Assignment 1: Ecological Footprint

Due in Tutorial Week 4 (Oct. 3rd or 5th)

Bring a paper copy to tutorial and upload a copy to turnitin by the start of your tutorial
This assignment is worth 9% of your final grade

Assignment Goals

1. Consider the strengths and weaknesses of the ecological footprint approach to measuring environmental sustainability.
2. Reflect on the impacts of your own lifestyle as compared to other students at UTM, Canadians, and people from around the world.
3. Continue to develop critical reading and writing skills.

Steps to Complete Assignment

Part I. Read the assigned article on the UTM Ecological Footprint Project.

The assigned reading is a peer-reviewed journal article based on research completed by ROP students and researcher assistants, which describes their work calculating UTM's Ecological Footprint. Two of these students started the project while taking ENV201. The article is available through the portal site, under assignments.

> Conway, T.M., C. Dalton, J. Loo, and L. Benakoun. 2008. Developing ecological footprint scenarios on university campuses: a case study of the University of Toronto at Mississauga. *International Journal of Sustainability in Higher Education* 9(1): 4-20.

Be sure to follow the steps presented in the "reverse outline" tutorial in Week 3 (September 26th /28th).

Part II. Complete the following tasks based on the reading.

Instructions

- -Your answers should be typed (12 pt font, double-spaced).
- -Do not include a cover sheet, but please make sure your name and student number is on your answer sheet.
- - Provide specific details where necessary, but do NOT include quotations in your answers. In other words, do not copy language from the article—paraphrase or summarize in your own words.
- - Two to four sentences per question 2 to 4 should be sufficient.
- - Citations are not required for this assignment.

Tasks/ Questions

1. Complete a reverse outline of the first two sections ("Introduction" and "The ecological footprint approach and universities") of the paper.
2. What does the ecological footprint try to measure and what does it not measure in terms of environmental impact?
3. What were the largest footprint categories for the UTM-wide campus calculation?
4. What pieces of information were missing from the UTM ecological calculator?

Part III. Calculate your own ecological footprint.

Go to http://www.footprintnetwork.org/en/index.php/GFN/page/calculators/. Start calculator by clicking button in map located in Ontario. FYI: Use 25-50% for percent of home electricity that comes from renewable sources, as Ontario's standard energy mix is approximately 30% for renewable energy.

Record your results to turn in as part of your assignment. **Make sure you include the number of hectares by different productive areas (e.g. Energy land), percent breakdown of your ecological footprint and the total number of Planet Earth's require for your footprint**. Be prepared to discuss these results and your input values in tutorial.

Part IV. Submit Assignment

Upload your assignment (one document containing the written components and your footprint results) to turnitin.com (instructions under tutorials/assignments) prior to coming to tutorial and bring a paper version of the same document to tutorial.

Marking Scheme

Part II, Task 1 = 40 marks
- 10 marks for writing clarity and 30 marks for content

Part II, Task/Questions 2 to 4: 15 marks each = 45 marks
- 5 marks for writing clarity and 10 marks for content

Part III, Complete ecological footprint calculation: 15 marks

Suggested Readings if you are interested in the UTM project or Ecological footprints in general

Redefining Progress, Ecological Footprint: http://www.ecologicalfootprint.org/
WWF Living Planet Report 2002, with ecological footprint values for different countries: http://www.panda.org/news_facts/publications/living_planet_report/index.cfm
Wackernagel, M. and W. Rees. 1996. *Our Ecological Footprint: reducing human impact on the earth*. New Society Publishers, Gabriola Island, BC.
Chambers, N. 2000. *Sharing Nature's Interest : ecological footprints as an indicator of sustainability*. Earthscan, London.