Developing an Interdisciplinary Course on Climate Change



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OVERVIEW

Review the handout

Supplies

sticky notes, markers, poster paper

Skills required:

team work (trust, lead/follow, respect, listen), efficiency, collegiality, enthusiasm

FORMING TEAMS

Sort into teams of three to five (different disciplines preferred)

Briefly introduce yourself to your team-mates and tell them about your teaching/curriculum development goals related to climate change

AGREE ON YOUR TARGET AUDIENCE

Who are your students?

- graduate or undergraduate,
- traditional, non-traditional
- freshman, sophomores, juniors, seniors,
- majors, minors, general education, etc.

What is your preferred format?

- What is the course structure?
- Single class or lab period?
- A full course or one module?
- Research capstone?
- Two or more integrated courses?
- On-line?
- Hybrid?

BRAINSTORMING YOUR COURSE CONTENT

Put each idea for potential course topic/ issue on separate sticky note;

Find a right balance of physical science, social science, and policy content;

What type of expertise do you have/need in your team?

Put each note/idea in middle of table

Go through all ideas together

***Some ideas for within-course modules or overarching course themes*:**

- Natural causes of climate change
- Anthropogenic causes of climate change
- Meteorological trends
- Climate impacts on (add yourself)
- Human vulnerability to climate change
- Risk mitigation
- Natural Disasters
- Climate policy (global, national)
- Alternative energy
- Land use and land-cover changes
- Monitoring climate change, Etc.

Consider local, regional/national, and global applications.

SORT AND CHOOSE ONE TOPIC

- Cluster ideas into related groups (negotiate differing opinions)
- Identify themes of the clusters
- As a team decide on <u>one theme</u> to develop.

  If consensus is difficult, just take a leap of faith and go with one.

It's not that important today.

Will team-teaching be necessary in your proposed course/module?

- *WHAT DISCIPLINARY PERSPECTIVES AND AREAS OF EXPERTISE WOULD YOU NEED TO BRING INTO YOUR COURSE OR MODULE?*
- *WHO CAN/SHOULD TEACH THIS COURSE?*
- *WILL YOU NEED TO INVITE GUEST SPEAKERS*?

IDENTIFY DESIRED OUTCOMES FOR STUDENTS

<u>What will your student</u>

1. KNOW: *Canonical knowledge*
2. DO: *Skills*
3. CARE ABOUT: *Impact*

Why collaborative approach is essential for your course outcomes? Whom do you need to involve to make this course successful?

ENVISION IMPLEMENTATION

- What disciplinary expertise would you need to bring in your course?
- What local sites or guest experts (intra- or extramural) could work with you?
- What readings (primary literature, texts, various literary genres), films, and videos might engage your students?
- What labs will you develop to teach what skills?
- Research projects (community-based, other?)

MAKE AND PRESENT SUMMARY POSTER OF YOUR MODEL TO OTHER GROUPS

