Last Updated: McCaul Jr, Edward Baldwin 5797.18 - Status: PENDING 12/03/2015

### **Term Information**

**Effective Term** Summer 2016 **Previous Value** Autumn 2015

### **Course Change Information**

What change is being proposed? (If more than one, what changes are being proposed?)

Change being proposed is to make this course a GE for Culture and Ideas; Change subsidy level to General Studies; remove first course goal.

What is the rationale for the proposed change(s)?

To make the course a GE Culture and Ideas course.

What are the programmatic implications of the proposed change(s)?

(e.g. program requirements to be added or removed, changes to be made in available resources, effect on other programs that use the course)?

None

Is approval of the requrest contingent upon the approval of other course or curricular program request? No

Is this a request to withdraw the course? No

### General Information

Course Bulletin Listing/Subject Area Engineering

Fiscal Unit/Academic Org Engineering Administration - D1400

College/Academic Group Engineering

Level/Career Graduate, Undergraduate

Course Number/Catalog 5797.18

Course Title **Engineering of Ancient Greece** 

Transcript Abbreviation Engr Ancient Gr

**Course Description** A study abroad trip to Greece for the purpose of understanding the importance of the influences and

continuing contributions to society of Ancient Greece's Engineering and Technological advancements. Students will visit various significant engineering marvels and examine the methods used for their

formulation and construction.

Semester Credit Hours/Units Fixed: 3

### Offering Information

**Length Of Course** 4 Week (May Session)

**Flexibly Scheduled Course** Never Does any section of this course have a distance Yes

education component?

Is any section of the course offered

Greater or equal to 50% at a distance

Letter Grade **Grading Basis** 

Repeatable

Course Components Field Experience, Lecture

**Grade Roster Component** Field Experience

Credit Available by Exam No Admission Condition Course No Off Campus Always Campus of Offering Columbus

Last Updated: McCaul Jr,Edward Baldwin 12/03/2015

## **Prerequisites and Exclusions**

Prerequisites/Corequisites Exclusions

# **Cross-Listings**

**Cross-Listings** 

# Subject/CIP Code

Subject/CIP Code 14.9999

Subsidy Level General Studies Course

Previous Value Doctoral Course

Intended Rank Junior, Senior, Masters, Doctoral

# Requirement/Elective Designation

General Education course:

Culture and Ideas

The course is an elective (for this or other units) or is a service course for other units

#### **Previous Value**

The course is an elective (for this or other units) or is a service course for other units

### **Course Details**

# Course goals or learning objectives/outcomes

- To increase the students' knowledge on how Ancient Greek Engineering was formulated and built and the identification and history of the ancient engineers, mathematicians and scientists
- Participate in a study abroad experience and understand how innovations from thousands of years ago still influence modern society.

#### Previous Value

- To gain an appreciation for the influences of Ancient Greek Engineering and Technology
- To increase the students' knowledge on how Ancient Greek Engineering was formulated and built and the identification and history of the ancient engineers, mathematicians and scientists
- Participate in a study abroad experience and understand how innovations from thousands of years ago still influence modern society.

### **Content Topic List**

- Experience culture, history, ancient and modern engineering marvels and innovations.
- Students make a presentation on the assigned site that the group will visit.
- Visit the engineering sites, museums, archaeological sites and engineering universities

#### **COURSE CHANGE REQUEST**

5797.18 - Status: PENDING

**Attachments** 

• ENGR 5797\_18\_2016 syllabus.docx: Syllabus

(Syllabus. Owner: Lindeboom, Sally Frances)

• assesment plan.pdf: Assessment Plan

(GEC Course Assessment Plan. Owner: Lindeboom, Sally Frances)

GE Educational Rationale.pdf: GE Rationale

(Other Supporting Documentation. Owner: Lindeboom, Sally Frances)

# **Comments**

• Returned per unit's request. Returned for needed changes. (by McCaul Jr,Edward Baldwin on 11/03/2015 07:14 AM)

Last Updated: McCaul Jr, Edward Baldwin

12/03/2015

### **Workflow Information**

Status	User(s)	Date/Time	Step	
Submitted	Lindeboom, Sally Frances	10/15/2015 09:26 AM	Submitted for Approval	
Revision Requested	McCaul Jr,Edward Baldwin	10/15/2015 10:20 AM	Unit Approval	
Submitted	Lindeboom, Sally Frances	10/27/2015 11:13 AM	Submitted for Approval	
Revision Requested	McCaul Jr,Edward Baldwin	11/03/2015 07:14 AM	Unit Approval	
Submitted	McCaul Jr,Edward Baldwin	11/12/2015 10:27 AM	Submitted for Approval	
Approved	McCaul Jr,Edward Baldwin	12/03/2015 03:08 PM	Unit Approval	
Approved	McCaul Jr,Edward Baldwin	12/03/2015 03:09 PM	College Approval	
Pending Approval  Pending Approval  Hanlin,Deborah Kay Jenkins,Mary Ellen Bigler Hogle,Danielle Nicole		12/03/2015 03:09 PM	ASCCAO Approval	

# Course Syllabus ENGR 5797.18 Engineering of Ancient Greece (3 credit hours) May 2016

### **Course Time and Location**

M-F May 9-17, 2016 from 1:00pm-3:00 pm 346 Hitchcock Hall

#### Instructor and Resident Directors

Olga Stavridis Instructor and Resident Director, ENGR 57971.8 Office Hours: T/R 9:00am – 11:00am

Stavridis.2@osu.edu Hitchcock Hall 205

Sheryl Sorby Resident Director, ENGR 5797.18 Sorby.1@osu.edu

#### **Class Materials**

Books: Reserved books will be available for your research at the OSU Libraries for purposes of this course.

**Passport** 

Cost for one Greek meal during class

### **Objectives**

At the end of the term, you will:

- Know a bit about the culture, history and significance of Ancient Greece's Engineering Contributions
- Know more about the importance of the iconic engineering sites and excavations and the various methods used for their construction
- Explore ancient and modern Greek cultures and how modern Greece has been impacted by historical events
- Tour and experience the culture of mainland Greece and the Islands of Crete and Samos and Kusadasi, Turkey (Ephesus Archaeological Excavation Site).

#### Grading (class taken at OSU & in Greece)

Presentation & Q&A assigned prior to site visit	20%
Participation	30%
Presentation & Write up for on-site guidance:	50%

### **Assignments:**

Unless otherwise noted, write up of site visit (agreed upon information between instructor and student during in class research) is due to CARMEN by the presentation date stated on the syllabus. No late assignment will be accepted.

Each student will be required to research one of the sites planned for the in country visit. Students will create a PowerPoint presentation of site's highlights; location; history; current impact for Greece and a "Q&A" format to an electronic notebook in CARMEN. Students must upload required research directives from Instructor by 11:59pm to CARMEN notebook each class session.

#### Attendance:

The in class portion of ENGR 5797.18 will meet M-F for (7) class sessions from 1:00-3:00pm. Attendance is **MANDATORY**. Students are expected to PROMPTLY attend all classroom sessions. Excused absences are: jail, court, hospital, and serious illness. ALL OF THESE MUST HAVE PROPER DOCUMENTATION (DOCTOR'S NOTE, COURT DOCUMENTS, ETC.). Students should e-mail the instructor **before** class if they are going to be absent.

#### **Academic Misconduct:**

Academic Misconduct such as cheating or plagiarism will be reported using official University procedures. Policies and procedures can be found in the Code of Student Conduct available online in several places including

http://studentaffairs.osu.edu/resource\_csc.asp. As a student, you need to know that faculty members are obligated to report all misconduct cases to the University Committee on Academic Misconduct. Not reporting suspected misconduct is not an option.

#### **Professional Conduct**

Students are expected to conduct themselves in a professional manner and to abide by the provisions in the Code of Student Conduct. Students should appreciate diversity, and they should conduct themselves professionally with members of the opposite gender and/or from different cultures. Any forms of sexual harassment or intimidation will not be tolerated. The University's Code of Student Conduct and Sexual Harassment Policy are available on the OSU web page. Harassment can occur between two or more students and between students and faculty, and the actions can take place in physical, verbal, or written forms. When a complaint is received, the situation will be investigated by the department and possibly by the police even if the harassment was done anonymously or possibly as a jest. Being found guilty of harassment, even if it was nominally done in jest, can be professionally damaging.

Students are also reminded to represent themselves in a professional manner in any information that they wish to share with the public. This includes information on personal forums available inexpensively on the web. Examples are MySpace and Facebook. Information on these pages is often screened by potential employers, and unprofessional material can have a negative impact on job prospects.

### **Students with Disabilities**

Course materials and exercises can be made available in alternative formats. Please contact the instructor or the Office for Disability Services (ODS) at 292-3307 for further information.

**Tentative Lecture Topics** 

Class Session	Date	Topics	In Class Work
1	May 9	Assignment of location/topic OSU Librarian to explain research of Lesson 1  Acropolis,  New Acropolis Museum  Syndagma Square	Research and information loade to CARMEN Site for "electronic travel guide". Make changes to research based on instructor input/comm
2	May 10	<ul> <li>Lesson 2</li> <li>Lavrion Technical Park</li> <li>Corinth Canal</li> <li>Oracle of Delphi</li> </ul>	Research and information loade to CARMEN Site for "electronic travel guide". Make changes to research based on instructor input/comm
3	May 11	<ul> <li>Lesson 3</li> <li>Arch Museum of Ancient M</li> <li>Epidaurus Theater &amp; Muse</li> <li>Nafplion</li> <li>Final pre-departure orienta</li> </ul>	
4	May 12	<ul> <li>Lesson 4</li> <li>Arch Museum of Crete</li> <li>Palace of Knossos</li> <li>Chania Archaeological Mus</li> </ul>	Research and Discussion
5	May 13	Lesson 5	Research and Discussion
6	May 16	Presentations to class	
7	May 17	Presentations to class	
	May 18-31	Greece trip!	

#### **General Education Rationale for Cultures and Ideas**

Culture and Ideas has two expected learning outcomes:

- 1. Students analyze, appreciate and interpret significant works of art.
- 2. Students engage in informed observation and/or active participation in a discipline within the visual, spatial, and performing arts.

ENGR 5797.18, Engineering of Ancient Greece is an approved study abroad course. During the course, students will spend seven days in class at the university learning about the construction, engineering methods and history behind iconic sites that have had major contributions for society. During the classroom sessions, students will research and prepare outlines and presentations of their assigned site(s) that will be visited during the incountry portion of the class. Travel to Greece will include guided tours to the following sites:

- Acropolis, Parthenon and New Acropolis Museum
- Lavrion Technical Park and Doric Temple of Poseidon
- Oracle of Delphi
- Ancient Corinth Canal structures
- Epidaurus Ancient Theater
- Mycenae, Tiryns Bronze Age sites
- Crete Archaeological and nautical museums and sites of Heraklion, Rethymnon and Chania.
- Samos Cave of Pythagoras and Archaeological Museum of Pythagora, Temple of Hera and the Tunnel of Eupalinos
- Day trip to Ephesus Archeological sites in Kusadasi, Turkey.

The course objectives address the Cultures and Ideas learning outcomes by allowing students to analyze these sites first in the classroom via research and then in-country actually touring the sites. Students will gain an appreciation of the enormity of the structures given the limited ancient means of construction and how these structures have lasted over thousands of years. Furthermore, students will observe and learn how modern day Greek engineering projects seek to preserve and maintain these ancient sites. At Lavrion Technical Park students will be given a tour of the lab that houses the H2SUSBUILD research project "Development of a clean and energy self-sustained building in the vision of integrating H2 economy with renewable energy sources." Students will learn about challenges that arise when building sustainable infrastructure among ancient ruins/sites that require preservation.

Several books will be used as sources for students to conduct research and OSU librarian David Lincove will provide a list of electronic sources on the course's Carmen site. Books that have been selected as key sources for students include: Constructing the Ancient World Architectural Techniques of the Greeks and Romans by Carmelo G. Malacrino; The Greek world by Anton Powell and plans to show a video from OSU Library's electronic resource "Greece Engineering an Empire" by A&E Television Networks, LLC.

The students will be responsible to research their assigned site and create a presentation of the site for the class. The presentation will be uploaded to Carmen site to create an online virtual tour guide of the sites to be visited in-country. Research will include origin of site; historical and political influences during the construction; overview of construction methods used; history of the site's changes over time to current conditions. Students will utilize in classroom and out of class time to conduct their research; site their sources (5-6 required different sources will be annotated in a bibliography). The instructor will provide feedback to daily updates of the research students completed to the Carmen site. During the last two class sessions, students will provide presentations to the class of their assigned site. Additionally, when at the site the student who conducted that

# **General Education Rationale for Cultures and Ideas**

location's research will present their findings again for students.	These in-country presentations will either take
place at the hotel prior to departure for the site or in route to th	e site on the coach.

Culture and Ideas Expected Learning Outcomes	Direct Methods	Follow-up	Indirect Methods	Follow-up	Achieving
Students analyze and interpret major forms of human thought, culture, and expression.	Analysis of the students' presentation and paper. Students must include information how the site has impacted engineering – if applicable and how profoundly local and world cultures have been impacted by these ancient ideas/monuments and/or people.	If the required information is not included on 80% of the presentations, the instructor and resident director will meet to determine what targets need more specificity and clarification for students to achieve Expected Learning Outcomes.	Opinion survey will be administered at the end of the course. Results of 80% or higher are required to indicate the Learning Outcome has been achieved.	If results are not 80% or higher, the Instructor and Resident director will re-evaluate the survey comments and compare to the learning outcomes to see what improvements can be made.	Records of the presentations and surveys will be kept by the Instructor.
Students evaluate how ideas influence the character of human beliefs, the perception of reality and the norms which guide human behavior.	Analysis of the students' presentation will have to include evidence that students took into account the scholarly agreed upon beliefs of Ancient times when these sites were planned and erected. Moreover, the students will indicate how these ancient monuments continue to affect present day beliefs.	If the required information is not included on 80% of the presentations, the instructor and resident director will meet to determine what targets need more specificity and clarification for students to achieve Expected Learning Outcomes.	Opinion survey will be administered at the end of the course. Results of 80% or higher are required to indicate the Learning Outcome has been achieved.	If results are not 80% or higher, the Instructor and Resident director will re-evaluate the survey comments and compare to the learning outcomes to see what improvements can be made.	Records of the presentations and surveys will be kept by the Instructor.