ENV 115 – Environmental Science
Chapter 3 Review Topics

1. Know the Central Case: The Gulf of Mexico's "Dead Zone"
2. What is a system?
3. What is a feedback loop? Distinguish between a positive and a negative feedback loop.
4. Define Lithosphere, Atmosphere, Hydrosphere and Biosphere.
5. What is eutrophication? Describe this process in the Gulf of Mexico.
6. Why is Chemistry important in talking about environmental issues?
7. Distinguish between potential, kinetic and chemical energy.
8. What is the First law of thermodynamics?
9. What is an electromagnetic spectrum? How is this related to visible light and our discussion on energy?
10. What is photosynthesis? What organisms have this process?
11. What is cellular respiration? What organisms have this process?
12. Define autotroph, heterotrophy, primary produce, consumer, herbivore, carnivore.
13. What is biomass and how do we measure the conversion of energy into biomass?
14. How do areas like the desert, the arctic, the deep ocean and the tropical rainforest differ in their net primary productivity? Why are they different?
15. What is an ecosystem?
16. Define ecotone, landscape ecology and conservation biology.
17. For each nutrient (biogeochemical) cycle, carbon, nitrogen, phosphorous and water be able to answer the four following questions:
    a. What is the main source of this nutrient that will end up in our body?
    b. What path does the nutrient follow to get used in our body?
    c. How does that nutrient end up back in the "source" (from question 1)?
    d. How do humans affect and/or impact this cycle?
18. Define Groundwater, transpiration and aquifer.