Course Sections

Section 1 (January 22 - February 21) - Proteins, Lipids, and Carbohydrates

Instructor:	Professor James Hurley 374D Stanley Hall Tel: 643-9483 james.hurley.mcb102@gmail.com
Office Hours:	Wednesdays & Thursdays, 2:00-3:00 PM in 321 Stanley Hall
Midterm Exam:	Wednesday, February 26, 7:00 PM - 9:30 PM 1 Pimentel & 155 Dwinelle

Section 2 (February 24 - March 31) – Metabolism

This section of the class will highlight principles in metabolism with particular emphasis on the human body.

Instructor:	Associate Professor Markus Pauly 212C Energy Bioscience Building Tel: 642-1722
Office Hours:	Tuesdays 1:00-2:00 PM Thursdays 2:00-3:00 PM 274 Koshland Hall
Midterm Exam:	Tuesday, April 1, 8:00 PM - 10:00 PM 1 Pimentel, 155 Dwinelle & 2050 VLSB

A total of 100 points can be obtained in this section. 85 points from the exam (Midterm 2) and 15 points through in class i-clicker participation. Clickers will be used in every lecture and you are responsible for bringing your functional iclicker.

Section 3 (April 2 - May 2) – Molecular Biology

Instructor:	Professor Richard Calendar 506 Barker Hall Tel: 642-5951 rishard@berkeley.edu
Office Hours:	Thursdays & Fridays, 2:00-3:00 PM in 506 Stanley Hall
Final Exam:	Tuesday, May 13, 7:00 PM - 10:00 PM Location TBD

GSI

GSI	Lab	Email
Amy Alabaster		amy.alabaster@gmail.com
Mason Appel	Bertozzi	appel@berkeley.edu
Carolyn Elya	Eisen	elyac@berkeley.edu
Rachel Hood	Savage	rhoodgsi@gmail.com
James Nunez	Doudna	jamesnunez@berkeley.edu
Jeanne Quirit	Firestone	jgquirit@gmail.com

Brett Robison	Weiss	brobison@berkeley.edu

Discussion Sections

Number	Day	Time	Location	GSI in charge
101	Monday	10:00 AM - 11:00 AM	25 Li Ka Shing	Amy Alabaster
102	Monday	12:00 PM - 1:00 PM	182 Dwinelle	Amy Alabaster
103	Tuesday	8:00 AM - 9:00 AM	182 Dwinelle	James Nunez
104	Tuesday	1:00 PM - 2:00 PM	130 Wheeler	Mason Appel
105	Tuesday	2:00 PM - 3:00 PM	122 Wheeler	Carolyn Elya
106	Wednesday	9:00 AM - 10:00AM	122 Wheeler	James Nunez
107	Wednesday	1:00 PM - 2:00 PM	110 Wheeler	Brett Robinson
108	Thursday	11:00 AM - 12:00 PM	141 Giannini	Rachel Hood
109	Thursday	12:00 PM - 1:00 PM	103 GPB	Brett Robinson
110	Thursday	3:00 PM - 4:00 PM	107 GPB	Rachel Hood
111	Friday	9:00 AM -10:00 AM	125 Li Ka Shing	Jeanne Quirit
112	Friday	10:00 AM - 11:00 AM	125 Li Ka Shing	Jeanne Quirit
113	Monday	3:00 PM - 4:00 PM	130 Wheeler	Mason Appel
114	Tuesday	1:00 PM - 2:00 PM	243 Wheeler	Carolyn Elya

Lecture Outline

Lecture	Date	Day	Lecturer	Topic	Chapter
1	Jan. 22	W	Hurley	Course Overview, water, and pKas	1-2
2	Jan. 24	F	Hurley	Amino acids, peptides, and proteins	3
3	Jan. 27	M	Hurley	Purification and analysis of proteins	3
4	Jan. 29	W	Hurley	Protein sequencing, identification, and posttranslation modifications	3
5	Jan. 31	F	Hurley	Protein folding and structure	4
6	Feb. 3	M	Hurley	Globins and binding equations	5
7	Feb. 5	W	Hurley	Enzyme kinetics	6

8	Feb. 7	F	Hurley	Enzyme mechanism	6
9	Feb. 10	M	Hurley	Enzyme regulation	6
10	Feb. 12	W	Hurley	Carbohydrates	7
11	Feb. 14	F	Hurley	Lipids	10
–	Feb. 17	M	–	*Academic and Administrative Holiday*	–
12	Feb. 19	W	Hurley	Membranes	11
13	Feb. 21	F	Hurley	Membrane transport and signaling	11-12
14	Feb. 24	M	Pauly	Bioenergetics	13
15	Feb. 26	W	Pauly	Glycolysis	14
EXAM	**Feb. 26**	**W**	**Hurley**	**MIDTERM #1, 7:00-9:30 PM** **1 Pimentel, 155 Dwinelle**	**–**
16	Feb. 28	F	Pauly	Gluconeogenesis	14
17	March 3	M	Pauly	Metabolic Regulation I	15
18	March 5	W	Pauly	Metabolic Regulation II	15
19	March 7	F	Pauly	TCA Cycle	16
20	March 10	M	Pauly	Fatty Acid Catabolism	17
21	March 12	W	Pauly	Fatty Acid Biosynthesis	21
22	March 14	F	Pauly	Amino Acid Catabolism	18
23	March 17	M	Pauly	Oxidative Phosphorylation	19
24	March 19	W	Pauly	Photophosphorylation	19
25	March 21	F	Pauly	Calvin-Benson Cycle	20
				Spring Break March 24-28	
26	March 31	M	Pauly	Hormonal Regulation	23
EXAM	**April 1**	**Tue**	**Pauly**	**MIDTERM #2, 8:00-10:00 PM** **1 Pimentel, 155 Dwinelle, 2050 VLSB**	**–**

27	April 2	W	Calendar	Nucleotides & Nucleic Acids	8
28	April 4	F	Calendar	More on Nucleic Acids	8
29	April 7	M	Calendar	Genes & Chromosomes	24
30	April 9	W	Calendar	DNA Replication	25
31	April 11	F	Calendar	DNA Repair & Recombination	25
32	April 14	M	Calendar	Transcription	26
33	April 16	W	Calendar	RNA Processing, Reverse Transcription	26
34	April 18	F	Calendar	Genetic Code	27
35	April 21	M	Calendar	Protein Synthesis	27
36	April 23	W	Calendar	Gene Regulation in Prokaryotes	28
37	April 25	F	Calendar	Gene Regulation in Eukaryotes	28
38	April 28	M	Calendar	Restriction Enzymes & Cloning	9
39	April 30	W	Calendar	Advanced Genetic Engineering	9
40	May 2	F	Calendar	Review	–

May 5-9: Reading/Review/Recitation Week

FINAL EXAM: Tuesday, May 13, 7:00 PM-10:00 PM, location TBD