

GCH 103H, Grand Challenges in the Natural Sciences
Fall 2015
Dr. Druschke

White Horn Brook action (group project) + 5 pg. individual reflection (20%)

Due: Tuesday, Oct. 13 (soon!)

On Tuesday, Sept. 29, we took a tour of our campus watershed with Professor Art Gold, followed by a field visit on Thursday, Oct. 1 to White Horn Brook (on campus) with Professor Laura Meyerson, and a weekend self-guided tour of the lower reaches of White Horn Brook.

These field visits, coupled with background readings about White Horn Brook, will give you a chance to learn about URI's White Horn Brook and consider, in working groups, an appropriate intervention on behalf of the Brook.

With your group, you will be expected to **design and implement an action of some kind**. You can use your creativity to determine what that action should be. Then, individual group members will write up a personal reflection about the project and defense of the action taken.

We already started this discussion with Dr. Gold about what the creek outside of Hope Commons could become. Dr. Meyerson and I also have some ideas in mind. **You can help us envision what White Horn Brook could be and help us advocate for that change.**

STEPS TO COMPLETE THE PROJECT:

Step 1: CREATE A TEAM!

Decide who you'd like to work with. It's okay to work alone, but it might be more interesting and productive (maybe) to work in groups. Whether you ACT alone or in a group, you'll still need to write your own individual reflection about your activity.

Step 2: PLAN SOMETHING!

As you're deciding who to work with, decide what you want to do! Solicit student feedback about the brook? Do water quality testing? Start a social media campaign? Write a letter to the administration? It's up to you! Be thoughtful and creative, but remember you need to work quickly on this project. You'll have more time to work on a substantial action project at the end of the semester.

Step 3: DO SOMETHING!

Each student will work alone or in a team to design and execute a consequential public action that works to educate the public about the issues facing the White Horn Brook, galvanize public support for the brook, and prompt further action. Put your newfound knowledge of watershed ecology, watershed change, and stream corridor structure to work!

Step 4: TELL CGD ABOUT IT!

Submit a five-page (double-spaced) individual reflection paper to Dr. Druschke that:

- describes—IN DETAIL!—the preparation for, execution of, and consequences of your action
- analyzes the action taken including a consideration of:
 - why this was the best possible action to take given the situation and any constraints (what other alternatives did you weigh? why did you choose this one?)
 - a description of the situation you were hoping to intervene in
 - the specific audience that you targeted and why this was the appropriate audience – what do they know about the issue? what do you know about them? how did you work to connect to them specifically?
 - the potential intended and unintended consequences of the action
 - the particular content, design, and delivery choices and their connections to desired consequences
 - how this action exemplified the scientific learning you did in this class
 - what the specific exigence was that you were reacting to and why you addressed this exigence in this particular way
 - how satisfied you are with your action
- attaches documentation of the action (photos, outreach materials, lesson plans, etc.)

The “A” reflection will:

- Demonstrate an underlying understanding of the social and ecological dynamics of the brook.
- Describe in specific detail the action taken and include documentation of that action.
- Explain precisely why the student chose the action she chose, including an explanation of what was gained or lost through this choice. Why was this action appropriate to the issue, the exigence, the river, and the student?
- Explain how successful or unsuccessful your choices were and consider why or why not.
- Be grammatically and syntactically flawless.
- Explain how the student anticipated and prepared for potential intended or unintended consequences.
- Be imaginative, lively, and informative.
- Frame the particular action within an arc of the student’s learning about the brook.