

## Environmental Sciences and Resources 171: A Biological Perspective

### Small Projects and Homeworks

1. **Analyze Your Ecological Footprint:** Begin to understand how your life practices affect resource consumption and the Earth's ecological capacity to regenerate these resources. Go to <http://www.myfootprint.org>. Calculate your footprint, tell me how many Earths it would take if all humans lived like you, and if there are things you could do or plan to do to help us have a more sustainable future.

If you choose a different country of residence, then your footprint would be very different even if you chose most of the same answers, why? [Hint: Consider Chapter 7, which describes many of the differences between how different human populations interact with the Earth.]

Note: You might also find these calculators interesting: Conservation International ([http://www.conservation.org/act/live\\_green/Pages/ecofootprint.aspx?qclid=CMLomuSM9JACFRIUagodGOWh1A](http://www.conservation.org/act/live_green/Pages/ecofootprint.aspx?qclid=CMLomuSM9JACFRIUagodGOWh1A)) and The Sustainable Indicators Program (<http://www.ecologicalfootprint.org/Global%20Footprint%20Calculator/GFPCalc.html>) which considers that only 2.2 global hectares exist per person!

2. **PCC Sylvania Cafeteria Food Choice Project:** Choose two similar types of items from the PCC Sylvania Cafeteria to research and check the sign up list so you do not choose the same products as someone else in the class. Choose your products (before you do any research) such that you think one product is a "better" choice than the other. After you choose your items (you do not need to purchase them!), I want you to evaluate these two products based on the impacts of these products on the **environment, health, and society**. You may want to visit the University of Wisconsin's web pages on cost tags (see [http://www.cias.wisc.edu/archives/2003/02/01/price\\_tagscost\\_tags/index.php](http://www.cias.wisc.edu/archives/2003/02/01/price_tagscost_tags/index.php)) and to carefully evaluate your chosen products by gathering as much information as you can. I recommend finding the company websites and even calling their marketing people. Explain whether your first choice was truly "better!" Be prepared to explain your decision to your classmates and guests on November 20, 2007 during lab time!

Here is the scoring guide that I will use to evaluate your cafeteria food choice projects. I will evaluate your project by the "cost tags" that your classmates put together on your products based on your research.

Appropriate products chosen and initial decisions explained clearly	<u>    </u> /1
Social impacts of both products investigated well	<u>    </u> /1
Health impacts of both products investigated well	<u>    </u> /1
Environmental impacts of both products investigated well	<u>    </u> /1
Decisions explained fully and clearly during class	<u>    </u> /1

/5

3. **Attend an Environmental Event in the Portland Metro Area:** Attend an approved event and complete an event attendance form (check our <http://my.pcc.edu> files). For example, you may attend a "Fix-It Fair," the Bioneers conference, or a Global Warming Performance Art Event. The event attendance form has you document the location, date, name of the event/speaker, title of the event or lecture, summarize the event/lecture, and relate the event/lecture to topics in ESR 171. Many events are posted to our my.pcc.edu message board and if you find other events that you think fit the interests of the class, check in with me before you attend! If you find events/lectures/sources other than listed on our message board, please tell me about them! 😊

Here is the scoring guide that I will use to evaluate your environmental event project.

Appropriate event chosen and approved	<u>    </u> /1
Event attended and date, speaker, and location clearly given	<u>    </u> /1
Summary of event shows attention and detail	<u>    </u> /2
Event themes/details clearly related to topics within the course	<u>    </u> /1
	/5

4. **Basel Action Network Video and Field Trip to Free Geek:** During the short video and our field trip, keep in mind that you have questions to answer regarding these activities.
- Why is e-waste an issue for global trade?
  - What should the developed nations be doing about these e-waste problems?
  - What are some of the physical threats to humans and environmental threats from e-waste?
  - What was the most shocking/surprising thing you learned from *The Digital Dump*?
  - Do you have any further questions that you would like to know about e-waste?
  - What is Free Geek?
  - What can you bring to Free Geek for recycling and how much does it cost?
  - What do volunteers do at Free Geek?
  - What are the benefits of Free Geek to the environment and to the community?
  - Does Free Geek address some of the e-waste issues that we saw in the two DVDs? Explain.
  - Is Free Geek enough to solve our e-waste problems? What do you think should be done?