

BIBC102, METABOLIC BIOCHEMISTRY

Winter, 2016

INSTRUCTOR: Gen-Sheng Feng (gfeng@ucsd.edu, 858-822-5441)

LECTURES: MWF; 2:00 - 2:50 pm, CENTR119

OFFICE HOURS: MWF: 3:00 – 4:00 pm, Room 1132, Biomedical Research Facility 2 (BRF2)

COURSE WEBPAGE:

<https://tritoned.ucsd.edu/webapps/login/>

TEXTBOOK:

Lehninger's **PRINCIPLES OF BIOCHEMISTRY** by Nelson and Cox, fifth or sixth edition

ADMINISTRATIVE QUESTIONS:

Please contact Biology Undergraduate Student Affairs Office, Pacific Hall, Room 1129 for adding/dropping a class, etc.

UCSD POLICY ON ACADEMIC INTEGRITY:

All academic work will be done by the student to whom it is assigned without unauthorized aid of any kind.

EXAMS:

There will be two Mid-term and one Final Exams.

Each of the Mid-term is worth 25%, and the final worth 50% of the grade. Both scores will be included in the calculation of the final grade, and there is no extra credit.

All three exams will be based on lectures and assigned readings only.

The exams are closed book. Calculator, cell phone, camera, or any other electronic devices that are capable of storing information are not allowed to use during the exams.

Backpacks should be left in front of the classroom during the exam.

Mid-term will be 50 minutes long and the Final will be 3 hours long.

There will be no make-ups for the Midterm. If you do not take the midterm, you will be assigned a zero unless you provide valid documents for medical or family emergency to the Instructor.

No one may take the Final Exam early. The grades will be curved.

The midterm will consist of short answer questions, true/false, and other types of questions.

The Final exam will be comprehensive and covers every lecture.

BIBC102, WI16, COURSE SCHEDULE:

Date	Lecture	Topic	Chapter
Jan 4	1	Introduction	1-2
Jan 6	2	Overview of Biomolecules	3, 7, 8, 10
Jan 8	3	Enzymes: Kinetics and Mechanism	6
Jan 11	4	Enzymes: Kinetics and Mechanism	6
Jan 13	5	Bioenergetics	13
Jan 15	6	Glycolysis	14
Jan 18	No class	MLK Jr. Holiday	
Jan 20	7	Glycolysis	14
Jan 22	8	Citric Acid Cycle	16
Jan 25	9	Citric Acid Cycle	16
Jan 27	Midterm 1	2:00 – 2:50p	
Jan 29	10	Oxidative Phosphorylation	19
Feb 1	11	Oxidative Phosphorylation	19
Feb 3	12	The Pentose Pathway	14
Feb 5	13	Gluconeogenesis, Glycogen	14, 15
Feb 8	14	Regulation of Glucose Metabolism	15
Feb 10	15	Photosynthesis	19
Feb 12	16	Lipid Degradation	17
Feb 15	No class	President's Day	
Feb 17	17	Lipid Degradation	17
Feb 19	Midterm 2	2:00 – 2:50p	
Feb 22	18	Lipid Synthesis	21
Feb 24	19	Lipid Synthesis	21
Feb 26	20	Amino Acid Oxidation & Urea Cycle	18
Feb 29	21	Amino Acid Oxidation & Urea Cycle	18
Mar 2	22	Amino Acid Synthesis	22
Mar 4	23	Amino Acid Synthesis	22
Mar 7	24	Nucleotides and Others	22
Mar 9	25	Integration of Metabolic Pathways	23
Mar 11	Review	Comprehensive review	
Mar 14	Final	3:00p - 5:59p	