Biology I (BIO 1123)

Fall 09, Sec 004 , CRN 15079
TR 5:00 – 7:30

Instructor: Helen Cronenberger, Ph.D.
hcronenberger@satx.rr.com
Office BSE 1.652; Tel: 458-6297 Hrs: Th 4:00 – 4:45 (or by appointment)

Dr. Cronenberger Bio:

PhD - U Houston in Biophysical Sciences (Research at Baylor Med Sch and NASA)
Dissertation - Physical Chemical Studies of the Glycoprotein Moiety of Immuoglobulins
Baylor U Med School –Head Clin Immunology Laboratory that developed anti-thymocyte serum for first heart transplants
Post Doctorate – Max-Planck Instutite, W Berlin..studied ribosomal level protein synthesis
Deutsche Forschungs Gemeinschaft Fellowship – Research on 5S ribosomal subunit
Faculty U North Carolina Med School, Chapel Hill – clinical immunology & medical informatics
UTHSCSA -- Director Telehealth and Distance Learning
UTSA – founding faculty and currently returned as NT faculty Biology

Textbook: What is Life: Jay Phelan; Freeman, 2010

Prerequisite: None

Catalog Course Description: This is the first course in a two-part introduction to the science of biology for **non-majors**. This course focuses on the chemical basis of life, principles of inheritance, principles of evolution and biodiversity. May be applied toward the Level I Core Curriculum requirement in science.

Instructor Course Description: To **HAVE FUN** gaining a general foundation of the science of biology from a layman's perspective. This course is intended to develop one's knowledge base for understanding current news items arising from the biological sciences, e.g. HIV or AIDS, stem cells, cancer, DNA fingerprinting, forensic science, evolution (for/against), etc.

Grading:

4 multiple choice exams (50 questions, drop lowest, average high 3)	60%
Average of weekly assignments	20%
Cumulative Final (100 multiple choice questions)	20%

Letter grades will be assigned according to the following:

A = 85 - 100
B = 75 - 84
C = 65 - 74
D = 50- 64
F = < 50

All grades will be posted on BlackBoard. Students are responsible for informing the instructor of any questions regarding grading of the exams. Posted grades will be considered final one week after posting. Thereafter no changes will be considered.

You will need ParSCORE forms for all exams.: 50 answers each side "*Compatible with Scantron 48/TSM scanners only*". Exams forms should be filled out properly, *e.g.*, name, ID (drop the @ and use remaining 8 digits), number 2 pencil and completely-filled circles or boxes—lines sometimes are not detected by scanner.

Missed Exams: Anyone missing an exam will count that one grade as the one to be dropped. There will be no make up exams and no rescheduling (late or early) of exams. The final exam must be taken.

Attendance: This is an upper division level course. Students are expected to attend all classes. Grades will neither be enhanced nor diminished based upon attendance. Each student is responsible for knowing what is covered during class. HOWEVER, all assigned problems and in-class problems must be turned in when directed. No late submissions or emails will be accepted. Normally, assigned problems will be due at the beginning of each class period.

University Policy Statements

PLAGIARISM/ACADEMIC DISHONESTY STATEMENT

Scholastic dishonesty is a serious offense at the University (UTSA Student Code of Conduct, Sections 202 and 203 -- http://www.utsa.edu/infoguide/appendices/b.cfm). Any assignments that show evidence that they have not been completed directly by the student, any act designed to give unfair advantage to a student or the attempt to commit such acts will not be accepted and could result in automatic failure in the course. Scholastic dishonesty also includes but is not limited to cheating, plagiarism, and collusion. Academic misconduct makes the student subject to possible consequences from the University. Behavior that is not consistent with the guidelines presented in the SCC will be addressed by the instructors and referred to Student Judicial Affairs for review. Additional information and resources area available for students and faculty at http://www.utsa.edu/osja/scholastic.cfm

DISABILITIES STATEMENT

If you need accommodation related to a disability, please make an appointment during my office hours to discuss your needs. Students requesting accommodation must be registered with Disability Services (www.utsa.edu/disability) and provide me with an accommodation letter.

HAVE FUN CLASS SYLLABUS

WEEK OF	TOPIC	Chapter
Aug 27	Syllabus, Grading, Scientific Thinking	1
Sept 1	Raw Materials & Fuel	2
	Smallest Part of You	3
Sept 8	**Examination I**	
	Energy	4
Sept 15	DNA, Biotechnology	5
Sept 22	Chromosomes, Cell Division	6
Sept 29	**Examination II**	
	Family Resemblance	7
Oct 6	Evolution/Natural Selection	8
Oct 13	Evolution and Behavior	9
Oct 20	Understanding Biodiversity	10
Oct 27	**Examination III**	
	Animal Diversification	11
Nov 3	Plant and Fungi	12
Nov 10	Microbes	13
Nov 17	Population Ecology	14
Nov 24	**Examination IV**	
	Organisms and their environments	15
Dec 1	Human Influences on the environment	16

FINAL EXAMINATION: **Dec 15; 5:00 – 7:30**

HINTS FOR STUDYING

1. Keep up with the assignments per class period. This course will cover much material, and it will be very difficult to catch up after missing even a single class assignment. **STUDY EACH DAY !!**

2. Plan to spend at least 2 hours (most likely more) studying for every in-class hour. Different individuals may need more time depending upon their background.

3. Look at study questions after reading and learning material. Study questions should be used to evaluate your knowledge of the materials. Be sure to understand the philosophy behind answers to the questions. Many exam questions will be based upon the study question content but will be reworded.

4. Read chapters before class, take notes in class, rewrite and review notes after each class.

5. After reading the chapter and after the lecture, make an outline of each chapter to help organize the material.

I. Macromolecules
- **A. Nucleic Acids**
  - **1. Bases**
  - **2. Sugars**
  - **3. Phosphate**
  - **4. Major reactions**
- **B. Proteins**

6. If a particular topic is not thoroughly understood, read that material in a different text and/or a web source (http://www.google.com). Reading the same topic from a different author's perspective helps understanding.

7. If something is still unclear after doing the above, then immediately consult instructor. Reading different sources and trying to work through difficulties for understanding enhances learning.