

(SD2019-806) Course Description: Bending The Curve: Climate Change Solutions

Tech ID: 30372 / UC Case 2019-806-0

BACKGROUND

“There is no single technology that will solve climate change. If we want to prepare our students to fight global warming, they need to understand the scientific and the human dimensions of the problem, and we need to give them the tools to address the problem.” - Professor V. Ramanathan

TECHNOLOGY DESCRIPTION

The brainchild of professor Veerabhadran “Ram” Ramanathan from the Scripps Institution of Oceanography at UC San Diego, ***Bending the Curve: Climate Change Solutions (BTC)***, follows the interdisciplinary nature of UC’s groundbreaking report “Bending the Curve: Ten scalable solutions for carbon neutrality and climate stability” to help students from various academic backgrounds and fields of study to work together in identifying and exploring solution-focused projects. This undergraduate level course was specifically designed to support the exploration of creative scalable solutions to climate change.

BTC is structured around the report’s ten scalable solutions and features more than 95 separate video lectures from top UC professors throughout the UC system, providing content rich in multiple perspectives. The lectures cover the multidimensional aspect of climate change, discussing climate science, societal transformation, technology, ecosystem management, governance, economics, communication and more.

BTC, unlike a typical lecture-based course, leverages a dynamic “flipped” classroom approach. Students learn content through online video lectures before class and arrive prepared to discuss the topic with the instructor(s) and classmates. Instructors have the flexibility to shape and adapt the course around their own expertise and the interests of the students. With students learning the material prior to discussion, this model of instruction engages the student in more active learning and provides a richer, more collaborative in-person experience.

Detailed information on the instructional modules and learning objectives (what students will be able to do at the end of the course) are described on the course website: <https://bendingthecurve.ucsd.edu>

View at : https://drive.google.com/file/d/1a_B7msL2g7G16oc7IWqIHtskQJR_oWII/view

INTELLECTUAL PROPERTY INFO

CONTACT

Skip Cynar
scynar@ucsd.edu
tel: 858-822-2672.



OTHER INFORMATION

CATEGORIZED AS

- ▶ **Energy**
- ▶ Other
- ▶ **Environment**
- ▶ Other

RELATED CASES

2019-806-0

Available for Licensing. If you are interested in licensing the hybrid course to offer it for credit at your own institution, please contact us at ILTI@ucop.edu.

The **BTC** course content is available under a site license to institutions interested in offering this course of instruction. Following the completion of a site license for the **BTC**, each institutional licensee will be allowed to access the course content via the Common Cartridge ‘.imscc’ format to be provided by UC (the ‘.imscc’ format was developed by IMS Global Learning Consortium and encodes the required packaging format and infrastructure to support subsequent presentation to students).

What is included under a site license:

1. A Common Cartridge (in .imscc format) will contains all **BTC** content (all or part of the content within the cartridge may be utilized within the context of the site license).
2. PowerPoint slide files for each video lecture within the **BTC** Video Library.
3. Lecture caption files for all video lectures within the **BTC** Video Library;
4. Instructor and student guides.
5. **BTC** Course overview document and sample syllabus.
6. Developer guide that details the steps for setting up the course within Licensee’s LMS.
7. A list of URLs that provides access to the **BTC** Video Library, which will stream in the licensee’s LMS directly from the UC video platform. (The developer guide provides detailed instructions on how to link videos that stream from the UC video platform and into the course environment.)

Each institutional licensee will be expected to use the **BTC** course content to build the offering on the Licensee’s chosen delivery platform.

RELATED MATERIALS

- [APRU News Release: Bending the Curve: A curriculum that empowers 1 Million Climate Champions to solve climate change. The Association of Pacific Rim Universities \(APRU\) encourages universities and students to join Bending the Curve: Climate Change Solutions, a multifaceted education project initiated by the University of California. \[July 15, 2019\] - 07/15/2019](#)