**APPENDIX A**

**Biology 106**

**Political Science 430**

**Fall 2013**

***Assignment #1: “What do you need to know” and “Pre-Synthesis System Map”***

**Due at the end of class Tuesday, November 12.**

**Prior to class on Tuesday November 12:**

1.Please complete the survey found at this survey monkey link: <https://www.surveymonkey.com/s/BKZX6XK>

2. Think about this research question:

Background:  The Cowlitz River runs through southwest Washington, and drains into the Columbia River at Kelso, WA.  The Cowlitz has historically supported large runs of Pacific salmon, but the river is also modified with two very large hydroelectric dams located upstream that disrupt the natural migration patterns of the salmon.

Problem:  Publicly-owned hydroelectric dams must be license for operation by the Federal Energy Regulatory Commission (FERC), and must be re-licensed every 40-50 years.

**Question: Should the FERC re-license the dams on the Cowlitz River as is, or should the FERC require modifications of the dams for improved salmon passage?**

Generate a typed list of things you would need to know about in order to answer this question. Be as specific as possible, and think as broadly as possible. Remember, you’re not being asked to actually answer the question, just to identify items you’d need to know about in order to do so. Bring TWO (2) COPIES of your TYPE-WRITTEN list to class on Tuesday Nov 12 – one you will turn in at the beginning of class, and the other you will use during the class.

**In class on Tuesday November 12:**

3. As a full class, we will generate a “master” list of items that students identified through the homework assignment. Based on the collection of ideas, we will look for and identify groupings that emerge, and discuss how these items and categories relate to the research question.

4. In a small group, write down each listed item from the master list onto an individual post-it note. On the large sheet of white paper provided, organize the post-it notes into the categories that the full class identified, and add any other groupings that make sense to you and your group. Feel free to re-write, modify or refine the items as you go. You may want to move the post-it notes around several times to see which spatial arrangements best represent the ideas and relationships you think are important.

5. Based on the arrangement of your post-it notes, each student will create a “concept map” that shows how the items (groups or categories) relate to each other and to the research question. You will copy what is on your group’s large piece of paper directly onto your own. You may also want to change the map as you write it down.

6. Draw a box around each idea, and then draw lines between boxes that are related. Write a brief (2-3 words) description next to each line that defines the nature of the connection. Ideally, your diagram will show your best thinking about the system that applies to our research question.

7. At the end of the exercise, you will turn in your own concept map and your own list of the ideas with any additions or subtractions you made that relate to the question.