

Our LAST CLASS:



GLOBAL CHANGE WRAP-UP:

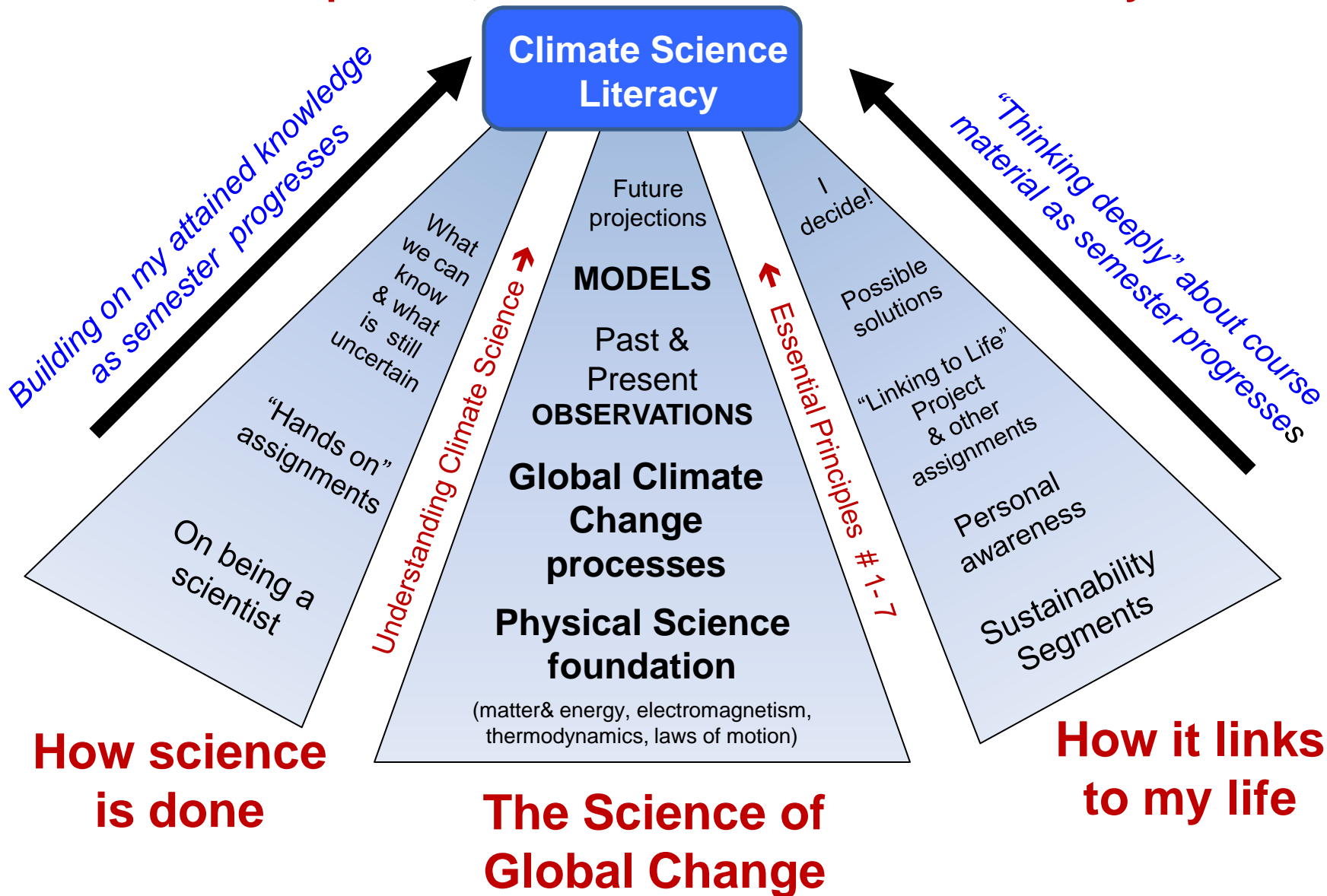
CLIMATE SCIENCE LITERACY

(class Notes pp 105 -114)

OUR CHOICES

plus THE GREAT DEBATE

GOAL: Enhanced Understanding Of Global Change Science, How It Operates, & What It Means To Me Personally



CLIMATE LITERACY

Climate Literacy Network

Working Towards a Sustainable Future

Climate Literacy

Climate Literacy

CLN

Essential Principles

Climate Literacy
Network

Climate Change
Education Projects

Teleconference
Schedule

Events Schedule

Discussions

Documents

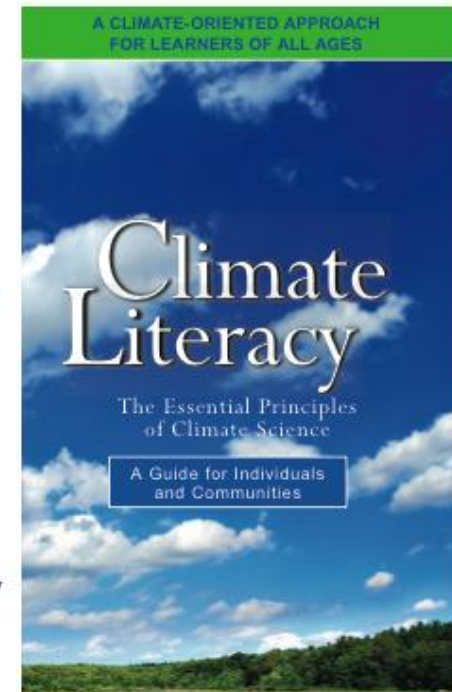
What is Climate Literacy?

Climate literacy is an understanding of your influence on the climate and climate's influence on you and society.

A climate-literate person

- understands the essential principles of Earth's climate system,
- know how to assess scientifically credible information about climate,
- communicates about climate and climate change in a meaningful way, and
- is able to make informed and responsible decisions with regard to actions that may affect climate.

The [Climate Literacy Network](http://cleanet.org/cln/index.html) has been responsible for the development of the **Climate Science Literacy Essential Principles** which summarize the most important principles and concepts of climate science. The principles were originally developed in 2007 using a community-wide consensus building process and were revised in March 2009.



<http://cleanet.org/cln/index.html>

7 ESSENTIAL PRINCIPLES:

- 1. The Sun is the primary source of energy for Earth 's climate system.**
- 2. Climate is regulated by complex interactions among components of the Earth system.**
- 3. Life on Earth depends on, is shaped by, and affects climate.**
- 4. Climate varies over space and time through both natural and man - made processes.**
- 5. Our understanding of the climate system is improved through observations, theoretical studies, and modeling.**
- 6. Human activities are impacting the climate system.**
- 7. Climate change will have consequences for the Earth system and human lives.**

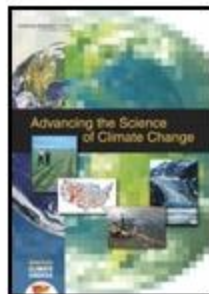
DECISIONS & CHOICES AT THE NATIONAL LEVEL:

NATIONAL RESEARCH COUNCIL
OF THE NATIONAL ACADEMIES

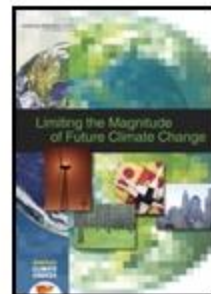


America's CLIMATE CHOICES

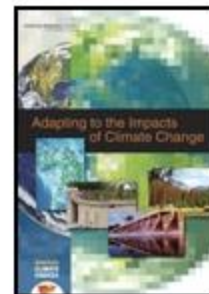
Strong Evidence on Climate Change Underscores Need For
Actions
to Reduce Emissions and Begin Adapting to Impacts



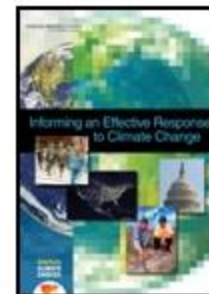
Advancing
the Science
of Climate
Change



Limiting the
Magnitude
of Climate
Change



Adapting to
the Impacts
of Climate
Change



Informing
an Effective
Response to
Climate
Change

DECISIONS & CHOICES AT THE SECTOR, BUSINESS & LOCAL LEVEL :



The Next Frontier: Engineering the Golden Age of Green

<http://www.thenextfrontiermovie.com/>

<http://fp.arizona.edu/kkh/nats101gc/GC-next-frontier.htm>

DECISIONS & CHOICES AT THE PERSONAL LEVEL:



<http://fp.arizona.edu/kkh/nats101gc/GC-video-story-of-stuff.htm>

MailOnline

What happened to the 'warmest year on record': The truth is global warming has halted

By David Rose
...at 4:17 PM on 5th December 2010
...opening of the UN Copenhagen world climate summit, the British Meteorological
...odd temperature for 2010, it announced, 'is expected to be 14.58C, the
...1990 average.
...perimental decadal forecast
...year observed so far.

Climate scientists defend global warming hockey stick

03.12.2010 14:23 Age: 3 days
Category: Paleoclimate
By: Leon Clifford
Climate scientists have reacted strongly to an unpublished paper from two US statisticians that criticises the hockey stick global warming temperature graph that has been the subject of previous controversy.
The paper has attracted comments from around 13 individuals or groups and the majority of these are to varying degrees critical of the work of the statisticians, according to a paper that has created a reaction among climate scientists with the following telling Reporting Climate Science .Com that the 'hockey stick' is 'up'.

Climate Change on  **msnbc.com**

Last decade warmest on record, review finds

U.N. agency also says 2010 could be single warmest year on record

Winter's icy grip: Drive...

http://www.msnbc.msn.com/id/40474599/ns/us_news-environment/

THE DEBUNKING WILL CONTINUE SO THINK LIKE A SCIENTIST:

Be curious and open-minded, yet skeptical and probing, don't accept something without knowing the source or the whole story . . .

Find out: is it PEER REVIEWED?

An excellent and very measured series of videos on CLIMATE CHANGE by a science journalist →

<http://fp.arizona.edu/kkh/nats101gc/climateyoutube.htm>

READ THE SHORT SKIT on "CLIMATEGATE" featuring Stella Student & Lee Learner

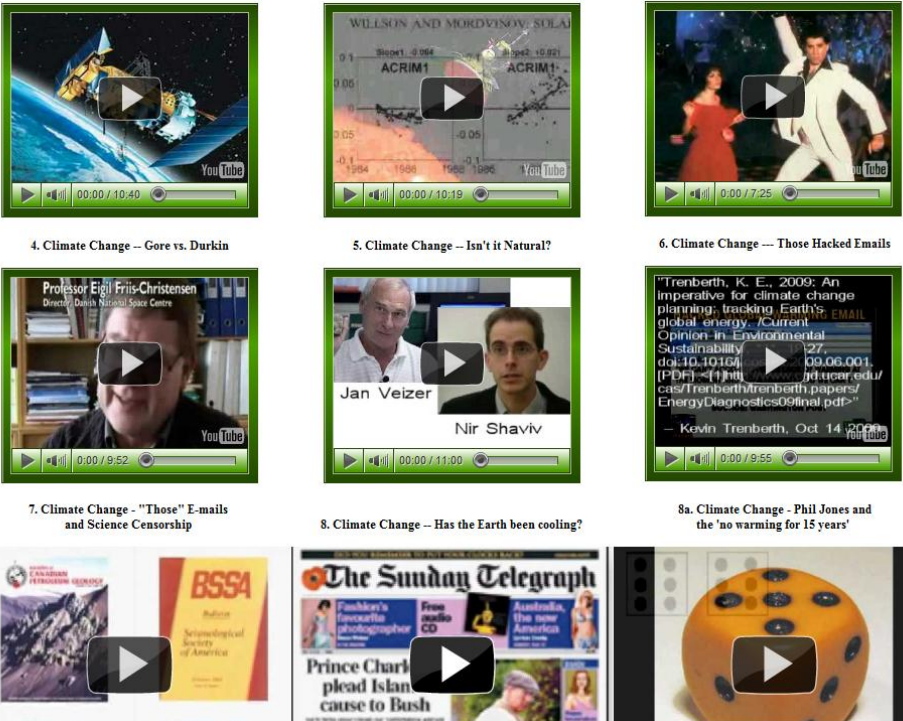
<http://fp.arizona.edu/kkh/nats101gc/PDFs->

[2010/CLIMATEGATE-SKIT-2010.pdf](http://fp.arizona.edu/kkh/nats101gc/PDFs-2010/CLIMATEGATE-SKIT-2010.pdf)

Some Climate Change YouTube Videos
These are science-based YouTube videos by a science journalist "Potholer54"

"The main purpose of this channel, for those who don't know, is to explain in simple terms the conclusions of scientific research and correct some of the uncensored crap you get fed on the Internet."

1. Climate Change -- the Scientific Debate
2. Climate Change -- The Objections
3. Climate Change -- Anatomy of a Myth
4. Climate Change -- Gore vs. Durkin
5. Climate Change -- Isn't it Natural?
6. Climate Change -- Those Hacked Emails
7. Climate Change - "Those" E-mails and Science Censorship
8. Climate Change -- Has the Earth been cooling?



**THE FALL 2010
CLASS
GLOBAL WARMING
DEBATE**

THE QUESTION:

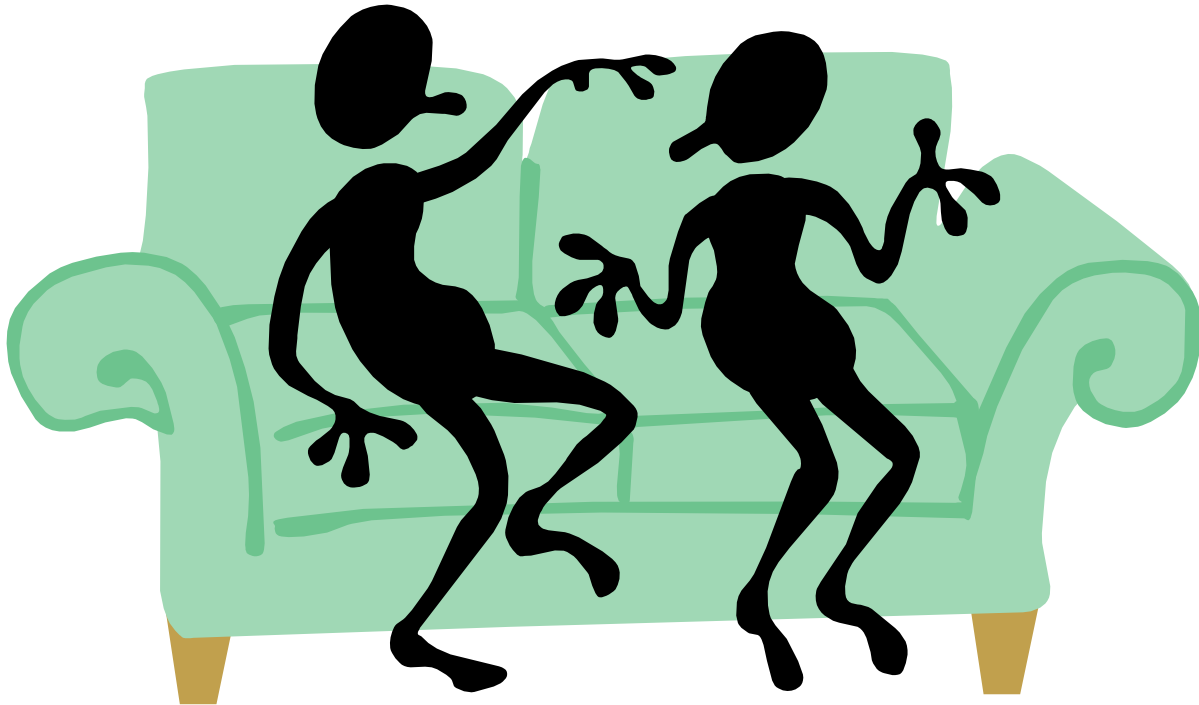
**Should the United States
take aggressive and
immediate action to slow
global warming?**

**(e.g. sign the International
Climate Treaty, reduce or tax
GHG emissions, etc. etc.)**

DIRECTIONS FOR DEBATE ACTIVITY

- 1) Get in your Groups facing each other & select a Group Discussion Monitor
(1 bonus pt – reward the one who deserves it after a semester of service!)
- 2) Monitor passes out a "ROLE LABEL" to group members.
- 3) **THE DEBATE:** The debate begins by going around the group with EACH STUDENT READING HIS or HER prepared 1-minute OPENING STATEMENT
- 4) **GENERAL OPEN DEBATE** (for a few minutes more)
- 5) WHEN TIME IS CALLED, Monitor takes a tally of "YES" or "NO" votes (based on ROLES)
- 6) **FILL IN** the VOTE RESULTS for each role, TOTAL THEM, & **HAVE EVERYONE SIGN** the "DEBATE PARTICIPATION FORM" → (This is the basis of **your 5 pts** for group participation in the debate)
- 7) At the end you will use clickers to **VOTE YOUR OWN VIEW YES / NO**

DEBATE TIME



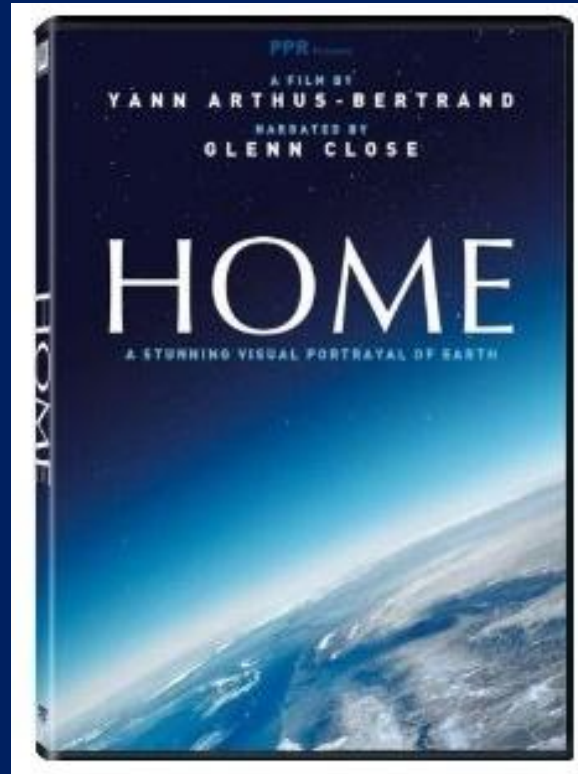
**NOW . . . WITH YOUR CLICKER
VOTE YOUR OWN VIEW ON THE
DEBATE QUESTION:**

YES = 1

NO = 2

**Should the United States
take aggressive and
immediate action to
slow global warming?**

EPILOGUE



The last 20 minutes of the film
Watch it in D2L via streaming video starting at 1:38:10
or better yet,
WATCH THE WHOLE FILM!



**IT'S UP TO US TO WRITE
WHAT HAPPENS NEXT . . .
TOGETHER!**

**THANK YOU
NATS STUDENTS
FOR AN
AMAZING SEMESTER!**

**Dr H & The TA's
See you at the Final Exam!**