

USEM 7b

The Concept of Time

Syllabus

This USEM will explore the concept of time from ancient calendars to modern physics. We will look at cultural and societal impacts of advancements in time measurements. We will explore how modern physics laws such as special relativity, general relativity, and string theory affect our understanding of time. We will also explore alternative time concepts in literature, including time travel and its possibility within our current understanding of the laws of physics.

The three required books for this course are *Time's Pendulum* by Jo Ellen Barnett, *Einstein's Dreams* by Alan Lightman, and *The Elegant Universe* by Brian Greene. In addition, we will read several short stories and articles.

Grading in this class will be based on class participation, two papers, and oral presentations.

People with both non-science and science backgrounds are welcome. Neither a physics nor math background is assumed or needed for this course.