

SCED 255 - Special Topics: Climate Justice Action Research in Secondary Schools

Thurs 4-6:45PM

DH 246 (in person)

Course number: 009045

Email: tammie.visintainer@sjsu.edu (for course permission code)

Course Description

This course takes an interdisciplinary approach to exploring climate justice at the intersection of race, place, socioeconomic status, and community health through the lens of extreme heat. The goal of this course is to reimagine science learning experiences in secondary schools by deriving ways to support science teachers and students as climate justice action researchers in their school communities. During the course we will engage in overarching questions including: What is climate justice? What are urban heat islands? What is action research? What are community science stories? How can art/science activism be used to generate awareness and create change? Through course readings, materials, and activities, these foundational ideas will be grounded in the increasingly pressing climate justice phenomena of extreme heat and urban heat islands.

During the course we will: (1) Explore the science of extreme heat and urban heat islands through an interdisciplinary socio-historical, political, and structural lens, (2) Examine the impacts of extreme heat and access to greenspace/trees on community health, (3) Identify mapping tools and science research approaches to exploring extreme heat that science teachers and students can utilize as climate justice action researchers in their school communities, (4) Explore the knowledge, science research practices (e.g., data collection, analysis), and critical pedagogies that teachers need in order to design/implement curricular units in their classrooms that explore climate justice issues of local concern. During the school year, secondary science students will conduct community-based investigations to explore issues of extreme heat, share their findings through arts-based community science stories, generate awareness, and advocate for change.

This graduate course is part of a recently-funded five-year NSF CAREER grant entitled: *Empowering Teachers & Students as Climate Justice Action Researchers & Change Agents*. Students who take the course will: 1) Have an opportunity to help shape the summer professional learning program that will prepare science teachers with the resources and tools needed to design/implement climate justice action research projects in their classrooms, 2) Be eligible to apply for paid positions to help facilitate the summer program for teachers.