

Life Science 2

Cells, Tissues, and Organs

Course Information, Spring 2005

Professor: Marc Kubasak, PhD
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Email: mdkubasak@hotmail.com
Office hours: Tues. 3:15-4:15 pm, Wed. 3-4pm
Course web address: www.lsic.ucla.edu/

Teaching assistants:

Aya Takeoka
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Lecture meets: **T, Th 2:00 – 3:15pm, Franz 1178**

TEXTBOOK

Purves, Sadava, Orians, Heller. 2004. Life, The Science of Biology, 7th Edition.
LS2 Laboratory Manual.

COURSE REQUIREMENTS

200	Midterm Exams (100 points)	
50	Section	Four two-page papers on Sci. Amer. Articles - 10 points each Participation: 10 points
80	Lab	Scientific method write-up: 5 points Histology lab identification of unknown slides: 16 points Photosynthesis lab write-up: 29 points Metabolism lab write-up: 22 points Rat lab: 8 points
175	Final Exam (comprehensive)	
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505	TOTAL POINTS POSSIBLE	

EXAMS

The midterms in this class are given on the Thursdays of week 4 (**April 28**) and week 7 (**May 19**) in the evening from **5-6:50 pm**. They will cover the material from lectures, the readings, and the discussion sections. Approximately half of the exams will be multiple choice questions and half will be short answer questions. The final exam is **comprehensive** and will also include questions based on the **lab** exercises.

Make-up exams are **NOT** given. If you are unable to take an examination or have an illness or other emergency, you are responsible for contacting the Life Sciences Core Office (LS Building, Room 2305, 825-6614) **BEFORE** the examination. You are required to have written verification regarding the illness or emergency. If you feel that a clerical error was made in grading your exam, submit your exam with a typed explanation of the issue to your teaching assistant or the Life Science Core Office by the Friday of the week following the exams return. Exams will not be regraded for content. Late regrades will not be accepted.

THE LIFE SCIENCE CORE OFFICE

For any administrative problems relating to this course, see Mark Gray in the Life Sci Core Office in **Life Sci 2305, 825-6614**. They will be able to assist you with copies of lecture handouts, scheduling difficulties, or other LS Core class matters.

Discussion Section and Labs

- Discussion sections will alternate with a set of laboratory experiments according to the schedule published by the Life Science Core office. Labs will be held in the second floor labs of Young Hall South. Please see room information posted by the core office.
- The non-lab discussions will meet in your regular section room (listed in the schedule of classes) for discussion of the lecture and lab material and the *Scientific American* articles.
- You will turn in a 2-page paper, worth 10 points, on the *Scientific American* articles that are assigned for each meeting. You will receive more specific instructions on each writing assignment. You must turn in these papers ***in person during the section they are due*** or you will lose one point. Also, for each additional day they are late you will lose another point. Your TA will not be allowed to make any exceptions to these rules. **A quiz on the readings will be substituted for the paper in some instances. Advanced notice will be given if this is to occur.**
- Your written report for Lab 1 on the scientific method must be turned in at your very next meeting. Your written assignments for the Photosynthesis and Metabolism labs must be turned in to your TA in person during the week specified by the lab manager. The same scoring penalties for late assignments apply as with the *Scientific American* articles.

Week	Assignment
1	Lab 1: Intro to the Scientific Method
2	Sci. Amer. Articles: 1
3	Lab 3: The pigments of Photosynthesis
4	Sci. Amer. Article: 2
5	Lab 4: Metabolism
6	Sci. Amer. Article: 3
7	Lab 2: Histology and Microscopy
8	Sci. Amer. Article: 4
9	
10	Lab 5: Rat Dissection

LECTURE SCHEDULE FOR LS2

Week	Lecture topic	6 th Ed Reading (chapter)	7 th Ed
1	1. Introduction to biological molecules	1-2	
	2. Biological macromolecules	3	
2	3. Cellular organelles	4	
	4. Cellular membrane	5	
3	5. Enzymes and energetics	6	
	6. Mitochondria and cellular respiration	7	
4	7. Chloroplasts and photosynthesis	8	
	8. Photosynthesis II	8	
MIDTERM 1 (Thursday Apr 28th)			
5	9. Cell cycle, mitosis, meiosis	9	
	10. Reproduction	42	43
6	11. Animal development	43	20
	12. Endocrine system	41	42
7	13. Neurons and sensory systems	41/44	42/44
	14. Immunity	19	18
MIDTERM 2 (Thursday May 19th)			
8	15. The synapse	44/45	
	16. Gas exchange and respiration	48	
9	17. Transport and circulation	49	
	18. Cardiovascular system	49	
10	19. Nutrition and digestion	50	
Catch-up and Review			

Final Exam Wednesday, June 15, 2005, 6:30pm-9:30pm

(FINAL COVERS ALL MATERIAL!)