BILD 1: THE CELL (SP24)

Dr. Gentry N. Patrick

Lectures: Tu/Thu 8am - 9:20am, Mosaic 114

RCLAS Virtual Discussion: Thursday 1:00pm – 1:50pm; https://ucsd.zoom.us/j/96782539182

Office Hours: Wednesday 9:30am-10:30am; https://ucsd.zoom.us/j/97552753878 **Optional:** Textbook *Campbell Biology* (12th edition, or any edition after 8th edition).

E-mail: gpatrick@ucsd.edu (must include BILD1 in the subject line and if the matter requires

immediate attention include **URGENT** in the subject line as well).

DATE	LECTURE		TOPIC	READING
4/02	Tue	1	Introduction / Small Molecules / Bonds	Chapters 2-3
4/04*	Thu	2	Small Molecules / Macromolecules	Chapters 2-5
4/09	Tue	3	Macromolecules	Chapter 5
4/11	Thu	4	Bioenergetics / Enzymes	Chapters 8
4/16*	Tue	5	Enzymes / Metabolism	Chapters 8-9
4/18	Thu	6	Metabolism	Chapter 9
4/23	Tue	7	Photosynthesis	Chapter 10
4/25	Thu		MIDTERM EXAM 1 (Lectures 1-7)	
4/30	Tue	8	Organization of the Cell	Chapter 6
5/02*	Thu	9	Membrane Structure & Function	Chapters 6-7
5/07	Tue	10	Cell Signaling	Chapters 11
5/09*	Thu	11	Cell Cycle/Cancer/Mitosis	Chapters 12 + concept 18.5
5/14	Tue	12	Mitosis/Meiosis	Chapters 12-13
5/16	Thu		MIDTERM EXAM II (Lectures 8-12)	
5/21*	Tue	13	Genetics	Chapter 14
5/23	Thu	14	Genetics	Chapter 15
5/28	Tue	15	DNA / DNA Replication	Chapter 16 + concept 19.2
5/30*	Thu	16	DNA Replication / RNA / Transcription	Chapters 16-17
6/04	Tue	17	Transcription and Translation	Chapters 17
6/06	Thu	18	Genes & Gene Regulation	Chapters 18
6/13	Thu		FINAL EXAM (Comprehensive) 8:00am - 11:00am	

^{*}New materials available for download on Canvas

Review Session Dates: Tuesdays 4/23 and 5/14; 6-8pm (Midterms 1 and 2 Review, respectively) and Sunday 6/06 11am to 2pm (Final Review) Location TBA

NOTE: Any changes to the syllabus/schedule will be made thru announcements (notified on your UCSD email) and posted on Canvas.

University of California, San Diego Consent to Act as a Research Subject

Assessing the Impact of the Acing Chemistry in Biology Education (AChiBE) Program

Who is conducting the study, why you have been asked to participate, how you were selected, and what is the approximate number of participants in the study?

Melinda T. Owens and Claire Meaders and their research associates are conducting a research study to find out more about how the Acing Chemistry in Biology Education (AChiBE) program affects student learning and experience in the classroom. You have been asked to participate in this study because you are a student in a class that is being studied or used as a control. There will be approximately 2000 participants in this study.

Why is this study being done?

The purpose of this study is to create knowledge that has the potential to improve the learning and educational experience of introductory biology students at UC San Diego and beyond.

What will happen to you in this study and which procedures are standard of care and which are experimental?

If you agree to be in this study, the following will happen:

 Your data from this class including grades, homework and exam submissions, and survey responses will be included in the analysis to determine the effectiveness of the AChiBE program used in this course compared to other similar courses.

How much time will each study procedure take, what is your total time commitment, and how long will the study last?

Your participation involves only agreeing to let us use your data in our analysis. It will require no time on your part above the time you put into this course without agreeing to the study.

What risks are associated with this study?

Participation in this study may involve some added risks or discomforts. These include the following:

1. A potential for the loss of confidentiality. We will not share your personally identifying data with people outside our research team. Data will only be kept in anonymized form for research purposes. Course data will be rendered confidential by removing any identifiers before analysis. Your instructor will never know whether or not you are participating in this study. Data from students who opt out of the study will be removed prior to data analysis by a person on the research team who is not your instructor. Research records will be kept confidential to the extent allowed by law. Research records may be reviewed by the UCSD Institutional Review Board.

Since this is an investigational study, there may be some unknown risks that are currently unforeseeable. You will be informed of any significant new findings.

The alternatives to participation in this study are not to participate. If you choose to opt-out of participating in this research study, we will exclude your data from analysis. Whether you participate will have no impact on your experience or grade in the associated class as the professor will not know who is or is not participating in the study.

What benefits can be reasonably expected?

There is no direct benefit to you for participating in the study. The investigator, however, may learn more about how to improve student learning, and society may benefit from this knowledge.

Can you choose to not participate or withdraw from the study without penalty or loss of benefits?

Participation in research is entirely voluntary. You may refuse to participate or withdraw or refuse to answer specific questions on a questionnaire at any time without penalty or loss of benefits to which you are entitled, like grades. If you decide that you no longer wish to continue in this study at any time, simply respond to the online opt-out form here: https://forms.gle/fkewm31xa4twQTXk8

You will be told if any important new information is found during the course of this study that may affect your wanting to continue.

Can you be withdrawn from the study without your consent?

The PI may remove you from the study without your consent if the PI feels it is in the best interest of the study, for example if there is incomplete data or plagiarized responses. You may also be withdrawn from the study if you do not follow the instructions given you by the study personnel.

Will you be compensated for participating in this study?

You will not be compensated for participating in this study.

Are there any costs associated with participating in this study?

There will be no cost to you for participating in this study.

Who can you call if you have questions?

Melinda Owens, Claire Meaders, or one of their associates has explained this study to you and answered your questions. If you have other questions or research-related problems, you may reach Melinda Owens at mtowens@ucsd.edu or (415) 290-8853.

You may call the Human Research Protections Program Office at 858-246-HRPP (858-246-4777) to inquire about your rights as a research subject or to report research-related problems.

Your Consent

If you consent to participate in this study, no action is needed. If you **do not** consent to participate in this study, or you choose to opt-out at any time during the quarter, please submit this form online at https://forms.gle/fkewm31xa4twQTXk8. Your instructor will not have access to the list of students who opted out.