

HON 250-02 – The Physics and Philosophy of Time
Embry-Riddle University
Spring 2010

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Required texts: *A Brief History of Time*, 10th anniversary edition, by Stephen Hawking
 About Time, by Paul Davies
 Selected readings

<u><i>Percentage system:</i></u>		<u><i>Grading scale:</i></u>
4 reports	60% (15% each)	A sustained excellence
attendance	10%	B good
discussion	10%	C minimally adequate
homework	10%	D, F less than adequate
daily quotes	10%	

Course Description: Why does time flow only forward and not backward? Was there a beginning of time? Will there be an end of time? Is time travel possible? In this course we will attempt to answer these questions by exploring what current physical theories have to say about time and the universe. An exploration of mankind's view of the nature of time and philosophical speculations on what, exactly, time is, will accompany our scientific journey. We will discuss the theories of Newton, Mach (yes, he's the Mach of Mach number fame), Einstein, and Hawking, and attempt to synthesize them and develop our own "theory of time."

RULES

1. Arrive on time; depart on time.
2. Take notes.
3. No eating, no cell phones.

Reports

5 pages; double-spaced; at least one book reference from ERAU library
Due Dates: Mon 8 Feb, Fri 5 Mar, Mon 4 Apr, Wed 28 Apr.

Reading

Daily assigned reading.

Attendance and Discussion

This class is primarily discussion-based, so timely attendance is required. We will utilize the “Harkness” system – everyone is expected to contribute to the discussion.

Homework

One page of definitions, questions, etc. Daily.

Daily quotes

One quote from the day’s reading, along with a short paragraph explaining why you chose that particular quote. In notebook.

Daily writing

Recap discussion during last 10 minutes of class. In notebook.

All assignments are due at the *beginning* of class on the due date, after which they will be considered late and the score will be reduced by 50%. After the *beginning* of the *next* class period, they will not be accepted.