

Biology 1102: Human Biology (4 sem hrs)
Fall Semester, 2012

Lecture: TR, 9:35-10:55pm, Jennings Hall 001

Lecturers: Dr. Sherwood Forest, Department of Biochemistry
forest.123@osu, 292-1234
Office Hours: Fridays, 2:30-4:30pm, Riffe Bldg 231

Course

Coordinator: Ms. Bea Keaper, Center for Life Sciences Education
keaper.19@osu.edu, 688-4321

Head TA: Mr. Mark Descardes, Ohio State Biochemistry Program
descardes.1@osu.edu, 292-9876
Office Hours: T & R, 8:30-9:30am, Jennings Hall 247

Prerequisite: None

Textbook: Recommended: *Human Biology*, 12th Ed., Mader & Windelspecht, ISBN: 9780073525464

GEC Goals & Objectives: Courses in the Natural Sciences foster an understanding of the principles, theories and methods of modern science, the relationship between science and technology and the effects of science and technology on the environment.

Learning Objectives:

1. Students understand the basic facts, principles, theories and methods of modern science.
2. Students learn key events in the history of science.
3. Students provide examples of the inter-dependence of scientific and technological developments.
4. Students discuss social and philosophical implications of scientific discoveries and understand the potential of science and technology to address problems of the contemporary world.

How students meet the GEC objectives through this course: In Biology 102, non-major Biology students meet the GEC Natural Science Learning Objectives in multiple ways. The course provides students with an understanding of basic human biology. Lectures and recitations address human evolution and genetics, nutrition, sex and reproduction, organ functions and development, hormones, infectious, genetic and immune diseases. Discussions of topical scientific research help students understand the history and development of scientific investigations of human biology and health. Current interactions of science, technology and society are noted and discussed throughout the course. Assignments give students opportunities to personally consider these interactions. Biology 102 is designed to help students make informed decisions about their own biology, human society and biology-based technological advances that they will encounter during their 21st century lives.

Evaluation

There will be two lecture midterms (worth 150 points each) and a lecture final exam (worth 200 points). The questions will be in a multiple choice format. You will be responsible for material presented in lecture, the recitation activities, and in the reading assignments. The final will be comprehensive with emphasis on the material after the 2nd midterm.

The course point breakdown is as follows:

Lecture midterms/Final	500 pts
Recitation Activities	200 pts
NYT Project	100 pts
Poster Project	100 pts
Lecture Participation	70 pts
TA Points	30 pts
TOTAL	1000 pts

Final Grades:

Your final grade will be based on the percentage of the 1000 points that you earn during the course of the quarter, as indicated below. Please note that we do not grade the course on a curve and *Carmen* does not round averages up to the next nearest percentage point, so 92.11% and 92.97% both earn the grade of A-.

93-100%: A	80-82.9%: B-	67-69.9%: D+
90-92.9%: A-	77-79.9%: C+	60-66.9%: D
87-89.9%: B+	73-76.9%: C	≤59.9%: E
83-86.9%: B	70-72.9%: C-	

Course Policies

Absences:

If you are too ill to take the final exam or complete a quiz or assignment, please contact the course coordinator within 24 hours of the class period in which the exam was taken. You must be seen by and receive written documentation from a professional health care practitioner on the day (or period) of the exam in order for a make up to be given. Persons arriving late for the final exam will not be offered an exam after the first person has finished. Other serious personal problems will be considered, in advance, but on an individual basis. In all instances, documentation supporting the excused absence will be required. Lack of transportation, loss of electricity, travel plans, etc. will not be considered as valid excuses and you will receive a "0". Make ups for missed exams may be in a different format than the scheduled exam or quiz.

Note: Check the date and time of the final examination now and make sure that this time does not conflict with your future plans. No early final exams will be given.

Students must contact their recitation TA **within two days** of the original missed recitation date. There is no opportunity for a make-up assignment if a student contacts his/her TA on the third day or later. In order to establish that the student was prevented from attending recitation for a valid reason, some form of written verification acceptable to the Center for Life Sciences Education is required. Students will not receive credit for attending any recitation section other than their regularly scheduled section.

LATE ASSIGNMENTS POLICY: Late assignments turned in within 24 hours after the due date is worth a maximum of half credit. Any assignment turned in past the 24-hour deadline is worth no credit. If possible, students should deliver late assignments directly to their TA in person. If that's not possible, students may deliver late papers to their TA's mailbox in the CLSE TA mailroom (Jennings 247), but students must stamp the papers with the day and times received and log it in as per posted instructions. A date stamp machine is available across from the TA mailboxes. Dropboxes are available on *Carmen*. Do not email assignments to your TA. ***This policy will be enforced so that all students in the course are treated equally.***

CLSE Policies

Problem Solving Pathway: The CLSE believes that student concerns are usually most effectively addressed at the lowest possible level within the organization. Therefore, students are ordinarily expected to address issues or concerns with their TAs first. If the issue cannot be resolved by your TA, or for some reason you feel that you absolutely cannot address your concern with your TA, please feel free to contact your Course Coordinator (listed on the syllabus) or Assistant Director Matt Misicka.

Course Management System: This course uses CARMEN (<http://carmen.osu.edu>) as its tool to manage grades and communicate timely information to our students. It is expected that all students will check this site frequently for schedule changes, assignment guidelines, and other information. If you are unfamiliar with CARMEN, instructions are available at the Center for Life Sciences Education office (260 Jennings Hall). Additionally, your teaching assistant can help you activate your account if you are unfamiliar with this software.

Section Changes/Adds: All section changes and adds that cannot be accomplished by the student through Buckeye Link or requiring signatures must be done through the Course Coordinator.

Grade Inquiries: All grades will be posted on Carmen; you will have 10 working days to challenge any grade or inquire regarding any unposted grade; after that time, grades are final. To challenge or inquire about quiz or exam grades contact your Course Coordinator to set up an appointment.

University Policies

Students With Disabilities: Any student who feels s/he may need an accommodation based on the impact of a disability should contact the Course Coordinator privately to discuss your specific needs within the first two weeks of class.

Academic Misconduct: Examples of academic misconduct include (but are not limited to) plagiarism, collusion (unauthorized collaboration), copying the work of another student, and possession of unauthorized materials during an examination. Ignorance of the University's *Code of Student Conduct* (Section 3335-23-04) is never considered an "excuse" for academic misconduct. Faculty, staff, and TAs employed by the CLSE are obligated by University Rules to report suspicions of Academic Misconduct to the Committee on Academic Misconduct.

Sexual Harassment: While all members of the staff involved in this course have been trained in the OSU sexual harassment policies and procedures, this is not true for all OSU students. Please report any concerns about questionable or unwanted behavior that has the purpose or effect of unreasonably interfering with an individual's work or academic performance or creating an intimidating, hostile, or offensive environment for working, learning, or living on campus, to your course coordinator.

Student Safety Services: To promote safety on campus, transportation across campus is offered by the OSU Department of Public Safety. Service is available between 7:30pm and 2:40am. Call 292-3322 to schedule a pick-up. You must provide at least one hour notice (http://www.ps.ohio-state.edu/sss/escort_info/).

Errors & Omissions: While every effort has been made to insure the validity and correctness of the information presented in this syllabus, any mistakes or clerical errors that are discovered will be corrected and communicated through subsequent editions as necessary.

A Word About Conduct in Large Classes

This is a large class, but you are not a small part of it! To make our time together as valuable as possible, we all have to work hard at it. The following basic principles may give us some guidelines:

Every student has the right to learn as well as the *responsibility* not to deprive others of their right to learn.

Every student is accountable for his or her actions.

In order for you to get the most out of this class, please consider the following:

- a. Attend all scheduled classes and arrive on time. Late arrivals and early departures are very disruptive. If you must be late or need to leave early, please sit in the balcony.
- b. Please do not schedule other engagements during either lecture or recitation. You probably wouldn't like it if we did! We will try to make class as interesting and informative as possible, but we can't learn the material for you.
- c. If you have trouble hearing the material presented in the lecture because of distractions around you, quietly ask those responsible for the distraction to stop. If the distraction continues please let us know. It is often impossible to hear such things from our position in the classroom.

(Brinko, K.T. and Menges, R.J., (Eds.)(1997). *Practically speaking: A Sourcebook for Instructional Consultants in Higher Education*. Stillwater, OK: New Forums Press Inc.)

If you have any questions about any of the above policies please contact the Course Coordinator.

Lecture and Recitation Schedule

Week	Class	Date	Topic	Recitation Activity
1	1	Aug. 23	Course Overview ; Scientific method and human experiments.	No recitations this week
2	2	Aug. 28	Natural Selection	CS: Pros and Cons of Smoking Bans
	3	Aug. 30	Human features, ancestral hominids	
3	4	Sept. 4	Present and future human evolution.	<i>NOVA: The Pill</i>
	5	Sept. 6	DNA Structure & Replication	
4	6	Sept 11	Central Dogma of Biology, Prions	How do you get from a gene to a protein?
	7	Sept. 13	Mendelian Genetics	
5	8	Sept. 18	Mendelian Genetics	How are human genetic traits inherited?
	9	Sept. 20	Midterm I	
6	10	Sept. 25	Human genome and chromosomes, karyotype and sex determination	CS: Stem Cells
	11	Sept. 27	Stem cells, reproductive versus therapeutic cloning;	
7	12	Oct. 2	Human genetic traits and hereditary diseases	CS: Fertility Treatments
	13	Oct. 4	Human genetic traits and hereditary diseases	
8	14	Oct. 9	Blood groups, human pedigrees, DNA testing and gene replacement therapy, human genomics	CS: Selecting the Perfect Baby
	15	Oct. 11	Cancer, longevity, aging, death, apoptosis,	
9	16	Oct. 16	Midterm I	<i>NOVA: Cancer Warrior</i> CS: Cancer Trials
	17	Oct. 18	Mate selection, pheromones, male and female reproductive systems;	
10	18	Oct. 23	Ovarian and uterine cycles Fertilization, contraception,	CS: Who Owns and Embryo?
	19	Oct. 25	Embryonic and fetal development, birth and breast feeding, oxytocin	
11	20	Oct. 30	Blood, heart, cardiovascular system and disorders;	CS: Heart Transplant
	21	Nov. 1	Lymphatic system, Respiration, nutrition,	
12	22	Nov. 6	Digestion, Urinary system, medical rationing	CS: DNA Dragnets
	23	Nov. 8	Midterm II	
13	24	Nov. 13	Nervous system, nerve impulses, neurotransmitters and drugs, synapses; Brain structure, limbic system.	<i>Influenza 1918</i>
	25	Nov. 15	Sensory perception; taste, vision, hearing, balance.	
14	26	Nov. 20	Endocrine system, hormones, diabetes;	No recitations this week
	27	Nov. 22	Thanksgiving Day - No Classes	
15	28	Nov. 27	Immune system, antigens and antibodies, autoimmune diseases, vaccines,	CS: To Vaccinate or Not to Vaccinate?
	29	Nov. 29	Disease transmission, viral diseases, influenza, HIV	
16	30	Dec. 4	Antibiotic resistance, bacterial and parasite diseases	No recitations this week
17	🍏	Dec. 6	Final Exam	