Bio-1
Study Guide for Chapter 1

**Disclaimer**  This sheet does NOT necessarily include everything you will need to know for the exam – it is merely to help guide your studying. You will be responsible for everything that has been covered in lecture, for information from any videos that we watched or activities that we did in class, and for relevant information in the book.

**Before the Exam**
You must come to each exam with a 100-question Scantron form (can be purchased at the bookstore – it’s long, thin, and green) and a sharpened #2 pencil. Please do not fold or punch holes in any part of the Scantron form.

Concentrate your studying on topics that were emphasized in class, and use the textbook to fill in details and clarify concepts.

If you have questions about any of the material, don’t hesitate to make an appointment with me or come to office hours.

**During the Exam**
You will have one hour to complete the first exam – this should be plenty of time. If the wording of any question is unclear, please don’t hesitate to ask me. I will clarify as much as I can (although you will need to know the definitions of the basic terminology that we have covered in class).

If you need to change an answer on your Scantron form, make all erasures complete. I will not give credit for incomplete erasures.

Finally – a few words about cheating – Don’t Do It! If you are caught cheating, I will give you an “F” for the course – no warnings will be given about this. Not only will I punish those who cheat, I will punish those who help others to cheat (whether voluntary or not). So, my advice is…don’t cheat and be very discrete with your own Scantron form!

**After the Exam**
Bring your completed test materials to me at the front of the room. We will continue with lecture after the exam, so please – DON’T LEAVE! Sit quietly or step outside to take a break until your classmates have finished their exams.
**Vocabulary**

Atom
Biology
Biosphere
Cell
Community
Control group
Dependent variable
Ecosystem
Emergent properties
Homeostasis
Independent variable
Molecule
Population
Organ
Organelle
Organ System
Standardized variable (aka constant variable)
Tissue

**Important Concepts**

Understand life’s hierarchy of organization – what does each level consist of and how does it relate to other levels in regards to complexity?

Know the 3 domains of life and their *major* characteristics.

What are the levels of taxonomic classification from broadest to most specific?

What are the common features that we use to define “life”?

What are the four major steps of the scientific method?

What is the difference between an observation, a hypothesis, and a theory? Be able to apply to examples.