

AY 101 - Extra Credit Assignment #2, Summer 2011

(up to 10 points)

Write a brief essay (5 pages typed, typically) in which you speculate on how any **one** of the following changes would impact the Universe and our interaction with it (remembering that there are many connections with such fields as physics and geography). There are obviously no right answers - I am most interested in how well thought-out your scenario is, and how cogently you argue for it based on astronomical principles. Clarity of thought and expression are important; literary quality is secondary. These must be turned in no later than Friday, June 24.

1. If we had somehow found ourselves living in an elliptical galaxy, how might our understanding of stars and their formation be different?
2. Invent a sequence of events surrounding the discovery of a black hole surprisingly near to our solar system and attempts to explore its vicinity.
3. How might a human culture be different if we lived inside a dense interstellar cloud, rather than the fairly clear region where the Sun is in fact located?
4. What impact might it have on Earth if we were to find evidence of a very advanced civilization elsewhere in the Galaxy, which showed no interest at all in communicating with or visiting us?
5. How might conditions on Earth differ if the center of the Milky Way hosted a quasar?

A few hints to improve your score:

- Don't waste a page restating the question. I know what the question was.
- Please answer the question you picked, not some other question!