

## ASTR 2000 RESEARCH PAPER GUIDLINES

I truly hope that this research paper will prove a valuable part of this class for you.

### GUIDELINES FOR RESEARCH PAPER (25% OF GRADE IF SELECTED)

(PAPER DUE December 8th; RETURN THIS FORM BY October 27th)

Name: \_\_\_\_\_ Topic: \_\_\_\_\_

Count:            MIDTERM    PAPER            FINAL EXAM            for my grade (circle two).

Research paper will be 10-15 pages double-spaced, typed.

Submit hard copy to J. Stocke; Submit electronic copy to TA.

The electronic copy will be used to check that you have not plagiarized your paper (i.e. used someone else's work as your own). If we determine that you have plagiarized your paper, this will result in an "F" on this paper and, possibly an "F" for the class. \*\*\*You are warned!!\*\*\*  
\*\*\*Acceptable formats for electronic submission are (only these): text, rtf, word, pdf, and postscript.

We will accept books and articles as references and no more than two internet sites as references. The internet can be used for finding references, but is not always reliable as referenced information. A minimum of two books and/or journal articles, in addition to your textbook are required for this research paper. If you wish you may add internet sites for references in addition to the book/journal references. In your bibliography, you will need to provide the COMPLETE URL address for any internet sites that you use, so that I can locate and read the exact site that you used. No specific referencing format is required; but appropriate referencing of quotations and ideas is required.

\*\*\*Papers which rely primarily or exclusively on internet references will receive low marks.\*\*\*

Criteria used in grading research papers:

1. Content complete and correct; well-researched and documented.
2. Presentation well-organized, clear and easy to understand.
3. Exposition without significant flaws; good grammar and correct spelling.
4. Good introduction and conclusion summarizing the topic.
5. Relevant to the course material; appropriate length and depth.
6. Good creativity in approach, exposition and/or conclusions. Did I learn something from your paper? It is highly recommended that you consult with your instructor about your topic prior to starting your research. This is to make sure that the topic is neither too broad nor too narrow (e.g., has too little or no reference material available).

I truly hope that this research paper will prove a valuable part of this class for you.

\*\*\* NEW REQUIREMENT \*\*\* Electronic copy cannot have your name listed in the body of the paper or on a cover sheet; provide your name in the filename or in the subject line only \*\*\*

Some of you seem to be having trouble selecting a research topic for your paper. In general, I am hoping that you will focus on a ancient culture that you are interested in and delve deeply into their use of astronomy. This could involve: calendrics and ceremonies, sacred sites and alignments, special methods or ways of observing the heavens (e.g., Chinese interest in supernovae), ways of incorporating "As above, so Below" into their astronomy, cosmological outlooks, etc. Modern astronomy topics are "off limits"; e.g., Black Holes, expanding Universe, space telescopes, etc. etc. Western astronomy up to and including the Greeks and middle ages is OK, but no further. Your textbook (Hadingham) is excellent on standing stones in Britain and France and North American peoples of the southwest and Meso-America. Aveni's "Ancient Astronomers" has good sections on Maya, Inca, Polynesian, Babylonian, Chinese and African peoples. Krupp's books contain vignettes from a number of different cultures not well covered elsewhere (e.g., Pawnee, Chumash, Chinese, Eskimo and Siberian tribes, etc).

The following books, on reserve at the CU Geology Library in Benson (across the hall from the lecture hall), maybe helpful in initiating research for your paper.

Ancient Astronomers by Anthony Aveni  
Early Man and the Cosmos by Evan Hadingham  
Echoes of Ancient Skies by Ed Krupp  
Beyond the Blue Horizon by Ed Krupp

In addition, there is now a new Archaeoastronomy encyclopedia called:

Exploring Ancient Skies: An Encyclopedic Survey of Archaeoastronomy by Kelley and Milone (QB16. K45. 2005) on the reserve as well. \*\* Please be considerate of your fellow students and return the reserve books promptly.

Less helpful books also on reserve:

The Secret Language of the Stars and Planets by Cornelius and Devereux  
Stars of the First Peoples by Dorcas Miller

Successful papers were written in recent years on:

Osiris legend and the sky  
Hopi religion and astronomy  
Aztec Astronomy and calendar  
Stone Pleiades: Importance in several cultures  
Inuit Astronomy  
Pawnee Astronomy

Lakota Astronomy  
History of Hindu (Vedic) Astrology  
Maori Astronomy  
Angkor Wat Chinese Supernova Observations  
Comets in the Ancient World  
Mayan and Aztec Cosmology  
Incan Cosmology and the Ceque System System  
Greek Astronomers (i.e., some specific astronomer)  
Islamic Astronomical Advances in the Middle Ages  
Papers on Individual standing stone sites in Britain  
The development of the Gregorian Calendar  
Australian Aboriginal astronomy and cosmology  
The development of Babylonian/Greek astrology  
Newgrange  
Babylonian eclipse predictions

Topics already covered in class for which papers would have to delve much deeper to be successful:

Egyptian Pyramid alignments; Stonehenge, Sundagger & Chaco Canyon; Polynesian navigation; eclipse predictions; Maya calendars; Antikythera Mechanism

Not much touched in recent years (but still good topics):

The Chumash of southern CA; The Tower of the Winds in Athens and in the Vatican; armillary spheres and water clocks in China and Europe; Japanese astronomy; Nabta Playa; Nazca lines; the Cahokia people and mounds; sacred geometry in India; other Chaco culture sites in SW (Chimney Rock, Hovenweep etc); details of clock towers in Europe (e.g. Prague Orloj, etc). other Egyptian monuments (e.g. Heliopolis, Karnak, Dendera, etc); Macchu Picchu, The use of Solar calendars and alignments in European cathedrals; Masonic use of Astrology; Precession Mythology