Chemistry 260 Syllabus Spring 2022

Professor: Dr. Jim Lawrence

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Office Hours: Monday 1:00-2:00, Wednesday 10:00-11:00, Friday 10:00-11:00

I will try as best I can to be in my office for these hours, however, sometimes things come up and I will be unavailable. However, you are free to come anytime to my office and chat. I enjoy these conversations,

please do stop by anytime.

Times:

Lecture MWF 12:00-12:50 Room: CBB 261

Lab #01L1 Thurs 11:00-1:50 Room: CBB 323 Lab #01L2 Wed 2:00-4:50 Room: CBB 323

Required Material:

Textbook Charlotte Pratt and Kathleen Cornely: *Essential Biochemistry*, Third edition, Available at text rental.

Calculator: A scientific calculator with scientific notation will be virtually indispensable for this course.

Course Description:

CHEM 260. Elementary Biochemistry. 4 cr. Introduction to the structure and cellular reactions of the primary constituents of living cells; for students with limited preparation in organic chemistry. 3 hrs lec, 3 hrs lab per wk. Does not count toward chemistry major. Prereq: 220; or 326

Attendance:

Attendance may or may not be taken periodically and extended absences will be reported to the Dean of Students. Attendance, in itself, will have no direct effect on your grade, but it is almost guaranteed that you cannot perform adequately in the class if you do not attend lectures. You, the student needs to take an active role in your education. That is impossible to do unless you routinely attend all lecture and lab sessions. Students are responsible for all missed material. It is allowable and encouraged to get class notes from other classmates if you miss a lecture. There will be no make up possibilities for labs. Due to COVID-19 circumstances, all lectures will be video or audio recorded and available to all students via Canvas.

Class Notes

I will not be making my class notes available to students. All lecture overheads will also be available on Canvas.

Face Coverings:

- At all UW-Stevens Point campus locations, the wearing of face coverings is
 mandatory in all buildings, including classrooms, laboratories, studios, and other
 instructional spaces. Any student with a condition that impacts their use of a face
 covering should contact the <u>Disability and Assistive Technology Center</u> to discuss
 accommodations in classes. Please note that unless everyone is wearing a face
 covering, in-person classes cannot take place. This is university policy and not up to
 the discretion of individual instructors. Failure to adhere to this requirement could
 result in formal withdrawal from the course.
 Other Guidance:
- Please monitor your own health each day using this screening tool. If you are not feeling well or believe you have been exposed to COVID-19, do not come to class; email your instructor and contact Student Health Service (715-346-4646).
- As with any type of absence, students are expected to communicate their need to be absent and complete the course requirements as outlined in the syllabus.
- Maintain a minimum of 6 feet of physical distance from others whenever possible.
- Do not congregate in groups before or after class; stagger your arrival and departure from the classroom, lab, or meeting room.
- Wash your hands or use appropriate hand sanitizer regularly and avoid touching your face.
- Please maintain these same healthy practices outside the classroom.

Academic Morality

Your career as a student is closely linked to your participation. Simply put, the more you put into your studies, the more you will get out of your education. This is as true for school as it is for life. However, in spite of this, some students feel the need to resort to cheating, plagiarism and other academic misconduct. I will do everything I possibly can to prevent this type of behavior. I reserve the right to assign seats, video tape and/or photograph test sessions. I am also likely to use multiple test versions to ensure academic honesty. There will be absolutely no cell phones, cameras or other electronic devices, except for calculators, allowed in any test sessions.

Below is the UWSP Academic Misconduct policy

UWSP 14.03 ACADEMIC MISCONDUCT SUBJECT TO DISCIPLINARY ACTION.

Academic misconduct is an act in which a student:

- 1. Seeks to claim credit for the work or efforts of another without authorization or citation:
- 2. Uses unauthorized materials or fabricated data in any academic exercise;
- 3. Forges or falsifies academic documents or records;
- 4. Intentionally impedes or damages the academic work of others;
- 5. Engages in conduct aimed at making false representation of a student's academic performance; or

- 6. Assists other students in any of these acts.
- Examples of academic misconduct include, but are not limited to: cheating on an examination; collaborating with others in work to be presented, contrary to the stated rules of the course; submitting a paper or assignment as one's own work when a part or all of the paper or assignment is the work of another; submitting a paper or assignment that contains ideas or research of others without appropriately identifying the sources of those ideas; stealing examinations or course materials; submitting, if contrary to the rules of a course, work previously presented in another course; tampering with the laboratory experiment or computer program of another student; knowingly and intentionally assisting another student in any of the above, including assistance in an arrangement whereby any work, classroom performance, examination or other activity is submitted or performed by a person other than the student under whose name the work is submitted or performed.

The penalty for any academic misconduct is an F for the course grade.

Lecture schedule

Week	Material Covered		
	Mon	Wed	Fri
January 24	Chapter 1	Chapter 2	Chapter 2
January 31	Chapter 2 & 4	Chapter 4	Chapter 4
February 7	Chapter 4	Chapter 5	Chapter 6
February 14	Chapter 7	Chapter 7	Chapter 7
February 21	Chapter 8	Exam # 1	Chapter 8
February 28	Chapter 9	Chapter 11	Chapter 11
March 7	Chapter 11	Chapter 3	Chapter 3
March 14	Chapter 3	Chapter 3	Chapter 20
March 21	Spring Break	Spring Break	Spring Break ©
March 28	Chapter 20	Chapter 20 & 21	Chapter 22
April 4	Chapter 22	Chapter 12	Exam # 2
April 11	Chapter 12	Chapter 13	Chapter 13
April 18	Chapter 14	Chapter 14	Chapter 15
April 25	Chapter 15	Chapter 15 & 17	Chapter 17
May 2	Chapter 17	Chapter 19	Chapter 19
May 9	Chapter 10	Exam # 3	Chapter 10

Final Exam Schedule - Cumulative, May 17th, 12:30 – 2:30 CBB 261

We will cover a large amount of material in this class. As a result we will have to work quickly. The actual pace of the lectures may deviate from this schedule depending on several factors. It is my goal to move quickly, yet at a pace that allows everyone to grasp the material and not be constantly overwhelmed. I may have to slow down at some points throughout the semester to more thoroughly cover some material. In the event that we have to slow down, we may not cover all of the chapters and topics listed in the schedule.

Some other important dates:

February 2 nd	Last day to drop a course without a W grade reported.
April 8 th	Last day to drop a course

Lab Schedule

Lab#	Week Of:	Description
	January 24	Check In
1	January 31	pH/Buffers/Dissociation of Weak Acid
2	February 7	Properties of Amino Acids
3	February 14	Modeling Lab
4	February 21	Properties of Proteins
5	February 28	Bradford Protein Concentration Assay
6	March 7	Protein Extraction
7	March 14	Protein Electrophoresis
	March 21	⊕ Spring Break ⊕
8	March 28	Enzyme Lab
	April 4	National No Elementary Biochemistry Lab Week
9	April 11	Isolation of DNA from wheat germ
10	April 18	Calcium Content in Milk and Dairy Products
11	April 25	Vitamin C content in Common Foods
12	May 2	MALDI-TOF Identification of Microorganisms
	May 9	Check Out

Grading Opportunities

- Exams = 100 Points each (100 X 3)
- Final = 200 Points
- Labs = 10 Points each (10 X 12 = 120 Points)
 - o 620 points total

I will not be grading on a curve. Grades will be given according to actual points earned divided by total possible points awarded during exams, problem sets and labs. I reserve the right to lower the percentages required to achieve each grade if class performance dictates such a correction. I will not raise the percentages under any circumstance.

A = 93% or greater $A^{-} = 90-93\%$ $B^{+} = 87-89\%$ B = 84-86% $B^{-} = 80-83\%$

 $C^+ = 77-79\%$ C = 74-76% $C^- = 70-73\%$

 $\mathbf{D}^+ = 67-69\%$ $\mathbf{D} = 60-66\%$

 $\mathbf{F} = \text{Below } 60\%$

Simple, Effective Ways to Increase Your Satisfaction and Success Throughout Your Academic Career.

1. Be comfortable socially with campus life.

- a. Do become active with the social aspects of UWSP
 - i. Live on campus, at least for a while
 - ii. Join a sports team, intramural team, organization or group on campus
 - iii. Make friends and spend time with them
 - iv. Form study groups
- b. People who don't get comfortable with their social surroundings seldom excel academically.

2. Show up for class every time

- a. This sounds easy, but, for most students, it is the most often broken rule to success. This is your life. You need to show up.
- b. There is no substitute for being present at lectures, labs or discussion sections.
- **c.** You can't succeed anywhere in life if you choose not to show up. You might as well get used to it now and start forming good work habits.

3. Read the textbook BEFORE lecture

- a. You can read the textbook the night before the exam, but it's going to largely waste your time
- b. If you read the text before the lecture instead of after, you will have a much deeper and clearer understanding of the material. Also, it won't sound like I am simply blithering on and on. You'll actually GET what I'm saying right away instead of having to some how sort it all out later by yourself
- **c.** Take notes on the text as you read. Note any material that is unclear to you and ask questions in class or come see me directly about it.

4. Talk to your professors

- a. Professors are not scary people. I am here to help you learn and will do just about anything to help you succeed.
- b. It is a fact that students who come to talk with their professors throughout the semester routinely out perform other students.

5. Do the work routinely

- a. The exams will be similar to the homework problems. If you regularly read and do home work assignments you are very likely to find yourself performing well on exams.
 - i. Athletes, musicians, etc. don't just show up for a performance and expect to excel. That would be ridiculous. Instead, they prepare daily, sometimes for months, just to be ready for the opportunity to perform once.
 - ii. If you train as a student like an athlete or musician does, working a bit every day, you will enable yourself to perform at the highest possible level on exam day.