

GEOGRAPHY 137

Global Energy Resources

EXAM #4 (take-home)

Fall 2011

Please type your answers to the following questions. Answers should indicate that you have a comprehensive understanding of the topic (at least 250 words which is one full page typed, double-spaced, 12-point font). If you borrow exact text from any source, you will need to cite that source with a footnote (use any format for the footnotes as long as all the reference info is there). Footnotes don't count toward the 250 words. Please type your answers and have someone proof read your work if grammar is an issue.

Exam is due Friday 12/16/11 at 11:59 p.m. No late exams will be accepted unless you have been in contact with me in advance (e.g., broken neck, compound fractures with extruded bones, amputations, etc.—photos required).

1. Describe the three-phase AC generator that we have been working on all semester.
2. Discuss the world population as well as the population of China and India. The world has undergone population increases before, but in terms of energy resources, what is different about the current situation? Be sure to mention the energy consumption trends in India and China since the year 2000 (see U.S. Dept. of Energy links on course website under Coal, Oil and Natural Gas).
3. Describe the geothermal system at SC4.
4. Discuss some of the reasons why experts feel that nuclear power in its current form is not a long-term solution to our energy needs.
5. Based on what we have discussed in this class, what do you think is the best possible energy solution for the future and why? Be sure to mention energy needed for transportation needs as well as stationary sources of power. You can also mention your own ideas that were not discussed in class.