

BIOS 100: Biology of Cells and Organisms (14694)**MWF 11:00 AM, 145 BSB**

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Course Description: Processes of cellular and organismic function: cell structure, respiration, photosynthesis, molecular genetics and development, structure, and physiology of plants and animals.
Animals may be used in the laboratory

Textbooks: BIOLOGICAL SCIENCE, by Freeman. (Prentice Hall, 2002).
 BIOLOGICAL INVESTIGATIONS, by Dolphin (lab manual)
Website: <http://www.uic.edu/classes/bios/bios100/summer2004>

Lecture Syllabus

Week	Date	Topic	Chapter
1	5/31	Memorial Day - No Class!	
	6/2	Course Introduction, Science as a Process	1
	6/4	Chemistry of Life I	3
2	6/7	Chemistry of Life II	3
	6/9	Cells, the Fundamental Unit of Life	4, 5
	6/11	Cells - Structure and Function	4, 5
3	6/14	Energy, ATP, and Enzymes	2, 3
	6/16	Examination I - Covers Material from 6/2 to 6/14	
	6/18	Photosynthesis I	7
4	6/21	Photosynthesis II	7
	6/23	Cellular Respiration I	6
	6/25	Cellular Respiration II	6
5	6/28	Chromosomes, Mitosis, Meiosis	8, 9
	6/30	DNA - The Molecule of Heredity	11, 12
	7/2	Protein Synthesis	13
6	7/5	Control of Genetic Systems in Prokaryotes and Eukaryotes	14, 15
	7/7	Examination II - Covers Material from 6/18 to 7/5	
	7/9	Plants - Structure and Function	31
7	7/12	Plants - Reproduction and Diversity	28, 36
	7/14	Animal Systems - Circulation, Respiration, Digestion	40, 41
	7/16	Animal Systems - Immune, Nervous, Endocrine	42, 44, 46
8	7/19	Animal Systems - Reproduction, Development	45, 18, 19
	7/21	Examination III - Covers Material from 7/9 to 7/19	
	7/23	Cumulative Final Exam - 11:00 - 1:00 - 145 BSB	

Grading

Points in BIOS 100 may be earned in both the laboratory and for lecture examinations. Each hourly examination is comprised of 50 multiple-choice questions, each worth two points. The final examination is optional - if you choose to take the final, we will drop the lowest exam score. Note that there is no penalty for taking the final examination - if this is your lowest score, we will drop the final examination score. If you miss one of the two hourly examinations, you must take the final examination. The final exam is cumulative and will contain all new questions. **No Makeup Exams will be given!**

Points are also earned through the completion of laboratory exercises. There are fourteen laboratory exercises, each worth 10 points. You will be allowed to drop your lowest laboratory grade. If you miss a lab, you will be allowed to make it up only during the week in which it is offered. No makeups will be allowed after the labs are taken down for the week!

The final grade will be determined by the following grading scale:

- A: 385 - 430
- B: 340 - 384
- C: 295 - 339
- D: 250 - 299
- E: 0 - 249

News, announcements, and other supplemental information will be provided on the website. The URL is:

www.uic.edu/classes/bios/bios100/summer2004

Be sure you check this website out as it provides much information regarding both the lecture and the laboratory portions of the course

Laboratory Schedule for Summer, 2003

Week	Dates	Topic	Chapter
1	June 1 - June 4	No Labs June 1 or 2 - Lab begins June 3 & 4	----
		A & B: Techniques in Microscopy	2
2	June 7 - June 11	A: Cellular Structure Reflects Function	3
		B: Quantitative Techniques and Statistics	5
3	June 14 - June 18	A: Determining the Properties of an Enzyme	6
		B: Biomolecules	p. 451
4	June 21 - June 25	A: Investigating Form and Function in Photosynthesis	25
		B: How Do Materials Enter Cells?	4
5	June 28 - July 2	A: Measuring Cellular Respiration	7
		B: Mitosis & Meiosis	8, Website
6	July 5 - July 9	A: Paternity Determination in Whooping Cranes	p. 454, Website
		B: Plant Reproduction	26
7	July 13 - July 16	A: Plant Anatomy	23, 24
		A & B: Digestive, Gas Exchange, and Circulatory Systems	27 & 28
8	July 20 - July 23	A & B: Excretory & Reproductive Systems	29
		No Labs July 24 & 25 - Final Exams!	----

How Do I Read the Lab Syllabus? (Where the heck does my lab meet?)

There are two labs offered every week. If you look at the lab syllabus, you will see that some of the labs are labeled "Lab Code A" while the other labs are labeled "Lab Code B." If your lab is scheduled to meet in 3086 SEL (sections 14705, 14718, 14720), you will do the "A" lab on Tuesday or Wednesday in 3086 SEL and then do the "B" lab on Thursday or Friday in 3100 SEL. If your labs are scheduled to meet in 3100 SEL (sections 14736, 14747, 14754), you will do the "B" lab on Tuesday or Wednesday in 3100 SEL and then do the "A" lab on Thursday or Friday in 3086 SEL.

Please note that the last four labs are labeled with Lab Codes A & B. This means that for these labs, you will meet in either 3086 or 3100 SEL for all four labs. These are the mitosis, whooping crane paternity test and the pig dissection labs, and it is much more convenient to remain in the same lab room for all four labs.

Be sure that you understand how the summer laboratory schedule operates so that you do not prepare for the wrong lab!

Note: Some of the laboratories will be using stains and chemicals which can damage clothing, so please dress accordingly to laboratory. Neither UIC nor the Biology Department will assume any responsibility for damaged clothing. Also, there will be a fetal pig dissection. If you have religious or ethical objections to this, please contact Michael Muller as soon as possible. An alternate exercise will be assigned.