IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	**Spring 2023**	Instructor Name:	**Dr. Patrick S. Pauley**
Course Title & #:	**Biology 182**	Email:	**Patrick.pauley@imperial.edu**
CRN #:	**20408**	Webpage (optional):	**N/A**
Classroom:	**Online (CANVAS)**	Office #:	**Online (Email)**
Class Dates:	**February 13, 2023 – June 9, 2023**	Office Hours:	**Monday – Thursday 7AM – 8 AM**
Class Days:	**N/A (Online)**	Office Phone #:	**(760) 355 - 6363**
Class Times:	**N/A (Online)**	Emergency Contact:	
Units:	**4**	Class Format:	

Course Description

This is one of two entry-level courses designed for life science, biology, health care, and science education majors intending to transfer to four-year institutions. However, this course is open to all students. This course provides students an introduction to biology and the scientific method. Additionally, properties of life leading to genetic and biological diversity are studied. The course surveys evolutionary relationships, systematics, ecology, biological diversity, population regulation, and physiology of living organisms (Protista, Fungi, Plants, and Animals). Emphasis is on structure and function at the organismal level. (C-ID: BIOL 140; C-ID: BIOL 135 S with BIOL 180 & BIOL 182) (CSU/UC)

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

Appropriate placement as defined by AB705; or MATH 098 or MATH 091 with a grade of "C" or better.

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. Communication Skills
2. Critical Thinking

Course Objectives

Upon satisfactory completion of the course, students with a grade of "C" or better will be able to:

1. Describe the biological characteristics of life, and demonstrate an understanding of cells, and levels of biological organization.
2. Understand the process of science and demonstrate an ability to test hypotheses.
3. Define biological evolution, and demonstrate an understanding of how genetic variation and natural selection influence biological diversity.
4. Define what plants are, and provide evidence of an understanding of plant evolution, development, structure, growth, reproduction, and selected physiological processes.
5. Describe what Fungi are, and provide evidence of an understanding of development, structure, growth, and reproduction within this phylum.
6. Describe what Fungi are, and provide evidence of an understanding of development, structure, growth, and reproduction within this phylum.

7. Define what Protists are, and provide evidence of an understanding of their characteristics, structure, diversity, and reproduction.
8. Demonstrate an understanding of animal diversity, ecology and evolutionary trends.
9. Demonstrate an understanding of animal form and function including physiological processes, development, and reproduction across phyla.
10. Demonstrate an understanding of animal nervous systems from the cellular level to integrated systems.
11. Demonstrate an understanding of the structure of muscles, and the sliding filament model theory.
12. Understand animal sensory systems.
13. Demonstrate an understanding of population growth and regulation.

Textbooks & Other Resources or Links

Great news: your textbook for this class is available for **free** online!
Biology 2e from OpenStax Links to an external site., ISBN 978-1-947172-51-7

You have several options to obtain this book:

- View online Links to an external site.(Links to an external site.)
- Order a print copy Links to an external site. (Links to an external site.)

You can use whichever formats you want. Web view is recommended -- the responsive design works seamlessly on any device.

Course Requirements and Instructional Methods

Exams:

There will be five (5) exams covering chapters assigned. The power points have already been uploaded.

Assignments:

In addition, there will one (1) paper Fungi.

I also will be doing weekly discussions. I do expect you to participate in these discussion boards. Discussions are an important component of many online classes. They replicate in-class (face-to-face) discussions, so they can be fertile ground for exploratory learning. They can also be fertile ground for self-assessment. When students are directed to consciously compare their ideas or their participation with other participants in the class, they may be able to adjust their participation (both quantity and quality) to meet the bar set by other students. A total of sixteen (16) discussions will take place online over the course of the semester.

Labs:

Laboratory experiments will be conducted. A total of fifteen (15) labster will be assigned over the course of the semester.

Course Grading Based on Course Objectives

Class grading will be based on points accumulated in the following ways.

• Five (5) Exams Covering Chapters Assigned – 50-100 points each

• One (1) paper Fungi (I would like the paper to be typed, double spaced, font to be Helvetica or Ariel and 12pt) - 100 points each

• Five (15) Labster Assignments – 10 points each

• Weekly Class Participation (16 weeks) – 25 points each

* Exams may include true/false, multiple choice and short answer questions. Missed quizzes and exams must be cleared with the professor to be made-up. Asking to make-up missed quizzes or exams is your responsibility and needs to be for a reasonable excuse. You have all day from 12:00AM to 11:59PM to take Exams/Quizzes. This is 24 hours so plan accordingly.

Grading: A = 100 – 90% B = 89 – 80% C = 79 – 70% D = 69 – 60% F = < 59%

Course Policies

What does it mean to "attend" an online class?

Attendance is critical to student success and for IVC to use federal aid funds. Acceptable indications of attendance are:

• Student submission of an academic assignment

• Student submission of an exam

• Documented student interaction with class postings, such as weekly discussions.

• A posting by the student showing the student's participation in an assignment created by the instructor.

• A posting by the student in a discussion forum showing the student's participation in an online discussion about academic matters.

• An email from the student or other documentation showing that the student has initiated contact with a faculty member to ask a question about an academic subject studied in the course.

Logging onto Canvas alone is NOT adequate to demonstrate academic attendance by the student.

What is online netiquette?

Netiquette is internet manners, online etiquette, and digital etiquette all rolled into one word. Basically, netiquette is a set of rules for behaving properly online.

Students are to comply with the following rules of netiquette: (1) identify yourself, (2) include a subject line, (3) avoid sarcasm, (4) respect others' opinions and privacy, (5) acknowledge and return messages promptly, (6) copy with caution, (7) do not spam or junk mail, (8) be concise, (9) use appropriate language, (10) use appropriate emoticons (emotional icons) to help convey meaning, and (11) use appropriate intensifiers to help convey meaning [do not use ALL CAPS or multiple exclamation marks (!!!!)].

Academic Honesty

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.

Examples of Academic Dishonesty that can occur in an online environment:

• Copying from others on a quiz, test, examination, or assignment;

• Allowing someone else to copy your answers on a quiz, test, exam, or assignment;

• Having someone else take an exam or quiz for you;

• Conferring with others during a test or quiz (if the instructor didn't explicitly say it was a group project, then he/she expects you to do the work without conferring with others);

• Buying or using a term paper or research paper from an internet source or other company or taking any work of another, even with permission, and presenting the work as your own;

• Excessive revising or editing by others that substantially alters your final work;

• Sharing information that allows other students an advantage on an exam (such as telling a peer what to expect on a make-up exam or prepping a student for a test in another section of the same class);

• Taking and using the words, work, or ideas of others and presenting any of these as your own work is plagiarism. This applies to all work generated by another, whether it be oral, written, or artistic work. Plagiarism may either be deliberate or unintentional.

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.

Anticipated Class Schedule/Calendar

This schedule will be reviewed to include dates for the tests, assignments, and due dates. As the human experience is impacting the environment in positive and negative manners, and as the fifth IVC institutional learning outcome is global awareness this course will include human world events as part of the discussion. You will be expected to be aware of current world events and able to engage in discussion relevant to this fact. Amendments will be communicated in class and/or in canvas.

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1 February 13 – 16	**Module 0:** Orientation **Module 1 (Week 1):** Chapter 1 - The Study of Life & Chapter 2 - The Chemical Foundation of Life	Labster: Earth's Atmosphere - **February 16** Labster: The Scientific Method – **February 16** Discussion: About You – **February 16** Self-Check Quiz – **February 16** Student Self-Evaluation – **February 16**
Week 2 February 21 – 24	**Module 2 (Week 2):** Chapter 3 - Biological Macromolecules & Chapter 4 - Cell Structure	Labster: Periodic Table - **February 25** Labster: Carbohydrates Sugars– **February 24** Exam 1: Chapters 1, 2, 3 & 4 – **February 24** Discussion: Health Risk – **February 24**
Week 3 February 27 – March 3	**Module 3 (Week 3):** Chapter 5 - Structure and Function of Plasma Membranes, Chapter 6 - Metabolism, and Chapter 7 - Cellular Respiration	Labster: Metabolism - Karen's or Citric Acid Cycle – **March 3** Labster: Cellular Respiration – **March 3** Discussion: Human Health Risk – **March 3**
Week 4 March 6 - 10	**Module 4 (Week 4):** Chapter 8 - Photosynthesis & Chapter 9 - Cell Communication	Labster: Photosynthesis Experiment – **March 10** Labster: Signaling by Cells – **March 10** Labster: Signaling Transduction – **March 10** DiscussionMental Health – **March 10** Exam 2: Chapters 5, 6, 7, 8 & 9 – **March 10**
Week 5 March 13 - 17	**Module 5 (Week 5):** Chapter 21 - Viruses & Chapter 22 - Prokaryotes: Bacteria and Archaea	Discussion: Mask Wearing and it's Effects – **March 17** Labster: Evolutionary Genetic Directions– **March 17**
Week 6 March 20 - 24	**Module 6 (Week 6):** Chapter 23 - Protists & Chapter 24 - Fungi	Discussion: Plastics – **March 24**
Week 7 March 27 - 31	**Module 7 (Week 7):** Fungi	Assignment: Fungi– **March 31** Discussion: 5-second Rules – **March 31** Student Self-Evaluation – **March 31**
Week 8 April 3 - 7	**Module 8 (Week 8):** Chapter 25 - Seedless Plants & Chapter 26 - Seed Plants	Discussion: Raw Sewage – **April 7** Labster: Cell Theory and InTer Al Organelles – **April 7**
NO SCHOOL April 10 - 14	**NO SCHOOL**	

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 9 April 17 - 21	**Module 9 (Week 9):** Chapter 27 - Introduction to Animal Diversity	Discussion: Emotional Factors – **April 21** Labster: Cell Membrane and Membrane Transporter – **April 21**
Week 10 April 24 - 28	**Module 10 (Week 10):** Chapter 28 - Invertebrates & Chapter 19 - Vertebrates	Labster: Cell Structure: Cell Theory and Internal Organelles– **April 28** Discussion: Healthy Eating – **April 28** Exam 3: Chapters 21, 22, 23, 24, 25, 26, 27, 28 & 29 – **April 28**
Week 11 May 1 - 5	**Module 11 (Week 11):** Chapter 44 - Ecology and the Biosphere	Labster: Carbon Bonding for Organic Matter Angles and Valences – **May 5** Discussion: Exercise – **May 5**
Week 12 May 8 - 12	**Module 12 (Week 12):** Chapter 45 - Population and Community Ecology	Discussion: World Population – **May 12**
Week 13 May 15 - 19	**Module 13 (Week 13):** Chapter 46 - Ecosystems	Discussion:Moods and Colors– **May 19**
Week 14 May 22 - 26	**Module 14 (Week 14):** Chapter 47 - Conservation Biology and Biodiversity	Discussion: Deadly Coronavirus– **May 26** Exam 4: Chapters 44, 45, 46 & 47 – **May 26**
Week 15 May 30 – June 2	**Module 15 (Week 15):** Chapter 30 - Plant Form and Physiology & Chapter 31 - Soil and Plant Nutrition	Labster: Protein Synthesis – **June 2** Discussion: Urban Environment – **June 2**
Week 16 June 5 - 9	**Module 16 (Week 16):** Chapter 32 - Plant Reproduction	Discussion: It's Closing Time – **June 9** Final Exam: Chapters 30, 31 & 32 – **June 9**

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