

3070 Biochemistry

Edward B. Walker

Professor of Chemistry

Contact Information

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Office Hours: M, W, F 8:30-9:00am (LL011), M, W, F 10:40-11:30pm (TY255P) (or by Appt.)

Course Objectives

Students enrolled in Biochemistry will

1. Apply their existing knowledge of organic and inorganic chemistry to the study of living systems.
2. Gain knowledge of the structure and function of proteins, carbohydrates, lipids, and nucleic acids.
3. Understand complex functions of proteins and enzymes through mathematical modeling.
4. Learn the chemistry of metabolic pathways in cells that produce and store energy through redox and chemiosmotic processes.
5. Enhance their skills for experimental design by studying important historical discoveries in biochemistry and the scientists who made them.
6. Appreciate the commercial importance of biochemicals.
7. Acquire working knowledge of techniques used to study biochemicals in the laboratory.

Textbook

Biochemistry, 9th edition, Berg, Tymoczko, Gatto, Stryer; e-text with Sapling & iClicker: ISBN1319309593, adding printed textbook to this package: ISBN 1319274552

Lecture Notes: <http://faculty.weber.edu/ewalker> - (Power Point slides)

Homework and In-class Assignments: *WSU Canvas System and Achieve*

Grading

Description	Points	%	All assignments and labs will be submitted electronically through WSU's Canvas teaching support system.
First Hour Exam	100	21%	
Second Hour Exam	100	21%	
Third Hour (Final) Exam	100	21%	
Textbook Problems	100	21%	Hand-written assignments must be scanned and submitted electronically as <i>easily-readable images</i> in .pdf or .doc/.docx format.
In-class / Extra Assignments	75	16%	
Total:	475	100%	

Smart phone apps such as (<https://www.camscanner.com/>) are acceptable if the images are of high quality. Combine multiple pages into a single file. Work must be submitted by the deadline as listed on Canvas to receive full credit.

Submissions up to one week following the deadline will be marked off 10% per day.

NO ASSIGNMENTS WILL BE ACCEPTED MORE THAN ONE WEEK AFTER THE DEADLINE.

The following scale will be used to calculate grades, based upon a percentage of total points accumulated as indicated above. There will be no other options available for accumulation of points. Percentages will be rounded to the nearest whole point. At the discretion of the instructor, lower point totals may be used for certain grades. All students in the top 10% of the class will receive at least an "A." There is no limit to the number of "A" grades. All students in this section may earn an "A" grade this semester.

A	94-100	B+	87-89	C+	77-79	D+	67-69	E	<60
A-	90-93	B	83-86	C	73-76	D	63-66		
		B-	80-82	C-	70-72	D-	60-62		

In accordance with university policy, recording of lectures is not allowed, unless specifically authorized by Dr. Walker.

HOMEWORK AND SPONTANEOUS ASSIGNMENTS:

Two types of assignments will be given this semester, both of which utilize the WSU Canvas system:

1. "Achieve" is an online learning system coupled to our textbook that will provide you with enhanced pedagogical tools, helpful tutoring for homework problems, videos, and guided learning "curves" that will guide you through your studies. Completed activities in Sapling will automatically record in Canvas.
2. "Spontaneous Assignments" will be given during lectures. These activities enhance participation in lecture and provide me feedback on learning outcomes. Written responses to these assignments will be submitted directly into Canvas as electronic images (e.g., "pdf" pictures generated by <https://www.camscanner.com/> or similar pdf generating app.)

Work must be submitted by the deadline as listed on Canvas to receive full credit.

Submissions up to one week following the deadline will be marked off 50%.

NO ASSIGNMENTS WILL BE ACCEPTED MORE THAN ONE WEEK AFTER THE DEADLINE.

Participation in our virtual lecture is highly recommended, since some questions on exams will be based on lecture material not found in the text. Extra assignments will also be given during lecture, often spontaneously and will be due during the same lecture period or the following day. *No make-ups or late extra assignments will be allowed.*

EXAMS:

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This semester, we will have THREE exams: Two mid-term exams and a final exam. The first two exams will be given in the Tracy Hall Testing Center. The final exam will be in our lecture room, LL123, during our assigned final exam time. Be sure to put these dates on your calendar and arrange to take the exams on the dates given in our course schedule. It is important that we all take the exams together at the same time.

OFFICE HOURS:

Scheduled office hours include a half-hour immediately following our lecture in LL011 for a while after lecture and later at my office (TY255P). You will also have opportunities to chat with me during weekly labs (if you are taking lab) or by making an appointment.

3075 LABORATORY:

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Chem 3075 is a separate course that meets once each week for three hours. These labs are located in Tracy Hall room 373-374 (3rd floor, west end of north tower). These fun, exploratory activities will allow you to learn hands-on techniques of conducting biochemical experiments.