

# ASTRONOMY 260

## ARCHAEOASTRONOMY

### SYLLABUS – SPRING 2013

#### Class Hours

T, Th 2-3:15 PM, Planetarium

#### Instructor

**Dr. Kent Montgomery** (Office: Science Building 148, phone 903-468-8650, email: [kent\\_montgomery@tamu-commerce.edu](mailto:kent_montgomery@tamu-commerce.edu)) Office Hours M-Th 9-10

**Cheri Davis** – Teaching Assistant (Office: Science Building 148, phone 903-468-8650, email: [cheri\\_davis@tamu-commerce.edu](mailto:cheri_davis@tamu-commerce.edu))

#### Textbooks

##### **Required**

*Skywatchers*, Anthony Aveni

*Echoes of the Ancient Skies, The Astronomy of Lost Civilizations*, E.C. Krupp

##### **Reference**

*Ancient Astronomy*, Clive Ruggles

*Living the Sky, The Cosmos of the American Indian*, Ray A. Williamson

*Megaliths, Myths and Men, An Introduction to Astro-Archaeology*, Peter Lancaster Brown

*Stairway to the Stars, Skywatching in Three Great Ancient Cultures*, Anthony Aveni

#### Other Equipment

Also required for this class will be a compass, protractor, calculator and ruler.

#### Course Description

This course will give the students an understanding of the basic motions of the sky including determining cardinal points, sunrise and set positions, moon rise and set positions as well as tracking planets on the sky. In addition, we will get a basic understanding of the many ancient calendar systems. The studies of each of these concepts will be enhanced by studying ancient civilizations and cultures and their understanding of astronomy and how it is reflected in their beliefs, architecture and cultures.

The course will have many activities which will go along with the lectures. Most of the activities will occur during the lecture but we may on several occasions during the semester have activities which will be done at varying times during the day and night.

### **Web Enhanced Course**

This course will contain many pictures. To allow students access to these pictures and the PowerPoint presentations used during lectures the course has been web enhanced. To access the web enhanced portion students will need to log on to myLeo and then go to eCollege.

### **Homework and Activities**

Students will be given homework assignments or activities throughout the semester in order to work on skills learned during class and to prepare them for the tests. In addition, there will be reading assignments and some of the homework questions will be taken from the assigned readings. The lowest homework or activity grade will be dropped.

### **Project**

Using what they have learned during the semester students will design a sculpture, building, site, etc. that has specific astronomical alignments. They will then create a model of their design in whatever medium they chose (paper, wood, foam, clay, digital, etc.) and give a short presentation to the rest of the class describing what it is and the significant astronomical alignments.

### **Tests and Final**

Three exams will be given during the semester and a final will be given at the end of the semester. The three tests during the semester will cover only the material leading up to each test. The final will be comprehensive covering both the material at the end of the semester as well as material on the first three tests. A higher percentage of the questions will come from the untested material at the end of the semester.

## **Grading**

Homework and Reading assignments 20%

3 Tests 15% Each

Final 20%

Project 15%

Your grade will be determined using the following scale:

90% < A

80% < B < 90%

70% < C < 80%

60% < D < 70%

F < 60%

## **Attendance**

Regular attendance is essential to doing well in this class. Many of the topics covered will only be covered in lecture and not in the reference books. Many days during lecture we will be doing activities which will only be done on that day. Thus don't miss a lecture. If a student has excessive absences they will be referred to the Dean's office and may be involuntarily dropped from the class.

## **Syllabus Requirement**

Faculty are required to include the following statement in their syllabi: "All students enrolled at the University shall follow the tenets of common decency and acceptable behavior conducive to a positive learning environment." (See Student's Guide Handbook, Policies and Procedures, Conduct)

## **Materials Covered**

See attached for course outline and topics covered