Chemistry 365 Syllabus
Fall 2020

Professor: Dr. Jim Lawrence
Office: CBB 410 Fourth floor, west side office hallway
Phone: 346-3699
Email: jim.lawrence@uwsp.edu
Office Hours: Monday 3:00-4:00, Thursday 1:00-2:00, Friday 10:00-11:00
You will have to contact me to set up either a virtual meeting (Zoom) or an in person meeting. No students are allowed in my office area, therefor we will have to set up a meeting time and place.

Times:

Lecture	TThF 8:00-8:50	Room: DUC 370
Lab #1	Wed 8:00-10:50	Room: CBB 336
Lab #4	Tues 2:00-4:50	Room: CBB 336
Lab #2	Wed 2:00-4:50	Room: CBB 336

Required Material:
Textbook Nelson and Cox: *Lehninger: Principles of Biochemistry,* (WH Freeman) Available at text rental.
Calculator: A scientific calculator with scientific notation will be virtually indispensable for this course.

Course Description:
Chem 365/565. Biochemistry. 4 credits. Structure and function of principal biomolecules, biological thermodynamics, enzyme kinetics and modern biochemical techniques. Available for graduate credit as CHEM 565. 3 hrs lecture, 3 hrs lab per week. May not earn credit in both Chem 365 and Biochem 365.
Prereq: Chem 248 and Chem 326; accepted chemistry major/minor, biochemistry major, or consent of the Chemistry Chair.

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. For lecture, we are scheduled to meet in the DUC 370 which has a seating capacity of 28 students. We have more students than 28 enrolled in our class. There will be assigned days for each student to attend class in person. All classes will be recorded via either audio or video and available either live or recorded on

Canvas. For lab session, we have capacity for each section in CBB 336. Therefore we will have in person labs while students are still on campus.

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 Disability and Assistive Technology Center 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.

Class Notes

I will be making my class notes available to students. All notes, overheads and other material will be available on Canvas.

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 academlc 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.

Tentative lecture schedule:

Week of:	Material Covered		
	Tuesday	**Thursday**	**Friday**
Aug 31		Introduction	Chapter 1
Sept 7	Chapter 1 & 2	Chapter 2	Chapter 2
Sept 14	Chapter 2 & 13	Chapter 13	Chapter 13
Sept 21	Chapter 3	**Exam # 1**	Chapter 3
Sept 28	Chapter 3	Chapter 3	Chapter 4
Oct 5	Chapter 4	Chapter 4	Chapter 4
Oct 12	Chapter 4	Chapter 5	Chapter 5
Oct 19	Chapter 5	**Exam # 2**	Chapter 6
Oct 26	Chapter 6	Chapter 6	Protein Techniques
Nov 2	Protein Techniques	Protein Techniques	Chapter 7
Nov 9	Chapter 7	Chapter 7	Chapter 7
Nov 16	Chapter 8	Chapter 8	Chapter 8
Nov 23	**Exam # 3**	☺ **No Class** ☺	☺ **No Class** ☺
Nov 30	Chapter 10	Chapter 10	Chapter 10
Dec 7	Chapter 11	Chapter 11	Chapter 11

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:

Sept. 14th	Last day to drop a course without a W grade reported.
Nov. 6th	Last day to drop a course

Test Schedule

- Exam #1 = Thurs/Fri, September 24/25, (Chapters 1, 2 and 13)
- Exam #2 = Thurs/Fri, October 22/23, (Chapters 3, 4 and 5)
- Exam #3 = Tuesday, November 24, (Chapters 6, Protein Techniques, 7 and 8)
- Final Exam = Wednesday, December 16 12:30 – 2:30 (Chapters 10 and 11)

Lab Schedule

Lab #	Day	Description
	Aug 31	No Lab
1	Sept 7	Check In and Problem Set Review
2	Sept 14	Preparation and analysis of a multi-component solution
3	Sept 21	Effect of temperature on the pKa of the α-amino group of glycine.
4	Sept 28	Bradford Protein Concentration Assay
5	Oct 5	Comparison of Invertase Activity from two different yeasts.
6	Oct 12	Precipitation of Invertase activity
7	Oct 19	Isolation of Invertase by chromatography
8	Oct 26	Specific Activity measurements of Invertase fractions
9	Nov 2	SDS-PAGE Analysis of Invertase fractions
10	Nov 9	Kinetic parameters of tyrosinase activity
11	Nov 16	Organophosphate Quantitation
	Nov 23	No Lab
	Nov 30	No Lab
	Dec 7	No Lab

Grading Opportunities

- Exams = 150 Points each (150 X 3)
- Final = 150 Points
- Labs = 15 Points each (15 X 10 = 150 Points)
    - 750 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 on exams 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. In no case will the adjustment result in requiring more than the below point totals for any grade. It is EXTREMELY unlikely that there will be any extra credit, individual or group, awarded in this class.

A = 93% or greater **A**$^{-}$ = 90-92%
B^{+} = 88-89% **B** = 83-87% **B**$^{-}$ = 80-82%
C^{+} = 78-79% **C** = 73-77% **C**$^{-}$ = 70-72%
D^{+} = 68-69% **D** = 60-67%
F = 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 very 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.