Choose **one** of the following topics and write a paragraph or two. You are not receive any help with it from anyone. It is due by April 26, 2011.

- 1. Argue against the existence of black holes. In particular, give specific reasons why the evidence that we've discussed in class fails to demonstrate conclusively that such things exist.
- 2. To what extent can the public be expected to digest science? Citizens have to decide whether to support candidates based in part on the candidates' views on difficult subjects such as global warming and energy independence (fossil fuels versus nukes versus renewables). Closer to home, the general public are consumers voting with their dollars and must decide whether magnet therapy and homeopathy are legitimate or nonsense.
- 3. Compare and contrast your level of certainty in (i) the existence of dark matter in our universe and (ii) the existence of dark energy. Which is more established or credible? Provide specific examples of scientific data/experiments/facts that support your position.
- 4. Comment on which topic most impacts your world view and why. For some, the possibility of extra-terrestrial life might be of the most significance to understanding ones place in the Universe. For others, that the Earth is exposed to all manner of destruction, say by GRBs, AGN, supernovae, or simple asteroid collisions, shapes their view of the general stability of their greater environment. While others exposed to the vast scales of the Universe beyond the solar system must reevaluated the significance of this small little speck in the Milky Way.