Systems Thinking for Sustainability EnvirSt 402/Agronomy 375

Final Presentation and Paper Assignment

(200 points - Presentation due in class on Dec. 4 or Dec.6, Paper due by 5PM Fri. Dec. 14)

Develop and deliver a professional 4-5 slide, 5 minute presentation about a system and write a brief (5-8 page) description of the system that discusses its structure, functions, and how it might respond to an intervention.

What systems can you present?

You may present any system you choose, but we encourage you to choose one that can be connected to systems that we discussed or read about during class (*e.g.* - health care as a system, ecology and economy, surveillance, energy, agriculture, etc.). This will give you some additional source material.

What should be in the presentation?

Your presentation should touch on the following (note the last bullet):

- describe and name the system
- explain how you chose the boundary for your analysis/description of the system
- describe alternative ways you could have bounded the system and why you selected the system boundary as above
- give a detailed, well-researched and appropriately cited description of the dynamic (i.e. changing over some dimension) relationships among at least some of the parts in the system. This can be quantitative or qualitative, as appropriate for the system in question
- explain what your analysis/description of the system can do, or is good for
- explain some things that your analysis/description of the system probably can't do or is not good for
- use images and visual descriptions; most of the words should be in your verbal commentary, not on the slides
- discuss some important relationships between the system you describe and at least one other natural or human system

What should be in the paper?

Your paper should cover the same topic as your presentation, but in more detail. Use the system language and definitions from the Meadows and Capra & Luisi texts to help you explain system relationships and concepts. In particular, your paper should expand on the last bullet above. How do these relationships to other systems expand your understanding of the system you are analyzing? If you were to intervene in your chosen system, how does its relationship to other natural or human systems affect your recommended intervention? **Feel free to speculate but ground your speculation in clear analysis and research.**

Note: The citations/bibliography page for your paper does not count against the page limit.

How will the paper and presentation be graded (out of 200 points)?

Outstanding (-0 points)	The presentation and paper tell a coherent, visually and intellectually engaging story about the system you have chosen that leaves the viewer and reader significantly more informed and curious about the system and its behavior than they were before. The sources of information are reputable and clearly documented. You speak and write clearly and knowledgably about the topic.
Good (-25 points)	The presentation and paper tell a coherent, visually and intellectually engaging story about the system you have chosen that leaves the viewer and reader more informed or curious about the system and its behavior than they were before. The sources of information are clearly documented. You speak and write clearly and knowledgably about their topic with only occasional presentation or writing mistakes.
Adequate (-50 points)	The presentation and paper tell a story about the system you have chosen that is occasionally visually and/or intellectually engaging, and that leaves the viewer and reader informed and/or curious about the system and its behavior. There may be a few obvious gaps in the system description. Most of the sources of information for the paper are clearly documented. You speak and write clearly and knowledgably about the topic, but with a few minor stumbles that detract from the presentation and paper.
Unsatisfactory (-75 points)	The presentation and paper tell a story about the system you have chosen that has some significant gaps in content. Alternatively, there may be sufficient content, but the presentation and paper do not tell the system story in a way that generates curiosity or engagement. Some sources of information are poorly documented or unclear. You are un-prepared or underprepared for you presentation and paper.
Non-participant (0 points)	No presentation and/or paper