IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Spring 2025**	Instructor Name:	**Setareh Madani**
Course Title & #:	**Principles of Biological Sciences/BIOL 100**	Email:	**setareh.madani@imperial.edu**
CRN #:	**20574**	Webpage (optional):	www.imperial.edu/students/canvas
Classroom:	**Lecture 2734, Lab 2717**	Office #:	**2779**
Class Dates:	**Feb 10 – Jun 6, 2025**	Office Hours:	**MW 5 – 6 pm Online Zoom (link on Canvas)** **TR 10:15 – 11:15 am**
Class Days:	**Lecture TR, Lab R**	Office Phone #:	760 355 6148
Class Times:	**Lecture 2:40 – 4:05 pm** **Lab 11:20 am – 2:30 pm**	Emergency Contact:	Department Secretary 760 355 6155
Units:	**4.00**	Class Format/Modality:	**Face to Face (On Ground)**

Course Description

A comprehensive one semester general biology course for non-majors. Includes life from the molecular to the organismic level of both plants and animals and their interactions within the environment. Special emphasis is put on human biology within appropriate areas of study. Appropriate for general education as well as nursing, pre-professional, and higher-level biology courses. Includes laboratory component. (CSU) (UC credit limited. See a counselor.)

Course Prerequisite(s) and/or Corequisite(s)

Successful completion of Intermediate Algebra or appropriate placement as defined by AB 705.

Student Learning Outcomes

Upon course completion, the successful student will have acquired new skills, knowledge, and or attitudes as demonstrated by being able to:

1. Demonstrate an understanding of the steps of the scientific method.
2. Demonstrate an understanding of the basis of evolution.

Course Objectives

Upon satisfactory completion of the course, students will be able to:

1. Identify the basic characteristics of all living things.
2. Name basic chemical aspects that pertain to life and the concept of homeostasis.
3. Describe the subcellular components of the cell including their structure and function.
4. Explain the light and dark reactions of photosynthesis.
5. Explain cellular respiration and its relations to the entire organism.
6. Demonstrate knowledge of the structure and function of DNA and RNA.
7. Explain protein synthesis and site the central dogma of cell biology.
8. Compare and contrast the fundamentals of asexual and sexual reproduction.
9. Define ecology and the overall impact of ecology to conditions in the environment.
10. Solve problems in general genetics and in human genetics and relate advances in genetics to social responsibility of geneticists.

11. Identify and relate the functions of the major systems of the human body; the interrelationship among body systems and nature of disease.
12. Classify organisms in the kingdoms of plants and animals, discuss their evolutions and their relationships.

Textbooks & Other Resources or Links

Required Textbook:

Fowler, S. et al, ***Concepts of Biology***, OpenStax. (2022). ISBN: 9781947172036

This textbook is OER (open educational resource); digital access and downloading it/PDF is free. Here is the link to access the book:
https://openstax.org/books/concepts-biology

Course Requirements and Instructional Methods

Taking notes during lecture is very important to be successful in this course.
There will be 4 exams including the final exam. Every four weeks, you will have one exam; the last one, which is the final exam, is in week 16, the final week of the semester. Each exam is worth 50 points.
You will also have one final lab activity with 50 possible points to take.
There will be various lab activities based on the material we discuss each session. You will need to have 12 lab activities, each worth 20 points, completed and turned in to get your full credit for the lab part of the course.

Make sure that you attend every session. **Active participation matters A LOT**.
Please pay attention that:

- **there are NO Make-Up exams or class/ lab activities**.
- The final grade will be based on the 4 exams and your lab activities.

Out of Class Assignments: The Department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates not less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Grading Based on Course Objectives

Final grade will be assigned based on the total points that a student earns in both lecture and laboratory sessions:

4 Exams	4 x **50 pts**	200 pts
Final lab activity	1 x **50 pts**	50 pts
Class assignments, including labs, discussions, online quizzes, etc.	12 x 20 pts	240 pts
Total		**490 pts**

A: 90 – 100 % **B: 80 – 89.9 %** **C: 70 – 79.9 %** **D: 60 – 69.9 %**

Academic Honesty (Artificial Intelligence -AI)

IVC values critical thinking and communication skills and considers academic integrity essential to learning. Using AI tools as a replacement for your own thinking, writing, or quantitative reasoning goes against both our mission and academic honesty policy and will be considered academic dishonesty, or plagiarism unless you have been instructed to do so by your instructor. In case of any uncertainty regarding the ethical use of AI tools, students are encouraged to reach out to their instructors for clarification.

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Accessibility Statement

Imperial Valley College is committed to providing an accessible learning experience for all students, regardless of course modality. Every effort has been made to ensure that this course complies with all state and federal accessibility regulations, including Section 508 of the Rehabilitation Act, the Americans with Disabilities Act (ADA), and Title 5 of the California Code of Regulations. However, if you encounter any content that is not accessible, please contact your instructor or the area dean for assistance. If you have specific accommodations through ***DSPS***, contact them for additional assistance.

We are here to support you and ensure that you have equal access to all course materials.

Course Policies

- A student who fails to attend the first meeting of a class will be dropped by the instructor as of the first official meeting of that class. Should readmission be desired, the student's status will be the same as that of any other student who desires to add a class. It is the student's responsibility to drop or officially withdraw from the class. See General Catalog for details.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences.

- Electronic Devices: Cell phones and electronic devices must be turned off and put away during class, unless otherwise directed by the instructor.
- **Food and Drink are prohibited in all labs**. Water bottles with lids/caps are the only exception. Please comply as directed by the instructor.
- Disruptive Students: Students who disrupt or interfere with a class may be sent out of the room and told to meet with the Campus Disciplinary Officer before returning to continue with coursework. Disciplinary procedures will be followed as outlined in the General Catalog.
- Children in the classroom: Due to college rules and state laws, only students enrolled in the class may attend; children are not allowed.
- Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the important of acknowledging and safeguarding intellectual property.

- There are many different forms of academic dishonesty. The following kinds of honesty violations and their definitions are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct.

- Plagiarism is taking and presenting as one's own the writings or ideas of others, without citing the source. You should understand the concept of plagiarism and keep it in mind when taking exams and preparing written materials. If you do not understand how to "cite a source" correctly, you must ask for help.
- Cheating is defined as fraud, deceit, or dishonesty in an academic assignment, or using or attempting to use materials, or assisting others in using materials that are prohibited or inappropriate in the context of the academic assignment in question.

Anyone caught cheating or plagiarizing will receive a zero (0) on the exam or assignment, and the instructor may report the incident to the Campus Disciplinary Officer, who may place related documentation in a file. Repeated acts of cheating may result in an F in the course and/or disciplinary

action. Please refer to the General Catalog for more information on academic dishonesty or other misconduct. Acts of cheating include, but are not limited to, the following: (a) plagiarism; (b) copying or attempting to copy from others during an examination or on an assignment; (c) communicating test information with another person during an examination; (d) allowing others to do an assignment or portion of an assignment; (e) using a commercial term paper service.

DSPS (Disabled Student Programs and Services)

Any student with a documented disability who may need educational accommodations should notify the instructor or the Disabled Student Programs and Services (DSP&S) office as soon as possible. The DSP&S office is located in Building 2100, telephone 760-355-6313. Please contact them if you feel you need to be evaluated for educational accommodation.

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Makings SAP means that you are maintaining a 2.0 GPA, you have successfully completed 67% of your coursework, and you will graduate on time. If you do not maintain SAP, you may lose your financial aid. If you have questions, please contact financial aid at finaid@imperial.edu.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit http://www.imperial.edu/studentresources or click the heart icon in Canvas.

SOME IMPORTANT DATES TO REMEMBER:

February 22

- Deadline to register for full-term courses
- Deadline to drop full-term courses and be eligible for a Refund

February 23 (Sunday)

- Deadline to drop Spring full-term classes without a W (course appearing on transcript without receiving a W) and no fees

May 10 (Saturday)

- Deadline to drop full-term courses with a W

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Anticipated Class Schedule/Calendar

Date or Week	Lecture	Lab
Week 1 Feb 10 – 13	Syllabus, Introduction to biology (Ch. 1) Energy and matter. Chemistry of life (Ch. 2)	Please refer to Modules 1 & 2 on Canvas.
Week 2 Feb 17 – 20	Cell structure and function (Ch. 3)	Please refer to Module 3 on Canvas.
Week 3 Feb 24 – 27	Homeostasis (Ch. 16.1)	Microscopy, Study of Cells, Cell Models
Week 4 Mar 3 – 6	**Exam 1: Mar 6, Thursday** Nervous System (Ch. 16.6)	Q & A
Week 5 Mar 10 – 13	Endocrine System (Ch. 16.4)	Please refer to Module 6 on Canvas.
Week 6 Mar 17 – 20	Circulatory and Respiratory System (Ch. 16.3)	Please refer to Module 7 on Canvas.
Week 7 Mar 24 – 27	Immune System and Diseases (Ch. 17)	Please refer to Module 8 on Canvas.
Week 8 Mar 31 – Apr 3	**Exam 2: Apr 3** Digestive System (Ch. 16.2)	Q & A
Week 9 Apr 7 – 10	How Cells Obtain Energy (Ch. 4)	Please refer to Module 10 on Canvas.
Week 10 Apr 14 – 17	Diversity of Life (Ch. 12)	Please refer to Module 11 on Canvas.
	Spring Recess (Apr 20 – 26) Campus Closed	
Week 11 Apr 28 – May 1	Conservation and Biodiversity (Ch. 21)	Please refer to Module 12 on Canvas.
Week 12 May 5 – 8	**Exam 3: May 8** Energy Flow through Ecosystems (Ch. 20.1)	Q & A
Week 13 May 12 – 15	Biogeochemical Cycles (Ch. 20.2)	Please refer to Module 14 on Canvas.
Week 14 May 19 – 22	Reproduction at the Cellular Level (Ch. 6)	Please refer to Module 15 on Canvas.
Week 15 May 27 – 29	Discovering How Populations Change (Ch. 11.1), Evolution and Coevolution	Please refer to Module 16 on Canvas.
Week 16 Jun 2 – 5	**Exam 4/Final Exam: Jun 5**	Q & A

*****Subject to change without prior notice*****