

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



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**

FULTON CENTER, SUITE 420  
300 EAST UNIVERSITY DRIVE  
PO BOX 877805, TEMPE, AZ 85287-7805  
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**New Course Curriculum Form**

Arizona State University

E STS 110 Global Technology and Development 3.0 - Spring 2009 | CL: None

**Originator:** Silvia Llamas-Flores      **Status:** Approved      **Department:** Social and Behavioral Sciences (Polytechnic)

**Date Created:** 05/06/2008      **Submitted:** 05/14/2008      **Completed:** 10/19/2008      **To**  
**ACETS:**

**Campus:** E

**College:** Applied Arts and Sciences

**Subject:** STS

**Number:** 110

**Title:** Global Technology and Development

**Abbreviated title:** Global Tech and Dev

**Semester hours:** 3.0

**Effective semester:** - Spring

**Summer justification:** N/A

**Effective year:** 2009

**Catalog description:** Introduces awareness and understanding of how technology, processes of globalization and society influence one another. Credit is given for STS 317 or 110 only.

**Primary component:** Lecture

**Graded component:** \*Same as primary component

**Additional component(s):**

**Optional component(s):**

**Cross-listing:** | CL: None

**Cross-listed course(s):**

**Enrollment Requirements?:** No

**Prerequisite(s):**

**Conditional prerequisite(s):**

**Corequisite(s):**

**Pre-/corequisite(s):**

**Repeat for credit:** No

**Total hours allowed:**

**Total completions allowed:**

**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 110 Global Technology and Development (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)

Nicholas 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 110 Global Technology and Development**

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 course provides an introduction to globalization and to the field of development. By development we mean socio-economic development, as well as political development, as these dynamics are integrated in the real world. In this course we will focus primarily on socio-economic development. The globalization of the world economy, with the end of the Cold War, and the advent of global information and communications technologies, has had significant implications for development around the globe. While wealth is rising in many countries and among certain social classes, there is still overwhelming poverty, lack of access to clean water, adequate nutrition, and health services for the majority of people in the world. This is not a new situation; however the advent of the recent era of globalization, which includes both political and technological changes, is a variable that influences development in complex ways. In analyzing the impact of globalization on various regions it is imperative to assess the role of culture, politics, and socio-economic history on how different societies respond to the changes.

How is technological development affecting societies around the world at the beginning of the 21<sup>st</sup> century? How does one factor in the variables of culture and historical experiences? Will the expansion of technology increase or decrease the disparity of wealth around the world? How can technological solutions be applied to problems in developing countries? Is globalization the problem or the solution? These are some of the key questions that you will consider this semester. You will be introduced to the central themes and questions of globalization, technology and development, and explore central concepts from economic and social development theory. A background and framework will be established for examining the role of technology in this context, and for integrating social science approaches with the study of technology.

**The following issues will be treated in the course:** What is Global Technology and Development?; Introduction to the concept and field of development; What is globalization?; What is the role of technology in globalization?; What are the effects of globalization?; How does globalization relate to development?; Introduction to Development; What is development?; What is the theoretical heritage of development studies?; How is development implemented in practice by the U.N. Development Agency and the World Bank?; How do these agencies utilize technology in development?; How are current approaches to globalization and development influenced theoretically?; What is the current paradigm?; Is dependency theory still relevant?; What alternatives are there to the modernist and Marxist themes?; How does Sen conceptualize development as 'freedom'?; What does the anti-globalization movement suggest?; What is technology? What is its perceived role in history?; How has it impacted human development?; Does technology determine historical outcomes in human history?; History of technology and globalization; Technological change in the last decade; Perspectives on technology and development; Technology transfer; Appropriate technology; Can we differentiate the *use* of technology from the *production* of technology in the development process?; Unequal technological development; Unequal access to science and technology; National development of technological systems; Technology policy and development; and globalization, technology and sustainable development

### **Goals and Outcomes:**

The goals of this class are to introduce you to the concept of globalization, particularly from a comparative historical perspective, and to introduce you to the concept of socio-economic development. This will include the study of nation-states and regions around the world in order to gain an understanding of how technology and political and economic forces affect societies differently. Your critical thinking and communication skills will be further developed as well. Specifically, you will:

- Articulate, verbally and in writing, the major technological and political trends that have influenced the current era of globalization.
- Synthesize the presented material and develop your own concept of development and how globalization affects societies differently, given their varied cultural and historical contexts.
- Define the paradigm of technological determinism and offer perspectives on the role of technology in the development process.
- Apply theories and models to a critical review of a selected nation-state's national development and/or technology policy.

### **Required Materials:**

**Rowntree, Lester, et al, *Globalization and Diversity: Geography of a Changing World*, Prentice Hall, 2007**

**Bhargava, Vinay Kumar, ed., *Global Issues for Global Citizens: An Introduction to Key Development Challenges*, World Bank, 2006**

Other required readings are detailed below in the weekly schedule, and can be found electronically, either via ASU e-journals, or online reserve (for scanned documents). There is

also a Blackboard website for this course which will have external links to reliable sources of international news.

You are also required to have a good quality world map, which you will be expected to consult regularly. The map can be online or print.

### **Requirements and Grading:**

**Regional Group Project:** Each of you will have a country assigned to you (you will have some choice of country), and depending upon this country, you will be grouped with other students to form a region. For example, 3 or 4 of you will have Central America, with each of you responsible for one selected country in the region. 50% of the Group Project will be based upon participation in 5 in class group meetings where you will share research on assigned topics and make comparisons. The other 50% will be for a final presentation by each Group comparing the selected countries in the region.

**Participation:** Participation in weekly classes is expected, and as well that all cell phones will be off, and laptops are for note taking or conducting in-class research only. Participation includes reading the assigned chapters before class, reading any news assignments, and being prepared to discuss both in class.

**Country Paper:** This will be an individual paper that each of you will write on your selected country. It should be approximately 4-5 pages long, single spaced, and should be focused on a contemporary socioeconomic issue in that country. There should be 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.*

**Development Quizzes:** There will be 5 of these quizzes, worth 20 points each. They will be in class, and they will be based on the textbooks and current news about the countries and regions we will be studying. They will deal with the countries and concepts covered, including geography, so study your maps!

Regional Group Project	100 points
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Country Paper	100
Country Quizzes	100
Midterm	100
Final	100

<b>Total</b>	<b>500</b>
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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 (500). For example, a final point total of 450 will equal a percentage total of 90% which will be a final grade of A-. Any final percentage total less than 65% will result in a failing final grade of E.

## **Weekly Schedule:**

### **1. Introduction to course**

- Course requirements, etc.
- Class introductions – backgrounds and areas of interest
- What is Global Technology and Development?
- Introduction to the concept and field of development

### **2. Globalization**

- What is globalization?
- What is the role of technology?
- What are the effects of globalization?
- How does globalization relate to development?

### **3. Introduction to Development**

- What is development?
- What is the theoretical heritage of development studies?
- How is development implemented in practice by the U.N. Development Agency and the World Bank?
- How do these agencies utilize technology in development?

- *Human Development Report 2004, United Nations, at <http://hdr.undp.org/reports/global/2004/>; UNDP Millennium Development Goals, 2000, at <http://www.undp.org/mdg/>; compare with 1990 UNDP*



- Human Development Report at  
<http://hdr.undp.org/reports/global/1990/en/>
- *World Development Indicators 2005, World Bank, at*  
<http://www.worldbank.org/data/wdi2005/wditext/Cover.htm>;

#### **4. Globalization and Development**

- How are current approaches to globalization and development influenced theoretically?
- What is the current paradigm?
- Is dependency theory still relevant?
- The case of Jamaica - Film: "Life and Debt"

#### **5. Anti-Globalization and Alternative Development Strategies**

- What alternatives are there to the modernist and Marxist themes?
- How does Sen conceptualize development as 'freedom'?
- What does the anti-globalization movement suggest?

#### **6. Technology and Technological Determinism**

- What is technology? What is its perceived role in history?
- How has it impacted human development?
- Does technology determine historical outcomes in human history?
- Film: "Modern Times"

*Midterm Exam*

#### **7. Technology and Globalization**

- History of technology and globalization
- Technological change in the last decade

#### **8. Perspectives on technology and development**

- Technology transfer
- Appropriate technology

#### **9. Technology and development continued . . .**

- Can we differentiate the *use* of technology from the *production* of technology in the development process?

#### **10. Technology and development in global perspective**

- Unequal technological development
- Unequal access to science and technology

#### **11. National development of technological systems**

- Affects of culture on the development of science and technology
- Historical contexts of industrialization and technological development

#### **12. Technology policy and development**

- Comparison of national policies from different regions

- Analysis of role of policy in technology for socio-economic development

**13. Technology and development case studies**

- UNDP *Stories from the Field*
- World Bank projects

**14. Student Group Project Presentations**

***Final Exam – combination of multiple choice, short answer and essay***

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>110</u>	<u>GLOBAL TECHNOLOGY AND DEVELOPMENT</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)
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.	This is the basic survey course for the B. S. in Science, Technology, and Society that is designed to introduce globalization and development. By development we mean socio-economic and political development. It is designed to lay the basic foundation for understanding the interrelationship between technology and human cultures around the globe and how these interact with socio-economic and political development.	This course is designed to achieve two broad objectives, each of which can be said to constitute 50% of the course. The first is a basic understanding of the definitions and issues associated with the pursuit of science and technology in human society. The second is the global dimension where, as the syllabus shows, students are required to understand the major technological and political trends that have influenced the current era of globalization. In addition, students are expected to apply theories and models of international studies to a critical review of a selected nation-state's national development and/or technology policy. The selected nation-state must be international, not the United States.
Course emphasizes both the distinct knowledge of the social and behavioral sciences and the distinct methods of inquiry of the social and behavioral sciences.	The course emphasizes the important roles of science and technology in transforming human civilization at the global level. This is core social science material targeted to international development.	As pages 3-6 of the syllabus show, the topics included in this course emphasize a uniquely social and behavioral science knowledge base focused on international development. These topics include globalization, introduction to development, alternative development strategies, technology and globalization, and international technology policy as applied to World Bank projects.

<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 international development and globalization.</p>	<p>On pages 3-6 of the syllabus, the course weekly schedule lays out the selected topics and their relevance to both core social science and globalization studies.</p>
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