

BIO110:010 Principles of Biology Course

Welcome to a study of life! This course examines life especially structure and function. You will explore homeostasi

3. Composition Notebook: this is a blank notebook that you will use as your lab notebook when conducting your experiments. It can be purchased at the bookstore or any office supply store.

Canvas

You can access all course materials via the Canvas learning management system. All students are expected to check this site often, as this is my primary means of communication.

Lecture Conduct

UNC's policies and recommendations for academic misconduct will be followed. During class, talking on the phone, texting, listening to an iPod, talking with fellow students, and doing other work not related to class is not permitted. If you are doing any of these activities, you will be asked to leave the lecture hall immediately. On days when we do case studies, you will not be allowed to use computers during the lecture period. Lectures will start and end on time, so come to class a few minutes early to get settled and ready to begin. If you find you are running late, quietly enter the back of the classroom and slip into a row with minimal commotion. Please treat me and your fellow students with consideration and basic courtesy.

Academic Integrity

As members of a scholarly community dedicated to healthy intellectual development, students and faculty are expected to share the responsibility for maintaining high standards of honesty and integrity in their academic work. All material for this course must be your work and no one else's. Cheating or plagiarism in any form will not be tolerated. This includes, but is not limited to, copying someone else's work, and using banned material while taking exams. The penalty for cheating or plagiarism is a zero for the course. UNC's policies and recommendations for academic misconduct will be followed. For additional information, please see the Student Code of Conduct. Honor Code: all members of the University of Northern Colorado community are entrusted with the responsibility to uphold and promote five fundamental values: Honesty, Trust, Respect, Fairness, and Responsibility. These core elements foster an atmosphere, inside and outside of the classroom, which serves as a foundation and guides the UNC community's academic, professional, and personal growth. Endorsement of these core elements by students, staff, administration, and trustees strengthens the integrity and value of our academic climate.

Disabilities

Disability Resources is the policy and practice of the University of Northern Colorado to create inclusive learning environments. If there are aspects of the instruction or design of this course

Exams

Each of the first three exams will cover approximately 1/4 of the course material presented in lecture and in the textbook. The final exam will include both the last 1/4 of the material presented as well a comprehensive review of all material covered throughout the semester. Essentially, the final exam covers the entire semester. The format for all exams will be multiple choice and the

Course Schedule

Wk	Day	Date	Lecture Topic	Chpt	HW due	Lab Topic	
			THEME 1	INTRODUCTION AND MOLECULES			
1	M	20-Aug	Introduction - what is life?			Scientific Method	
	W	22-Aug	Studying Life	1			
	F	24-Aug	Case Study Science Methods		chpt 1		
2	M	27-Aug	Chemistry of Life	2	chpt 2	Lit Review and Critique	
	W	29-Aug	Small Molecules				
	F	31-Aug	Case Study - Too Much Aspirin				
3	M	3-Sep	LABOR DAY: NO CLASS			NO LABS THIS WEEK	
	W	5-Sep	Carbohydrates and Lipids	3	chpt 3		
	F	7-Sep	Proteins and Nucleic Acids				
4	M	10-Sep	Case Study - Brains and Broncos			Using the Microscope	
	W	12-Sep	Chemical Evolution	22	chpt 22		
	F	14-Sep	EXAM 1				
			THEME 2	CELLS AND ENERGY			
5	M	17-Sep	Cells - types and principles	4	chpt 4	Dilutions and Standard Curve	
	W	19-Sep	Cells - organelles				
	F	21-Sep	Cell Structure and Disease				
6	M	24-Sep	Case Study- Infection Diagnosis			Algae	
	W	26-Sep	Membranes Structure and Chemistry	5	chpt 5		
	F	28-Sep	Membrane Synthesis and Transport				
7	M	1-Oct	Case Study- Ecstasy			Graphing and Data Analysis	
	W	3-Oct	Thermodynamics and Enzymes	6	chpt 6		
	F	5-Oct	Enzyme Control and Pathways				
8	M	8-Oct	Case Study - Fire and Fish			Research Projects	
	W	10-Oct	Review - Exam Prep				
	F	12-Oct	EXAM 2				
			THEME 3	CELL PROCESSES			
9	M	15-Oct	Cellular Respiration	7	chpt 7	Research Projects	
	W	17-Oct	Case Study - Metabolic Murder				
	F	19-Oct	Anaerobic Respiration and Fermentation				
10	M	22-Oct	Case Study - Fun in Fermentation			Research Projects	
	W	24-Oct	Photosynthesis I	8	chpt 8		
	F	26-Oct	Case Study - Photosynthesis				
11	M	29-Oct	Cell Communication	9	chpt 9	Research Projects	
	W	31-Oct	Case Study - THC and Memory				
	F	2-Nov	Nucleic Acid Structure	11	chpt 11		
12	M	5-Nov	DNA Replication			Research Projects	
	W	7-Nov	Case Study - Dracula				
	F	9-Nov	EXAM 3				
			THEME 4	GENETICS			
13	M	12-Nov	Transcription	12	chpt 12	Research Projects	
	W	14-Nov	Translation				
	F	16-Nov	Gene Regulation	13	chpt 13		
14	M	19-Nov	Case Study - Schizophrenia			NO LABS THIS WEEK	
	W	21-Nov	THANKSGIVING: NO CLASS				
	F	23-Nov	THANKSGIVING: NO CLASS				
15	M	26-Nov	Mitosis and Meiosis	14,15	chpt 14	Presentations	
	W	28-Nov	Simple Mendelian Inheritance	16	chpt 16		
	F	30-Nov	Other forms of inheritance and pedigrees	17			
16	T	7-Dec	FINAL EXAM 8:00-10:30AM This is a TUESDAY				

