
University of Wisconsin-Eau Claire

Chem 352: Fundamentals of Biochemistry

Spring 2018 - Course Syllabus

Chem 352 is a 4 credit, one semester biochemistry course for science majors. This course is not intended for Biochemistry/Molecular Biology or Chemistry with Biochemistry Emphasis majors, who should instead take the Chem 452/454 sequence. The prerequisite/corequisite for this course is Chem 326 (Organic II). The course will focus on the fundamental chemical, structural, and functional properties of biological molecules. We will look at how metabolic pathways are used to degrade and synthesize these molecules. The goals for this semester are intended to develop an understanding and appreciation for biological systems at the molecular level and include:

- Be able to apply your knowledge of general and organic chemistry to predict the chemical and physical properties of biological molecules from their elemental compositions and structures.
- Develop an understanding of how the structures and behaviors of biological molecules are related to their functions.
- Develop an understanding of how biological molecules interact with one another to produce complex, self-regulating systems, and how energy is obtained and utilized to drive and sustain these systems.

Lecture:	Sect. 001	9:00 – 9:50 AM, Mon., Tue., Wed., & Fri.	Centennial 1920
Instructor:	Warren Gallagher	Phillips Hall 437 (715) 836-5388	wgallagh@uwec.edu
	Office hours	10:00 AM – 12:00 PM, Tue. You are welcome to stop by my door at other times, or call or email me ahead of time to make an appointment.	

Course Materials:

Textbook	<i>Principles of Biochemistry, 5th Edition</i> ; Moran, Horton, Scrimgeour, and Perry; Pearson, 2012 (Available through textbook rental)
CourseWebsite	Point your browser to www.chem.uwec.edu/Chem352_S18 . Among other things, you will find copies of the syllabus, problem assignments, answer keys, old exams and quizzes, lecture overheads, interactive molecular models, animations, and even some neat posters that you can download to hang over your bed.
i>Clicker	We will be using the i>Clicker Reef response system to respond to questions in class. This system will allow you respond to questions using either a dedicated i>Clicker remote, which you can purchase at the bookstore, or in the alternative, a smartphone, tablet or laptop. If you choose the second option, you will, however, need to purchase a i>Clicker subscription. Past experience indicates that using an i>Clicker remote is the more reliable of these options. Regardless of which option you choose, you will need to have an i>Clicker Reef account.

- If you plan to use a smartphone, [click here](#) to go to and sign in on the i>Clicker site, download the i>Clicker Reef app, purchase a subscription to i>Clicker Reef (\$14.99 for 6 months), and connect to our class.
- If you plan to use an i>Clicker remote, [click here](#) to log onto the i>Clicker site, register your remote, and connect to our class. Again, you do not need to purchase a subscription for this option.

When creating your account, please use your uwec.edu email address along with your UWEC login as your Student ID. If you want more information, [click here](#) to download a Quickstart guide for i>Clicker Reef.

Attendance Policy:

Attendance will be taken. Excessive absences will be considered when determining your course grade. Please email me (wgallagh@uwec.edu) or leave a message on my answering machine (836-5388) if you plan to have an extended absence. In the event of an absence, you are responsible for all materials covered, and for all announcements and assignments made.

- Missing an exam due to participation in a university sanctioned athletic event, or an approved field trip for another course, will be considered an excused absence. If illness or other mitigating circumstance should cause you to miss an exam or quiz, you should contact me, preferably prior to the scheduled exam or quiz, to petition for an excused absence. In the case of excused absences, arrangements will be made to make up missed exams and quizzes.

Students with Disabilities:

Any student who has a disability that requires classroom accommodations should contact both the instructor and the Services for Students with Disabilities Office, located in Centennial Hall 2106 (836-5800).

Academic Integrity:

It is important to realize that the official university policy on academic integrity will be strictly followed in this class: “Any academic misconduct in this course is a serious offense, and the strongest possible academic penalties for such behavior will be pursued. The disciplinary procedures and penalties for academic misconduct are described in the UW-Eau Claire [Blugold Code](#) (Go to Chapter UWS 14 – Student Academic Misconduct.”) Actions that will be considered as academic misconduct in this class include:

- Seeking to claim credit for the work or efforts of another without authorization or citation;
- Using unauthorized material or fabricated data in any academic exercise;
- Forging or falsifying academic documents or records;
- Intentionally impeding or damaging the academic work of others;
- Engaging in conduct aimed at making false representation of a student’s academic performance;
- Assisting other students in any of the acts listed above.

Grading:

	Points
• 3 in-class exams at 100 points each (see Schedule for dates)	300
• 4 in-class quizzes or hand-in assignments at 25 points	100
• Final Exam (comprehensive)	100
Total	500

Letter grades will be assigned on a percentage basis:

90 – 100%	A
80 – 89%	B
70 – 79%	C
60 – 69%	D
< 60%	F

- Up to 2 bonus percentage points can be earned based on your i>Clicker responses during the semester. These points will be added to your final semester grade percentage. Each i>Clicker question will be scored 50% for a response and 100% for a correct response. I will drop your 5 lowest days so that you will not be penalized for occasionally forgetting your i>Clicker, showing up with dead batteries, or skipping class so that you can run home to help celebrate your mom's birthday.
- +/- grades will be assigned at the end of the semester in borderline situations and will be based on criteria that include attendance, consistency, class participation and the overall perceived effort put into the class.

Advice for Success:

There is more material to cover this semester than can be covered in lecture, therefore, you should expect to be responsible for the materials found in the reading assignments, whether they are covered explicitly in class or not. In lecture we will review and discuss the material found in reading assignments and will discuss and work problems. You will benefit most from these activities if you read through the material to be covered before coming to class so that you can direct the discussion towards those areas you are most confused about. Problems will be assigned, but in general, will not be collected. The solutions to the end-of-chapter problems can be found in the back of your textbook. The reading and problem assignments for each lecture will be posted on the class website.