

Chautauqua Short Course # 102 (UWA-6)

Fire, Air, and Water: Effects of the Sun, Atmosphere, and Oceans in

## Climate Change and Global Warming

9-11 July 2007, The Evergreen State College

Instructor: Dr. E.J. Zita, The Evergreen State College  
Lab II, Physics and Astronomy  
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Texts: Kump, Kasting, Crane, The Earth System (2nd Ed., Prentice-Hall), and  
IPCC 2007 reports (AR4)

<u>Major Topics</u>	<u>Text Chapters</u>
<b>Day I:</b> Introductions Cosmic Origins Science	Kump 1 Kump 3-5, 8, 10, 16 IPCC I
<b>Day II:</b> Science Impacts CC & Pacific Rim Indigenous Nations	Kump continued, 15, 16 IPCC II NAWIP report
<b>Day III:</b> Mitigation Student research projects	IPCC III Pacala & Socolow article

We will discuss dynamics of the Earth system, natural and perturbed, in the past, present, and future.

**Science and evidence:** what do we know about the Earth system and climate change, how do we know it, and with what levels of certainty?

**Impacts:** what are impacts of climate change, historical and current, observed and predicted?

**Mitigation and Adaptation:** what responses can or should people take to human-induced changes in the Earth system, as groups and as individuals? On what variables do our responses depend?

We will use a combination of lectures, workshops, and group discussions. We will exchange teaching approaches and ideas, and do simple quantitative exercises together.

Please see our web page for more information and resources:

<http://academic.evergreen.edu/z/zita/meetings/Chau07/ChauCC.htm>