

Bio 102 Syllabus Spring 2008 Dr. Gallagher

Office hours Mon. 4:00-5:00 and W 2-4 other times by appointment room J526.

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Text is Campbell, N.A. and J.B. Reece. 2005. **Biology**, 7th Ed., Benjamin Cummings. New and used copies of the books plus a CD ROM study disk are available at the campus bookstore. Also check www.half.com, www.barnesandnoble.com, ebay and other websites for used copies. You are also responsible for reading the material on this website and for reading the pamphlet posted on Blackboard.

Overview: Bio 102 is the continuation of Bio 101 and covers organisms through ecosystems. The organizing principle of both Bio 101 and 102 is evolution.

Course objectives:

1. Increase your understanding of concepts of mechanisms at the organism level – proximal and ultimate
2. Increase your understanding of, and ability to describe principles of genetics, inheritance and development
3. Increase your ability to master quantification, tables and graphs for genetics
4. Increase your understanding of, and ability to describe Evolution, in a broad view of history and mechanism, and comparative approaches in biology
5. Increase your ability to apply Homeostasis, at the level of water regulation, temperature regulation, energy regulation
6. Increase your ability to describe basic concepts of physiology at the system level: circulatory system, secretion, digestion
7. Increase your understanding of beginning concepts of ecology

Attendance: **Attendance will be taken in both lab and lecture. Students who miss lectures are still responsible for the material.** Students who miss more than 2 lab sessions without making them up by attending another lab section on the same material, will be dropped from the course with a grade of WU. **This is a strict departmental rule. No exceptions. Attendance on the fieldtrips is required.**

Grades: The grade in the course is determined 50% on the scores of the 3 lecture exams and 50% on the lab grades (30% from the results on three lab exams, 15% from a lab report, and 5% on class participation). **There are no make-up exams in either the lab or the lecture!** If you know in advance that you have a conflict, then I will let you take the exam early.

Lecture Schedule Day class

	Date	Title	Book Chapter Campbell
1.	1/28	Intro. & organiz.; Evolution as	13,14

		an organizing theme in Biology Genetics I:DNA and inheritance	and website
2.	2/4	Genetics II: Mendel's laws & exp'ts	15,16
3.	2/11	Evolution at the genetic level: Speciation	22,23
4.	2/25	Evolution in the Fossil record and Development	21,24,25
5.	3/3	First exam (weeks 1-4)	
6.	3/10	Organisms I: circulatory system	40,42
7.	3/17	Organisms II: Homeostasis, nervous and endocrine systems	45,48
8.	3/26	Organisms III: Digestive system,	41
9.	3/31	Organisms IV: Water relations in plants	36
10.	4/7	Second exam	
11.	4/11	Organisms V: Water and osmoregulation in animals	44
	4/21- 4/27	No classes-Spring Break	
12.	4/28	Organisms VI: Reproduction in Plants and Animals	38,46
13.	5/5	Population growth, competition, predation, concept of the niche	50,52
14.	5/12	Succession, communities & global change	53,54

Final Exam will be due in Finals week.

Course Objectives

Students will:

1. Understand concepts of mechanisms at the organism level – proximal and ultimate
2. Describe principles of genetics, inheritance and development
3. Master quantification, tables and graphs for genetics
4. Describe Evolution – broad view of history and mechanism. Comparative approaches in biology.
5. Apply Homeostasis: at the level of water regulation, temperature regulation, energy regulation
6. Describe basic concepts of physiology at the system level: circulatory system, secretion, digestion
7. Understand beginning concepts of ecology

Laboratory Syllabus Bio 102 Spring 2008

The laboratory grades count for 50% of the grade in the course: 30% from the results on three lab exams, 15% from a lab report, and 5% on class participation. There are no makeup exams! Attendance will be taken in the lab. Any student who misses more than 2 labs will be dropped with a grade of WU. Final Papers must be handed in on time. No extensions. A paper handed in 1 day late will have 10% of the grade deducted. No papers will be accepted after one day. Students who do not hand in the final paper will receive a grade of zero (0) for the exercise.

Week	Dates	Exercise	pages in lab manual
1	1/29-1/31	Genetics I	Ex. 34 p. 272 and Ex 35 p. 284 handouts
2	2/5-2/7	Genetics II	handouts
3	2/13-2/19	Fieldtrip to Dinosaurs (AMNH) (note nite sections will go on the weekends!)	Text ch 40, 41
4	2/20-2/26	Evolution II: Alleles in populations; computer simulations	Ex. 38 p. 308 handouts
5	2/27, 2/28 3/11	Lab Exam I NOTE Tuesday labs delayed one week	
6	3/4, 3/5, 3/6	Function of Organisms I: Goldfish and Q ₁₀ Lab report will be written on this lab!	handout
7	3/12-3/18	Structure of organisms I: Dissection of Fetal Pig I <i>Hand in Results of goldfish</i>	Ex 18, p 140-157
8	3/19-3/26	Structure of organisms II: Dissection: Fetal Pig II <i>Hand in Methods, Hand back Results for Peer Review</i>	Ex 18, p 140-157
9	3/27-4/2	Lab Exam II <i>Hand in Introduction, Hand back Methods</i>	
10	4/3-4/9	Structure of organisms III: flowers and fruit <i>Hand in Discussion, Hand back Introduction</i>	Handouts, p 254-260
11	4/10-4/16	Genetics III: Pedigrees and Genetics Review <i>Hand in Abstracts, LitCit, Title; Hand back Discussion</i>	handouts
12	4/12-4/30	Computer simulations (Populus)	handouts
13	5/1-5/7	Ecology I: Fieldtrip to Inwood Park	Ex 37, p 297
14	5/8-5/14	Lab Final <i>Hand in Final Draft of Lab Report</i>	

(cont.)

Academic Integrity

The CUNY Policy on plagiarism says the following about plagiarism (the CUNY Policy can be found in Appendix B.3 of the CCNY Undergraduate Bulletin 2007 -2009):

“Plagiarism is the act of presenting another person’s ideas, research or writings as your own. The following are some examples of plagiarism, but by no means is it an exhaustive list:

1. Copying another person’s actual words without the use of quotation marks and footnotes attributing the words to their source.
2. Presenting another person’s ideas or theories in your own words without acknowledging the source.
3. Using information that is not common knowledge without acknowledging the source.
4. Failing to acknowledge collaborators on homework and laboratory assignments.
5. Internet plagiarism includes submitting downloaded term papers or parts of term papers, paraphrasing or copying information from the internet without citing the source, and “cutting and pasting” from various sources without proper attribution.

The City College Faculty Senate has approved a procedure for addressing violations of academic integrity, which can also be found in Appendix B.3 of the CCNY Undergraduate Bulletin.”

Be aware that if we suspect plagiarism **we will follow this procedure, no exceptions made**; i.e. we will report you to the Academic Integrity Official. Disciplinary sanctions range from failing the class to expulsion from the college