

Space On Earth

An English, Math, and Science LC

Science

The
Environmen
t

Math

English

Imagine a Science class where writing and math become the tools you use to investigate environmental issues.

Imagine a math class using Algebra to analyze and research environmental problems from the real world

Imagine an English class building your essay writing skills while reflecting on environmental issues effecting your daily life.



Stop Imagining!

Register for Fall 08 courses:

ENG101D-HCL English Composition I

MAT022D-HCL Basic Algebra II

ERS125D-HCL Environmental Issues

Instructors:

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Brief Description of Learning Community:

"Space on Earth" is a learning community linking Composition I, Basic Algebra II, and Environmental Issues. In this learning community, we will explore our relationship with the natural world, and take a constructive approach to today's environmental issues. Writing, Mathematics, and Science instruction will be interrelated throughout the semester as we address this theme.

Outcomes

Students completing our LC will have the ability to:

- Comprehend, analyze, and explain a body of text containing quantitative information.
- Write a well-developed conclusion.
- Use writing and math as a tool to think critically in the context of environmental issues.
- Write a well-documented research paper that answers a meaningful question and is supported by qualitative and quantitative reasoning.
- Use scientific practice and theory to engage in discourse around global issues.

COURSE KICK OFF (Integrated project #1):

Group Lab Project- Data Set Analysis

What is the greatest environmental Issue facing the world today?

Is this a global environmental change?

Science:

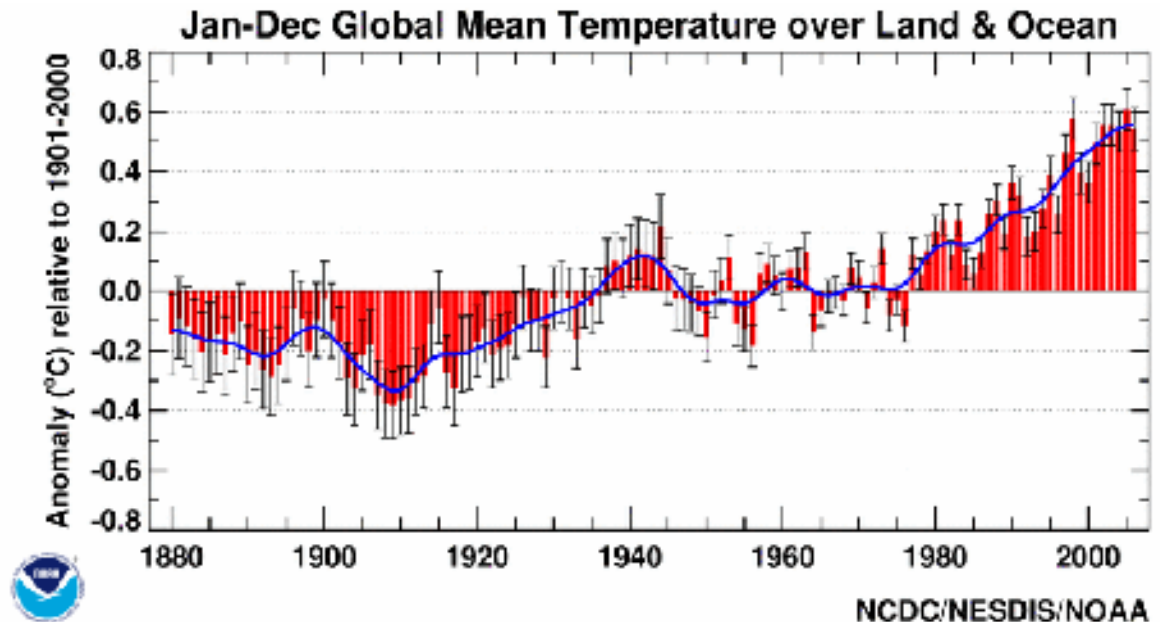
- Data bias concepts.
- Introduction to feedback loops

Mathematics:

- Number sense
- Spatial reasoning
- Graphing data

English:

- Reflection writing
- Technical and Quantitative writing



LONG TERM REFLECTION PROJECT (Integrated project #2):

Determining your Ecological Footprint

Quantitatively accessing lifestyle to generate a pollution inventory for the household.

Science:

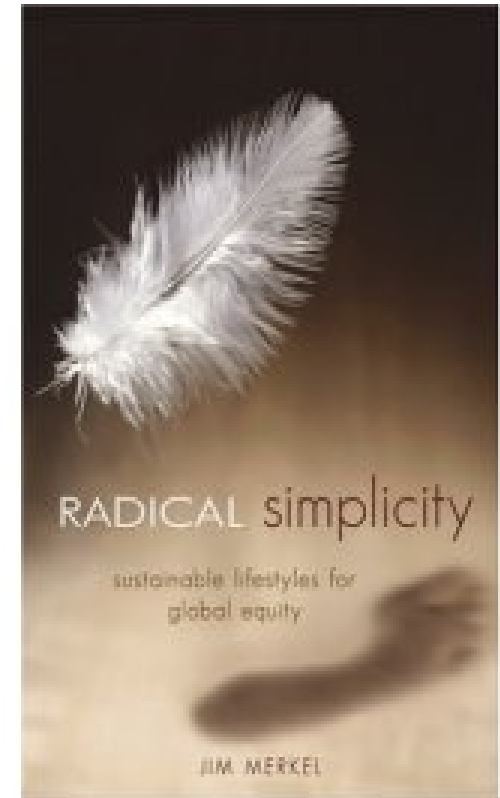
- Consumer choices
- Land use science
- Long term research strategies

Mathematics:

- Equation building
- Excel as a mathematical tool
- Measurement and geometry
- Data Analysis

English:

- Personal reflection writing
- Opinion statements
- Analytical writing



Overwhelming Goal: To be able to calculate how many earths we would need to support your lifestyle choices!
FYI- the average middle class American family needs 4.7 planet earths!!!!!!.

SYNTHESIS PROJECT (Integrated project #3): Your Personal Kyoto Protocol

Read pieces of Kyoto Protocol and use framework to design a plan that reduces household emissions by 20%.

Science:

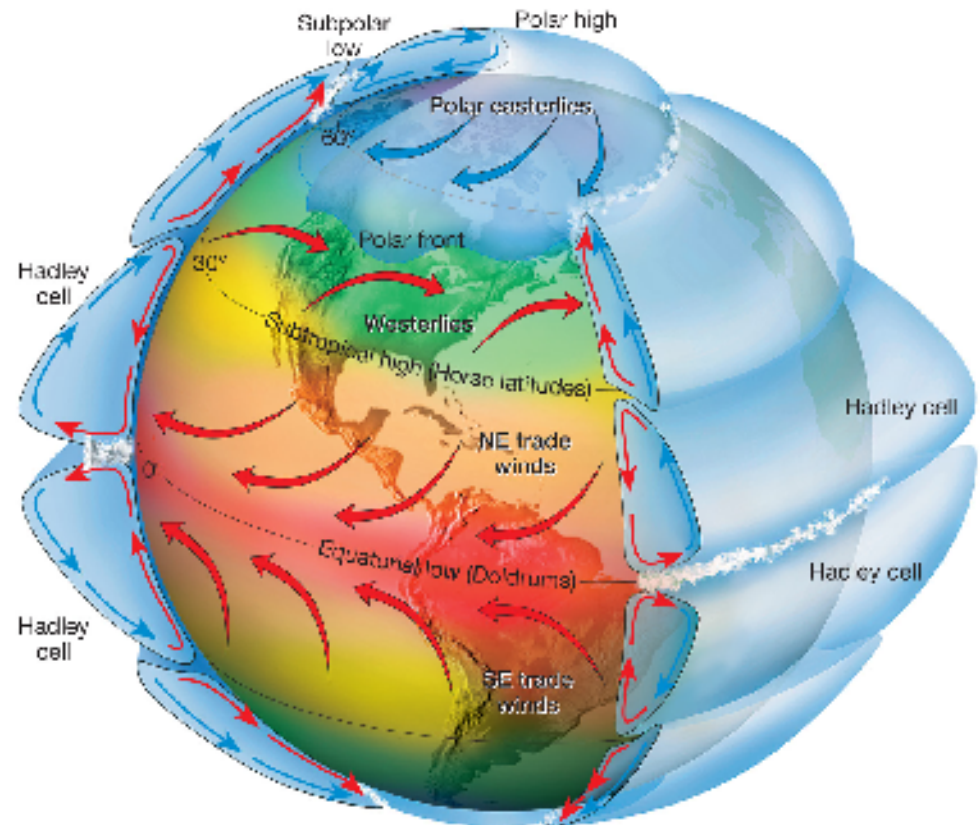
- Science in Policy
- Global Climate Modeling
- Energy Use

Mathematics:

- Unit analysis
- Equation design

English:

- Information and data synthesis
- Argument writing
- Reflection writing



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