

## BIBC102, METABOLIC BIOCHEMISTRY

Winter, 2024

**INSTRUCTOR:** Gen-Sheng Feng (858-822-5441; [gfeng@health.ucsd.edu](mailto:gfeng@health.ucsd.edu))

**LECTURES:** MWF; 2:00 - 2:50 pm

**OFFICE HOURS:** MWF: 3:00 – 4:00 pm, BRF2 bldg, Room 1132

**COURSE WEBPAGE:**

<https://canvas.ucsd.edu/courses/51937>

**TEXTBOOK:**

Lehninger's **PRINCIPLES OF BIOCHEMISTRY** by Nelson and Cox, 5<sup>th</sup> - 7<sup>th</sup> editions

**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.

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

**There will be no make-ups for the Mid-term.** If you do not take the mid-term, 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 Final exam will be comprehensive and covers every lecture.

**BIBC102, WI24, COURSE SCHEDULE:**

<b>Date</b>	<b>Lecture</b>	<b>Topic</b>	<b>Chapter</b>
Jan 8	1	Introduction	1-2
Jan 10	2	Overview of Biomolecules	3, 7, 8, 10
Jan 12	3	Enzymes: Kinetics and Mechanism	6
<b>Jan 15</b>	<b>No class</b>	<b>Martin Luther King Day</b>	
Jan 17	4	Enzymes: Kinetics and Mechanism	6
Jan 19	5	Bioenergetics	13
Jan 22	6	Glycolysis	14
Jan 24	7	Glycolysis	14
Jan 26	8	Citric Acid Cycle	16
Jan 29	9	Citric Acid Cycle	16
<b>Jan 31</b>	<b>Midterm 1</b>	<b>2:00 – 2:50p</b>	
Feb 2	10	Oxidative Phosphorylation	19
Feb 5	11	Oxidative Phosphorylation	19
Feb 7	12	The Pentose Pathway	14
Feb 9	13	Gluconeogenesis, Glycogen	14, 15
Feb 12	14	Regulation of Glucose Metabolism	15
Feb 14	15	Photosynthesis	19
Feb 16	16	Lipid Degradation	17
<b>Feb 19</b>	<b>No class</b>	<b>President's Day</b>	
Feb 21	17	Lipid Degradation	17
<b>Feb 23</b>	<b>Midterm 2</b>	<b>2:00 – 2:50p</b>	
Feb 26	18	Lipid Synthesis	21
Feb 28	19	Lipid Synthesis	21
Mar 1	20	Amino Acid Oxidation & Urea Cycle	18
Mar 4	21	Amino Acid Oxidation & Urea Cycle	18
Mar 6	22	Amino Acid Synthesis	22
Mar 8	23	Amino Acid Synthesis	22
Mar 11	24	Nucleotides and Others	22
Mar 13	25	Integration of Metabolic Pathways	23
<b>Mar 15</b>	<b>Review</b>	<b>Comprehensive Review</b>	
<b>Mar 18</b>	<b>Final</b>	<b>3:00 - 5:59p</b>	