

BIL 150 Syllabus - Summer 2021

Sec: A - MTWRF 8:30-10:00a

to "Critically Think" by disciplined, rational analysis & judgment about Biology

Date		#	Lectures and Workshops	Reading (Campbell 11th)
5/17	M	1	Introduction & Themes in Biology Quiz Practice	Class Web Site
5/18	T	2	Scientific Method	Chap 1
5/19	W	3	Scientific Method Workshop #1 - Introduction Quiz 2	Chap 1 & 26; Blackboard
5/21	R	4	Unity in Life Processes and the Origins of Life	Chap 25; pg519-531
5/22	F	5	Biological Organization: Atoms & Molecules Quiz 3	Chap 2 & 3
5/22	F		Workshop #2 (Introduction and Sci. Meth. & Life)	Blackboard
5/24	M	6	Organic molecules – Monomers &	Chap 4 & 5
5/25	T	7	Macromolecules Quiz 4	Chap 5
5/26	W	8	Macromolecules continued Workshop #3 (Chemistry 1)	Chap 5
5/27	R	9	Proteins & Enzymes End material Test 1 Quiz 5	Chap 5
5/28	F	10	Cellular Ultrastructure Workshop #4 (Chemistry 2)	Chaps 6, 19, & 27
5/31	M		Memorial Day	Holiday
6/1	T		TEST 1. - 80 points @ 8:30-9:45am	Direction to come
6/2	W	11	Cellular Ultrastructure Workshop #5 (Organelles) Quiz 6	Class web site
6/3	R	12	Cell Membranes & Cellular Communication	Chap 7 & 11
6/4	F	13	Bioenergetics & Metabolism - ATP, and Glycolysis Quiz 7	Chap 8
6/4	F		Workshop #6 (Membranes)	Blackboard
6/7	M	14	Krebs Cycle, Aerobic Metabolism Quiz 8	Chap 9
6/8	T	15	Electron Transfer Chain and ATP synthesis	Chap 9
6/9	W		Photosynthesis: Light Reactions Wkshp #7 (Energy-Metabolism)	Chap 10
6/10	R	18	Dark Reactions of Green Plants Quiz 9	Chap 10
6/11	F	19	Mitosis & Meiosis End material Test 2	Chap 12, 13, & 14
6/14	M	20	Mendelian Genetics Wkshp #8 (photosynthesis) Quiz 10	Chap 14 & 15
6/15	T		TEST 2. 80 points @ 8:30-9:45am	Directions to come
6/16	W	21	Linkage, Sex, & Multiple Alleles Quiz 11	Chap 15; p82-88
6/17	R	22	Molecular Genetics: Proof genes are DNA	Chap 16 & 17
6/18	F	24	Replication & Transcription Workshop #9 (Mol Genetics)	Chap 18, 19, 20
6/21	M	22	Genetic Code & Biotechnology Quiz 12	Chap 21
6/22	T	23	Neurophysiology: Neurons and their activities	Chap 48 & fig 49.3 & 49.7
6/23	W	24	Muscle Physiology	C50: 1087-96 & 1100-1112
6/25	F		TEST 3 and FINAL EXAM	



Biology 150 - Introductory Biology - analyzes the fundamentals of biology by providing general concepts pertinent to all biological processes of living organisms including the scientific method, patterns of organization, molecular structure, biochemical reactions, energy transformations, cell origins and structure, genetics, and evolution.

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TEXT: **Campbell Biology** by Reece et al, **11th Ed.** 2016. (ISBN-13: 9780134093413)

Older editions of the textbook are acceptable.

LECTURES: are available via Blackboard.

[courses.miami.edu - requires a Canelink signon.]

TESTS: will often be given on during lecture time via Blackboard – direction will be announced before tests. Tests generally come from the lecture material presented in class.

GRADE:

Two (2) lecture exams of 80 points each (40 multiple choice questions) and a third lecture exam (final exam) of 100 points (30 multiple choice question on new material and 20 multiple choice questions on cumulative material of tests 1, 2, & 3) for a total of 260 points. In class quizzes will be given every couple of lectures (see syllabus) via Blackboard and will total 100 points for the semester. 20 points will be awarded for completion of the workshop practice questions (self reported). Some test questions will come directly from the Workshops. 20 points will be for an assignment given during the semester. Thus there will be a maximum of 400 points available for the course.

Test # 1	80 points	40 MC questions (2 points each)
Test # 2	80 points	40 MC (2 points each)
Test # 3	100 points	50 MC (2 points each)

Quizzes	100 points	daily lecture quiz questions on Blackboard worth 2 points each
Workshops	20 points	self-reported - do on your own time
Assignment	20 points	to be described.

Academic Ethics: Cheating will NOT be tolerated. The Biology Department has adopted the policy that the penalty for cheating, plagiarism or acquiescence in them shall be FAILURE for the course and possible suspension or expulsion.

Important Notes: The **Biology 151 laboratory** is a co-requisite,

#	Date	Workshops
1	May 19	Introductions, Assignment of Workshop Groups, Group Dynamics
2	May 22	Origins of Life Research and methodologies Workshop
3	May 26	Chemistry Part 1: Biomolecules and Chemical Bonds
4	May 28	Chemistry Part 2: Nucleic acids, proteins, and enzymes
	T June 1	Lecture Test #1
5	June 2	Cell Structure, Organelles, and Organization
6	June 4	Cell Membrane and Transport
7	June 9	Energy, Metabolism, and Photosynthesis
8	June 14	Cell Reproduction & Mendelian Genetics
	T June 15	Lecture Test #2
9	June 18	Molecular Genetics
	F June 25	Combined Lecture Test #3 & Cumulative Final Exam

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