

# Biology 101: Humankind in the Biotic World

## The University of Tennessee, Fall 2009

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**Office hours:** Tuesdays 3:00 – 4:00, Wednesdays 8:00 – 9:00 and 12:00 – 2:00, or by appointment.  
Conversation/review sessions: Wednesdays 6 -7, Hesler 427

*Any student who feels that she/he may need an accommodation in this course based on the impact of a disability should contact Disability Services and Dr. Guffey privately to discuss your specific needs.*

I'm always happy to meet with you; however, I cannot be your personal tutor. We can talk most every day after class; Should you need or like to get together to talk at a time other than after class or during my office hours, we can arrange a suitable time.

Email is a good way to communicate with me, but I will not respond to emails that do not require or justify a response. I will delete without opening any email that does not have "Biology 101" in the subject line. You should also include your lab instructor's name and/or your section number in the email as appropriate.

**Course Description:** Introduction to the principles of biology from the perspective of the impacts of plants, animals, and microbes on human life, and the impacts of human activities on the biosphere, intended for students who are not majoring in the biological or pre-health sciences. Biology 101 surveys life from the cell to topics in human health. Topics include macromolecules and cells, energy flow in biological systems, genetics and information flow from generation to generation, reproduction, biotechnology and genetic engineering, sex and sexuality, human physiology, cancer, drug use and misuse.

### Texts and Required Materials:

Angier, N. 2007. The cannon. Houghton Mifflin, Boston.

Carlson, E. A. 2008. Neither gods nor beasts. Cold Spring Harbor Laboratory Press, Cold Spring harbor, NY.

Lab Manual: Biology 101 laboratory manual.

TurningPoint® Response card ("Clicker"): Instructions for registering and using your "clicker" are found in the Course Syllabus area of the lecture Blackboard site.

### Course website: <http://online.utk.edu/>

You will have two course sites, one for the lecture part of the course: Humankind in the Biotic World Lecture, and one for your lab section.

The syllabus, supplementary readings, assignments, and other useful information are located on the lecture site. Your lab instructor will keep your grades on the lab site, and may use it for other purposes.

### Policies:

We will begin class 5 minutes after the scheduled beginning time. This will give you time to find your team members and pick up any handouts that may be available that day. You will not be able to obtain materials after class begins.

Cell phones, PDAs, iPods, etc. must be turned off in class.

Laptop computers may not be used in class unless authorized by Disability Services.

All submitted work must have your lab instructor's name on it in addition to your own. Submitted work that does not have a lab instructor identified by name will not be evaluated.

If you miss an exam, notify me that you missed the exam and need to make it up (I don't need to know why). Get your make-up exam request to me by no later than 12:00 Friday the week before the make-up exam. The exam make-up request can be given to me at the end of class or submitted by email. Make-up exams will be given on the Monday following the in-class exam from 7:00 – 8:00am in NBA 119. Make-up exams will differ from those given in class. There will be no make up for the final exam.

Quizzes, other class participation activities, and labs (except as noted below) cannot be made up, nor are there any excused absences.

**Labs:** Begin the week of August 24 in the Neyland Biology Annex.

You must attend the section, in the room and at the time, for which you are registered.

Lab attendance is mandatory. Missed lab assignments may be made up for partial credit, at the discretion of your lab instructor. Excessive tardiness to lab or leaving early may qualify as an absence.

Grading:		Grade
	<u>Component</u>	<u>Contribution</u>
Lecture:	Two 100 point exams:	26.7%
	Final exam:	13.3%
	Quizzes and assignments	28.0%
	Genetics problems:	4%
	Syllabus agreement:	1.3%
Lecture total	550 points	73.3%
Lab:	200 points	26.7%
COURSE TOTAL		750 points

Exams and the final will consist of 50 multiple-choice and matching questions.

**Exams are an opportunity where your preparation meets our challenge.**

Quizzes and surveys will be taken on Blackboard and given in class using the “clickers”.

Team assignments will be the products of students from the same lab section working in teams of 3 or 4. Team membership assignment will be available on the first day of lab. Team members should get in touch and will need to sit together in class. Team assignments will be evaluated on the basis of the clarity of the ideas, the depth of the treatment, accuracy, neatness, and relative to the work of other teams. Written team assignments that are of marginal legibility due to carelessness in handwriting will be graded as a zero. A team member who did not participate in an assignment will receive a zero for that assignment.

**Grading Scale**

<u>Grade</u>	<u>Grading Guideline</u>
A	93 – 100% Superior performance. Exemplifies highest quality.
A-	90 – 92% Intermediate grade
B+	87 – 89% Superior performance in most aspects. High quality work.
B	81 – 86% High quality performance in all or most aspects.
B-	79 – 80% Intermediate grade
C+	76 – 78% High quality performance in some aspects; satisfactory performance in some aspects
C	70 – 75% Satisfactory performance.
C-	68 – 69% Intermediate grade
D+	65 – 67% Minimal learning and substandard performance throughout much of the course.
D	59 – 64% Minimal learning and substandard performance throughout most of the course.
D-	55 – 58% Intermediate charity grade
F	<55% Minimal learning and exemplary substandard performance throughout the course.

**In order to learn and to earn the grade you want, you will need to devote 6 to 9 hours each week to focused out-of-class reading, study, and work.**

**Academic integrity is the core value of learning communities**

*Academic dishonesty of any sort will not be tolerated.* Academic dishonesty involves any action where you are misrepresenting work as your own: Copying other’s work, cheating on exams, or plagiarism.

You are expected to abide by The University of Tennessee honor statement in Biology 101 and in all of your university activities:

***“An essential feature of The University of Tennessee is a commitment to maintaining an atmosphere of intellectual integrity and academic honesty. As a student of the University, I pledge that I will neither knowingly give nor receive any inappropriate assistance in academic work, thus affirming my own personal commitment to honor and integrity.”***

*(2009-2010 Undergraduate Catalog)*

Depending on the egregiousness of the offence, penalties for academic dishonesty range from the grade of zero for the assignment, to an F for the course, to the filing of formal academic dishonesty charges seeking dismissal from The University of Tennessee.

You should read and be familiar with the requisites of academic honesty and what constitutes academic dishonesty as outlined in the 2009-2010 Undergraduate Catalog.

<b>University Deadlines:</b>	Drop without a W	August 28
	Adjust hours for financial aid	September 2
	Drop with a W <sup>1</sup>	October 20
	Drop with a WP/WF <sup>1</sup>	November 10
	Withdraw from all classes <sup>2</sup>	December 1

<sup>1</sup> A "W" on your transcript that is not computed in your GPA. After October 20 and until November 10 you may drop the course and receive either a WP (Withdraw Pass) or WF (Withdraw Fail). If you are passing the course, I will assign a WP, which is not computed in your GPA. If you are failing the course, I will assign a WF, which is not calculated as an F grade in your GPA. My signature is required on a WP/WF form that you can retrieve from the web at <http://registrar.tennessee.edu/form/index.shtml> or pick up at the Registrar's office.

<sup>2</sup> If you need to drop all of your courses for the term (e.g. due to illness, accident, etc.) you may do so by applying to the university for total withdrawal for the term. The application for total withdrawal is available at <http://registrar.tennessee.edu/form/index.shtml> or from the Registrar's office. If you apply for total withdrawal you must also apply for readmission through the Office of Undergraduate Admissions, 320 Student Services Building, (865) 974-2184.

**Note to Tennessee Education Lottery Scholarship Recipients:** Students enrolled in a full-time status, as of the 14th day of classes, may not drop or withdraw to part-time status within the same semester without prior approval. Tennessee Law limits the reasons for enrollment status change to documented medical or personal reasons only. Students must include documentation with their request to be considered for an enrollment status change. See Financial Aid website at: <http://web.utk.edu/~finaid>

**Disability Services:** If you need course adaptations or accommodations because of a documented disability, or if you have questions or concerns about disabilities or emergency information to share, please contact Disability Services: 2227 Dunford Hall; 974-6807; Email: [ods@utk.edu](mailto:ods@utk.edu); Website: <http://ods.utk.edu/>.

#### Technical Assistance:

Blackboard: [http://online.utk.edu/tech\\_support.shtml](http://online.utk.edu/tech_support.shtml)

Clickers: the START desk in the Library Commons

General IT Support: Office of Information Technology: <http://oit.utk.edu/help.html>; 974-9900

#### Academic Assistance:

**Tutoring:** The Division of Biology does not offer tutoring services. Your instructor and your lab instructor are available to assist your learning, but cannot serve as your personal tutor. Contact the Student Success Center for information about tutoring opportunities.

**Student Success Center:** The comprehensive source for information, services, and resources to assist your success at UT:

1817 Melrose Avenue

946.HELP [4357]

Email: [studentsuccess@utk.edu](mailto:studentsuccess@utk.edu)

<http://studentsuccess.tennessee.edu/studentsuccesscenter/>

#### Student Counseling Services Center

Student Counseling Services Center

900 Volunteer Boulevard

974-2196

Email: [studentcounseling@utk.edu](mailto:studentcounseling@utk.edu)

## Biology 101 Lecture Schedule

**Reading assignments past week 8 will be updated after the first exam. Additional reading may be assigned. Additional assigned reading, supplemental reading, assignments, and quizzes will be announced in class and posted on Blackboard.**

Week 1: August 20: Introduction to the Course

Week 2: August 25 & 27: What is Science? – Learning and Doing  
The Canon (“TC”): pp.1 – 32  
Neither Gods Nor Beasts (“NGNB”): pp. 1 - 19  
Finding and Evaluating Information (Blackboard)

Week 3: September 1 & 3: What is Science? – Process and Practice  
TC: pp. 32 – 86  
NGNB: pp. 21 – 33  
Warning Signs of Bogus Science (Blackboard)

Week 4: September 8 & 10: What is Life? – Pieces and Properties  
TC: pp.121 – 146  
NGNB; pp. 35 – 52

Week 5: September 15 & 17: What is Life? – Cells and Energy  
TC: pp. 183 – 211  
NGNB: pp. 65 – 82

Week 6: September 22 & 24: What is Life? – Continuity and Change  
**Exam opportunity (September 22)**  
Introduction to Genetics (Blackboard)  
Gene Interactions (Blackboard)

Week 7: September 29 & October 1: What is Life? – Change and Continuity  
TC: pp. 147 - 182  
NGNB: pp. 53 – 63; 83 - 95  
**Genetics Problems due October 1**

Week 8: October 6 & 8: Manipulating Blueprints: Genomics and Biotechnology  
Genomics (Blackboard)  
GMOs (Blackboard)

Week 9: October 13: Historical Interlude: Fitter Families

Week 10: October 20 & 22: The Human Organism: Evolution & Quick Tour of the Complete Human

Week 11: October 27 & 29: The Human Organism: Coordination & Control Systems

Week 12: November 3 & 5: The Human Organism: Genes and Health – Our Evolutionary Legacies  
**Exam Opportunity (November 3)**

Week 13: November 10 & 12: The Human Organism: Infectious Diseases

Week 14: November 17 & 19: The Human Organism: Making Babies, There Sure Are a Lot of Us!

Week 15: November 24: Human Life: Living Well, Doing Right

Week 16: December 1: The Century of Biology: Problems & Prospects

**Final Exam: Friday December 4, 10:15 – 12:15**