards the end of the student several debates will be organized, which are also part of the participation grade. The goal of the debates is to explore all of the angles and stakeholder perspectives on a particular issue, so very often you will be given a position to explain and articulate, which may not be your own opinion.

The papers will be thoughtful essays with some amount of research involved. Each one will deal with a topic in ethics and science and technology. Research will involve information on all sides of the issue, so that you will be able to discuss the ethical implications with a full understanding. Guidance will be given on the topic selections and how you can structure your papers. Each paper should be approximately 5-7 pages long, single spaced, and with at least 5 references, properly cited in the text and a bibliography; these references can be newspaper articles, books or academic journal articles. The criteria for written work includes original work (**see note**), clarity of communication, coverage of concepts, and depth of analysis.

**NOTE ON WRITING ASSIGNMENTS:** *Academic honesty is expected of all students at Arizona State University. Cheating or plagiarism will result in disciplinary action against the student (s)*

*involved. Cheating includes, but is not limited to, buying or copying research papers from somebody. Plagiarism also includes copying sections, including sentences and phrases of text out of research articles, or off internet websites, without citing the source and putting phrase/sentences in full quotation marks.*

Participation	100 points
Paper 1	100
Paper 2	100
Final Exam (Essay)	100
<b>Total</b>	<b>400</b>

Pursuant to the University Grading Scale, the cutoff for final grades in the course is:

A+	98%
A	95%
A-	92%
B+	88%
B	85%
B-	82%
C+	78%
C	70%
D	65%

To determine your final percentage, divide your final point total by the total points available in the class (400). Any final percentage total less than 65% will result in a failing final grade of E.

**Weekly Topics (Readings: TBA from assigned texts):**

1. Introduction to global issues and international relations
2. Interaction between global issues and national interests
3. Science, technology and international law (treaties, agreements, norms)
4. Science, technology and international organizations and regimes
5. Impact of regional integration on science and technology policy: case of the European Union
6. Global issues: trade, access to science and technology and global terrorism
7. Global issues: science and technology management and environmental degradation and sustainability
8. Global issues: proliferation of weapons of mass destruction
9. Global issues: global crime and information technology
10. Global issues: international trade, pharmaceuticals, and disease

11. Taking sides: student debates (take home final essay exam assigned)
12. Taking sides: student debates
- 13/14 Student presentations (take home final due)

Arizona State University Academic Policies:

Plagiarism:

Academic integrity and honesty is expected of all students at Arizona State University, and is so stated in the ASU Student Code of Conduct (available at <http://www.asu.edu/studentaffairs/studentlife/judicial/>). Plagiarism or cheating can result in the grade of "XE". The XE grade denotes failure through academic dishonesty. For more information on plagiarism and the ramifications of academic dishonesty see: [http://www.asu.edu/studentaffairs/studentlife/judicial/academic\\_integrity.htm](http://www.asu.edu/studentaffairs/studentlife/judicial/academic_integrity.htm). Students are responsible for understanding these policies and following proper academic research and citation protocol.

Accommodations for Disabilities:

Accommodations for disabilities are made according to the policy of Arizona State University, which is in compliance with the Americans with Disabilities Act. For more information on ASU's Disability Resource Center see <http://www.asu.edu/studentaffairs/ed/drc/>.



Arizona State University Criteria Checklist for

**SOCIAL AND BEHAVIORAL SCIENCES [SB]**

**Rationale and Objectives**

The importance of the social and behavioral sciences is evident in both the increasing number of scientific inquiries into human behavior and the amount of attention paid to those inquiries. In both private and public sectors people rely on social scientific findings to assess the social consequences of large-scale economic, technological, scientific, and cultural changes.

Social scientists' observations about human behavior and their unique perspectives on human events make an important contribution to civic dialogue. Today, those insights are particularly crucial due to the growing economic and political interdependence among nations.

Courses proposed for General Studies designation in the Social and Behavioral Sciences area must demonstrate emphases on: (1) social scientific theories and principles, (2) the methods used to acquire knowledge about cultural or social events and processes, and (3) the impact of social scientific understanding on the world.

Proposer: Please complete the following section and attach appropriate documentation.

<b>ASU--[SB] CRITERIA</b>					
<b>A SOCIAL AND BEHAVIORAL SCIENCE [SB] course should meet all of the following criteria. If not, a rationale for exclusion should be provided.</b>					
YES	NO		Identify Documentation Submitted		
<b>X</b>	<input type="checkbox"/>	1. Course is designed to advance basic understanding and knowledge about human interaction.	Syllabus		
<b>X</b>	<input type="checkbox"/>	2. Course content emphasizes the study of social behavior such as that found in: <table border="0" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%; border-right: 1px solid black;"> <ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul> </td> <td style="width: 50%;"> <ul style="list-style-type: none"> <li>• LINGUISTICS</li> <li>• POLITICAL SCIENCE</li> <li>• SOCIAL PSYCHOLOGY</li> <li>• SOCIOLOGY</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	<ul style="list-style-type: none"> <li>• LINGUISTICS</li> <li>• POLITICAL SCIENCE</li> <li>• SOCIAL PSYCHOLOGY</li> <li>• SOCIOLOGY</li> </ul>	Syllabus
<ul style="list-style-type: none"> <li>• ANTHROPOLOGY</li> <li>• ECONOMICS</li> <li>• CULTURAL GEOGRAPHY</li> <li>• HISTORY</li> </ul>	<ul style="list-style-type: none"> <li>• LINGUISTICS</li> <li>• POLITICAL SCIENCE</li> <li>• SOCIAL PSYCHOLOGY</li> <li>• SOCIOLOGY</li> </ul>				
<b>X</b>	<input type="checkbox"/>	3. Course emphasizes: a. the distinct knowledge base of the social and behavioral sciences (e.g., sociological anthropological). <b>OR</b> b. the distinct methods of inquiry of the social and behavioral sciences (e.g., ethnography, historical analysis).	Syllabus		
<b>X</b>	<input type="checkbox"/>	4. Course illustrates use of social and behavioral science perspectives and data.	Syllabus		
		<b>THE FOLLOWING TYPES OF COURSES ARE EXCLUDED FROM THE [SB] AREA EVEN THOUGH THEY MIGHT GIVE SOME CONSIDERATION TO SOCIAL AND BEHAVIORAL SCIENCE CONCERNS:</b>			
		• Courses with primarily fine arts, humanities, literary, or philosophical content.			
		• Courses with primarily natural or physical science content.			
		• Courses with predominantly applied orientation for professional skills or training purposes.			
		• Courses emphasizing primarily oral, quantitative, or written skills.			

Course Prefix	Number	Title	Designation
<u>STS</u>	<u>332</u>	<u>GLOBAL ISSUES IN SCIENCE AND TECHNOLOGY</u>	<b>SB</b>

Explain in detail which student activities correspond to the specific designation criteria. Please use the following organizer to explain how the criteria are being met.

Criteria (from checksheet)	How course meets spirit (contextualize specific examples in next column)	Please provide detailed evidence of how course meets criteria (i.e., where in syllabus)
<p>Course is designed to advance basic understanding and knowledge about human interaction and emphasizes the study of social behavior such as found in anthropology, economics, cultural geography, history, political science, social psychology, and sociology.</p>	<p>This seminar focuses on science and technology issues that are global in nature, which are discussed and debated in the global arena. 'Global goods' is a term which refers to the elements which we all need that transcend borders, such as clean air, clean water, a safe environment, ecosystems, etc. 'Global bads' is a term which refers to the less desirable elements we, on earth, share, such as environmental damage and change, the proliferation of nuclear weapons, global crime, and global terrorism. Science and technology are key variables in both of these sides of the coin. How can policies that have a global impact be made when individual nation-states control their own science and technology policies, as well as foreign policy. What attempts have been made by international organizations to address these issues? How affective are they? These are some of the questions that we will discuss as we explore the most significant and current global issues and their relationship to science and technology. As the name seminar implies, the central method of instruction in the course will be student and faculty discussions, and student writing, based on assigned readings and individual research.</p>	<p><b>As can be seen from the syllabus, the following topics will be treated in the course:</b></p> <p>Introduction to global issues and international relations; Interaction between global issues and national interests; Science, technology and international law (treaties, agreements, norms); Science, technology and international organizations and regimes; Impact of regional integration on science and technology policy: case of the European Union; Global issues: trade, access to science and technology and global terrorism; Global issues: science and technology management and environmental degradation and sustainability; Global issues: proliferation of weapons of mass destruction; Global issues: global crime and information technology; Global issues: and international trade, pharmaceuticals, and disease.</p>

<p>Course emphasizes both the distinct knowledge of the social and behavioral sciences and the distinct methods of inquiry of the social and behavioral sciences.</p>	<p>The course emphasizes:</p> <ul style="list-style-type: none"><li>• Understanding the main themes and trends of current global issues relating to and influenced by science and technology.</li><li>• Understanding the complexity of national versus global interests.</li><li>• Articulating various viewpoints on these critical issues, and develop your own perspective based on the research.</li><li>• Researching and analyzing a particular issue related to the themes of the class and write two short papers.</li></ul>	<p>Three books are selected for this course. The first talks about science, technology and governance. The second talks about new modes of governance in developing an integrated approach to science, technology and risk assessment. The third examines clashing views on controversial global issues. Topics include: global crime and information technology, handling of global diseases, proliferation of weapons of mass destruction, etc. This is core social science material.</p>
<p>Course illustrates use of social and behavioral science perspectives and data.</p>	<p>The course relies on accumulated literature predicated upon practical and theoretical evidence. This literature focuses primarily on social and behavioral sciences material articulated in cross-cultural perspective.</p>	<p>On pages 3-4 of the syllabus, the course outline lays out the selected topics and their relevance to both core social science and international and global studies.</p>