



## A Teacher's Guide to UC-CSU NXTerra

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Hello and welcome to UC-CSU NXTerra, California's new climate emergency teaching tool.

I'm writing this in advance of the Climate Change and Resilience Workshop, in hopes of improving the NXTerra user experience in general and specifically making it easier for teachers at CSU Chico to transform their courses to meet the challenge issued by the President's strategic priority for Resilient and Sustainable Systems.

Faculty members who take up this challenge will transform their course(s) in such a way as to be included on the list of courses that satisfy a possible future General Education Requirement on Climate Change and Resilience.

What can NXTerra do to help? — or rather, what does NXTerra have that Chico faculty can access as they work to meet the President's challenge?

**The NXTerra KAN.** The KAN is our Knowledge Action Network for creating subject- or topic-driven KANs. This is our whole strategy — read about it on our [Our Strategy](#) page.

The idea here is Network collaboration. We are a self-organizing network of teachers helping each other learn by sharing sources, collaborating on sources, and sharing our sources on a free, open access platform (our web site).

**Teachers:** You can visit the site, see what's on offer, use whatever you can find, and make contact with our Faculty in order to critique our work, offer suggestions, ask for help, or propose new collaborations or whole new topics, and in doing so join us in transforming the experience of UC and CSU teachers and students.

Teachers, this is the most powerful resource we can offer you! — a demonstration that there is a Community of Climate Action Scholarship forming up and an Invitation to make contact, join in, or just freely use what you find.

### Important Links:

#### [Teaching Climate Change and Resilience Series:](#)

This web page at the CSU Chico Office of Faculty Development describes the series of workshops organized by Mark Stemen.

[UC-CSU NXTerra:](#) California's New Climate Emergency Teaching Tool. Download the original [NXTerra publicity flyer \(pdf\) with live links](#).

[EJ/CJ](#), the Environmental Justice and Climate Justice Studies Research Hub at UCSB's [Orfalea Center for Global & International Studies](#). The Orfalea Center generously supports UC-CSU NXTerra, providing it a permanent home and web domain: [nxterra.orfaleacenter.ucsb.edu](http://nxterra.orfaleacenter.ucsb.edu).

#### **3 NXTerra Topic Pages that offer complete courses:**

[Bending the Curve](#), by UCSD Scripps Professor V. Ramanathan.

[Climate Crisis 101](#), by UCSB English Professor Ken Hiltner.

[The Sociology of Climate Change](#), by UCSD Professor Andrew Szasz.

**Browsing Tip:** Most NXTerra web pages feature Videos selected by our Topic Curators; scroll through each page and identify the Videos by the universal solid right-facing Triangle "Play" symbol.

**Search Tips:** The NXTerra Search page features two unique search engines. The 'New Content Search Engine' is under development to help search for unique terms and file types. For best results search for discrete phrases using quotations marks and + symbols: for example "Stemen" + "Syllabus". [Additional search tips](#) from the Smithsonian.

#### **CONTACT NXTerra to reflect and/or get involved:**

John Foran, NXTerra Co-Director: [foran@ucsb.edu](mailto:foran@ucsb.edu)

**Themes.** Our Theme Pages are at the core of our work — start here by reading about [Climate Science - Breaking](#), [Teaching the Climate Crisis](#), [Critical Sustainabilities](#), and [Climate Justice Studies](#), and Each Theme page has a general narrative explaining what we mean by the theme's name, and then providing links to related classroom resources to explore and use.

**Teachers:** Start by asking yourself, is my first interest in up to date Climate Science, the Crisis, Sustainability, or Justice? Navigate to the appropriate Theme; read the intro narrative and follow links to key sources that you can use; check the side columns for classroom resources you can use — we always feature UC and CSU sources, per our mission of foregrounding and developing the work of our two sister university systems, but we move beyond these limits wherever we can.

Many of these sources are Centers, Institutes, and other collective efforts — teachers can navigate to these sites and create exercises requiring students to navigate there and discover cutting edge work being done on these topics.

**Climate Science – Breaking:** This Theme is not meant to be comprehensive — rather it seeks to provide the highest level

**Topics.** Each NXTerra Topic page has been curated by a NXTerra KAN member; in this role we call them Topic Curators, a term we use to indicate and encourage each Curators' complete creative independence in volunteering to make and maintain their Topics.

**Teachers:** Although this means that exploring each Topic page is a unique experience, you will see right away that each Topic began with a template, as follows: a Top Image, and below that a page divided into two columns => Column left: an Introduction to the Topic by the Curator, and Column Right: a Menu of Classroom Resources.

Each Curator introduces their Topic Page and offers what pedagogical insight they can in this opening narrative, and then maintains their Topic by regularly posting updated resources and links to key classroom-ready materials they create or discover, for example syllabi, videos, books, essays and articles.

By reading Topic Page Introductions, teachers can imagine how they would similarly integrate Climate Crisis, Critical Sustainability, and Climate Justice into their own courses, were they so inclined.

**Campuses.** The NXTerra [UC-CSU Campuses](#) page provides quick links to each Campus, as well the Sustainability Office on Each Campus and many climate-focused research institutes, centers, and programs, etc.

**Teachers:** To date, NXTerra has only developed a dedicated Campus page for one campus, [UC Santa Barbara](#). In time we hope volunteer Curators will discover the value of curating a NXTerra Campus page featuring the climate-focused efforts of all educators and students on their own campus. Please help spread the word!

### **Concerning CSU Chico's possible future General Education Requirement:**

There are four desired outcomes from courses proposed to satisfy the proposed GE Requirement:

The courses should:

- Probes the ecological, social, cultural, technological, and/or economic roots of climate change and the resultant crises that have emerged.
- Recognizes unequal impacts and systemic injustice of climate change.
- Alerts students to the urgency and breadth of global activism and empowers them to take action for climate change mitigation and resilience.
- Challenges students to imagine and design solutions to address climate change that move humanity toward an equitable world that is socially and ecologically just.

How might teachers use NXTerra to transform existing courses or design new courses to achieve these outcomes?

**Teachers:** NXTerra will be a great resource for achieving these outcomes.

Our [Climate Science – Breaking](#) page will direct students to the root cultural, technological, and economic causes of climate change, the climate crisis, and the climate injustice that follows from these.

Our [Climate Justice Studies](#) Theme and the [Climate Justice Movements](#) Topic will provide sources and insight into the unequal impacts and systemic injustices that follow from climate change — as well as the activism such injustices are increasingly fomenting.

Consider assigning your students to canvas the NXTerra site and look for sources that touch on and help answer the questions your course is asking.

Finally — Most of NXTerra's work is solutions-oriented!

See for example our topic [Bending the Curve](#), which is all about climate solutions! The subtitle of the course is *Climate Change Solutions*, and as Professor Ramanathan et. Al. write in their [Chapter 1](#) of the course text, it puts forward “10 Scalable Solutions for Carbon Neutrality and Climate Stability.”

Mark Stemen's topic [Cal-Adapt in the California Classroom](#) describes how he uses Cal-Adapt tool "enact positive change on our campus and in our community," by enabling students to get involved in modeling climate change in their own community and proposing and enacting solutions, including cleaning creeks, planting trees, and building community gardens.

Ken Hiltner's [Climate Crisis 101](#), another complete course, includes its own [YouTube Channel](#) on which one playlist is "[What each of us can do about the climate crisis](#)." — seven video mini segments that you are invited use in your own classrooms. This is a pioneering course at UCSB that Hiltner offers in Campbell Hall, fully enrolled with around 800 students.

Sarah Jaquette Ray (HSU) and Nicole Seymour (CSU Northridge) curate the [Climate Change Emotions](#) topic, and the solutions offered here include a downloadable assignment titled Action in Place, which purports to "link our academic inquiry with 'actually doing something,' alleviating some of the anxiety that comes from the perception that we're doing a lot of talking and thinking and not enough doing."

**Teachers:** This "solutions-oriented" dimension of NXTerra was explicitly decided by the KAN at our founding workshop, out of which grew [our Vision statement](#) and which anchors itself on these lines:

This means infusing our teaching practices with:

- the most up-to-date science describing the urgency of the unfolding climate crisis
- solutions-oriented and critical sustainability studies that foreground the need not merely for a quick transition to clean energy and development, but for a just transition to a better world
- under-represented voices from every sector of global society — those on whom the heaviest burdens of climate change are already falling (thus climate justice studies).

Looking forward, I encourage all educators and students at CSU Chico to explore NXTerra, use what you can find to transform your own courses and/or your own educational experiences into part of the climate solution, and get in touch to let us know what you think and how we can help.

[UC-CSU NXTerra](#) is a [Constituent Project](#) of the [Environmental Justice and Climate Justice Studies Research Hub](#) at UC Santa Barbara's [Orfalea Center for Global & International Studies](#).