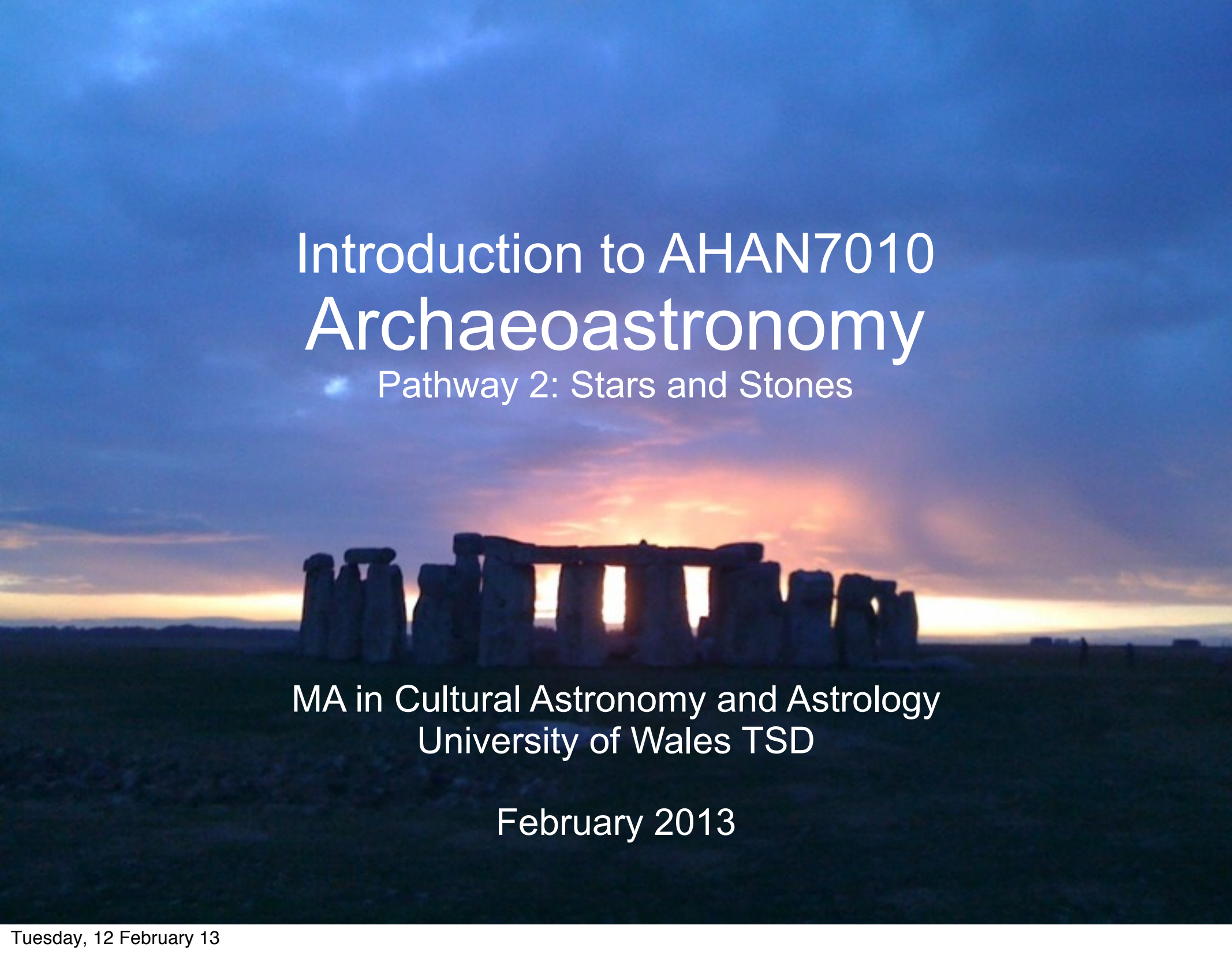


A photograph of Stonehenge at sunset. The sky is a deep blue with some clouds, and the sun is low on the horizon, creating a warm orange and yellow glow. The stones of Stonehenge are silhouetted against the bright light of the setting sun.

Introduction to AHAN7010 Archaeoastronomy

Pathway 2: Stars and Stones

MA in Cultural Astronomy and Astrology
University of Wales TSD

February 2013

Introduction to the Module

What is Archaeoastronomy?

1) As a *discipline*, it is the study of how people "have understood the phenomena in the sky, how they used phenomena in the sky, and what role the sky played in their cultures." (Sinclair 2006:13).

Introduction to the Module

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Introduction to the Module

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Ruggles warns about considering it the study of *ancient astronomy* (1999:155), since astronomy is a modern science.

Introduction to the Module

What is Archaeoastronomy?

Definition above too broad and dismissive of archaeoastronomy's focus on the material elements of cultures (but would it apply to Cultural Astronomy?)

Introduction to the Module

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Introduction to the Module

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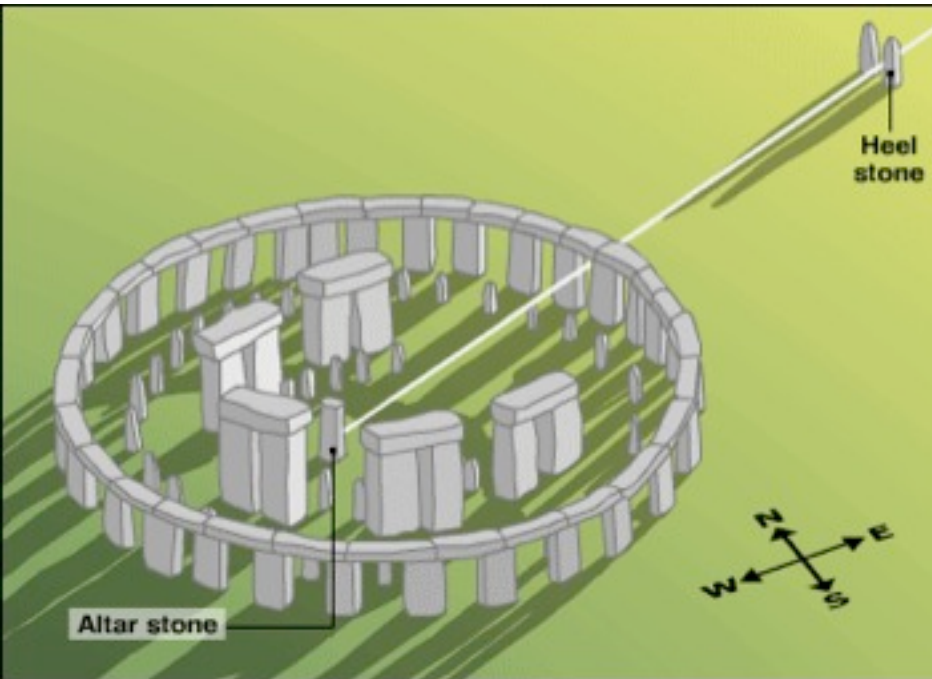
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Archaeoastronomy is the study of how people "have understood the phenomena in the sky, how they used phenomena in the sky, and what role the sky played in their cultures" *through the study of their material remains*.

This parallels Archaeology: "the study of people through their material remains" (Drewett 2011:1). And complements the approaches of Ethnoastronomy (*through ethnography*) and History of Astronomy/Astrology (*through the study of literary sources*).

Introduction to the Module Celestial Alignments



Newgrange on Winter Solstice

Introduction to the Module ...not just about alignments

Ice Age art



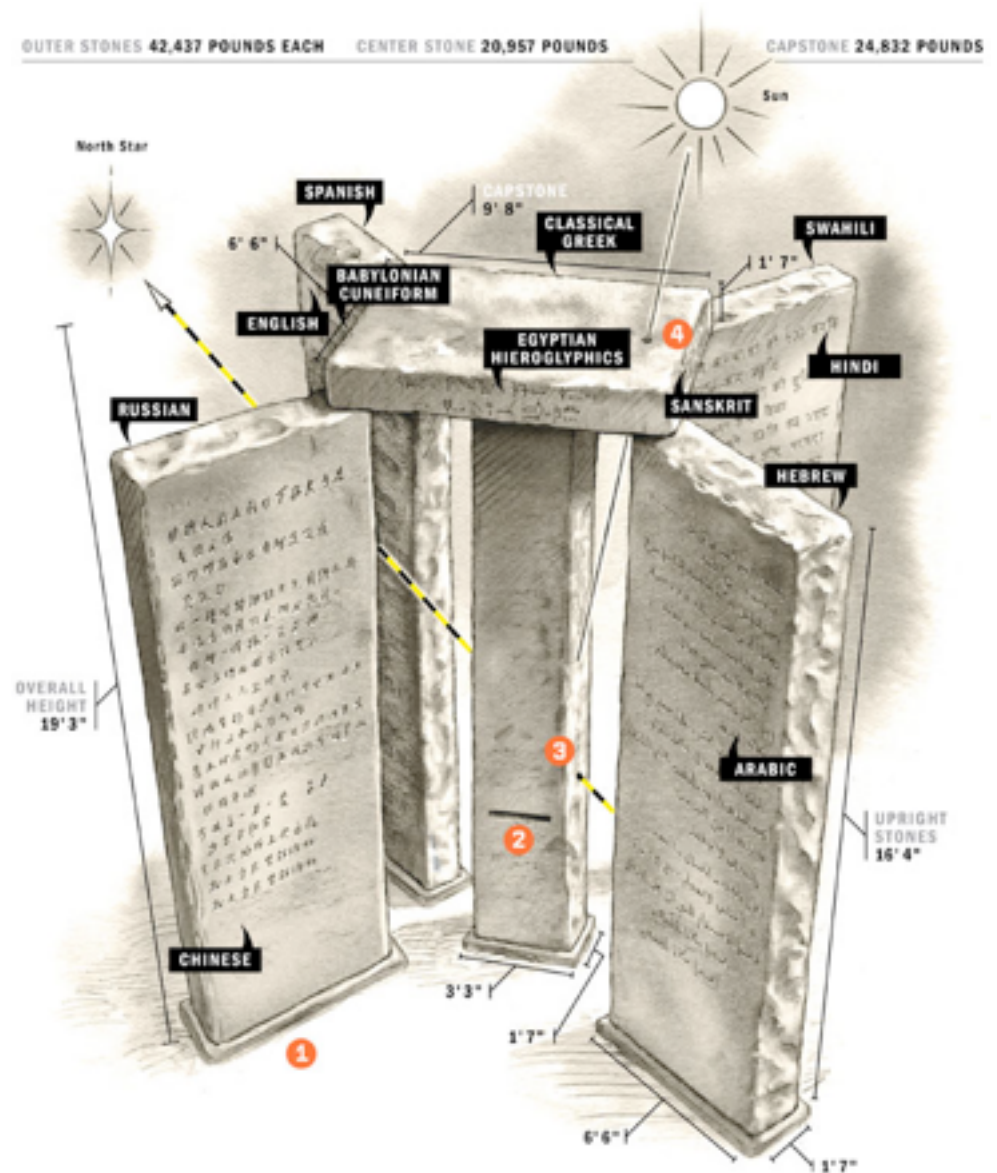
Puebloan art

Introduction to the Module

...not just about the ancient world



Calendar Buildings



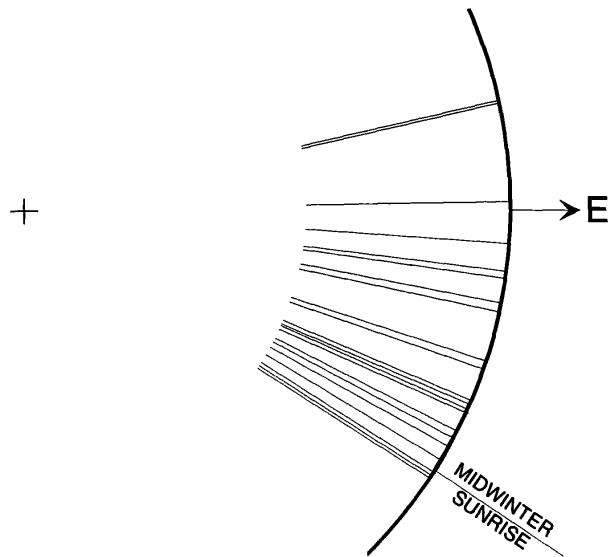
Georgia Guidestones

Introduction to the Module

Different Approaches

Introduction to the Module

Different Approaches



Statistical

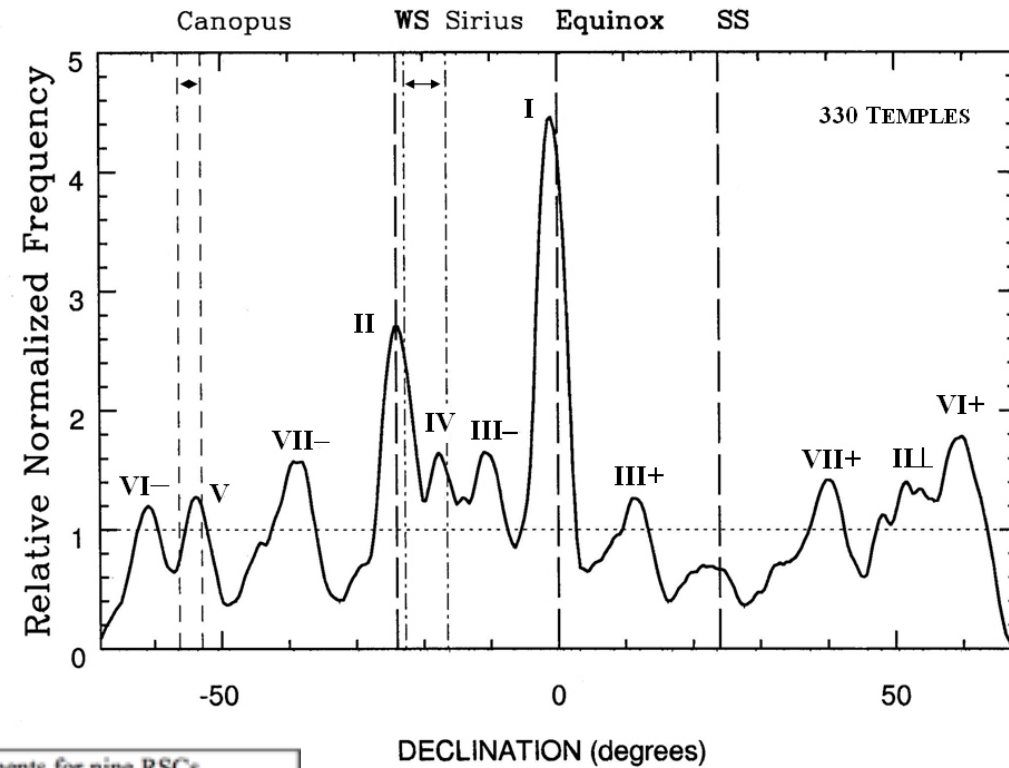


FIG. G2. Orientations of 21 megalithic tombs of the Mondego basin.

Percentages of Solar and Lunar alignments for nine RSCs			
Sun	%	Moon	%
		Northern major rising	42.8
Summer solstice rising	57.1		
		Northern minor rising	14.3
Equinox rising	11.1		
		Southern minor rising	44.4
Winter solstice rising	66.7		
		Southern major rising	44.4
		Southern major setting	66.7
Winter solstice setting	55.6		
		Southern minor setting	33.3
Equinox setting	33.3		
		Northern minor setting	12.5
Summer solstice setting	50.0		
		Northern major setting	25.0

Introduction to the Module

Different Approaches



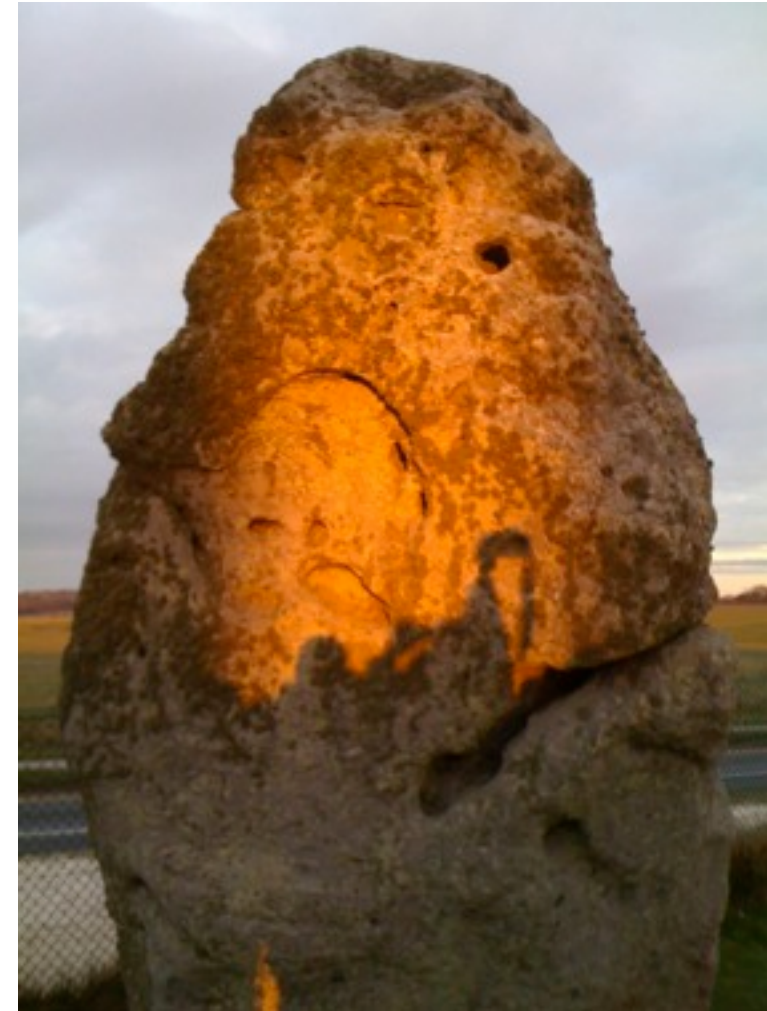
Photographical



Introduction to the Module

Different Approaches

Phenomenological / Experiential



Introduction to the Module

Different Approaches

Experimental

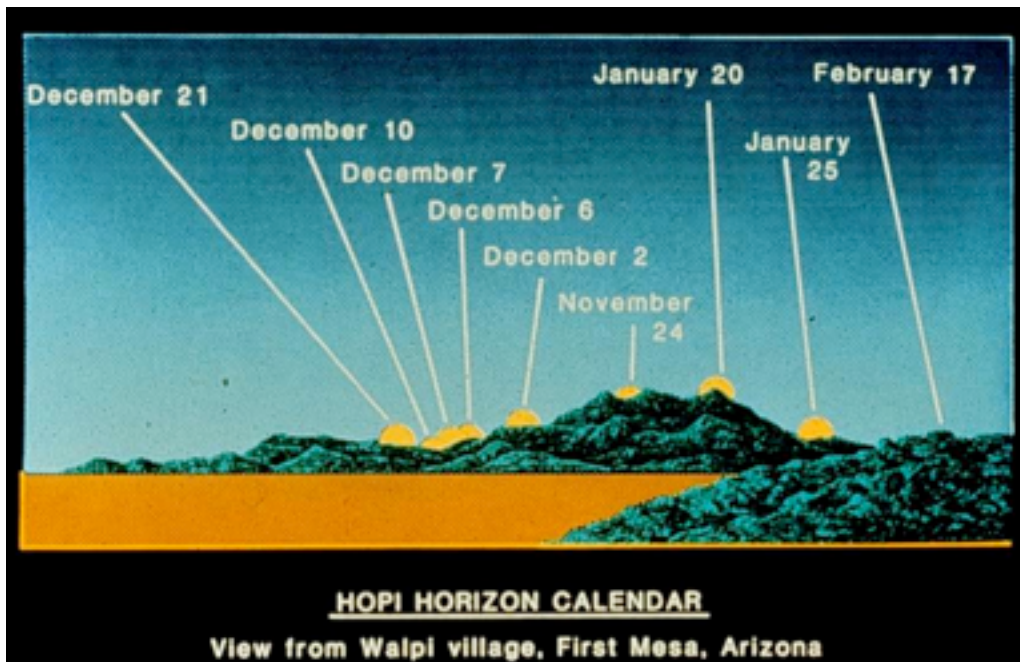


Introduction to the Module

What to expect from this module?

Introduction to the Module

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**Learn the movements of
the Sun, Moon and Stars**

**How to use a compass to
tell where a celestial object
will rise on a given date**



Introduction to the Module

What to expect from this module?

**Learn how to plan and
conduct fieldwork**



**How to draw on
archaeological evidence to
support/reject an argument**

Introduction to the Module

What to expect from this module?



Worldwide Case Studies



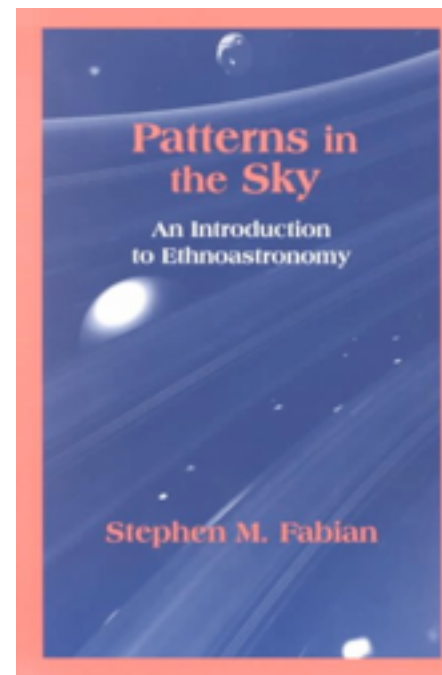
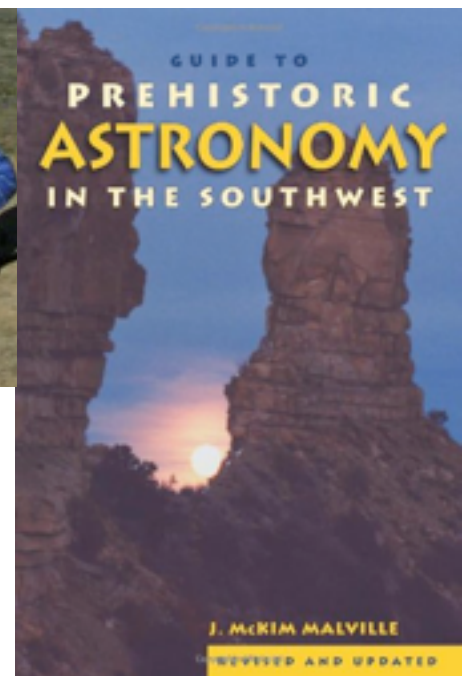
Introduction to the Module

Weekly Structure

Week	Theme	
1	Introduction to Archaeoastronomy	
2	Method and Theory	
3	Celestial Mechanics and Fieldwork	
4	Case Studies	Prehistoric Europe
5		Americas
6		Asia
7		Classical and Medieval
8		Oceania, Polynesia and Modern
9	Student Presentations	

Introduction to the Module

Required Reading



Introduction to the Module Assessment

Introduction to the Module Assessment

1. One 1500 word assignment (20% of total marks)

Write a critical review of the recent debate over the interpretation of Chankillo, Peru, between Iván Ghezzi, Clive Ruggles and Kim Malville. The two works to read are:

- Ghezzi, I and C Ruggles (2011) “The Social and Ritual Context of Horizon Astronomical Observations at Chankillo.” In C Ruggles (ed) *“Oxford IX” International Symposium on Archaeoastronomy. Proceedings IAU Symposium No. 278*, pp. 144-53.
- Malville, K (2011) “Astronomy and Ceremony at Chankillo: an Andean Perspective.” In C Ruggles (ed) *“Oxford IX” International Symposium on Archaeoastronomy. Proceedings IAU Symposium No. 278*, pp. 154-61.

You should read the guidelines on writing critical reviews on the MA CAA General Information page. You should critically evaluate the writers’ arguments and views and should refer to other literature in the field (five or more works, as a guide)

DUE DATE: MARCH 17th

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A research project within the subject area. You may take one of the following approaches:

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DUE DATE: JULY 7th



Let the journey begin!