

Natural Sciences II: 'The Human Body: How it Works': MAP-UA 309, Morse Academic Plan, Lectures T&R 9:30 to 10:45AM Room 207 Silver

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Office Hours: Tuesday 2:00PM to 3:30 PM, in Room 1152 Brown.

Course Description

This course will look at the following:

- Basic chemistry of living things
- The basic differences between bacteria and animal cells
- The general organization of the human body
- Several key body systems
- The disease process
- Genetics & biotechnology
- The ethics of scientific discovery

Course Objectives

- To develop a fundamental understanding of chemistry and biological chemistry.
- To observe in laboratory the skills needed to study these basic principles.
- To understand the methods of scientific investigation and how the human body functions.

Grade Point Allocation

Midterm exam 1	20%	Homework	20%
Midterm exam 2	20%		
Final exam	20%		
Laboratory	20%		

Grading: 100 to 95 = A, 94 to 90 = A-, 89 to 85 = B+, 84 to 80 = B, 79 to 75 = C+, 74 to 70 = C, 69 to 65 = D.

Homework assignments will be regularly collected and reviewed for completeness by your Laboratory Instructor in laboratory. There will be no formal grade given for these assignments, but existence and completeness is noted for deciding cases of borderline grades at the end of semester.

All assignments must be submitted **on time**, (when collected during your lab period by the laboratory instructor), for full credit. Late assignments will be penalized **1 pt/day late**. Late assignments must be given to your lab instructor via email or you must make other arrangements with the instructor.

If you miss lecture or laboratory, you are still responsible for work assigned and work that was to be collected that day! **An absence from laboratory session requires documentation and acceptance of this as an excused absence is at Dr. Goldberg's discretion.** The Lab Instructors **cannot** excuse an absence. You must contact your laboratory instructor to make him/or her aware of your absence, and arrange to hand in work collected. Questions from my lectures will be on the exams. Please come to class. I will give frequent in class assignments, you miss them, your problem! Reading the book is required but not the total of what I will hold you responsible for on exams.

Exam Format and Policies

- The exams will contain questions covering the lectures, readings and laboratory projects. **LET'S THINK ABOUT SOMETHING:** you pay how much for the text? You pay how much for the course? The cost of the course is **MUCH** greater, so think about what I am worth to each of you. **Don't miss lecture!** The final exam will be cumulative, and cover topics covered from throughout the course. Homework assignments are practice at answering exam questions. Same for laboratory questions and graded homework assignments.
- If you miss one of the midterms because of illness, you *must* contact Dr. Goldberg at least 24 hours prior to the exam, by e-mail (bg43@nyu.edu). **A doctor's note is mandatory!** For an absence to be considered an excused absence, this is mandatory. **No makeup exams are given.** Instead the final

exam will be worth 40% of your final (total) grade. Remember this is a cumulative exam. **If you miss both midterms for any reason, you must withdraw from the course. This is not open for negotiation.**

- Only under **very exceptional circumstances** will a makeup for the final be given. This must be discussed prior to the exam and not at the end of the semester. In this case, an Incomplete will be given and it is up to the student to seek out Dr. Goldberg and set a date for the makeup. It will be during the Spring Semester, at Dr. Goldberg's convenience.

Laboratory Policies

- You must be registered for the laboratory! This is not negotiable for any reason. It is an integral part of the course and your grade. If you are not in a laboratory section by Project #2, you **must** withdraw from the course. Enrollment in any section of laboratory is not increasable beyond the set limits on student number (20 students/laboratory) and do not bother to ask. This is not dictated by me but is rather the occupancy rules of the FDNY.
- You are expected to be on time. Arriving 10 minutes late is considered an absence, and loss of credit for the lab session.
- Questions for laboratory quiz will be based on the description of the experiment in the laboratory manual and will include pertinent lecture and readings material. Arriving 10 minutes late for a laboratory session, you are excluded from the quiz and will be given no credit as a grade (0).
- Laboratory assignments are handed in on time. Those collected at end of laboratory session and those questions that are given out and are to be handed in during the next session, must be on time.
- Missing more than 3 laboratory sessions for any reason will result in receiving a score of zero for the entire laboratory component of the course. This is not negotiable and is enforced, strictly!
- If you miss a session due to special circumstances, including observing a religious holiday, you must notify the laboratory instructor before the session.
- **There is no way to makeup a missed laboratory by going to another session. They are FULL, and we cannot accommodate makeup students. However, you *are* responsible for the material missed and any assignments due.**

Course Text and Internet Access

Required texts:

- *Human Biology, by S.S. Mader, 11th ed or the new 12th ed. This was a surprise to me as well!*
- *Natural Science I: The Human Body & How it Works, MAP-UA 306 Laboratory manual.*
- *We will also employ for lecture **BLACKBOARD**. Please make sure that you have an NYU email address. I will post readings and websites that will enrich the course. It will also serve as a sort of class 'chatroom' for all of us to communicate beyond the lecture room. There will always be postings on the **BLACKBOARD** site to keep you informed as to important notices and course information about the course. Assignments will be posted on **BLACKBOARD** as will the answers. Handouts will also be posted on **BLACKBOARD**. It is important that you check 'Announcements' on **BLACKBOARD** regularly.*
- *All assignments will be assigned as an online access to **CONNECT**, which you will have to access too. More First day of class. It means paperless homework assignment!*

Syllabus

Lec #	Date	Chapter & pages	Topic	Lab: T & W Room
1	Sept 06	CHPT.1 PP.1-10 & CHPT.2 19-40	INTRO. & Chemistry: from the atom to water. Handout: the Periodic Table of Elements	NO LAB
2	8	C. 2	MOLECULES: The covalent bond.	
3	13	C.2	PROTEINS, LIPID & N.A.	MICROSCOPE
4	15	C. 3, PP.43-64	THE CELL: Structure	
5	20	C.3	THE CELL: Function	OSMOSIS

6	22	C.4 PP.65-90	HOW ARE HUMANS ORGANIZED?	
7	27	C.8 PP.157-184	The DIGESTIVE SYS. : How is it organized? How does it function?	DIGESTION
8	29	C.8	The Chemistry of digestion. Things that can live in the digestive tract.	
9	Oct 04			<i>Review for Exam #1</i>
10	06		<i>Exam #1</i>	
	10/11	No class	<i>Colombus day</i>	
11	13	C.6. PP. 115-134.	CV. SYS. BLOOD	
12	18	*ASSIGNED	BLOOD BORNE DISEASE	BLOOD TYPE
13	20	*ASSIGNED	FAT, OBESITY & CHOLESTEROL	
14	25	C.18 p419-444	Patterns of Inheritance	CHOLESTEROL I
15	27	C. 20 p465-488	Patterns of Genetic Inheritance	
16	Nov 1	C.21 p 489-514	DNA BIOLOGY	CHOLESTEROL II
17	3	C.21	DNA-RNA-PROTEIN	
18	8	c.22 p515-540	Human Evolution	RESPIRATION
19	10	C.9 p185-206	HOW DO WE BREATHE?	
20	15		Diseases of the Respiratory Sys	<i>Review for Exam#2</i>
21	17		<i>Exam #2</i>	
22	22	C.7 p135-156	IMMUNITY	ELIZA
23	24-26		Thanksgiving Break	

24	29	Infectious Disease Supplement p 379-392	STD's & HIV	Heart Dissection
26	Dec 1	C.5 p91-114	CVS: Heart & Vessels	
27	6	*Assigned	ARTERIOSCLEROSIS & HEART DISEASE	<i>Review for Final Exam in lab with your TA's</i>
28	8	C.10 p207-238	URINARY SYS, & EXCRETION	
30	13	.	Review for Final	No Lab
		December 20, 8AM	FINAL EXAM	ROOM 207

Laboratory Instructors

It is my pleasure to introduce the laboratory instructors for this course. **If you have questions or are going to miss a lab, you must not only email me 24 prior to missing lab but also your laboratory instructor.**

Students will be required to purchase from MAP or bring your own safety goggles. These are required from Lab#1 on. DO NOT forget them. We will not have goggles to loan. The price for them will be \$5.00 (if you go to a hardware you will see that this is exceedingly cheap).

The laboratory Schedule: Room 203 Silver

Day & Section	Times	Instructor (email)
T 02	3:00-4:40	Kristina Harris kmh217@nyu.edu
T 03	5:00-6:40	Kristina Harris
W04	9:00AM-10:40	Kristina Harris
W 05	11:00-12:40	Kristina Harris
W 06	1:00-2:40	Anna Brady
W 07	3:00-4:40	Anna Brady agb5@nyu.edu