

Biology 101; Humankind in the Biotic World

Fall 2009; sections 035-043

Instructor: Dr. Randy Brewton; Coordinator of Core Biology, Division of Biology

Office: 128 Neyland Biology Annex, email: rbrewton@utk.edu, phone: 974-3354

Office Hours: by appointment

Lecture: Buehler 555, 11:10am-12:25pm, TR

Text (required): Biology, Concepts and Connections, 6E, Campbell et al., 2008

Laboratory: meets according to individual schedule – refer to timetable

Lab Manual (required): Laboratory Manual for Biology 101, Brewton and Guffey, 2009

Course Requirements:

1) Registration for this class automatically enrolls you in the UT Blackboard Course Management System (<http://online.utk.edu>). Humankind in the Biotic World with your section number will be listed in your course list. Your lecture and lab grades will be posted on this site as well as information regarding Biology 101 lab. In addition, a combined site, *BIO101FA09Lecture*, will serve as a communication link and is the site where lecture information will be posted.

2) Attendance: Attendance of lectures and laboratory sessions is required. Quizzes and in-class participation exercises will be given without notice – some of which will contribute to your course grade. NOTE: Laboratories begin NEXT WEEK!

3) Email etiquette: Always enter **Biology 101** in the subject line to ensure a timely response – email received without a relevant subject line may be deleted.

4) We will utilize ‘Clickers’ in class for problem-solving exercises, to solicit classroom discussion, review questions and quizzes. Some of the activities will count toward your final course grade. It is your responsibility to bring your clicker to every class. I do not provide batteries. Clickers are available at the UT Bookstore.

<u>Date:</u>	<u>Day</u>	<u>Topic</u>	
Section I: What is Science? What is ‘alive’?			
Aug	20	R	Introduction, How to Study? What is Science? What Isn’t?
	25	T	“Isn’t it just a Theory?” Characteristics of Living Things, Chap. 1
	27	R	Chemical Foundations, Chap. 2
Sept	1	T	Chemical Foundations, cont’d
	3	R	Biological Macromolecules. Why does cotton wrinkle? Chap. 3
	8	T	Biological Macromolecules. Cont’d
	10	R	Good Fat, Bad Fat – Diet Supplement (On Blackboard)
			Eating Made Simple (On Blackboard)
	15	T	EXAM 1
Section II: Metabolism			
	17	R	Cell organelles, Chap. 4
	22	T	More organelles – why so many?
	24	R	Thermodynamics and enzymes – Chap. 5
	29	T	Harvesting energy from biomolecules – Chap. 6, pp. 88-93, 100-105
Oct	1	R	Photosynthesis; Life needs light! – Chap. 7, pp. 106-113, 117, 119-121
	6	T	More plant metabolism
	8	R	Review
	13	T	EXAM 2

Date:	Day	Topic (Cont'd)
Oct 15	R	No Class (Fall Break Oct 15-16)
Section III: Can cancer be cured? Genetics and Molecular Biology		
Oct 20	T	Reproduction/Cell Division, Chap. 8
22	R	Cell Division/Genetic basis of Cancer, Chap. 11, pp. 224-227
27	T	Heredity – general rules – Chap. 9
29	R	More Genetics – Are you a mutant?
Nov 3	T	DNA Technology, Chap 12
5	R	Genetically modified organisms
10	T	Catch up, review
12	R	EXAM 3
Section IV: Immunity, Infection and Emerging Diseases		
17	T	Immune System/Growing up with AIDS - Chap 24
19	R	More Immune System
24	T	Are Viruses Alive? Supplement (On Blackboard) Preparing for a Pandemic, Supplement (On Blackboard)
26	R	No Class (Turkey Day Break, Nov 26-27)
Dec 1	T	The Challenges of STDs, Supplement (On Blackboard) Emerging Diseases, review

FINAL EXAM – 10:15AM-12:15 PM, THURSDAY, DEC. 10, in Lecture Room

Important Dates:

Last Day to add, change grading options or drop without a W – Aug, 28, 2009.
Last Day to drop with a W – Oct. 20, 2009.

Grading:

Exams 1-3 (100 points each)	300
Final exam	100
Quizzes, other assignments	TBD – approx 10% of course grade
Laboratory	<u>200</u> 600+

Note: The actual number of points for lecture may vary slightly from the numbers listed above depending on the number of lecture assignments recorded.

Grades :

I issue the following letter grades – A, B+, B, C+, C, D and F. I do NOT give minuses (A-, etc.)

Make-up Exams:

No make-up Exams will be given. If an individual exam is missed for a reason approved by Dr. Brewton, your Final Exam will be counted twice to replace the missed exam. If you have a conflict with a scheduled exam, notify Dr. Brewton beforehand if possible.

Course Content:

The syllabus will be adjusted as needed – additional readings may be assigned or substituted to best address the interests/needs of the class.

Classroom Etiquette:

Arrive on time! If you are late – take a seat in the back.

Please turn off your cell phones and PDAs.

If you want to use your laptop, you must sit toward the front – no checking email and surfing the web during class!

Academic Resources:

Student Success Center – 1817 Melrose Avenue (946-HELP [4357]) and 812 Volunteer

<http://studentsuccess.tennessee.edu/index.htm>

- Any questions, comprehensive study help, life and study skills, referrals to all resources.
- Supplemental Instruction (SI) study sessions for Math 119 and Math 130, Chem 120.

Black Cultural Center / Minority Student Affairs – 1800 Melrose Avenue (974-6861)

<http://web.utk.edu/~omsa/>

- Tutoring options for various 100 level courses in math, biology, chemistry, and foreign languages. Contact *now* to meet deadline.
- Sign up for Early Alert Program to receive feedback from your professors.

Hodges Library – 1015 Volunteer Blvd (974-4357) <http://www.lib.utk.edu>

- Consult with Reference Librarian by chat, phone, email or in person.
- Commons – (974-4624) for comprehensive help.

Office of Disability Services – 2227 Dunford, (974-6087) <http://ods.utk.edu/>

- Support for students with physical, emotional/psychological, or learning disabilities.

Counseling Center – 900 Volunteer Blvd. (974-2196)

- Personal counseling, psychotherapy, and psychological outreach and consultation services.