

BY 123-3B; INTRODUCTORY BIOLOGY I – Course Outline Fall 2007
Mondays & Wednesdays, 5:30 - 6:45 PM; Instructor: Dr. Chuck Amsler

PREREQUISITES: CH 115 and 116 (or concurrent enrollment) for Biology majors or pre-med; others are advised to also take BY115 and BY 116 before BY 123

<u>Date</u>	<u>Topic</u>	<u>Chapter</u>
22 Aug.	Introduction to Biology	1 (in part)
27-29	Water and Its Chemistry Carbon and Molecular Diversity	(part of 2), 3 4
5 Sept.	Structure and Function of Macromolecules	5
10-12	Structure and Function of Macromolecules (continued) The Cell	5 6
17-19	The Cell (continued) Cell Membranes and Their Function	6 7
24	Introduction to Metabolism	8
25	Optional Review Session at 5:00 PM in CH 274	
26	EXAM 1 (Chapters 1–7)	
1-3 Oct.	Cellular Respiration	9
8-10	Photosynthesis Mitosis and the Cell Cycle	10 12
15-17	Mitosis and the Cell Cycle Meiosis	12 13
22	Mendelian Genetics	14
23	Optional Review Session at 5:00 PM in CH 274	
24	EXAM 2 (Chapters 8, 9,10,12,13)	
29-31	The Chromosomal Basis of Inheritance The Molecular Basis of Inheritance	15 16
5-7 Nov.	The Molecular Basis of Inheritance (continued) Transcription and Translation	16 17
12-14	Genetics of Viruses and Bacteria	18
16	Optional Review Session at 3:00 PM in CH 274	
19	EXAM 3 (Chapters 14-18)	
26-28	Evolution Phylogeny How Populations Evolve	22 25 23
3-5 Dec.	Origin of Species Bacteria Eukaryotic Origins	24 27 28
11	Optional Review Session at 5:00 PM in CH 274	
12	EXAM 4; 4:15 to 5:30 PM ONLY (Chapters 22-25, 27, 28)	

Schedule subject to change at the whim of the instructor

- Texts: (1) Biology 7th Edition, Neil Campbell (**REQUIRED**)
(2) Student Study Guide for Campbell's Biology by Martha R. Taylor
(3) A Photographic Atlas for the Biology Laboratory, Van DeGraff/Crawley (**REQUIRED**)
(4) Biology Lab Manual, Cusic/Whitehead (**REQUIRED**)
(5) Biology in the Laboratory, by Doris R. Helms (**REQUIRED**)

Course Grading: Lecture = 70%; Lab = 30%
Lecture Exams 1, 2, 3, 4 = each ¼ of lecture grade
In general, the scale will be the standard A = 90-100%, B = 80-89%, C = 70-79%,
D = 60-69%, F = <60%.
There is no extra credit of any kind in lecture. (Lab credit is up to individual lab instructors.)

Notes: There may be material presented in class that is not in the textbook. You are responsible for this material if you miss class.

Exams will cover only material presented in lecture *and, perhaps, specific sections of the text book assigned by the instructor in class.* (Note that this does not mean the complete chapters as listed on the syllabus.) The exception is Chapter 2, which is a review of parts of introductory chemistry and will only be touched on in lecture. A list of additional topics you will be required to know in Chapter 2 will be presented to you in lab.

Attendance at scheduled examinations is mandatory. Make-up exams are given only in cases of medical incapacitation or specific forms of extreme hardship (both with documentation) and otherwise following university attendance policy. **You are required to contact the instructor to explain an absence no later than 24 hours after the exam to be eligible to take a make-up** (assuming that you have a documented and legitimate excuse). Make-up exams are short answer/essay type exams. For official university business that is in conflict with the exam the student must notify the instructor of the conflict at the earliest possible date.

OFFICE HOURS: Anytime by appointment. Appointments can be set up in class, by phone, or by e-mail. **Specific office hours during weeks preceding each exam will be announced in lecture.**

Office: 367 Campbell Hall (Lab: CH 373)
Phone: 975-5622
E-mail: amsler@uab.edu

E-mail can be used for setting up appointments or for asking questions that can be answered with short, simple answers (e.g., “yes/no” or “either/or” questions)

All matters pertaining to laboratory are handled by Alan Whitehead; Room 275 Campbell Hall; phone 934-3158.

Please turn off cell phones and pagers during class. If you have an emergency situation, you may request my permission to have your phone or pager on.

Cheating: Academic dishonesty will not be tolerated and will be reported to the appropriate university officials. Punishment is explained in the student handbook.

The sequence BY 123 – 124 is designed specifically for biology majors, other science majors (chemistry, physics, etc.), pre-health professions students (pre-medical, pre-dental, pre-optometry, pre-veterinary), Health Related Professions majors, and anthropology and psychology majors. The courses are in-depth treatments, fast-paced, and presume the above specific career goals. It is our experience that students with majors other than those above are less successful academically in this sequence, and we actively discourage such students from participation in it.

The Biology Department offers several courses designed for students seeking to satisfy general degree requirements in the science area. If you are majoring in Business, Humanities, or Social and Behavioral Sciences (other than anthropology or psychology) we recommend: BY 101 (Topics in Contemporary Biology), BY 102 (Laboratory for BY 101), ENV 108 (Human Population and the Earth's Environment), ENV 109 (Laboratory for ENV 108), BY 111 (Extended Topics in Contemporary Biology), BY 112 (Laboratory for BY 111), BY 115 (Human Anatomy).