

**BIOLOGY A Section 8513  
INTRODUCTION TO BIOLOGY  
Kareen Martin**

This is an **hybrid** class, which means some contents will be presented when the class meet each **Tuesday from 6:45 to 8:15pm in MSA 003** and others will be **posted online each Thursdays**.

**Contact:**

- **email:** martink@wlaac.edu
- **Office hours:** Tuesdays 5:30 to 6:45 in MSB 211
- **Private message on the Etudes Message board**

**Course description:**

This course covers the major principles of biology. The lecture will include basic biological molecules, cell structure and function, energy acquisition, the mechanisms of heredity, gene expression and the organization of the bodies of plants and ecosystems. This course is designed for students who are not biology majors. It is necessary to enroll in the laboratory portion Biology 3B to complete the course.

**Grading:**

Your grade will be based upon the following scores:

4 Exams	400 points
10 Quizzes	100 points
4 Assignments	100 points
Written Assignment	100 points
Attendance	20 points
<b>Total points</b>	<b>720 points</b>

- **EXAMS (100 points each)**
  - 4 exams will be administered.
  - Exams will consist of objective-type questions (true/false, multiple choice) and small written answers.
  - They will all be posted on **Sept 29<sup>th</sup>, Oct 20<sup>th</sup>, Nov 17<sup>th</sup> and Dec 15<sup>th</sup>**.
  - **Missed Exam:** All exams must be taken on the day decided by the instructor. **NO MAKE UP EXAMS** will be given for any reason. Any exam that is missed will receive the lowest grade from the other exams.
- **QUIZZES (10 points each)**
  - There will be a quiz for each week, except on exam week, which means there will be 10 quizzes.
  - Quizzes will be posted on Thursdays. You will have from Thursday to Sunday night to take them only. There are NO MAKE UP quizzes.
  - They will consist of true/false, multiple choices.
  - They will be timed to 10 minutes and you will be able to take them twice, the best score between the 2 will be kept. The questions however may be different in both quizzes.
- **ASSIGNMENTS (25 points each).**
  - There will be 4 assignments posted on Thursdays **Sept 17<sup>th</sup>, Oct 8<sup>th</sup>, Oct 29<sup>th</sup> and Nov 19<sup>th</sup>**.

- Assignments will be posted on a Thursday. **You will have until the following Thursday night to complete these assignments.**
- Assignments could be activities such as small written essays, participation into a discussion. **Any plagiarism will result in a zero**
- **WRITTEN ASSIGNMENT (100 points)**
  - A writing assignment will be given during the course of the class. Details are given under the module "Written Assignment"
  - This assignment should be 3 to 4 pages long, double space. It will be worth 100 points.
  - **NO PLAGIARISM, Any plagiarism will result in a zero.** The assignment must be submitted in the antiplagiarism website *turnitin*. For the definition of plagiarism refer to the module "Written Assignment". The instructions to post your assignment, the definition of plagiarism and an example can be found under the module "written assignment".
  - **The written assignment is due November 24<sup>th</sup>.** Assignment posted later won't be accepted.
- **ATTENDANCE POLICY (20 points)**
  - Consistent attendance to each lecture is required for successful completion of this course. Attendance will be taken at the beginning of each class. If the student misses more than three classes, either lecture or lab, he/she may be dropped from the course. Coming late to class and leaving early is irresponsible, impolite, disruptive and is not acceptable.
  - If a student needs to be late, miss a class or leave early, please inform the instructor, preferable by email or before the class. Late students will be marked as absent, since attendance is taken at the beginning of the class and not after. Leaving early from the class, will be noted and may count as absent. Walking in and out of class is rude and disruptive. Any student who does this excessively may be asked to leave the class and will count as an absence.
  - Please notify the instructor if you miss a class due to illness or other emergency. Attendance points are earned by being in class and conducting appropriately.

3 or less absences	20 points
4-5 absences	15 points
6-7 absences	10 points
8-9 absences	5 points
10 or more absences	0 points

Any student wishing to withdraw from the course must follow the correct procedure with the admissions office. It is the student's responsibility to drop the course should he/she decide to stop attending, DO NOT rely on the instructor to do this. Students who stop attending class and fail to follow the correct procedure will receive the letter grade of the scores they have accumulated for the semester.

#### Grading policy:

The grade scale for the entire course will be assigned using a percentage system:

A	B	C	D	F
89-100%	76-88%	60-75%	50-59%	below 50%

#### Religious holidays:

If you are going to miss an exam due to religious holidays, inform me **in writing** within the first 2 weeks of class. You will need to provide the appropriate verifications from your religious leader. We will meet and discuss the arrangements.

#### ADA Accommodations:

If you require accommodations as per ADA, you must register with the college' disabled student services and inform me (in writing) prior to the end of the 2<sup>nd</sup> week of class.

#### Recommendations for succeeding in this class:

**Study and review each day the class is given. Here are some suggestions:**

- learning is easier if you schedule time daily to read, think & review
- every time you study, spend at least 10 minutes reviewing previous lessons (this is the secret to long term memory)
- read the relevant chapters in your textbook, hi-lite pertinent lines and add these notes to your class notes (always write as you read)
- use associations to help you remember things
- prepare note cards and use them to help you review
- at a **minimum**, you should “learn” the course material 3 times in order to retain it for the exams:
  - 1) **comprehend** the class material during the lecture
  - 2) **read** the corresponding text material (before class is best)
  - 3) **review** your notes before the exams

**\*\*\*If you don't do at least this much, you won't do well in this class\*\*\***

### STUDENT LEARNING OUTCOMES

- Describe the characteristics of living things.
- Describe how living things are classified.
- Describe the scientific method; define the terms hypothesis, variable, experimental control.
- Describe the forces that attract atoms.
- Recognize functional groups found in biological molecules.
- Differentiate prokaryotic and eukaryotic cells.
- Describe the structures and functions of the different parts of a cell.
- Predict the movement of molecules in diffusion and osmosis.
- Define catalyst, enzyme and active site.
- Describe how ATP is used in metabolism.
- Describe the role of electron carrier transport chain in eukaryotic cells.
- Define autotroph and heterotroph.
- Compare and differentiate cellular respiration and photosynthesis.
- Compare and contrast the role and stages of meiosis and mitosis.
- Recognize the contribution of Gregor Mendel.
- Contrast genotype and phenotype.
- Compare complete dominance and incomplete dominance.
- Describe how DNA is copied and replicated.
- Name the 3 major types of RNA and tell how they function in protein synthesis.
- Explain how a cell controls gene expression.
- Define Biological evolution and discuss the four lines of evidence for evolution.
- Name the processes that occur in organisms that make variation of phenotypes possible.
- Explain the role of beneficial mutation and neutral mutation in evolution.
- Explain the function and structure of the different organs of a plant.
- Describe the human organization,
- List the major types of tissues found in the human body and describe their functions.
- List the different organ systems found in the human body and describe their functions.
- Recognize the definition of these terms: community, ecosystem, habitat, niche, consumer, producer, decomposer, pioneer, carrying capacity.
- Describe the flow of energy through a community.
- Understand how to maintain biodiversity is beneficial to ourselves.

**CHEATING/ACADEMIC DISHONESTY:**

Each student is expected to do his/her own work on all assignments, reports, examinations, etc.

Here is a list of some actions that are considered cheating:

- Talking during an exam
- Copying answers from someone else's paper
- Using notes of any kind during an exam
- Showing a fellow student your exam or passing information
- Turning in someone else's work
- Providing your work for someone else to copy
- Taking a call on your cell phone (please turn them off!)
- **Plagiarism** (Plagiarism is defined as the use, without giving reasonable and appropriate credit to, or acknowledging the author or source, of another person's original work)

If you have a question during an exam, quietly walk up to the instructor and whisper your question.

**Translation dictionaries are not permitted during exams. No electronic devices of any kind are permitted during exams. Exiting the room during an exam is not permitted, this also includes going to the restrooms.**

**WEST LOS ANGELES COLLEGE****Science Division Policy on Student Conduct in Classroom**

1. Be honest and ethical; follow the rules described in the college's policy on academic honesty.
2. Arrive before the start of class; wait until the previous class has been dismissed before entering the classroom.
3. Whenever you arrive to class late, open the door *quietly*, enter *quietly*, and close the door *quietly* so as not to disturb the class in session. Then, take a seat near the door, on the side or at the back of the classroom. Never walk in front of the instructor.
4. Do not eat or drink beverages in the classroom.
5. No gum chewing.
6. Sharpen pencils before class starts. Do not sharpen pencils during lecture.
7. Listen carefully when directions and announcements are being given. You are responsible for all information announced whether or not you were absent, tardy, or not paying attention.
8. Turn off or mute cell phones before entering the classroom.
9. Do not answer cell phones during class.
10. Do not leave the classroom during the lecture. Wait until the class is dismissed.
11. No talking during lecture. Do not chat with your classmates at any time during lecture, including during the time your instructor is putting information on the chalkboard.
12. Raise your hand and wait for recognition by the instructor to ask a question during lecture.
13. During the class, do not interrupt the instructor with personal questions. Wait until the class has been dismissed.

**Consequences of Misconduct**

Violators of these rules are subject to disciplinary action under Board Rule 9803.15 of the Los Angeles Community College District. Depending upon the seriousness of the conduct, the student disciplinary procedures may range from a warning to removal from the class with a referral to the Vice President of the College.

WEEK	Presented	DATE	QUIZ	DISC	LECTURE
1	Lecture <i>online</i>	Sep 1 Sep 3			INTRODUCTION: The study of life <i>The Molecules of Life</i>
2	Lecture <i>online</i>	Sept 8 Sept 10	1		Organic Molecules <i>Cell Structure and Function</i>
3	Lecture <i>online</i>	Sept 15 Sept 17	2	<b>Ass 1</b>	Membrane Structure and Function <i>Metabolism: Energy and Enzymes</i>
4	Lecture <i>online</i>	Sept 22 Sept 24	3		Cellular Respiration <i>Photosynthesis</i>
5	<b>Lecture</b> <i>online</i>	<b>Sept 29</b> Oct 1			<b>EXAM 1</b> <i>Cell Division</i>
6	Lecture <i>online</i>	Oct 6 Oct 8	4	<b>Ass 2</b>	Genetics and inheritance <i>DNA Structure</i>
7	Lecture <i>online</i>	Oct 13 Oct 15	5		Chromosomal Basis of Inheritance <i>Control of Gene Expression</i>
8	<b>Lecture</b> <i>online</i>	<b>Oct 20</b> Oct 22			<b>EXAM 2</b> <i>Biotechnology</i>
9	Lecture <i>online</i>	Oct 27 Oct 29	6	<b>Ass 3</b>	Evolution of Life <i>Human Organization</i>
10	Lecture <i>online</i>	Nov 3 Nov 6	7		Molecular Basis of Evolution/Speciation <i>Respiratory System</i>
11	Lecture <i>online</i>	Nov 10 Nov 12	8		Digestive System and Nutrition <i>Cardiovascular System</i>
12	<b>Lecture</b> <i>online</i>	<b>Nov 17</b> Nov 19		<b>Ass 4</b>	<b>EXAM 3</b> <i>Musculoskeletal System</i>
13	Lecture <i>online</i>	Nov 24 Nov 26			Urinary System and Excretion <b>WRITTEN ASSIGNMENT DUE</b> <i>NO CLASS POSTED- THANKSGIVING</i>
14	Lecture <i>online</i>	Dec 1 Dec 3	9		Nervous System <i>Lymphatic and Immune System</i>
15	Lecture <i>online</i>	Dec 8 Dec 10	10		Nervous System <i>The Senses</i>
16	<b>Lecture</b>	<b>Dec 15</b>			<b>EXAM 4</b>