

ARIZONA STATE UNIVERSITY GENERAL STUDIES COURSE PROPOSAL COVER FORM

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Academic	Unit _	Engineering -	SSEBE	Department	_ <u>Co</u>	nstruction Manageme	nt
Subject	CON	Number	101	Title Construction	and Culture:	A built Environment	Units: 3
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Contact	ıntorma	ation:					
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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) indepth 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.

Reviewed 4/2014

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

	ASU[G] CRITERIA						
	GLOBAL AWARENESS [G]						
YES	NO		Identify Documentation Submitted				
		1. Studies must be composed of subject matter that addresses or leads to an understanding of the contemporary world outside the U.S.	Course Syllabus - specifically the Course Description section				
		2. The course must match at least one of the following descriptions: (check all which may apply):					
		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.					
		b. The course is a language course for a contemporary non-English language, and has a significant cultural component.					
		c. The course is a comparative cultural study in which most, i.e., more than half, of the material is devoted to non-U.S. areas.					
		d. The course is a study of the cultural significance of a non-U.Scentered global issue. The course examines the role of its target issue within each culture and the interrelatedness of various global cultures on that issue. It looks at the cultural significance of its issue in various cultures outside the U.S., both examining the issue's place within each culture and the effects of that issue on world cultures."	Table of contents of the Textbook "Construction and Culture: a Built Environment"				

Global Awareness [G] Page 3

Page 3 of 4

Course Prefix	Number	Title	Designation
CON	101	Construction and Culture: a Built Environment	Global Awareness (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)
SAMPLE: 2d: study the cultural significance of a non-U.S. centered global issue	SAMPLE: The course examines the cultural significance of financial markets Japan, Korea, and the UK.	SAMPLE: Module 2 shows how Japanese literature has shaped how Japanese people understand world markets. Module 3 shows how Japanese popular culture has been changed by the world financial market system. Modules 4 & 5 do the same for Korea and modules 6 & 7 do the same for the UK.
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 disipline through worlds events	Topics in weeks 1, 7, 9, 10, 12, 13, 14, 15 and 16 cover topics that range from an introduction of globalization, canals in other countries, building structures commonly found in Central and South America, Egypt and the pyramids, and current construction projects around the world (e.g. Chunnel and Three Gorges Dam). Please see the attached course syllabus Course Content area.
2d: The course is a study of the cultural significance of a non-U.Scentered global issue.	The course examines the cultural significance of the built environment and the role that construction has played in the evolution of cultures.	Detailed Class Schedule Week 1 (Chapter 1 of the textbook entitled "The Evolution of Civilization and Cultures")
2d: The course is a study of the cultural significance of a non-U.Scentered global issue	The course examines the cultural significance of the built environment and the role that construction has played in the centrality of construction of today's rapidly changing world.	Detailed Class Schedule Weeks 12-16 (Chapter 12 of the textbook entitled "Globalization"))

CON101 Construction & Culture: A Built Environment

Arizona State University | Del E. Webb School of Construction Course Syllabus

COURSE INFORMATION

Semester: Spring

Time/Location: 9:00am MUR101

Website: Blackboard (https://myasucourses.asu.edu)

INSTRUCTOR INFORMATION

Instructor: Kraig Knutson CAVC466

Email: kraig.knutson@asu.edu

Office Hours: Tuesday &Thursday (9:00am - 10:15am)

OVERALL PROGRAM GOALS

Construction management professionals combine knowledge of innovative technologies, construction principles and business management to lead a wide variety of construction projects from residential and commercial buildings to infrastructure projects. The DEWSC program goals are to teach students how to become responsible leaders in the construction industry through organization, leadership, and current/innovative management techniques.

The American Council for Construction Education (ACCE) states that it is essential that every Constructor be capable of effectively managing personnel, materials, equipment, costs, and time. The Constructor must be able to effectively communicate and understand their role as a member of a multi-disciplinary team, the assessment of project risk, and the alternate methods that can be used to structure the owner-designer-constructor team.

PROGRAM LEARNINGOUTCOMES:

- 1. Lead individuals and teams in the delivery of projects in the built environment
- 2. Communicate effectively in verbal, written, and graphic forms to all participants in the built environment
- 3. Behave ethically, professionally, and sustainably in the construction industry and society
- 4. Effectively analyze, plan, and manage the components of the construction supply chain and manage the necessary human, material, equipment, time, and financial resources therein
- 5. Think critically and solve complex construction management problems

COURSE 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.

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.

LEARNING OBJECTIVES

Upon completion of this course, students are expected to:

- a. **Explain** the connection between construction and culture.
- b. **Remember** and explain historical construction methods.
- c. Summarize the differences between historic and current construction equipment.
- d. **Identify** the role of the builder in the construction process.
- e. **Explain** how we learn from construction failures.
- f. **List** the types of falsework used in the construction process.
- g. **Understand** the effects of forces on the structure.
- h. **Identify** historical and modern methods to provide ventilation and illumination in buildings.
- i. **Appreciate** the role of the craftsperson in the construction process.
- j. **Summarize** historical and modern transportation systems.
- k. **Analyze** various theories of pyramid construction.
- 1. **Understand** the structural systems and construction methods used to construct a gothic cathedral.
- m. **Compare** the basic process of designing and constructing a building in the past and today.
- n. **Present** a comparison of historical and current construction methods and materials in written and graphical communication.

TEXTBOOKS AND REFERENCE MATERIAL

The required textbook for this class is:

Title: Construction & Culture: A Built Environment, second edition

Publisher: Stipes Publishing, 2004 (ISBN: 1-58874-347-0)

GRADING POLICY

The following criteria, weights, and grading scale will be used to calculate the Final Grade (the Instructor may modify/adjust as necessary):

Assignment	Number	Points (each)	Total Points	Grading Scale
Quizzes/Homework	~10	15	~150	>96% = A+
Report	1	250	250	> 92% = A
Test 1	50	3	150	> 90% = A-
Test 2	50	3	150	> 86% = B+
Test 3	100	3	300	> 82% = B
			~1000	> 80% = B-
				> 76% = C+
				> 70% = C
				> 60% = D
				< 60% = E

COURSE POLICIES, PROCEDURES, AND REQUIREMENTS

Classroom Procedures – Please turn off your cell phones prior to attending class. Cell phone usage in class is not allowed (this includes texting). Food or drinks cannot be brought into the classroom.

General Responsibilities – The responsibility for learning rests with each student. The professor or lecturer will assist by making the classroom environment one conducive to learning but your preparation is essential! The student is responsible for reading all assignments, doing any assigned homework problems, and seeking assistance if needed. Each student is expected to bring all necessary tools to class (including any course materials, notes, calculators, writing materials, etc).

Attendance and Participation – Class attendance is mandatory. Absence from class may result in the loss of participation points. Much of the learning that occurs during this course happens in the classroom. If you are absent, for whatever reason, you lose the benefit of sharing of knowledge by the faculty and other students. Additionally, the class does not gain the benefit of sharing your knowledge and experience; thus, the learning experience is diminished and will be reflected in your grade. Punctuality, class attendance, participation and preparation are explicit reflections of your interest in the course.

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.

Exams/Quizzes —Quizzes and Tests will be taken on BlackBoard. Quizzes will not be announced in advance and may be announced at the beginning or the end of the class period. Once announced Quizzes and Tests will only be available online for 24 hours and will NOT be turned back on. Normally a quiz or Test will begin at 10:00am and be available until 10:00am the following day. Once you have started to take a Quiz you will have 10 minutes to complete it. Tests will be broken into 25question blocks and each block will have a 30 minute time limit. Tests 1 and 2 will have two 25 question blocks — Test 3 will have four 25 question blocks.

Assignments – Assignments are due at the beginning of class and will be turned in on time and in class. Late assignments will not be accepted. Assignments must be submitted in a professional format – that means they must be neat, complete, and free of all spelling and grammatical errors.

Professional Work – To receive credit for your work, it is imperative the work be organized, readable, and professional (part of your grade will be based on presentation of your work).

Course Requirements – Students will be required to prepare a written report on assigned topics. All quizzes and tests will be of the subjective type. 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.

UNIVERSITY POLICIES

Academic Integrity - All students in this class are subject to ASU's Academic Integrity Policy (http://provost.asu.edu/academicintegrity) and shall acquaint themselves with its content and requirements, including a strict prohibition against plagiarism. By registration in this class, you are assumed to have read, understand and agreed to this policy. All violations will be reported to the Dean's office, who maintains records of all offenses.

Student Code of Conduct - The Student Code of Conduct sets forth the standards of conduct expected of students who choose to join the university community. Students who violate these standards will be subject to disciplinary sanctions (http://students.asu.edu/srr/code).

Classroom Behavior - Any violent or threatening conduct by an ASU student in this class will be reported to the ASU Police Department and the Office of the Dean of Students. The use of recording devices is not permitted during class (unless permitted by the Instructor).

Religious Observances - Accommodations will be made for religious observances provided that students notify the instructor at the beginning of the semester concerning those dates. Alternative arrangements will generally be made for any examinations and other graded in-class work affected by such absences.

University Sanctioned Activities - Students who expect to miss class due to officially university-sanctioned activities should inform the instructor early in the semester. Alternative arrangements will generally be made for any examinations and other graded in-class work affected by such absences.

Disability Accommodations - Suitable accommodations will be made for students having disabilities and students should notify the instructor as early as possible if they will require same. Such students must be registered with the Disability Resource Center and provide documentation to that effect.

Academic Calendar - The academic calendar (https://students.asu.edu/academic-calendar) contains important dates that students should be aware of, including: the first and last day of class, drop/add deadlines, withdrawal deadlines, and observed holidays.

Copyright Protection - All contents of these lectures, including written materials distributed to the class, are under copyright protection. Notes based on these materials may not be sold or commercialized without the express permission of the instructor.

Syllabus Changes - Any information in this syllabus may be subject to change with reasonable advance notice.

DETAILED CLASS SCHEDULE

Class sessions will be in accordance with the attached schedule. The instructor reserves the right to modify and/or adjust the schedule.

See BlackBoard Announcements page

Week	Topics	Reading	Assignments
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 (ACCE GE.Humanities)	Chapter 1	Report Assigned
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. (ACCE 5.5 and 5.6)	Chapter 2	
3	Learning from the environment. Sources of information about "how" structures were built. Repairs, Renovation, and Restoration. Learning from nature. Hydrogenesis. (ACCE GE.Humanities)	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. (ACCE 4.2)	Chapter 4	
5	Types of "falsework" used: scaffolding, formwork, centering, & shoring. (ACCE 4.3)	Chapter 5	
6	Structural forces. Review of building science & knowledge. Types and origins of structural forces: stress, strain, loads. (ACCE 4.2)	Chapter 6	TEST 1 - TBD
7	Controlling the interior environment. Ventilation & illumination. Past & present examples. HVAC. Fireplaces. Teepees. Kivas. Future systems. (ACCE GE.Humanities)	Chapter 7	
8	Origins & culture of the construction worker. Organized work force. Typical characteristics. Craft roles and responsibilities.	Chapter 8	

	(ACCE GE.Humanities)		
9	Transportation and building construction. Roads, canals, harbors; methods of moving building materials to the sites. (ACCE GE.Humanities)	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. (ACCE GE.Humanities)	Chapter 11	TEST 2 TBD
11	A review of the philosophy, motivation and methods behind the construction of the cathedrals. Three case studies. (ACCE GE.Humanities)	Chapter 10	
12	Introduction to Globalization. Issues and concerns affecting construction in the world. (ACCE GE.Humanities)	Chapter 12	
13	An analysis of construction events that are currently underway around the world. Chunnel. Three Gorges Dam. (ACCE GE.Humanities)	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. (ACCE 5.6)		REPORT (DUE) (ACCE GE.Communications) TEST 3 TBD

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