

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
(480) 965-1224 FAX: (480) 965-0785
betty.capaldi@asu.edu

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

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 21st 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
------------------------	------------

Country Paper	100
Country Quizzes	100
Midterm	100
Final	100
Total	500

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. 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

GLOBAL AWARENESS [G]

Rationale and Objectives

Human organizations and relationships have evolved from being family and village centered to modern global interdependence. The greatest challenge in the nuclear age is developing and maintaining a global perspective which fosters international cooperation. While the modern world is comprised of politically independent states, people must transcend nationalism and recognize the significant interdependence among peoples of the world. The exposure of students to different cultural systems provides the background of thought necessary to developing a global perspective.

Cultural learning is present in many disciplines. Exposure to perspectives on art, business, engineering, music, and the natural and social sciences that lead to an understanding of the contemporary world supports the view that intercultural interaction has become a daily necessity. The complexity of American society forces people to balance regional and national goals with global concerns. Many of the most serious problems are world issues and require solutions which exhibit mutuality and reciprocity. No longer are hunger, ecology, health care delivery, language planning, information exchanges, economic and social developments, law, technology transfer, philosophy, and the arts solely national concerns; they affect all the people of the world. Survival may be dependent on the ability to generate global solutions to some of the most pressing problems.

The word university, from universitas, implies that knowledge comes from many sources and is not restricted to local, regional, or national perspectives. The Global Awareness Area recognizes the need for an understanding of the values, elements, and social processes of cultures other than the culture of the United States. Learning which recognizes the nature of others cultures and the relationship of America's cultural system to generic human goals and welfare will help create the multicultural and global perspective necessary for effective interaction in the human community.

Courses which meet the requirement in global awareness are of one or more of the following types: (1) in-depth area studies which are concerned with an examination of culture-specific elements of a region of the world, country, or culture group, (2) the study of contemporary non-English language courses that have a significant cultural component, (3) comparative cultural studies with an emphasis on non-U.S. areas, and (4) in-depth studies of non-U.S. centered cultural interrelationships of global scope such as the global interdependence produced by problems of world ecology, multinational corporations, migration, and the threat of nuclear war.

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

ASU--[G] CRITERIA			
GLOBAL AWARENESS [G]			
YES	NO		Identify Documentation Submitted
X	<input type="checkbox"/>	1. Studies must be composed of subject matter that addresses or leads to an understanding of the contemporary world outside the U.S.	Syllabus
		2. Course must be one or more of following types (check all which may apply):	
X	<input type="checkbox"/>	a. In-depth area studies which are concerned with an examination of culture-specific elements of a region, country or culture group. The area or culture studied must be non-U.S. and the study must contribute to an understanding of the contemporary world.	Syllabus
<input type="checkbox"/>	<input type="checkbox"/>	b. Contemporary non-English language courses that have a significant cultural component.	
X	<input type="checkbox"/>	c. Comparative cultural studies in which most, i.e., more than half, of the material is devoted to non-U.S. areas.	Syllabus
X	<input type="checkbox"/>	d. In-depth studies of non-U.S. centered cultural interrelationships of global scope, such as the global interdependence produced by problems of world ecology, multinational corporations, migration, and the threat of nuclear war. Most, i.e., more than half, of the material must be devoted to non-U.S.	Syllabus

Page 3 of 4

Course Prefix	Number	Title	Designation
STS	110	GLOBAL TECHNOLOGY AND DEVELOPMENT	G

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)
Studies must be composed of subject matter that addresses or leads to an understanding of the contemporary world outside the U.S. Course must be in-depth area studies which are concerned with an examination of culture-specific elements of a region, country or culture group. The area or culture studied must be non-U.S. and the study must contribute to an understanding of the contemporary world.	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.
Comparative cultural studies in which most, i.e. more than half, of the material is devoted to non-U.S. areas.	The course emphasizes the important role of science and technology in transforming human civilization at the global level. This is core social science material targeted to international development and not the U.S.	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>In-depth studies of non-U.S. centered cultural interrelationships of global scope, such as the global interdependence produced by problems of world ecology, multinational corporations, migration, and the threat of nuclear war. Most, i.e., more than half, of the material must be devoted to non-U.S.</p>	<p>The course relies on accumulated literature predicated upon practical and theoretical evidence. This literature focuses primarily on international development and globalization. When we talk about globalization, technology comes to mind. This includes technologies associated with transportation and communication. This course is at the center of all of this.</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>
---	--	---