

BIOCHEMISTRY-PROTEINS
CHEM 3811-1
FALL 2021

Instructor: Dr. Martin Margittai
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Text: Lehninger Principles of Biochemistry, Eighth Edition, Nelson and Cox, Freeman and Company, 2021

Lectures: 9:00-9:50 am, MWF, Olin Hall 205

Office Hours: Tuesdays and Thursdays 2:00-3:00 pm via zoom, or by appointment.

Homework: Homework will be given out occasionally. These assignments will not be graded. However, it is highly recommended to work through the problems as similar ones may appear in the exams.

Exams: There are two 1-hour midterm exams during the quarter, plus a 2-hour cumulative final exam. Each exam is worth 100 points. Exam questions will be non-multiple choice.

If you miss a 1-hour midterm exam, then your final exam will be counted twice and replace the missed midterm exam. **THERE WILL BE NO MAKEUP EXAMS.** The only exceptions to the no-makeup policy will be for members of a university team or group, e.g. athletic team or music group scheduled to be away from campus at the time of the exam or individuals with documented COVID-related excuses. You must inform your instructor of this prior to the exam and make arrangements at that time for a makeup exam.

Quizzes: There will be 7 quizzes. Each quiz will cover the material of the preceding week and be worth 20 points.

Group assignments: There will be 3 in-class group assignments. These assignments are worth 20 points each.

Grading:	midterm exams	200 points
	final exam	100 points
	quizzes	140 points
	group assignments	60 points

Lecture and Testing Accommodations: If you have a disability/medical issue protected under the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act and need to request accommodations, please make an appointment with the Disability Services Program (DSP); 303.871.2372/ 2278/ 7432; located on the 4th floor of Ruffatto Hall; 1999 E. Evans Ave. Information is also available online at <https://www.du.edu/studentlife/disability-services/index.html>
See the Handbook for Students with Disabilities.

Any student who feels they may need an accommodation based on the impact of a disability should contact me privately to discuss your specific needs. Please contact the Disability Services Program.

If you qualify for academic accommodations because of a disability or medical issue please submit a Faculty Letter to me from Disability Services Program (DSP) in a timely manner so that your needs may be addressed.

Religious Accommodation Policy: As part of its commitment to diversity and Inclusive Excellence, the University provides reasonable accommodations for students' sincerely held religious beliefs or practices unless the University determines that such an accommodation would fundamentally alter the curriculum or academic program. Students are expected to examine the course syllabus for potential conflicts with religious beliefs or practices and submit the Religious Accommodation Request webform to seek accommodation. Students who have conflicts with the overall class or experience schedule, such as the time and date the class is offered, are encouraged to find an alternative section for the class. For full details, including request process, visit the [Religious and Spiritual Life web page](#).

Honor Code/Academic Integrity: All work submitted in this course must be your own and produced exclusively for this course. For the consequences of violating the Academic Misconduct policy, refer to the University of Denver website on the Honor Code (www.du.edu/honorcode). See also <http://www.du.edu/studentconduct> for general information about conduct expectations from the Office of Student Conduct.

COVID-RELATED POLICIES

Class Attendance: It is the expectation that you attend class in person as required unless you have made alternative arrangements with me prior to the start of class due to illness, medical reasons, or the need to isolate or quarantine due to COVID-19. As in any in-person course, attendance and participation are crucial for a complete understanding of course material. In choosing to attend the University of Denver, you've chosen to join a larger Community of Care, which means you've chosen specific responsibilities—including in this class. By enrolling in the University of Denver and in this course, you have agreed:

- Not to attend class when you're sick.
- Not to attend class when you've been exposed to people who have or may have COVID-19.
- To follow the university's masking policy.

When the University places you in isolation or quarantine, you will receive documentation within your MyHealth record to provide to instructors regarding the duration of your quarantine or isolation and when and under what conditions you may return to in-person activities. It is your responsibility to provide this documentation to me. If you receive a positive COVID-19 test off-campus or are notified by a public health authority about the need to quarantine, you must provide this notification at reportCOVID@du.edu or by calling 303-871-COVD. The University will then place you in isolation and quarantine pursuant to University protocols.

Accessing Course Materials and Contingency Plans: This course has been designed to transition to entirely online, should the need arise due to tightening local, state, or federal guidelines or campus closure. To that end, Canvas will be utilized to support this course. It is recommended that you familiarize yourself with the Canvas container for this course as soon as the term begins. If you are self-quarantining/isolating, you can access all in-person materials on Canvas.

General Masking: University of Denver continues to use an alert level system from clear (low risk, high vaccination) to purple (severe risk). [See here](#) for details. At certain levels, mask requirements vary depending on your vaccination status. As we begin the fall term with level green, the following guidelines are in place based on vaccination status.

Unvaccinated Individuals

In level green, people without verified full vaccination must wear face coverings at all times except in private offices or residential rooms or while actively eating or drinking.

Vaccinated Individuals

Face coverings also are required for fully vaccinated individuals indoors for all classes and all in-person meetings/events with 5 or more people, except while actively speaking/performing at six feet or more distance from others or while actively eating or drinking.

Should the university transition to level “clear”, campus policy states, “all DU personnel and students without verified full vaccination records must wear face coverings/masks at all times while indoors. Anyone may choose to wear a face-covering/mask at any time for any reason. While individuals with specific health risks or vulnerabilities may ask coworkers or classmates to wear a mask, because the University policy does not require individuals who are fully vaccinated to wear face coverings/masks, this cannot be required.”

Contact Tracing: To assist in contact tracing efforts, DU faculty have been asked to keep track of close contacts (6 ft or closer) in classrooms of 20 or more students. Please help me by committing to sit in the same place each class day, learning the names of your close-by peers, and self-identifying your seat choice on the document provided.

No Eating in Class: To assist in COVID mitigation, students are not permitted to eat during classes, except where a student has an approved accommodation through the Disability Support Program (DSP). Please plan accordingly.

Dates	Topics Covered	Reading Chapters
09/13/21	Biochemistry Foundations 1	1
09/15/21	Biochemistry Foundations 2	1
09/17/21	Water: Weak Interactions and Solvation	2
09/20/21	Water: Weak Acids and Bases Quiz	2
09/22/21	Water: Buffers and Hydrolysis	2
09/24/21	Amino Acids	3
09/27/21	Protein Primary Structure Quiz	3
09/29/21	Protein Purification	3
10/01/21	Protein Sequencing and Synthesis	3
10/04/21	Overview of Protein Structure Quiz	4
10/06/21	Secondary Structure 1	4
10/08/21	Secondary Structure 2 Group Assignment	4
10/08/21	Review Session 1. 3:00-4:00 pm via Zoom	
10/11/21	Exam 1	
10/13/21	Tertiary Structure	4
10/15/21	Tertiary Structure/ Quaternary Structure	4
10/18/21	Protein Denaturation and Folding Quiz	4
10/20/21	Assisted Protein Folding	4
10/22/21	Assisted Protein Folding and Degradation	4
10/25/21	Protein Dynamics, Misfolding, and Disease Quiz	5
10/27/21	Protein Function: Myoglobin	5
10/29/21	Protein Function: Hemoglobin, Asynchronous Zoom	5
11/01/21	Protein Function: Immune System Quiz	5
11/03/21	Protein Function: Actin, Myosin	
11/05/21	How Enzymes Work Group Assignment	6
11/05/21	Review Session 2. 3:00-4:00 pm via Zoom	
11/08/21	Exam 2	
11/10/21	Enzyme Kinetics 1	6
11/12/21	Enzyme Kinetics 2	6
11/15/21	Enzymatic Reactions 1 Quiz	6
11/17/21	Enzymatic Reactions 2	6
11/19/21	Regulatory Enzymes Group Assignment	6
11/19/21	Review Session 3. 3:00-4:00 pm via Zoom	
11/23/21	Final Exam (comprehensive), 8:00 am – 9:50 am, Olin Hall 205	