## Peak Theory Project – Fall 2011

## Perry/Lerario Team

Can you imagine a day in which the world's supply of energy is not enough to power what many of us depend on in our daily life, i.e. cell phones, computers, refrigerators, cars, medical equipment, etc.? What about a day in which the English language fades from use? Or, a day in which the United States is no longer considered a global super power? Are these scenarios possible, and if so, how likely are they to occur? Is there anything we can do to stop or slow the process of eventual decline? Is it even important that we do so?

In nearly every we see or do, both in history and current day, we can see cycles of boom and bust, or in other words, cycles of increase followed by contraction. Over the course of this semester, you will have the opportunity to examine thoroughly some of these cycles, to find patterns of interaction, and to research theories on why these patterns occur, what if anything needs to be done to counteract, slow, or in some cases, even expedite the process, and what lessons we might learn from historical tipping points and current trends.

<u>**Project description**</u>: This project is an interdisciplinary project in which students critically examine theories related to the peak and collapse of societies, natural resources, languages, culture groups, physical well-being, trends, etc. and convey their understanding through in-depth research, including, but not limited to, a literature review / written research paper and the production of an RSA video that will be published on the internet and displayed to the public at our final exhibition.

## **Essential Questions:**

- When is too much too much?
  - Are certain societies, languages, resources, companies, leaders, economies, culture groups, etc. destined to collapse or tip?
  - What factors contribute to their collapse and can it be slowed or prevented? Or, in the case of trends perceived as positive, can they be expedited?
  - Even if we have the information to prolong a resource, culture, economy etc., why, in some cases, does it still not happen?

To complete this project, we will conduct initial research and exercises to familiarize ourselves with the concept of collapse/tipping points, including those that occurred throughout history, and the skills we will need to complete our final component of the project, an RSA video. Then, each student will design their own research question, analyze the literature on that topic, and make some hypotheses (conjectures) and suggest areas of future research. Each major component will be described in detail as we move forward. The components and projected due dates listed below are subject to change, given that as the project progresses we may need to make some slight adjustments.

There is a lot of work to be done, but working as a team and putting our best effort forward, we are certain that we will be able to have a final product we will all be proud to display.

## Components (Dates subject to change – at discretion of Liz and Andrew)

- 1. Historical Tipping Points Paper & Presentation
  - a. Topics Selected / Assigned (Sept. 21)
  - b. Draft #1 Paper, Critique (Oct. 3)
  - c. Draft #2 Paper, Critique (Oct. 5)
  - d. Presentations (Oct. 5 (model), Oct. 6 & 7)
  - e. Final Papers Due (Oct. 10)
- 2. A Short Stop Motion Animation of a Topic Related to Chemistry (dates and requirements forthcoming). Final videos will be due the week of SLCs (Oct. 10<sup>th</sup> Oct. 13<sup>th</sup>)
- 3. RSA Research Paper (Individual Component)
  - a. Design Research Questions (Oct. 13) / Written Proposal (Oct. 17)
  - b. SDSU Library Trip (Oct. 19)
  - c. Annotated Bibliography (Oct. 21)
  - d. Literature Review Draft #1 (Nov. 4)
  - e. Literature Review Draft #2 (Nov. 7)
  - f. Literature Review Final Draft (Nov. 9)
  - g. 2 minute pitch (Nov. 14<sup>th</sup>) & selection of projects
  - h. Groups Assigned (Nov. 16<sup>th</sup>)
- 4. RSA Production (Group Components Each will have its own deadlines, TBD; however, final RSA is due before Winter Break).
  - a. Script
    - i. Section 1 + Critique
    - ii. Section 2 + Critique
    - iii. Section 3 + Critique
    - iv. Section 4 + Critique
  - b. Scribing
    - i. Rough sketch (of each section)
    - ii. Story board 1
    - iii. Story board 2 (2 minimum)
    - iv. Detailed / Plotted Sketch
    - v. Expo Trial (1 minimum)
  - c. Editing / Video
    - i. Video & Audio Trial 1
    - ii. Video & Audio Trial 2
    - iii. Put together final video w/corresponding audio
    - iv. Receive critique & modify
  - d. Voice
    - i. Practice script & voice control
    - ii. Record + critique
    - iii. Re-record when necessary
  - e. QR Code
  - f. Shellac board
  - g. Upload to YouTube & Link to QR
  - h. Ensure free of glitches
  - i. Prepare & rehearse for exhibition
- 5. POLs, Reflection & Exhibition Will be conducted after Intersession (late Jan. early Feb.)