BIBC 100 FALL 2021 SYLLABUS

Class Time and Location: Tu/Th 12:30-1:50 PM; Peterson Hall, Room 110. Lectures will be prerecorded and posted in advance. Attendance in person for the scheduled class is NOT mandatory; during each scheduled class period, Dr. Huffaker will hold an in-person discussion and review in Peterson Hall.
Instructor: Dr. Alisa Huffaker
Email: ahuffaker@ucsd.edu
Website: https://canvas.ucsd.edu (click on BIBC100 FA21)

SCHEDULE

WEEK	LECTURES: Prerecorded and posted in advance; Dr. Huffaker will be in person during class time to review material	PROBLEM SET DUE	DISCUSSION SECTION	EXAMS
0	Th 09/23: Lecture 1.1 Life in aqueous systems	None	None	
1	Tu 09/28: Lecture 1.2 Amino acid & protein properties	Problem Set 1	Zoom	
	Th 09/30: Lecture 1.3 Protein Domains and structures			
2	Tu 10/05: Lecture 1.4 Protein folding and stability	Problem Set 2	In person	
	Th 10/07: Lecture 1.5 Chaperone-mediated folding			
3	Tu 10/12: Lecture 1.6 Structure of immune binding proteins	Problem Set 3	Zoom	
	Th 10/14: Lecture 2.1 Nucleic acid biochemistry & structure			
4	**Tu 10/19: MODULE 1 EXAM** (Lectures 1.1 - 1.6)		In person	**EXAM 1 Tu 10/19**
	Th 10/21: Lecture 2.2 Structure of DNA-binding proteins			
5	Tu 10/26: Lecture 2.3 Structure of oxygen-binding proteins	Problem Set 4	Zoom	
	Th 10/28: Lecture 2.4 Structural facilitation of enzyme activity			
6	Tu 11/02: Lecture 2.5 Structure of carbohydrates	Problem Set 5	In person	
	Tu 11/04: Lecture 2.6 Structure of membrane lipids			
7	Tu 11/09: Lecture 3.1 Structure of membrane proteins	Problem Set 6	Zoom	
	Th 11/11: VETERANS DAY OBSERVANCE (NO CLASS)			
8	**Tu 11/16: MODULE 2 EXAM** (Lectures 2.1 - 2.6)		In person	**EXAM 2 Tu 11/16**
	Th 11/18: Lecture 3.2 Structures of signalling pathways 1			
9	Tu 11/23: Lecture 3.3 Structures of signalling pathways 2	Problem Set 7	None	
	Th 11/25: THANKSGIVING HOLIDAY (NO CLASS)			
10	Tu 11/30: Lecture 3.4 Protein design and engineering	Problem Set 8	Zoom	
	Th 12/02: Lecture 3.5 CRISPR/Cas9 strcuture & engineering			
FINALS	**Friday 12/10 11:30 AM: MODULE 3 EXAM** (Lectures 3.1 - 3.5)		None	**EXAM 3 Fr 12/10**

TEXTBOOKS: Are optional. Exams will be based only on material covered in class & discussion sections. Most material is derived from: Lehninger Principles of Biochemistry (Nelson and Cox); Introduction to Protein Structure (Branden and Tooze).

COURSE FORMAT INFORMATION SPECIFIC TO FALL 2021

To promote accessibility for all students given that some are unable to attend in person, some may need to quarantine over the course of the quarter, and many are eager to attend in person, the class will be a hybrid of in-person and remote learning opportunities, with specific formats described below. In the case of IAs or Instructor needing to quarantine, classes will continue over Zoom during that period.

LECTURES: Lectures will be prerecorded and posted in advance as Zoom recordings to Canvas. In person attendance for class is NOT mandatory. Dr. Huffaker will be in person during the designated class time (Tu/Th 12:30-1:50) in Peterson Hall, room 110, to hold live office hours/lecture review sessions.

DISCUSSION SECTIONS: To promote discussion section accessibility for all, section meetings will alternate between Zoom and in-person formats as indicated in the class schedule at the top of the syllabus.

INSTRUCTIONAL ASSISTANTS AND DISCUSSION SESSIONS

DISCUSSION SECTIONS:

Section	Day	Time	Instructional Assistant	Email
A01	Monday	8:00 - 8:50 AM	Evan Sandoval	evsandov@ucsd.edu
A02	Monday	10:00 - 10:50 AM	Trevor Marshall	tmmarsha@ucsd.edu
A03	Monday	3:00 - 3:50 PM	Jennifer Park	jepark@ucsd.edu
A04	Monday	4:00 - 4:50 PM	Emily Riley	eariley@ucsd.edu
A05	Wednesday	8:00 - 8:50 PM	Joshua Burrows	jtburrow@ucsd.edu
A06	Friday	1:00 - 1:50 PM	Justin Yu	jdy002@ucsd.edu
A07	Friday	2:00 - 2:50 PM	Justin Yu	jdy002@ucsd.edu
A08	Friday	3:00 - 3:50 PM	Margi Shaw	mhshah@ucsd.edu
A09	Friday	4:00 – 4:50 PM	Joey Truong	jbtruong@ucsd.edu
A10	Friday	5:00 - 5:50 PM	Evan Sandoval	evsandov@ucsd.edu

To promote discussion section accessibility for all, section meetings will alternate between Zoom and in person formats as indicated in the class schedule above. Students are required to attend at least 4 of the discussion section meetings for which they are registered. Sections will meet for the first time the week of September. A 20-point problem set will be posted online for discussion in section meeting each week. Students are to complete the problem set prior to attending discussion section for the week to the best of their ability. All students must be prepared to contribute to section discussions.

GRADING

POSSIBLE EARNED POINTS FOR THE QUARTER:

40 points	Discussion section participation
160 points	Discussion section problem sets
300 points	Exams
500 points	**Total**

- Grades will be assigned based on points earned using the scale listed on the right.

- **Curving:** If necessary, all point cutoffs will be adjusted downward so that at least 50% of the class receives an A or B. Under no circumstances will point cutoffs be adjusted upward.

GRADING SCALE:

≥ 500 points	(100%)	A+
≥ 450 points	(90%)	A
≥ 435 points	(87%)	A-
≥ 420 points	(84%)	B+
≥ 400 points	(80%)	B
≥ 385 points	(77%)	B-
≥ 370 points	(74%)	C+
≥ 350 points	(70%)	C
≥ 335 points	(67%)	C-
≥ 285 points	(57%)	D
< 285 points	(56%)	F

ASSESSMENT

DISCUSSION SECTION PARTICIPATION (40 POINTS): Discussion sections will begin the week of Monday, September 27th. Weekly discussion sections are important for your success in this course. They will help you develop your analysis and problem-solving ability that will be evaluated by the exams. Discussion sections also provide you with the opportunity to build relationships with fellow students and your Instructional Assistant. **To promote discussion section accessibility for all, section meetings will alternate between Zoom and in person formats as indicated in the class schedule above. Students are required to attend at least 4 of the 9 discussion section meetings for which they are registered.** You will receive 10 points for your active participation in each (4 x 10 = 40). **To obtain full points for participation, you need to attend for the full class period and actively participate in class discussion**.

PROBLEM SETS (160 POINTS): Required problem sets will be posted for each week as designated in the course schedule above. These problem sets are your most valuable study material, as they are designed to reinforce the learning objectives for each lecture and cover the primary concepts. Complete the problem set to the best of your ability prior to your discussion section and then be prepared to contribute to discussing and working through the problems together in your discussion section meeting. **You must submit your problem set through Canvas by 11:59 PM on Friday the week that they are due.** If students do not make a good-faith effort to complete problem sets to the best of their ability prior to attending section, and do not participate in a rigorous discussion, then due date/times will be moved to require submission during your section meeting. Eight problem sets will be assigned throughout the quarter for a total of 160 points (20 points each).

EXAMS (300 POINTS): There will be three equally weighted exams for the course, two midterms and a final exam, each worth 100 points. If your final exam score is higher than either of your midterm scores, I will replace your lowest midterm score with the equivalent of your final exam score (e.g. If you earn an 84 on the first midterm, a 78 on the second midterm, and a 90 on the final, the exam scores I count for you would be 84, 90 and 90). **Exams will be administered on Canvas and proctored via Zoom during the scheduled lecture time on the dates designated in the course schedule: Tuesday October 19, Tuesday November 16, and Friday December 10.** The **exams are NOT cumulative**, and exam questions will only cover material taught in class and in the discussion sections for each given module.

COURSE POLICIES

COMPLIANCE WITH MANDATED COVID-19 SAFETY PRACTICES: For in-person attendees, compliance with all UCSD COVID-19 mandated safety practices is essential to maintaining our collective capability to attend in person. In brief, all persons must be properly masked at all times in classrooms. You may not remove your mask to eat or drink in the classroom. Please also avoid removing your mask in crowded outdoor areas while waiting to enter the classroom. You must also complete and pass your daily symptom check prior to coming to classes in person; do not come to class in person if you are exhibiting any symptoms. Many of your fellow UCSD community members live with unvaccinated minors or with persons that have health conditions that increase their risk of illness; please be mindful of this fact and respect others in your actions and compliance with safety mandates. If you are notified by contact-tracing that you must quarantine due to a known COVID-19 exposure, you must comply with this mandate. There is no penalty for students that must quarantine! All components of the class can be completed remotely if needed. Please notify your Instructor and Instructional Assistant if you are required to quarantine.

EXAMS: Exams will be 80 minutes in length. Questions will include several types of questions such as multiple-choice, short answer questions, labeling structures, true/false and other types of questions. **Exams will be administered on Canvas and proctored via Zoom during the scheduled lecture time, and all students will be required to enable their video camera while taking the exam. Students may NOT work collaboratively or seek information from any external sources during the exams.** There will be no make-ups for exams unless you provide documents for medical or family emergency with contact information. **You must contact the instructor about the situation before the exam** to discuss your options. Once you have taken an exam (or part of it), you will not be able to drop the score or negotiate a reduction of its impact on your grade for any reason. If you do not take the exam, your grade will be a zero. Once exams have been graded, you will be able to view your score at the course website. After the quarter you will also be able to view your final exam score and final grade at this location.

Students for which the Office of Students with Disabilities have issued exam accommodation letters should present their letter at the beginning of the quarter or as soon as it is available. Please contact Dr. Huffaker at least one week prior to each exam to arrange for accommodation.

ADMINISTRATIVE QUESTIONS: To drop/add a class or with other similar questions/issues, please contact the Biology Undergraduate Student Affairs Office.

UCSD POLICY ON ACADEMIC INTEGRITY: Cheating or academic dishonesty will not be tolerated, and all academic work will be completed by the student to whom it is assigned without assistance. As defined by UCSD policy, academic dishonesty includes:

- Taking an exam for another student or allowing another student to take an exam for you
- Copying another student's work on an exam or allowing another student to copy your work
- Seeking answers to exam questions on any website/social media platform, etc.
- Altering graded exams or assignments and submitting them for a regrade
- Communicating with other students during the exam
- Bringing answers or cheat sheets to the exam in note form or using a calculator, phone or other electronic device

Any student caught or suspected of cheating by doing one of the things on the list above (including those found using two or more clickers in class) will be reported to the UCSD Academic Integrity Coordinator and the Dean of the student's college. Confirmed cases of cheating on exams or altering an exam and submitting it for a regrade will result in the student receiving an automatic F as their final grade as well as other disciplinary actions determined appropriate by the Academic Integrity Coordinator.

UCSD STUDENT RESOURCES (not specific to this course)

UCSD COVID19-SPECIFIC INFORMATION AND RESOURCES FOR STUDENTS:

STUDENT AFFAIRS COVID19 INFORMATION: A broad website with links to resources for supporting students during these challenging circumstances, including (but not limited to) resources for: Student Retention and Success, Remote Student Employment, Preparing for Remote Learning, Academic Support, Internet and Technology Access, Remote Library Resources, Accommodations for Students with Disabilities, Student Health and Mental Wellness Services, and Information for International Students, https://vcsa.ucsd.edu/news/covid-19-info.html

UCSD COVID19 GENERAL INFORMATION: https://coronavirus.ucsd.edu/

ASSISTANCE COPING WITH STRESS: If you are experiencing heightened feelings of anxiety, please contact Counseling and Psychological Services (CAPS), https://wellness.ucsd.edu/CAPS/Pages/default.aspx. Also see this helpful article from thisweek@ucsandiego with coping strategies and resources available from both UCSD and more generally:
https://ucsdnews.ucsd.edu/feature/coping-with-coronavirus-stress?utm_source=This+Week+Subscriber+List&utm_campaign=c2382a82da-THIS_WEEK_2020_03_26&utm_medium=email&utm_term=0_db568fca07-c2382a82da-92196685

ACADEMIC SUPPORT RESOURCES:

- Teaching and Learning Commons at UCSD: http://commons.ucsd.edu/students/index.html

- Supplemental Instruction: Scheduled sessions to support students in classes that many UCSD students find challenging. A list of supported classes and schedules may be found at:
 https://commons.ucsd.edu/students/supplemental-instruction/index.html

- Triton Achievement Partners: Drop-in tutoring for lower division math and chemistry courses. https://commons.ucsd.edu/students/math-science%20tutoring/index.html#Math-and-Chemistry-Tutoring

- Writing and Critical Expression Hub: See http://commons.ucsd.edu/students/writing/index.html. Writing mentors on staff (including some biology expertise and training in science writing) work with students to improve their writing skills while working on class writing assignments (e.g. lab reports!) and other writing projects. See their drop-in hours, and options for appointments.

- OASIS: Office of Academic Support and Instructional Services also offers tutoring, writing and mentoring support – see https://students.ucsd.edu/sponsor/oasis/ Each year, OASIS serves 3,000 students in language, math, science, study skills, and writing as well as peer counseling and peer mentoring. Located on the third floor of Center Hall, (858) 534-3760, oasis@ucsd.edu.

HEALTH AND COMMUNITY RESOURCES (IN ALPHABETICAL ORDER):

- Black Resource Center: a campus community center that serves everyone at UC San Diego while emphasizing the Black experience. Promotes scholarship, fosters leadership, and cultivates community through the committed, collaborative effort and support of faculty, staff, and the broader UC San Diego community. http://brc.ucsd.edu/

- Counseling and Psychological Services: (CAPS) provides FREE, confidential, psychological counseling and crisis services for registered UCSD students. CAPS also provides a variety of groups, workshops, and drop-in forums. See http://caps.ucsd.edu/ and/or call (858) 534-3755.

- Cross-Cultural Center: strives for meaningful dialogues and context across all cultures, particularly those of underrepresented or underprivileged backgrounds. Offers supportive and educational services through art, social and educational programs, workshops, and outreach. Welcomes creative venues for enhancing social consciousness and equity. http://ccc.ucsd.edu/

- LGBT Resource Center: provides a visible presence on campus and enhances a sense of connection and community among LGBT faculty, staff, students, alumni and the UC San Diego Community. http://lgbt.ucsd.edu/

- Office for the Prevention of Harassment & Discrimination (OPHD): provides assistance to students with concerns about bias, harassment, and discrimination. UCSD is committed to upholding policies regarding nondiscrimination, sexual violence and sexual harassment. Students have options for reporting incidents of sexual violence (e.g. sexual assault, dating violence, domestic violence, and stalking) and sexual harassment. Information about reporting options may be obtained at OPHD at (858) 534-8298, ophd@ucsd.edu, or http://ophd.ucsd.edu. Students may also receive confidential assistance at the Sexual Assault Resource Center at (858) 534-5793, sarc@ucsd.edu or http://care.ucsd.edu.

- Office for Students with Disabilities (OSD): works with students who have documented disabilities to provide reasonable accommodations. See https://disabilities.ucsd.edu/about/index.html or call 858.534.4382 and/or email osd@ucsd.edu. Students in need of disability accommodations for a UCSD course must provide their instructor with a current Authorization for Accommodation (AFA) letter issued by OSD. If you have an AFA, please arrange to meet privately with me during the first week of the quarter so we can discuss your accommodation. If you have any questions or concerns about a disability, please discuss with me!

- Raza Resource Centro: a lively space where students study, meet, write, get tutoring, and most importantly are in community. It is a space where Latina/Chicano organizations hold meetings, events and where culture, art, and academics interconnect. http://raza.ucsd.edu/

- Student Veterans Resource Center (SVRC): supports military-affiliated students in making the transition to campus life and facilitating their progress toward degree completion. The Center also provides opportunities for peer-to-peer support, mentoring and social networking. See https://students.ucsd.edu/sponsor/veterans/

- Women's Center: serves as a resource for the entire campus community while placing the experiences of diverse women at the center through resources provided, programming and learning opportunities facilitated, and dynamic community space. https://women.ucsd.edu/

There are many other resources available to you on campus. If you want to know more about where you can go for support, please let me know and we'll work together to identify useful resources!