



#PodcastsInTheClassroom

Episode Question Ideas: Episode 86

Dr. Michael Mann: Return of the Climate Jedi

<https://www.americaadapts.org/episodes/dr-michael-mann-return-of-the-climate-jedi>

Full Episode Questions

- Dr. Mann is perhaps most famous as the creator of the atmospheric CO₂ concentration “[hockey stick](#)” graph -- an example of how well-presented data can be an effective communications tool. What other visualizations of climate data have you seen that have grabbed your attention? What makes them work?
- Dr. Mann discusses the idea of the Serengeti strategy, where climate deniers attack the newest scientists or those who may traditionally be ‘pushed to the margins.’ Have you experienced this? If so, how did you deal with this? If not, how would you deal with it in future?
- Dr. Mann makes reference to numerous current impacts of climate change. What are the localized impacts of climate change where you live? What are the projections for future impacts in your area?
- Dr. Mann emphasizes the importance of science communication. How is your current curriculum helping you develop science communication skills? What experiences would make you a better science communicator? What can you do to bring about these changes?
- Dr. Mann and Doug discuss the strengths and pitfalls of academic freedom and the tenure system. What are your opinions of this system with regards to climate science? Would you change it if you could? How would you change it?
- What is the Youth Climate Movement? Describe the movement as well as any local actions that you can join or contribute to.
- Dr. Mann discusses what brings him hope at the end of the episode. What brings you hope in the climate science space?
- Dr. Mann recommends President Trump as a guest for America Adapts, noting that it might be a difficult conversation... But there is a lot to learn about how to talk to climate deniers. In 30 seconds/ 100 words, how would you explain the science of climate change to a climate denier? Focus your argument on the difference between science/facts and belief systems.

(For more information about how to discuss with a climate denier, see the Episode and Podcast Discussion Guides for America Adapts, Episode 47 with Marc Morano. Deconstructing a Climate Skeptic: The Marc Morano Podcast. Episode available [here](#). Exemplar guide available [here](#). Exemplar assignment outline available [here](#).)



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Related Open Education Materials

Learn more about issues raised in this episode! You may find the following open educational resources from MIT OpenCourseWare of interest.



[21W.035 Science Writing and New Media: Communicating Science to the Public](#)

One of Professor Jared Berezin's goals in this course is for students to gain experience in translating complex scientific and technological developments into clear and engaging stories for the public. With Instructor Insights, readings and reading response questions, assignments, in-class activities, and communication experiments, educators can access a plethora of materials to

help students communicate the important work of scientists.

Image caption: NASA released several animated illustrations of facts about Mars as part of their literature on the Mars Exploration Program. (Image courtesy of [NASA](#).)



[STS.034 Science Communication: A Practical Guide](#)

In teaching this course, Prof. John Durant and Dr. Blina Venkataraman seek to develop the abilities of students to communicate science effectively in a variety of real-world contexts. They also cover strategies for dealing with complex areas and address challenges in communicating about topics such as climate change and evolution. Educators have access to readings, lecture

notes, and assignments.

Image caption: Leslie Hawthorn, Jacob Kaplan-Moss, and Robert Lofthouse present together at DjangoCon 2008. (Photo courtesy of [Jacob Kaplan-Moss](#) on Flickr. CC-BY-NC.)



[12.757 Science and Communication](#)

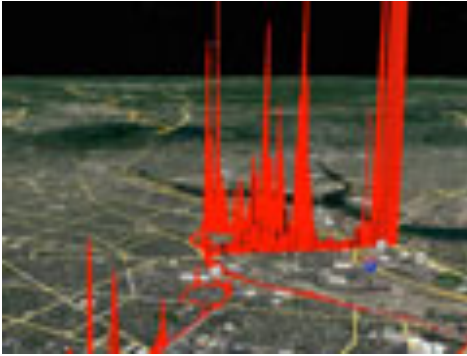
The goal of this course is to help participants learn to communicate more effectively by developing the beginning and the end of their research story. In addition, instructor James Price emphasizes science as a social process—and the important roles of written and oral communication. Educators have access to insights from the instructor on teaching this seminar course, as well as a rich reading list accompanied by topics that include

thoughtfully written questions to consider about science, research, and communication.



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Image caption: Collecting marine samples for a study on the biological effects of aging as part of WHOI's Aging Lab project. (Photo by [johncumbers](#) on Flickr.)



[Supplemental Resource: Climate Action Hands-On: Harnessing Science with Communities to Cut Carbon](#)

This course explores how citizen science can support community actions to combat climate change. Leaks in the natural gas system—a major source of methane emissions, and a powerful contributor to climate change—will be a particular focus. Participants learn about framing problems, design ways to gather data, gather some of their own field data, and consider how the results can enable action. Video lectures, along with a workshop video, field trip video, image galleries, and selected lecture notes, provide educators with resources to teach problem solving, “maker”-style activity, and more.

Image caption: Participants in this class drove through some urban streets in a van equipped with a GPS-linked methane analyzer, producing data and visualizations like this. The height of the red spikes are proportional to measured methane concentrations. Lower left is near the MIT campus, with the so-called “Alps of Somerville” to the upper right. (Image courtesy of Audrey Schulman / [HEET](#).)



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