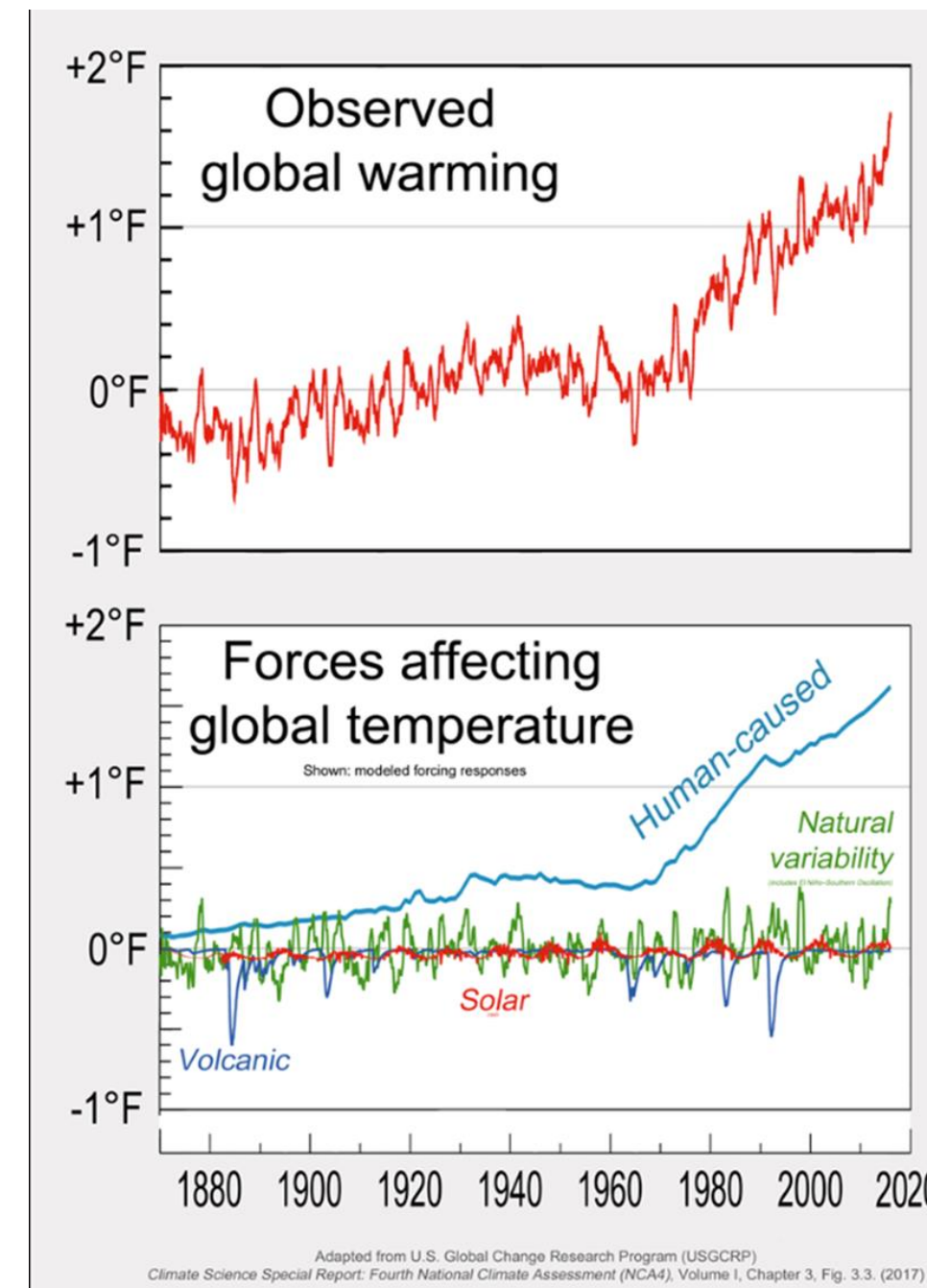


# Geographic Environmental Education: Teaching Climate Change from a Social Science Perspective



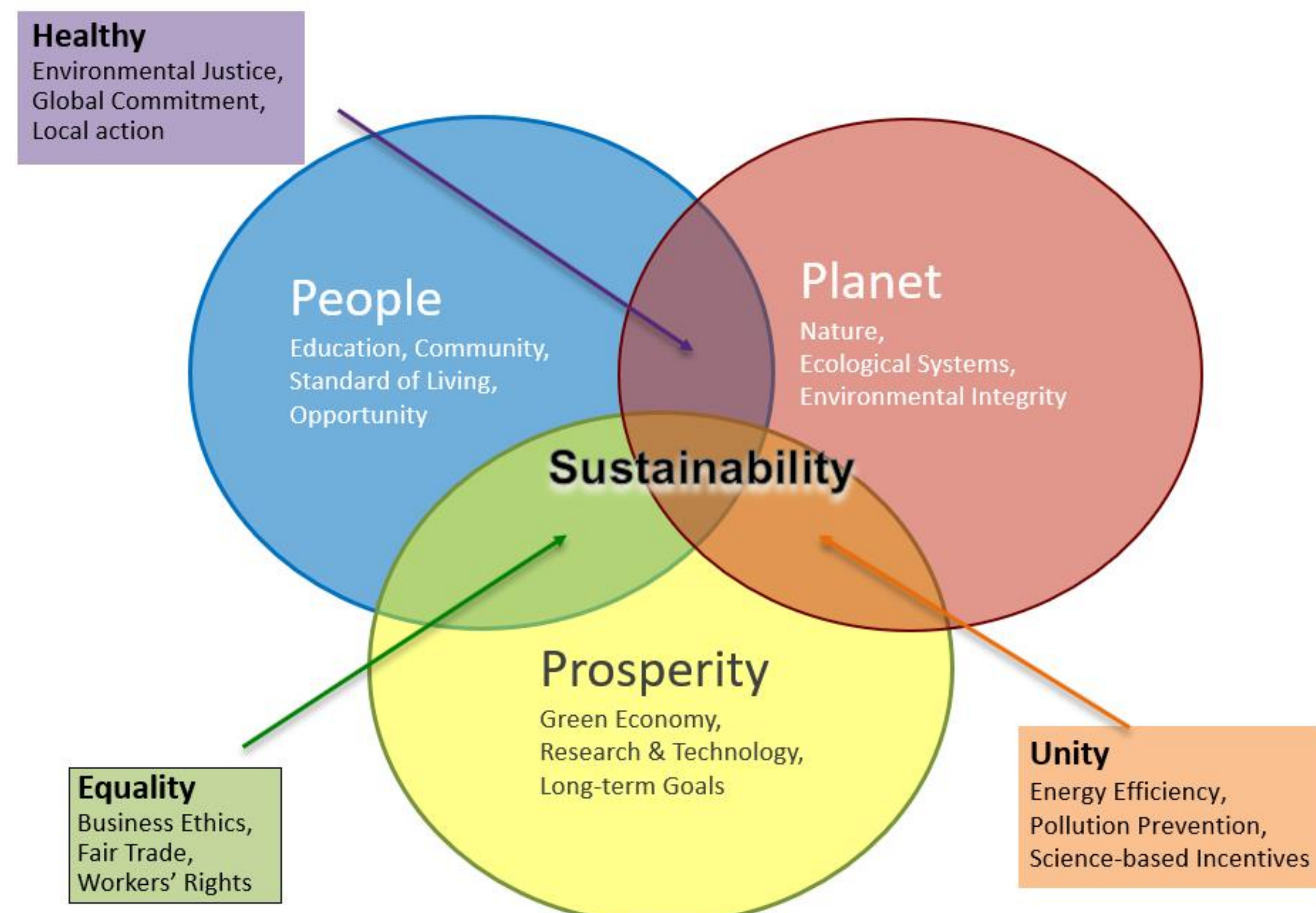
## Introduction

Social science perspectives must be included in climate change education in order to address the policy, economic, and cultural influences that impact the environment. This case study describes a course at SIUC that employs a geographic approach, so climate change topics and activities are structured in a local-to-global curriculum perspective. This is relevant to United Nations Sustainable Development Goal (UNSDG) 13: Climate Action, which states that education must encompass geographic and socio-cultural influences on human activities that impact anthropogenic emissions.



**Keywords** •Climate Change •Environmental Studies •Geographic Education •Higher Education •Local-to-Global •Social Science •Sustainability

## Themes of Sustainability



Duram, L.A. 2018. *Environmental Geography: People and the Environment*. ABC-CLIO. [Link](#)

## GEOG 439/539: Global Climate Change

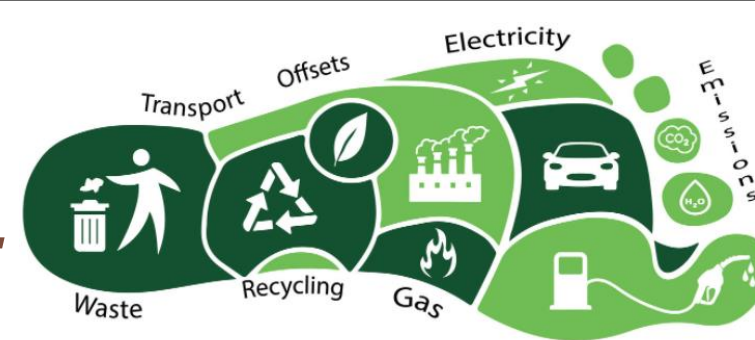
This course examines the major environmental, social, and policy issues relevant to global climate change, including natural and anthropogenic causes, environmental pollution, land use/land cover change, extinction and biodiversity issues, and potential climate change-related impacts on human health.

## Course Overview: Local-to-Global Actions

- Lecture topics include: environmental education, historical knowledge timeline, climate justice, youth action, climate activists, science communication, hope vs despair, basis of misinformation, climate refugees, environmental non-governmental organizations, and policies.
- Action-oriented, "real world" examples
- Curriculum perspective: geographic scale
- Online Readings/Quiz and Lectures; In-person Student-led Discussions and Hands-on Activities
  - Activities address relevant individual, local, state, national, and international climate topics

### Activity 1

#### Personal Climate Footprint:



- Cool Climate website <https://coolclimate.org/calculator>
- Students assess their personal climate impacts and determine what actions they you may take to reduce their climate footprint
- 2 Page Report with specific data, behaviors, daily activities, etc.
- Develop a Personal Climate Action Plan

### Activity 2

#### Local & State Policy Report:



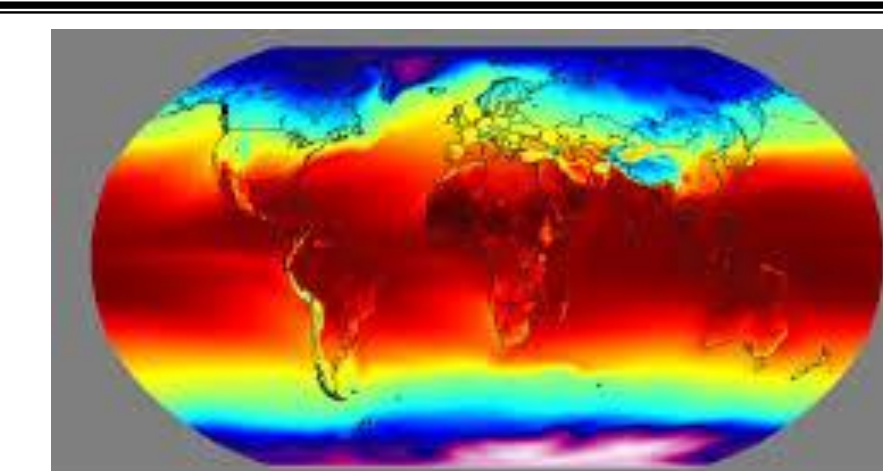
- Investigate viable opportunities for innovation
  - Clean energy data sources: DoE, EIA, ICLEI, IPCC, NAS, NREL, etc.
- Assess local and state level climate mitigation policies
  - What actions are being taken by some Mayors and Governors?
- Describe one policy option in detail.
  - What policy is achievable?
  - Which action would be meaningful?
  - Who should you contact to promote this policy?
- Write scripts for two phone calls: ask a local official and a state official to take specific action. Back up your request with specific, personal examples to show your interest.



### Activity 3

#### USA National Policy EICD Act Factsheet

- Study several ENGOs that focus on climate action.
- Learn about the Energy Innovation and Carbon Dividend Act (EICD)
  - This policy initiative has been introduced in the US Congress
  - Who is on the Climate Solutions Caucus?
  - Describe "Price of Pollution Studies"
  - Explain the 4 key components about: "How it Works"
- Write a constituent letter to your Senator or Representative that describes the p
  - Use specific, personal examples to support your request



Annual Mean Temperature

take action

## Global Climate Summit



- Saluki CC Agreement:**
- Similar to Conference of the Parties (COP) to the United Nations Framework Convention on Climate Change (UNFCCC)
  - Each student prepares a policy report and represents a nation in negotiating a multilateral climate agreement
- Policies:** each nation (aka: student) can design, describe, and justify one policy initiative in support of one of these four concepts:
- Past Emitters Must Pay
  - Responsibility Must Be Shared by All
  - Economic Growth/Development Must Come 1st
  - Polluting Industries Must Take Responsibility
- National Policy Document** (2 pages) with these sections:
- Brief introduction to your country
  - National Climate Change Data
  - Describe your nation's viewpoint on the 4 policy concepts
  - National CC Goals and Policy Proposal
  - Reference list
- International Agreement** with specific goals
- During the **Saluki Climate Summit**, students will:
- Introduce your country
  - Talk with other nation's representatives and work to build coalitions for the policies
  - Decide on specific goals (2-5 goals); write up agreement
  - Conclusion: international vote will be held on a "Saluki CC Agreement"

**Geographer**  
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## FOR MORE INFORMATION

[EnvironmentalStudies.siu.edu](http://EnvironmentalStudies.siu.edu)  
[Geography.siu.edu](http://Geography.siu.edu)

