

3075 Biochemistry Lab

Laboratory Instructors

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Course Objectives

Students enrolled in Biochemistry Laboratory 3075 will

1. Acquire working knowledge of techniques used to study biochemicals in the laboratory.
2. Learn important skills utilized in biochemistry experiments.
3. Gain knowledge of the structure and function of proteins, carbohydrates, lipids, and nucleic acids.
4. Develop a better understanding of complex functions of enzymes through experimentation and mathematical modeling.
5. Enhance skills for experimental design.
6. Appreciate the commercial importance of selected biochemicals.

Textbook

All our laboratory activities were developed by WSU chemistry faculty and are supplied free online through Canvas; Students do not need to purchase a textbook for this course.

Grading

Description	Points/ea:	Totals:	
Lab Activities:			All reports will be submitted electronically through WSU's Canvas teaching support system.
12 Pre-lab Quizzes	5	60	
12 Experiment Reports	20	240	Hand-written assignments must be scanned and submitted electronically as <i>NEAT, easily readable images</i> in .pdf format.
Total:		300	
<i>Extra for Neat Reports</i>	1	11	

Many students go paperless, using their tablets or laptops in lab. Others write on paper and submit an electronic copy of their paperwork. Either type of submission is acceptable. However, only high-quality, easily-readable images in "pdf" format will be accepted. To emphasize this, two extra points will be given this semester for each readable, well-formatted, clean, neat lab report. Images captured by smart phone apps such as (<https://www.camscanner.com/>) are acceptable if the pdf images are of high quality. Combine multiple pages into a single file; multiple page submissions in multiple files will not be graded. Pages must be ordered and aligned properly with diagrams positioned in their proper locations. Work must be submitted by the deadline as listed on Canvas to receive full credit.

Important Note: It is strongly recommended that students double-check each submission by viewing it in Canvas. (Frequent submissions do NOT necessarily show up in Canvas, even when a message states it was submitted!) If you can't read your submission in Canvas, neither can the person grading it...)

You have 3 days to turn in a lab report after the due date. However all late submissions will be marked-off 50% of the total possible points.

NO ASSIGNMENTS WILL BE ACCEPTED AFTER THE FINAL DEADLINE.

Participation in lab is important. Lab reports with the instructor's signature will be worth half credit for participation. Full credit will be based upon completeness and correctness of the lab report. Each student must attend lab 83% (10/12) of the scheduled labs to earn a passing grade. 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		

Lab Safety:

Our beautiful new labs in Tracy Hall were designed with significant space between workstations, which allows for significant social distancing. We always wear personal protection clothing in the lab. This includes safety glasses/goggles. Due to the COVID pandemic, you should wear a FACE MASK throughout the lab but this is not mandatory. **Do not come to lab if you are sick - we will ask you to go home.**

Policy for missing labs:

1. First lab missed; if you have a valid reason for missing a lab, we will provide data or allow you to use your partner's data to complete the lab - BUT you must petition for this accommodation through a Canvas email message to both lab instructors. You may not copy your partner's work without written permission. Authorization can be granted from either lab instructor. You will receive an "Excused" for the prelab quiz.

2. Second lab missed; if you have a valid reason for missing a second lab, you will be given an "Excused" for the missing lab and prelab quiz. Excused labs are graded by reducing your total possible score to 275 instead of 300 for the semester. YOU MUST turn-in your lab report ON TIME with the words "Excused" written on the cover page. If your submission is late, it will be graded according to the late policy described above. Moreover, you must petition for this accommodation through a Canvas email message to both lab instructors. Authorization can be granted from either lab instructor. You will receive an "Excused" for the prelab quiz.

YOU ARE RESPONSIBLE TO BRING YOUR OWN SAFETY GLASSES!

Please Note: safety rules will be strictly enforced. As per WSU department guidelines, no one will be allowed in lab without wearing safety glasses.

It also important to wear clothing in lab that adds extra protection. Students must wear long pants without large holes and closed-toe shoes. Long hair (over the shoulder length) must be drawn back (e.g. braids, ponytail, bun) such that it does not hang down over the lab bench. Students should also avoid wearing bulky, oversized sleeves that might drag across the lab bench or clothing items that hang down such as a scarf or a necktie, must be removed before starting lab.

Each student will be required to follow all safety guidelines as described on the first day of class in accordance with the signed safety document.

When needed in the lab, the chemistry department will supply disposable gloves. We also anticipate having alcohol hand sanitizer available for you as you enter and leave the lab.

Labs should be a fun experience where you can discover science in a safe, hands-on environment. By following these rules and the instructions of your instructor, our labs this semester should be an enjoyable and memorable experience.

All balances and common areas must be kept clean. If you spill something – clean it up! If you are unsure of how to clean the spill, please ask your instructor. Any violation of this policy may result in loss of prelab points for the day. We expect you to show respect and be good citizens in the lab.