Syllabus BICD110 (Cell Biology) Instructor: Dr. Teodorof-Diedrich, Carmen

Spring Quarter 21 (ONLINE) UC San Diego

Course description:

This is an upper division course on the structure and function of eukaryotic cells. Lectures will cover: methods of cell biology research, membrane structure and dynamics, protein synthesis and sorting, signal transduction, cytoskeleton structure and dynamics, cell cycle, cancer and cells in development and disease. *All exams will be given ONLINE*.

<u>NOTE:</u> The syllabus along with course assignments and due dates are subject to change, particularly because of campus efforts to contain COVID-19. Students have the responsibility to check on CANVAS website for any corrections, updates or changes to the syllabus. All changes and notifications will be announced online on Canvas or through email. Please make sure to frequently check the website to keep updated.

<u>Class Location:</u> The class website is located at CANVAS, UCSD. https://canvas.ucsd.edu. <u>Virtual Class time:</u> *Tuesday and Thursday, 3:30 PM: 4:50 PM via Zoom.*

Instructor: Carmen Teodorof-Diedrich, Ph. D

Email: cteodorof@ucsd.edu.

<u>Virtual Office Hours</u>: *Friday, 3:00 PM- 4:00 PM.* Please try to make at least one office hour. This is a good opportunity to meet you, say hello virtually and answer your questions.

Virtual 1-1 meetings (30 min): by student request and instructor availability.

<u>Sections:</u> Discussion sections will be held online with your IAs. Sections will go over the problem sets or any other assignments.

Instructional Assistants (IAs):

Ryan Joseph Geusz, email: rgeusz@ucsd.edu

Brian Khov, email: brkhov@ucsd.edu

Harriet Jiayi Song, email: julatt@ucsd.edu
Jacqueline Lilly Blatt, email: julatt@ucsd.edu
Catherine Chen, email: cac002@ucsd.edu
Romella Petrosian, email: ropetros@ucsd.edu

Virtual Discussion Sections time: can be found it here

https://act.ucsd.edu/scheduleOfClasses/scheduleOfClassesStudent.htm

Virtual IAs office hours: TBA on Canvas

<u>Class Materials and Technology:</u> Course materials will be posted on UCSD Canvas. We will use <u>Zoom</u> for course sessions, discussion sessions, office hours and any other group collaboration. *All educational sessions (lectures and discussions) will be recorded and made available asynchronously to the class.* Please make sure that you check out this website for resources on how to learn remotely:

https://digitallearning.ucsd.edu/learners/learning-remote.html

- •A laptop or desktop computer with a current operating system and internet access.
- •You will also need access to the following tools to fully participate in this course:
- Webcam (for video conferencing through Zoom).
- Microphone (for audio conferencing through Zoom).
- A stable internet.
- Current browser.

<u>Laptop loaner request form for UCSD students can be found it here:</u> https://eforms.ucsd.edu/view.php?id=490887. Please contact vcsa@ucsd.edu if you have questions about this program.

<u>Text Book:</u> Molecular Cell Biology, 8 Edition, Lodish et al. (Optional/Not required).

An eBook is available as a purchasing option for this course via RedShelf (Check Course Details on Canvas). Your digital course materials are provided by the UC San Diego Bookstore through Canvas. You can opt in to the Inclusive Access program by **April 10th, 2021** to access the materials at a special reduced price.

<u>Class Schedule</u>: The schedule below is tentative and will vary to make sure you learn all the key concepts in cell biology.

Date Subject

Tu/March 30: Methods in Cell Biology Research I Th/April 1: Methods in Cell Biology Research II

Tu/April 6: Membrane Biochemistry

Th/April 8: Membrane transport of ions and small molecules;

Science News

Tu/April 13: Endocytosis; Quiz submission

Th/April 15: Secretory Pathway I (ER); Science News

Tu/April 20: Secretory Pathway II (ER, Golgi), **Quiz submission** Th/April 22: Secretory Pathway III (Golgi, Lysosomes), Nucleus;

Science News

Tu/April 27: Nuclear Import, Nuclear Export; Teamwork Assignment 1 due

Quiz submission

Th/April 29: Signal Transduction I; Science News

Tu/May 4: Midterm Exam (ONLINE)

Th/May 6: Signal Transduction II; Science News

Tu/May 11: Signal Transduction III;

Th/May 13: Cytoskeleton I; Science News
Tu/May 18: Cytoskeleton II; Quiz submission
Th/May 20: Cytoskeleton III; Science News
Tu/May 25: Cytoskeleton IV; Quiz submission

Th/May 27: Cell Cycle; Science News; Teamwork Assignment 2 due

Tu/June 1: Cancer; Quiz submission

Th/June 3: TBA

Mo/June 7: Final Exam (ONLINE)

Exams and Grading: I understand this is a challenging time and that you may have challenges with accessing the course material, adapting to online-only learning, and taking online quizzes and exams. My goals are to teach you the course material, fairly test your knowledge of this material, and grade you accordingly, while keeping these challenges in mind.

Midterm exam is mandatory.

Final exam is mandatory and cumulative.

<u>Exams are timed and are given synchronously</u>. A 24h period for exam completion is available upon request for students with a valid reason (different time zone, health problems, etc) and requires instructor's approval.

Total Final Score (100%) is made as:

30% Midterm Exam + **30%** Final Exam (or **60%** Final if beneficiary for the student meaning that the final exam score is higher than the midterm score).

10% Quiz submission (75% for the correct answer; 25% for the submission only); 6 graded Quizzes per quarter (you can miss only one quiz)

30% Teamwork Assignment (group of 5 students); 2 assignments per quarter.

Grading Scale:

Above 100= A+

100-91.5% = A

91.5-87.5% = A

87.5-83% = B+

83-79% = B

79-75% = B-

75-70.5% = C+

70.5-66.5 = C

66.5-62.5% = C-

62.5%-50% = D

50%-0 = F

Using this system there is no upper limit to the number of A's in the class as there is when a standard curve is created.

<u>Problem Sets:</u> This course covers a lot of different concepts, and requires you to understand them and apply them. To help achieve this, problem sets will be assigned each week, and will be followed by a graded quiz submission. Problem sets and quiz answers will be covered during discussion sections. The questions will refer to material covered in class, and will often mimic those given on exams. Students who take the time to do these problems regularly are virtually quaranteed to be ready to perform well on the exams. **Quiz submission will count for 10% of**

your final score.

<u>Teamwork Assignments:</u> Teamwork assignments are designed to help you work cooperatively as a team, to improve student learning through group work, to improve productivity, creativity, and student scores, to feel connected, and to relieve stress by sharing the work. The goal is to use active learning and problem based learning strategy to increase your analytical skills, and to be able to think like a scientist. *Teamwork assignments count for 30% of your final score.* Students are randomly assign in a teamwork group (up to five students) on Canvas.

Extra Points (OPTIONAL): A participation grade up to <u>5 points</u> will be given for the <u>"Science News"</u> participation. This is a teamwork presentation available by the end of a designated lecture or discussion section. The work (collecting research data, editing, proofreading, presentation, etc.) will be divided through collaboration among the group members. The assigned time is 15 min total (5-10 min presentation +5 min questions). The topic has to be related or in connection to the cell biology. You will use Power Point and/or short videos to deliver the News on Zoom. The goal of this activity is to practice science communication to a general audience/general public. Available spots are during the <u>week 2- 9 of the quarter for in class presentations or discussion section presentations. A google form for registration will be available on Canvas and send by email.</u>

<u>Make up exams and lateness:</u> A student may not take a make-up test unless she/he has an excused absence. Excused absences are given only with presentation of a valid medical or emergency excuse/ note (for self or family member) in writing. Any other failure to take an exam when it is scheduled will result in no credit for the exam. There are absolutely no makeups for the final exam unless you meet the conditions set out in the undergraduate handbook and/or syllabus. Please note that a make-up exam will be given only as an online exam assignment and/or an online oral exam (in real time, on video) through Zoom, on the discretion of the instructor.

Regrade Policy: The purpose of regrades is to protect you from potential mistakes made by overworked and underappreciated IAs. Requests for regrades must be submitted via email with a description of the grading error **within one week of the exam**. Any inconsistencies will be considered a breach in academic honesty and will be grounds for failure of the course.

<u>Email etiquette</u>: Before e-mailing the instructor or the IA, consider carefully whether your question might be already answered on Canvas, or whether it is best to ask your question during office hours. For example, it is difficult to e-mail about concepts that require drawings or demos. If you send an e-mail, please make sure to include BICD 110. As always, a well-written and professional e-mail greatly increases the likelihood that you will get a response in a timely manner.

<u>Adds/Drops/Withdrawals</u>: Use <u>TritonLink</u> to add into open sections, to waitlist a full section, or to drop the course.

Netiquette in the Classroom: Netiquette, or Internet etiquette represents a set of rules for online communication. To maintain a healthy and productive environment, the following rules should be followed:

- Do not dominate any discussion.
- Give other students the opportunity to join in the discussion.
- Do not use offensive language. Present ideas appropriately.

- Be cautious in using Internet language. For example, do not capitalize all letters since this suggests shouting.
- Popular emoticons such as J or L can be helpful to convey your tone but do not overdo or overuse them.
- Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation. Never make fun of someone's ability to read or write.
- Share tips with other students.
- Keep an open-mind and be willing to express even your minority opinion. Minority opinions have to be respected.
- Think and edit before you push the Send button.
- Do not hesitate to ask for feedback.
- Using humor is acceptable but be careful that it is not misinterpreted. For example, are you being humorous or sarcastic?

Adapted from: Mintu-Wimsatt, A., Kernek, C., & Lozada, H. R. (2010). *Netiquette: Make it part of your syllabus. Journal of Online Learning and Teaching 6(1).* http://jolt.merlot.org/vol6no1/mintu-wimsatt_0310.htm

Special Circumstances: You must communicate special needs, including those based on medical conditions or religious beliefs, prior to **April 6**. These needs will be taken into account only after they have been discussed with the professor. Students with disabilities are given my full support as long as you work through the Office for Students with Disabilities. Excusal from an exam will be granted by the professor only if proper documentation is provided (e.g., from medical/law- enforcement professionals). *No rescheduling or make-up exams are allowed*, except as noted in: http://www.ucsd.edu/catalog/front/AcadRegu.htmlLinks to an external site.

<u>Students with disabilities:</u> Students requesting accommodations and services due to a disability for this course need to provide a current Authorization for Accommodation (AFA) letter issued by the Office for Students with Disabilities (OSD), prior to eligibility for requests. Receipt of AFAs in advance is necessary for appropriate planning for the provision of reasonable accommodations. OSD exams will run concurrently with the scheduled exam. Please note that instructors are unable to provide accommodations unless they are first authorized by OSD. For more information, contact the OSD at (858) 534-4382 (voice), **osd@ucsd.edu**, or visit **osd.ucsd.edu**.

Academic integrity (AI): DO NOT CHEAT. Academic Integrity is expected of everyone at UC San Diego. This means that you must be honest, fair, responsible, respectful, and trustworthy in all of your actions. Lying, cheating, or any other forms of dishonesty will not be tolerated because they undermine learning and the University's ability to certify students' knowledge and abilities. Thus, any attempt to get, or help another get, a grade by cheating, lying or dishonesty will be reported to the Academic Integrity Office and will result in sanctions. Sanctions can include an F in the class and suspension or dismissal from the University. So, think carefully before you act. Before you act, ask yourself the following questions: a: is my action honest, fair, respectful, responsible, and trustworthy? and b: is my action authorized by the instructor? If you are unsure, don't ask a friend, ask your instructor, instructional assistant, or the Academic Integrity Office. Please do not risk your future by cheating. Students suspected of Al violations on exams will be invited to Zoom follow-up meetings where they will be asked to (in real time, on video) justify their answers (before the graded exams or solutions are released. If the instructor is not convinced during the meeting, or the student refuses to participate, the student will be submitted to the Office of Academic Integrity for Al violations. You can learn more about academic integrity at academicintegrity.ucsd.edu.

<u>Instructors' Responsibility.</u> "The Instructor shall state in writing how graded assignments and exams will contribute to the final grade in the course. If there are any course-specific rules required by the Instructor for maintaining academic integrity, the instructor shall also inform students of these in writing."

<u>Students' Responsibility.</u> "Students are expected to complete the course in compliance with the instructor's standards. No student shall engage in an activity that involves attempting to receive a grade by means other than honest effort; for example:

- No student shall knowingly procure, provide, or accept any unauthorized material that contains questions or answers to any examination or assignment that is being, or will be,
- No student shall complete, in part or in total, any examination or assignment for another
- No student shall knowingly allow any examination or assignment to be completed, in part or in whole, for himself or herself by another
- No student shall plagiarize or copy the work of another person and submit it as his or her own work.
- No student shall employ aids excluded by the instructor in undertaking course work or in completing any exam or
- No student shall alter graded class assignments or examinations and then resubmit them for regrading.
- No student shall submit substantially the same material in more than one course without prior authorization."

Instructional Assistant's (IA) Responsibilities

"A student acting in the capacity of an Instructional Assistant (IA), a category including but not limited to teaching assistants, readers, and tutors, has a special responsibility to safeguard integrity of scholarship. In this role the student functions as an apprentice instructor, under the tutelage of the responsible instructor. An IA shall equitably grade student work in the manner agreed upon with the course instructor. An IA shall not provide a student with any information or collaboration that would aid the student in completing the course in a dishonest manner (e.g., providing access to unauthorized material related to tests, exams, and homework.