# INTERDISCIPLINARY TEACHING AND LEARNING



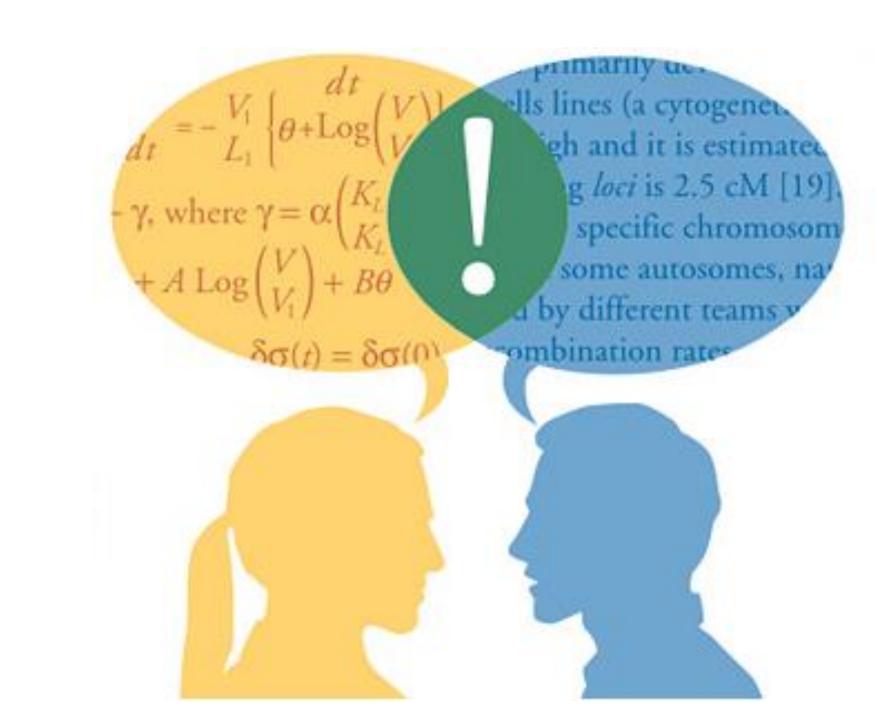
## WHAT DOES IT MEAN TO BE INTERDISCIPLINARY?

To be conversant with research questions and methodology in a number of fields, and cultivate the ability to see connections between them. Given this criteria, the goal of our Faculty Learning Community (FLC) was to develop individual projects that infused interdisciplinary learning into our coursework. This poster includes our FLC members' (I) project objectives, (2) implementation strategies, and (3) brief reflections of each project.

### Katherine Gibson

#### Computer Science and Electrical Engineering

- I. Objective: To teach students how to apply technical skills and extract meaningful conclusions from a large data set, as well as learning what constitutes writing styles and how to quantifiably measure them
- 2. Implementation: Students will complete a multi-part assignment in which they research writing styles, write a program to extract the measured aspects, and compare this with user input to find a match
- 3. Reflection: This projects shows STEM majors that humanities-based fields are complex and they can create programs and learn more about other fields through research



## **Matthias Gobbert**

#### **Mathematics and Statistics**

- I. Objective: To expose students in mathematics classes to applications (as well as expose application students to mathematical theory)
- 2. Implementation: Some homework and project problems contained applications and students were expected to develop full reports using the terminology of the application (see Figures A and B)
- 3. Reflection: Students report gaining a broader appreciation of interdisciplinary contributions from multiple areas to solve problems

## Milvia Hernandez

# Modern Languages, Linguistics and Intercultural Communication

- I. Objective: To make SPAN 201 more applicable to the different majors, students will create a manual of common Spanish expressions that will be used in their professional field with the Hispanic/Latino community
- 2. Implementation: Toward the end of the semester, students will work in groups outside of the class period to develop their manual and then present this information in class
- 3. Reflection: The goal of this project is to help reinforce the value of languages in the job market

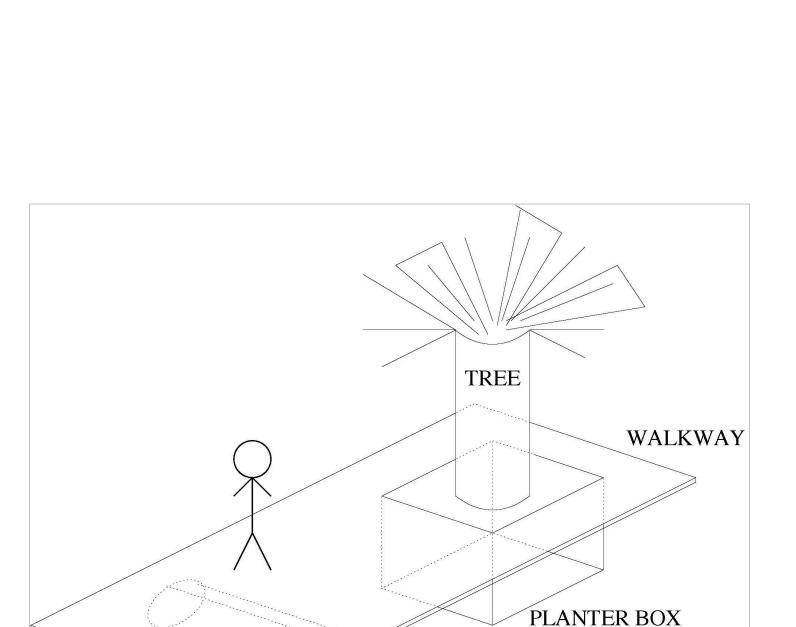


Figure A

STEAM PIPE

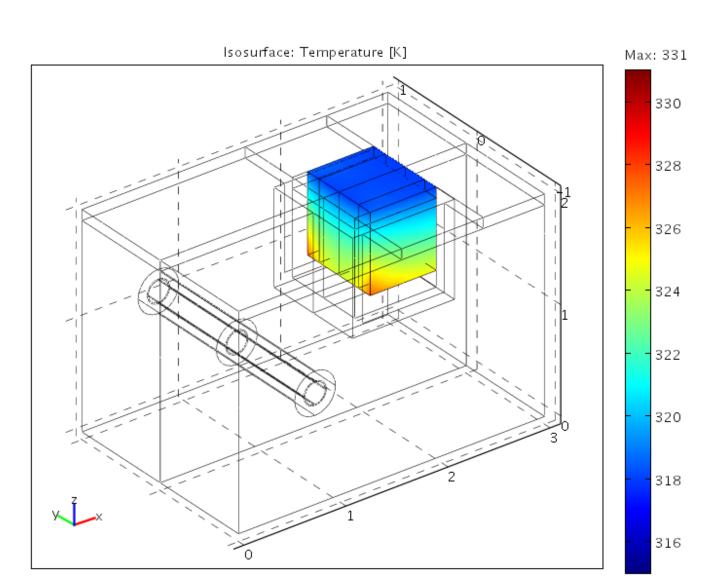


Figure B

## Carole McCann

#### Gender and Women's Studies

- I. Objective: To build common ground for students enrolled in GWST 300, a writing intensive interdisciplinary methodology course that attracts students from a wide variety of majors
- 2. Implementation: Students complete two research exercises as well as a literature review that is workshopped in small groups as a way to bring diverse disciplinary perspectives and skills to class discussions
- 3. Reflection: Despite the different format across disciplines, the focus on writing up one's research has been very useful as clear research questions, presentation of evidence, and cogent argumentation is valued in all of them

## Jana Rehak Anthropology

- I. Objective: To compliment teaching material in ANTH 313 during the section focused on ecology, environment and land management in rural Japan
- 2. Implementation: Bringing in a guest speaker (Dr. Tomoko Hoogenboom, MLLI) for class discuss and having students write a journal reflection on the visit and reflect in a group setting
- 3. Reflection: This partnership exchange, based on students' reflections, contributed to a more holistic understanding of course material, specifically the role of religion and cosmology in farming and environmentalism in Japan

# Laura Rose

#### **Psychology**

- I. Objective: To have students from a variety of majors apply PSYC 200 course material to their respective fields and long-term career goals
- Implementation: During the first half of the semester, students were presented with different in-class activities and instructed how materials apply across various contexts. During the second half of the semester, students were asked to apply inclass activities to their majors and career goals
- 3. Reflection: There is variability in students ability to make meaningful links with the course material, but preliminary feedback suggests this strategy may be a useful

# Donald Snyder

#### **Media and Communication Studies**

- . Objective: To provide resources and guidance about internships and careers for all students enrolled in MCS 144, a course that open to all majors
- 2. Implementation: Partnering with Career Services to identify mentors and support structures across the university
- 3. Reflection: While this project is more multidisciplinary in nature, there is value in terms of interdisciplinary pedagogy. Students across majors are encouraged to share their own disciplinary approaches and think about connections to students in other majors and colleges

# Tomoko Hoogenboom

# Modern Languages, Linguistics and Intercultural Communication

- I. Objective: To bridge fields and asks students to analyze cultural practices/products/perspectives using a different field's methodology
- 2. Implementation: Bringing in a guest speaker (Dr. Jana Rehak, Anthropology) to MLL 327 Modern Japanese Culture to encourage students to bridge the fields and think about and analyze culture from an anthropological perspective
- Reflection: Good way to visualize how culture fits into Anthropology field. Future plans include bring in more guest speakers for specific topics so students will be exposed to different fields and learn to connect these fields to culture

#### Tania Lizarazo

# Modern Languages, Linguistics and Intercultural Communication, and Global Studies Program

- I. Objective: To revise MLL 602 (Ethnography of Communication) syllabus into a more broadly interdisciplinary class
- 2. Implementation: Inclusion of more contemporary ethnographic research approaches (digital, visual, sensorial) and hands-on exercises + preliminary conversations with the INCC (MA in Intercultural Communication) committee
- 3. Reflection: Interdisciplinarity is a collective endeavor, and its implementation (even in already interdisciplinary programs) requires slow conversations



# Liz Stanwyck Mathematics and Statistics

- I. Objective: To find a way to address statistical content (i.e. polling) in other academic fields by providing relevant information about techniques that are commonly used in these disciplines but are not explained in detail
- 2. Implementation: Developed an adjustable pedagogical module on polling techniques and methods intended to be used in non-STEM classes, including guided discussions, homework assignments, and PowerPoint presentations
- 3. Reflection: It has been illuminating to get feedback from faculty in other disciplines. Future plans include additional refinement so that the module is useful in many courses with or without my presence