Maya Archaeoastronomy and Ethnoastronomy

Ang 5162, section; 3 credit hours Tuesday 3-5, Rogers Hall 106
Instructor: Dr. Susan Milbrath Office hours: after class or Thursday 3-5 PM at MUS 110
Students must sign in at the front desk of Dickinson Hall on Museum Road

Course objectives:
This graduate seminar explores the role of astronomy in Maya culture, focusing on the Precolumbian Maya and the survival of indigenous beliefs among the Maya today. Study of ethnoastronomy in the cultural context of the contemporary Maya shows that astronomy remains important in agricultural cycles and calendar rituals. These practices have their roots in the astronomy of the Precolumbian Maya. Between around A.D. 150-1400 the Maya constructed astronomical observatories to track solar positions. They also recorded specific events involving the sun, moon, stars, and planets on carved monuments during the Classic period (A.D. 250-900). Painted books dating to the Postclassic period (A.D. 900-1550) record the cycles of Venus, Mars, and the Moon. They also contain seasonal almanacs and a zodiac depicting animal constellations. Astronomy played a central role in Maya religion, and astronomy became astrology when it began to influence dates chosen for events such as raids and royal rituals.

Each class will be divided in two blocks of time with a short break in between. During the first part of the class, Dr. Milbrath will present an illustrated lecture to develop topics related to the weekly reading assignments. During the second half of class, students will present a synopsis of additional readings to be assigned in each class, and there will be an opportunity to discuss topics related to the weekly readings. After the first few weeks of class, students will select a research topic focusing on Maya archaeoastronomy. They will present their research in class near the end of the term, and the results of their research will also be documented in a formal research paper (15-20 pp. plus 2-3 pp. bibliography). This paper will include social science citations and a complete bibliography of all works cited to support the research. Class attendance and active participation in discussion based on the reading assignments comprise 25% of the course grade. Another 25% of the grade is based on class presentations of additional assigned readings. The final paper comprises the remainder of the grade with 20% based on the oral presentation and 30% on the written version.

Required Texts
Anthony F. Aveni, Skywatchers (a revised and updated version of Skywatchers of Ancient Mexico), University of Texas Press, 2001 (paperback).
Susan Milbrath, Stargods of the Maya: Astronomy in Art, Folklore, and Calendars, University of Texas Press, 1999 (paperback).
Recommended Texts
Michael C. Coe,The Maya, Thames and Hudson, most recent edition (paperback).
Extra readings distributed individually as pdfs or Xerox copies during class
Also check these journals available in UF Science Library or online:
E59.A8A68 Archaeoastronomy: Journal of Cultural Astronomy
GN799.A8 A72 Archaeoastronomy: Supplement to Journal of the History of Astronomy;

Week 1: January 8 (2013), Introduction to Archaeoastronomy and Ethnoastronomy
Readings: Aveni's Skywatchers, pp. 1-11; Milbrath's Star Gods, pp. 1-11

Week 2: January 15, Maya Geographical Area and Environment Early Maya and Rise of Maya Civilization, Early Classic Maya
Readings: Coe's The Maya, pp. 7-109

Week 3: January 22, Late Classic Maya and Terminal Classic Maya
Readings: Coe's The Maya, pp. 110-176

Week 4: January 29 February, Postclassic and Colonial Maya, Maya Thought and Culture
Readings: Coe's The Maya, pp. 177-243

Week 5: February 5, Contemporary Maya Ethnoastronomy
Popol Vuh Video
Readings: Coe's The Maya, pp. 242-255; Milbrath's Star Gods, pp. 12-43

Week 6: February 12, Naked-Eye Astronomy
Readings: Milbrath's Star Gods, pp. 44-57; Aveni's Skywatchers, pp. 49-96; 97-117

Week 7: February 19, Site Orientation in Precolumbian Mesoamerica
John Carlson Video on Archaeoastronomy
Readings: Aveni's Skywatchers, pp. 12-40, 217-250

Week 8: February 26, Solar Cycles and Deities; Maya Site Alignments
Readings: Milbrath's Star Gods, pp. 58-104; Aveni's Skywatchers, pp. 250-300

Week 9: Spring break March 2-9

Week 10: March 12, Maya Calendar; Lunar Cycles and Deities
Readings: Aveni's Skywatchers, pp. 127-165, 173-184, 207-214
Milbrath's Star Gods, pp. 105-156

Week 11: March 19, Inferior Planets (Venus and Mercury)
Readings: Milbrath's Star Gods, pp. 157-217; Aveni's Skywatchers, pp. 166-172**,** 184-195

Week 12: March 26, Superior Planets in Maya Cosmology (Mars, Jupiter, Saturn)
Readings: Milbrath's Star Gods, pp. 218-248; Aveni's Skywatchers, pp. 196-200

Week 13:April 2, Stars in Maya Cosmology, The Milky Way, and Celestial Signs
Readings: Milbrath's Star Gods, pp. 249-293; Aveni's Skywatchers, pp. 200-207

***** Draft Papers Due April 9 (no grade but comments on returned papers should be incorporated in writing final draft for optimal grade).**

Week 14: April 9, **Measuring Alignments; Computer Programs for Navigating the Sky**
Readings: Aveni's Skywatchers, pp. 118-126

Weeks 15-16: **April 16, 23 Student Presentations (Final Draft Papers due on April 30)**