

Los Angeles Mission College	Fall 2017	Instructor: Dr. Diane Livio
Lecture: TTh 1:35-3:00pm (CMS 106)		Email: liviodl@lamission.edu
Lab: TTh 3:30-6:40pm (CMS 106)		Phone: 818-833-3334
Office hours: M 9:30-10:15am, Tu 10:00am-12:30pm, W 9:30-10:15am, Th 10:00am-12:00pm; also by appointment		
Office: CMS 229 (of the 221 office suite)		Website: ilearn.laccd.edu
Contact the instructor directly by sending a direct message through CANVAS (using "Inbox")		

BIOLOGY 7 (section 21955/21956)

PREREQUISITES: *Math 125 or 123C; English 28 or ESL 8*

ADVISORY: *Biology 6*

ARTICULATION: LAMC Biology 6 & 7 are equivalent to CSUN Biology 106 & 107, CSULA 100A, 100B & 102, and UCLA LS1 & LS2; LAMC Biology 6, 7 & 40 are equivalent to UCLA LS1, LS2 & LS3

STUDENT LEARNING OUTCOMES

1. Biology 7 students will demonstrate an understanding of the relationship between the taxonomy and phylogeny.
2. Biology 7 students will compare and contrast the basic structure-function relationships among members of the animal kingdom.
3. Biology 7 students will interpret and analyze a controversial issue in ecological biology.

COURSE DESCRIPTION: Biology 7 is intended for students *intending to major in an area of the life sciences at the college/university level*. Upon completion of this course, the student will be able to describe the morphological and physiological characteristics that are used to determine the phylogenetic relationships of organisms of the three domains of life. The student will be able to describe the anatomy and physiology of the major organ systems of vertebrates. In addition, the student will learn to apply the principles of ecology and evolution to understand the behavior and adaptability of plant and animal ecosystems.

The student will apply the concepts learned in lectures through hands-on application in related laboratory exercises. The laboratory experience will allow the student to develop practical knowledge of many fundamental biological principles by employing an *experimental approach* to scientific inquiry. Students will be required to explore their own questions in lab, and will be required to present a group project. *Critical analysis and small group collaboration are incorporated throughout the course.*

COURSE OBJECTIVES: Throughout the semester, the student:

1. Applies and interprets the terminology of biology in both written and oral expression.
2. Demonstrates the ability to read with comprehension current, historical, and popular literature in biology.
3. Develops the ability to use classical and contemporary laboratory methods for studying basic life processes.
4. Applies the general concepts from the textbook and other references to the specific principles which are demonstrated in the laboratories, and shows this in written and oral reports.
5. Develops a practical understanding of the use of the scientific method through experimental design.
6. Expresses an awareness of the complexity and inter-relatedness of organisms and their environment.
7. Identifies the unifying themes throughout all hierarchical levels of the life sciences.

August 24, 2017 – policies and course outline may be revised with prior notice

REQUIRED BOOKS AND MATERIALS

Biology, 11th ed., Campbell, Reece, et. al. 2017 (ISBN-13: 978-0-134-45466-5)

Investigating Biology, 9th ed., Morgan and Carter 2017 (ISBN-13: 978-0-134-47346-8)

5 Scantron 882-E forms & **5** blue books

Lab and assignment downloads from CANVAS

Access to a printer

COURSE GRADE BREAKDOWN APPROXIMATIONS

Quizzes (10)	100 points
Exams (5)	375 points
Lab Practical Exam (1)	60 points
Group Projects (2)	120 points
Lab Worksheets (16)	160 points
Field Trip (1)	15 points
Homework/Participation	60 points
TOTAL 890 points	

QUIZZES & EXAMS:

Quizzes will be given at the start of class, are closed book, and are worth 10 points each. There will be 11 quizzes, and the lowest quiz score will be dropped. Each exam will be worth 75 points. Exams and quizzes will consist of multiple choice, matching, and free response questions. For exams: multiple choice and matching questions are to be answered on **Scantron** forms (882-E); free response questions are to be answered in Blue Books. **There are no make-up quizzes or exams. Make note of the dates in your calendar now.** It is at the discretion of the instructor to decide if a student who has an excused absence from one exam to receive the percentage earned on the next exam counted for that missed score. The excuse for the absence must be reported to the instructor within 24 hours and accompanied with proper documentation. Students should arrange all personal, family, and vacation plans accordingly. These occasions are not considered as excused absences.

LAB WORK:

Students are expected to read each lab exercise ***BEFORE*** class. Lab worksheets and review questions are due **one week** after *completion* of the lab exercises and are worth 10 possible points. **Late assignments will only be accepted within one week from the due date and will be deducted by 10% each day past the due date.** Homework/participation points will be based on various activities throughout the semester, and regular participation in class discussions and exercises is required. Guidelines for the group projects will be provided online. There will also be one mandatory field trip during our regular class hours, worth 15 points, and one project will require field data collection outside of class hours. Refer to the schedule, and **make note of the dates in your personal calendar now.**

I do not make special extra credit arrangements for anyone, so please do not ask me for it.

Grading Scale: Grades are determined on a straight scale based on overall performance.

90-100% = A; 80-89% = B; 70-79% = C; 60-69% = D; below 60% = F

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ATTENDANCE POLICY

Attendance & participation is required for all lecture and lab sessions. Following LAMC policy, students that miss **three** class sessions may be dropped. If you must be absent or late due to special circumstances, it is your responsibility to inform me ahead of time and contact another student for the information missed. If you miss any of the class meetings in the first week without contacting me in advance, you will be dropped from the course. **You are responsible for any information, date changes, etc., presented in class, whether or not you are present.** See the academic calendar to note important dates: <http://www.lamission.edu/students/calendar.aspx>

RECOMMENDATIONS FOR SUCCESS

This is a demanding college-level course covering a lot of information. I am here to help you however I can, but you need to communicate with me. Here are some suggestions:

- do **NOT** fall behind in the course; review the texts in advance of each class session
- each time you study, spend a few minutes reviewing previous lessons (this is the secret to long term memory)
- **outline** the notes: this will help you to mentally organize the large amount of material you will be learning
- use associations and acronyms to help you remember things
- form study groups and create your own study materials
- **know the key terms** (you can't answer questions correctly if you don't!)
- at a **minimum**, you should **learn** the course material **3 times** in order to retain it well for the exams and quizzes:
 - 1) **comprehend** the class material during the lecture (requires reading ahead)
 - 2) **read** the corresponding material in the text while reviewing your notes
 - 3) **review** your notes and key terms before the exams

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

SPECIAL ACCOMMODATIONS

If you require special accommodations for a disability, religious holiday, etc., please inform me within the first two weeks of the course and I will accommodate you if at all possible. In general, recording of the lectures requires prior approval by the instructor. For accommodations due to disability, you must consult the Disabled Student Programs and Services office after which we will abide by their recommendations. For appointments, eligibility and information call 818-364-7732 or visit <http://www.lamission.edu/dsps/>

IMPORTANT WEBSITES

<https://ilearn.laccd.edu/>

- Here you can access notes and handouts, helpful links, and your entered scores throughout the semester. This is also where you post questions about the course and engage in discussion forums.

<http://www.pearsonmylabandmastering.com/northamerica/masteringbiology/>

- This site contains the textbook publisher's online supplemental study material, practice questions and exercises, all of which are optional. Access requires a code you will receive when purchasing the textbook in the bookstore, or you can purchase access online.

COLLEGE RESOURCES FOR STUDENTS

STEM Tutoring Center: Free tutoring is available for all science students in CMS 101 of the Center for Math and Sciences (CMS).

NetTutor: Free online tutoring is available for all LAMC students in Biology and other subjects at:

<https://mymission.lamission.edu/nettutor.aspx>

STEM Office: For information on free tutoring, resources and academic counseling for STEM (Science, Technology, Engineering, and Technology) students visit the STEM Center in CMS 014.

<http://www.lamission.edu/stem>

Admissions and Records: Students can register for classes, request transcripts, file petitions for graduation, and drop classes at this office. For more information call 818-833-3322 or visit:

<http://www.lamission.edu/admissions/>

Bookstore: For hours of operation, book availability, buybacks, and other information call 818-364-7767 or 7768 or visit <http://eagleslanding.lamission.edu/default.asp>

Counseling Department: For appointments and information call 818-364-7655 or visit

<http://www.lamission.edu/counseling/>

Extended Opportunity Programs and Services (EOPS): For appointments, eligibility and information call 818-364-7645 or visit <http://www.lamission.edu/eops/>

Financial Aid: For information and applications call 818-364-7648 or visit

<http://www.lamission.edu/financialaid/>

Library: For information on hours, resources, workshops, and other services contact 818-364-7106 or visit <http://www.lamission.edu/library/>

Tutoring Services in Learning Center: Laboratories for Learning, Writing, & Math. Walk-in and appointment services offered. Call 818-364-7754 or visit www.lamission.edu/learningcenter/

Code of Honor and Integrity

Los Angeles Mission College

Department of Life Sciences

Students at Los Angeles Mission College, because they are members of an academic community dedicated to the achievement of excellence and the pursuit of honor, are expected to meet high standards of personal, ethical, and moral conduct. These standards require personal integrity and a commitment to honesty without compromise. Without the ability to trust in these principles, an academic community and a civil society cannot exist. Los Angeles Mission College students and faculty are as committed to the development of students with honesty and integrity as they are to the academic and professional success of its students.

The Code of Honor and Integrity is an undertaking of the students, first and foremost, both individually and collectively, that they will:

1. Not give or receive dishonorable aid during exams, quizzes or assignments
2. Do their share and take an active part in seeing to it that fellow students, as well as themselves, uphold the spirit and letter of the Code of Honor and Integrity.

Some examples of conduct that are regarded as being in violation of the Honor Code include:

- Copying from another's examination or quiz, or allowing another to copy from one's own papers
- Using any unpermitted source of information, human or other, during an exam, quiz or assignment that influences the grade; this includes the use of technological devices
- Any student-to-student collaboration that is unpermitted
- [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)
- Representing the work of another as one's own work
- Giving or receiving aid on an academic assignment under circumstances in which a reasonable person should have known that such aid is not permitted

As a part of the effort to promote an environment of honesty and integrity during quizzes and examinations, the following guidelines will apply for any courses in the Department of Life Sciences:

1. Students will leave all books and all other non-essential items (e.g. paper, electronic devices) on the floor so that they are not useable nor block the sight line between professor and student. No electronic devices will be in reach.
2. Students will not communicate in any way that will dishonorably assist themselves or another student.
3. Students will leave the room during an exam only if permitted by the professor's policy. If permitted, only one student may leave the room at any time and be gone for only the average length of time needed for the stated purpose. Students will leave all purses, bags, books, phones, jackets, etc., in the classroom during the absence.
4. Students will promote the spirit and letter of the Code of Honesty and Integrity by dissuading fellow students from dishonest activity and, when such casual persuasion does not work, informing the professor of the possible dishonest activity, either anonymously, or otherwise.
5. Students will make every effort to avoid even the appearance of dishonesty or lack of integrity.

Violation of this policy will not be tolerated and violators will be subject to severe penalties. The success of the Code of Honor and Integrity is based upon the collective desire of students, faculty and the community to live in an environment that embraces respect for that which is right – both in the college and in society as a whole.

Biology 7 – COURSE SCHEDULE

Fall 2017

***QUIZ:** A quiz will be given during the **first 20 minutes** of class, after which we will review the answers and discuss. Schedule accordingly!

Week	Date		Lesson Plan
1	8/29	LEC	Introduction to the Course; Evolution & Speciation Review
		LAB	Morgan/Carter #1 – The Scientific Method
			<i>How to Read Your Textbook</i>
	8/31	LEC	Phylogeny & the Tree of Life (ch 26)
		LAB	How to Make a Cladogram
2	9/5	LEC	QUIZ 1; An Introduction to Ecology & the Biosphere (ch 52)
		LAB	Group Project planning
	9/7	LEC	Population Ecology (ch 53)
		LAB	Group Project planning + Check-in
3	9/12	LEC	QUIZ 2; Community Ecology (ch 54) & Ecosystems (ch 55)
		LAB	Group Project practice
	9/14	LEC	Bacteria & Archaea: pt 1 (ch 27)
			Group Project presentations (start of class)
		LAB	Morgan/Carter #12 – Bacteriology: Exercise 12.3
4	9/19	LEC	QUIZ 3; Bacteria & Archaea: pt 2 (ch 27)
			Ecology Paper rough draft due (start of class)
		LAB	Morgan/Carter #12 – Bacteriology
	9/21	LEC	EXAM 1; reflections; Intro to Protists (ch 28.1)
		LAB	<i>Documentary – “Your Inner Fish”</i>
5	9/26	LEC	Protists (ch 28)
			Ecology Paper final draft due
		LAB	Morgan/Carter #13 – Protists
	9/28	LEC	Plant Diversity I: How Plants Colonized Land (ch 29)
		LAB	Morgan/Carter #14 – Bryophytes & Seedless Vascular Plants
6	10/3	LEC	QUIZ 4; Plant Diversity II: The Evolution of Seed Plants (ch 30)
		LAB	Morgan/Carter #15 – Seed Plants
	10/5	LEC	Plant Structure & Growth (ch 35)
		LAB	Field Trip: Plants in the Local Environment
7	10/10	LEC	QUIZ 5; Transport in Plants (ch 36)
		LAB	Morgan/Carter #20 – Plant Anatomy; Field Trip Follow-up
	10/12	LEC	Fungi (ch 31)
			Morgan/Carter #17 – The Kingdom Fungi
		LAB	Group Project: Background Research Due
8	10/17	LEC	EXAM 2; An Overview of Animal Diversity (ch 32)
		LAB	Intro to Invertebrates (ch 33)

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8	cont'd	10/19	LEC	An Introduction to Invertebrates (ch 33) <i>Morgan/Carter #18 – Animal Diversity</i> LAB <i>Group Project: Hypothesis & Experimental Design</i>
9	10/24	LEC	QUIZ 6 ; The Origin & Evolution of Vertebrates (ch 34) LAB <i>Morgan/Carter #19 – Animal Diversity</i>	
	10/26	LEC	Evolution of Homo sapiens (ch 34); Basic Principles of Animal Form & Function (ch 40) LAB <i>Morgan/Carter #22.1 – Histology of the Skin</i>	
10	10/31	LEC	QUIZ 7 ; Hormones & the Endocrine System (ch 45); Animal Nutrition pt 1 (ch 41) LAB <i>Group Project Meetings: data analysis</i>	
	11/2	LEC	EXAM 3 ; Animal Nutrition pt 2 (ch 41) LAB <i>Morgan/Carter #22 – Digestive System</i>	
11	11/7	LEC	QUIZ 8 ; Circulation & Gas Exchange (ch 42) <i>Morgan/Carter #23 – Circulatory & Respiratory Systems</i> LAB <i>Group Project Meetings: conclusions</i>	
	11/9	LEC	Osmoregulation & Excretion (ch 44) <i>Lab Report rough draft due (start of class)</i> LAB <i>Morgan/Carter #24 – Excretory System</i>	
12	11/14	LEC	QUIZ 9 ; Animal Reproduction (ch 46) LAB <i>Morgan/Carter #24 – Reproductive Systems</i>	
	11/16	LEC	Animal Development (ch 47) <i>Lab Report due</i> LAB <i>Morgan/Carter #25 – Animal Development</i>	
13	11/21	LEC	EXAM 4 ; Neurons, Synapses, & Signaling pt 1 (ch 48) LAB <i>Practice Lab Practical Exam</i>	
	11/23	LEC	THANKSGIVING HOLIDAY	
		LAB	CAMPUS CLOSED	
14	11/28	LEC	Neurons, etc. pt 2 (ch 48); Sensory Mechanisms (ch 50) LAB <i>LAB PRACTICAL EXAMINATION (given before lecture)</i>	
	11/30	LEC	QUIZ 10 ; Nervous Systems (ch 49) LAB <i>Brain dissection & Morgan/Carter #24 – Nervous Systems</i>	
15	12/5	LEC	Motor Mechanisms (ch 50); Animal Behavior (ch 51) LAB <i>Morgan/Carter #26 – Animal Behavior</i>	
	12/7	LEC	QUIZ 11 ; Animal Behavior Presentations (at the end) LAB <i>Animal Behavior Experiment</i>	
16	12/12		EXAM 5 (3:00pm-5:00pm)	