



ARIZONA STATE UNIVERSITY

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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 3-1-2010

1. ACADEMIC UNIT: School of Sustainable Engineering and the Built Environment

2. COURSE PROPOSED: CON 101 Construction and Culture: A Built Environment 3
(prefix) (number) (title) (semester hours)

3. CONTACT PERSON: Name: G. Edward Gibson, Jr.; Program Chair Phone: 480-965-7972
Mail Code: 5306 E-Mail: GEdwardGibsonJr@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. (Please submit one designation per proposal)

Core Areas

Awareness Areas

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

- Global Awareness-G
Historical Awareness-H
Cultural Diversity in the United States-C

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.

Please see attached.

CROSS-LISTED COURSES: [X] No [ ] Yes; Please identify courses:

Is this amultisection course?: [ ] No [X] Yes; Is it governed by a common syllabus?

G. Edward Gibson Jr.
Chair/Director (Print or Type)

[Signature]
Chair/Director (Signature)

Date: 3-7-10

## 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.

<b>ASU--[G] CRITERIA</b>			
<b>GLOBAL AWARENESS [G]</b>			
YES	NO		Identify Documentation Submitted
<input checked="" type="checkbox"/>	<input type="checkbox"/>	1. Studies <b>must</b> 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 <b>one or more</b> of following types (check all which may apply):	
<input checked="" type="checkbox"/>	<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. <b>The area or culture studied must be non-U.S. and the study must contribute to an understanding of the contemporary world.</b>	Syllabus
<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Contemporary non-English language courses that have a significant cultural component.	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Comparative cultural studies in which most, i.e., more than half, of the material is devoted to non-U.S. areas.	
<input type="checkbox"/>	<input checked="" 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. <b>Most, i.e., more than half, of the material must be devoted to non-U.S.</b>	

Course Prefix	Number	Title	Designation
CON	101	Construction and Culture: a Built Environment	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)
Criterion 1- Studies must be composed of subject matter that addresses or leads to an understanding of the contemporary world outside the U.S.	The course explores topics of globalization in the Construction discipline through world events.	Topics in weeks 1, 7, 9, 10, 12, 13, and 14-16 cover topics that range from an introduction to globalization, canals in other countries, building structures common to South America, Egypt and the pyramid, and current construction events around the world. Please see the syllabus Course Content area on pages 4-5.
Criterion 2A- 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 studies must be non-U.S. and the study must contribute to an understanding of the contemporary world.	This course explores topics that encompass and explore the Construction culture specific to a variety of non-U.S. regions.	Topics in weeks 1, 7, 9, 10, 12, 13, and 14-16 cover topics that explore and implication of the concept of construction and the built environment in a variety of cultures outside of the U.S. through an introduction to globalization, canals in other countries, building structures common to South America, Egypt and the pyramid, and current construction events around the world. The course also covers the concept of

		construction and the built environment in the Neolithic Revolution, the "New" World, and the Urban Revolution. Please see the syllabus Course Content area on pages 4-5.

# COURSE SYLLABUS - CON 101

## "CONSTRUCTION & CULTURE: A BUILT ENVIRONMENT"

Instructor	Office	Email
Kraig Knutson	USE146	kraig.knutson@asu.edu

**NOTE: Satisfies Humanities, and Historical and Global Awareness General Studies Requirements**

### CATALOG DESCRIPTION:

An analysis of the cultural context of construction, emphasizing its centrality in the evolution and expansion of the built environments as expressions of ethical and aesthetic value systems.

### PURPOSE AND PHILOSOPHY OF THE COURSE:

The purpose of this course is to broaden the student's awareness of the significance of construction as a discipline which affects, and is affected by, ethical and aesthetic values in all societies. It emphasizes the critical role that construction has played in the evolution of cultures and looks at the centrality of construction of today's rapidly changing world. The basis for forming sound judgments and developing wise philosophies in the diverse areas of the construction process will be illustrated. Specifically, the course will be devoted to an historical review of construction and a study of current global issues. Primary focus throughout course will be on the human elements and issues that have impacted the industry and society.

COURSE PREREQUISITES: None

### TEXTBOOK:

Mulligan, Donald E., and Kraig Knutson. *Construction & Culture: A Built Environment, second edition* Stipes Publishing, 2004. ISBN: 1-58874-347-0

### STUDENT WORK:

Students will be required to prepare written reports on assigned topics. Use of the word processor/typewriter is mandatory. All quizzes and tests will be of the subjective type.

### ETHICS:

Each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. You are responsible to learn how the Student Academic Integrity Policy (<http://www.asu.edu/studentlife/judicial/integrity.html>) and (<http://www.eas.asu.edu/sas/cheat.html>) applies to you personally and to this course in particular. Violations of the University Academic Integrity policy will not be ignored. Penalties include reduced or no credit for submitted work, a failing grade in the class, a note on your official transcript that shows you were punished for cheating, suspension, expulsion and revocation of already awarded degrees. The university requires that should I implement any of these penalties, I must report the matter to the Dean's office. Now, in terms of defining specific examples of cheating, the university policy is very simple. Everything is forbidden until the instructor authorizes it. Cheating is doing something that affects an academic evaluation without the instructor's authorization. We will discuss in class what is authorized and that if you want to do anything else, you need to ask me first.

ASSIGNMENT POLICIES:

Assignments are due at the beginning of class and will be turned in *on time and in class*. Late assignments will be **downgraded 50%**. Late assignments will not be accepted in class X+1. Assignments must be submitted in a *professional* format – that means they must be neat, complete, and free of all spelling and grammatical errors. **All questions about scores or grades on specific assignments must be brought to the attention of the instructor within one week of the return of the assignment.**

GRADING CRITERIA: (for compilation of final grade)

	Number	Points (each)	Total Points
Quizzes/Homework	~10	10	~100
Final Report	1	200	200
Exam 1	50	2	100
Exam 2	50	2	100
Final Exam	100	2	200
			~700

The assignment requirements represent the expectations for the average student. Increased excellence in execution and/or presentation of work is required to merit a "B" or "A" grade.

MAKE-UP POLICY:

Prior notice, when possible, will be given to the instructor when a class will be missed. Only under the most extreme circumstances, supported by written documentation, will a make-up quiz or test be given. The final decision rests with the instructor. When a class is missed, it is the student's responsibility to obtain notes and assignments from fellow classmates. If you miss a class due to university-sanctioned activities please refer to ACD 304-02 at (<http://www.asu.edu/aad/manuals/acd/acd304-02.html>).

ATTENDANCE & QUIZZES:

Roll will be taken periodically. Punctuality, class attendance, participation and preparation are explicit reflections of your interest in the course. Quizzes will not necessarily be announced in advance and may be given at the beginning or the end of the class period.

COURSE WEB PAGE:      <http://my.asu.edu>

## COURSE CONTENT:

<u>WEEK TOPICS</u>	<u>READING ASSIGNMENTS</u>
1 Introduction. Overview and analysis of the origins of construction, beginning with man's first efforts to build an environment for survival. Neolithic Revolution. The "New" World. Urban Revolution	Chapter 1
2 The profile of the builder. The Specialist. The New Order. Constructability. Design-Build. The builder's responsibilities & knowledge; functions outside of builder's control.	Chapter 2 <b>REPORT ASSIGNED</b>
3 Learning from the environment. Sources of information about "how" structures were built. Repairs, Renovation, and Restoration. Learning from nature. Hydrogenesis.	Chapter 3
4 Origins of building codes. Failures caused by natural disasters. Hurricanes, floods, etc. Failures due to human error. Misinformed, miscalculated, misjudged. Jerry-building.	Chapter 4
5 Types of "falsework" used: scaffolding, formwork, centering, & shoring.	Chapter 5
6 Structural forces. Review of building science & knowledge. Types and origins of structural forces: stress, strain, loads.	Chapter 6 <b>TEST #1 - TBD</b>
7 Controlling the interior environment. Ventilation & illumination. Past & present examples. HVAC. Fireplaces. Teepees. Kivas. Future systems.	Chapter 7
8 Origins & culture of the construction worker. Organized work force. Typical characteristics. Craft roles and responsibilities.	Chapter 8
9 Transportation and building construction. Roads, canals, harbors; methods of moving building materials to the sites.	Chapter 9



- |         |  |            |                                     |
|---------|--|------------|-------------------------------------|
| 10      | A review of the philosophy, motivation and methods behind the construction of the pyramids. Step Pyramid. Great Pyramid. Who built the pyramids? Mummification.  | Chapter 11 | <b>TEST #2 -- TBD</b>               |
| 11      | A review of the philosophy, motivation and methods behind the construction of the cathedrals. Three case studies.  | Chapter 10 |                                     |
| 12      | Introduction to Globalization. Issues and concerns affecting construction in the world.  | Chapter 12 |                                     |
| 13      | An analysis of construction events that are currently underway around the world. Chunnel. Three Gorges Dam.  | Chapter 12 |                                     |
| 14 - 16 | Continue with highlights of current global construction projects using prevailing information from trade journals, videos, and guest lecturers. Conclude with the forecast for future of the industry. |            | <b>FINAL REPORT<br/>(DUE – TBD)</b> |

**FINAL EXAM: TBD**

**SCHEDULE SUBJECT TO CHANGE!**

A.M.D.G.

# **Construction and Culture: A Built Environment**

**Second Edition**

by

**Donald E. Mulligan**

Del E. Webb School of Construction  
Arizona State University

and

**Kraig Knutson**

Del E. Webb School of Construction  
Arizona State University

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