



Basic Course Information

Semester:	Spring 2026	Instructor Name:	Peggy Brady
Course Title & #:	General Biology: Principles of Organismal Biology – Biol182	Email:	peggy.brady@imperial.edu
CRN #:	20408	Webpage (optional):	Canvas
Classroom:	2713	Office #:	2777
Class Dates:	2/17/26 – 6/12/26	Office Hours:	M/W: 11:30am – 12:30pm, T/Th: 3-4pm.
Class Days:	M/W	Office Phone #:	760-355-6202
Class Times:	8:00 – 11:10 am	Emergency Contact:	peggy.brady@imperial.edu
Units:	4	Class Format/Modality:	Face-to-Face (On Ground)

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 w/BIOL 180 & BIOL 182) (CSU/UC)

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

Successful completion of Intermediate Algebra or appropriate placement as defined by AB705.

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. Illustrate an understanding of evolution through natural selection.

Course Objectives

Upon satisfactory completion of the course, students 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. Define what Protists are, and provide evidence of an understanding of their characteristics, structure, diversity, and reproduction.



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

Textbooks & Other Resources or Links

This class has two required books.

For Lab:

Biology Laboratory Manual

Edition: 13th

ISBN: 9781264137275

Author: Vodopich

Publisher: McGraw-Hill

This book is for sale at the IVC Bookstore. You will need a copy before your first lab. Physical or digital versions are both acceptable.

For Class:

Good news: your textbook for this class is available for free online!

Biology 2e from OpenStax, Print ISBN 1947172514, Digital ISBN 1947172522,

www.openstax.org/details/books/biology-2e

There are additional student resources available for this book as well and can be found on website listed above under “student resources”.

Course Requirements and Instructional Methods

Class activities: This class will utilize lectures, videos, discussions, and other activities to aid your learning. You are expected to come to class having looked over the materials presented in the textbook. This will help you engage during the class. You have an obligation to the others in the class to participate in creating an excellent learning environment in our classroom.

Lecture Exams: There will be 4 Lecture exams worth 100 points each (400 points total). Exams will happen at the end of class. Each exam will be given 70 minutes for completion. These exams can include multiple choice, short answer, true/false, matching, and fill in the blank questions. Be sure to bring a few writing utensils.

Lab Exams: There will be 1 lab exam worth 100 points. It will be given during the laboratory time. You will have the entire time to complete the exam, but you may not need the entire lab period. These exams can include multiple choice, short answer, true/false, fill in the blank, and practical (application) questions. For some questions you may need to complete a task (such as taking measurements) to answer the question.

There will be no makeup exams, except for extreme circumstances (ex. illness, emergency). If you have a valid and documentable reason for missing an exam it is your responsibility to inform me (the instructor) within 48 hours of the missed exam and provide documentation for the day of the exam. **This must be done by email.** Without this you will be unable to make up the exam and a grade of 0 will be entered into the gradebook. The makeup exam will be scheduled as



soon as reasonably possible. Failure to show up for the makeup will be treated the same way as missing the original exam day. Work conflicts, family conflicts, travel, or forgetting about the exam do not count as valid excused absences.

Lab worksheets: There will be 12 lab worksheets worth 25 points each (300 points total). Lab worksheets are due at the end of lab. Lab groups will be groups of 2-3 people. Larger groups are not permitted and will receive a point deduction. You are responsible for making sure everyone's name is on the worksheet. Students must stay in lab until everyone in their lab group has completed the entire lab. Leaving before your lab group is done will result in a 0 for that lab assignment. The lab groups must also clean their lab area before leaving to receive full points for their lab assignments.

These assignments cannot be made up because lab rooms are only set up for one day. Students may have their first missed lab excused without documentation. After the first absence, additional missed labs will require valid documentation to be excused from the assignment. This documentation must be provided by email within 48 hours of the missed lab. No more than 4 lab assignments will be excused. Work conflicts, family conflicts, travel, or forgetting about the exam do not count as valid excuses.

Mini project: There will be 1 mini project worth 50 points. This project will be assigned and completed during lab.

Lab Research Project: Lab groups will complete a literature review research project. Students will come up with a complex question relating to Evolution by natural selection and complete a literature review to try and answer their question. A presentation will be given during Week 16 to communicate their findings with the rest of the class. This presentation is worth 100 points. A rubric will be provided on Canvas during the second half of the course. All students must attend presentation day and stay through the presentations of their peers.

Self-Assessments: There will be 5 self-assessments worth 10 points each (50 points total). They will be online and will be submitted through Canvas.

Spelling and grammar (within reason) count on all written assignments. If spelling or grammar impedes my ability to understand your answer you will lose points.

Extra Credit: I often give extra credit in the form bonus questions on exams. These are never guaranteed. If I choose to do so, everyone will receive the same opportunities to earn the extra points.

Late Work: I do not accept late work.

Course Grading Based on Course Objectives

4 class exams - 100 points each
1 lab exam - 100 points
1 lab research Project – 100 points
1 mini project - 50 points
12 Lab worksheets - 25 points each
5 self-assessments - 10 points each
Total: 1000 points

Grade Breakdown:

- A** 900 - 1000 points
- B** 800 - 899 points
- C** 700 - 799 points
- D** 600 - 699 points
- F** 0 - 599 points

Should I feel a grade adjustment is called for based upon the distribution of point totals across the entire class, I will adjust this grading scheme. However, anyone receiving $\geq 90\%$ of all points is guaranteed at least an A,



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≥80% of all points at least a B, and ≥70% of all points at least a C. The grade cutoffs might fall below these levels but will not be raised above them.

At the end of the term many students tend to email me asking me to round their grade. Decisions on grade adjustments, as per the policy above, are done once I can see the distribution of grades for the entire class. If any adjustments are made, they will be applied to all students in the course. Emailing me will not change your final grade. Because of this, I ask that you please refrain from emailing about grade adjustments.

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.

My policy: AI use is not permitted in this class for any reason. Therefore, using AI in any capacity for any assignment where you would earn points will result in an automatic 0 for cheating.

Academic honesty in the advancement of knowledge requires that all students and instructors respect the integrity of one another's work and recognize the importance of acknowledging and safeguarding intellectual property.

There are many different forms of academic dishonesty. The following kinds of honesty violations are not meant to be exhaustive. Rather, they are intended to serve as examples of unacceptable academic conduct. If you are ever unsure about what conduct is permitted, you must ask.

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: (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; (f) using work from a previous course and submitting it for credit; (g) using materials not permitted for an assignment or exam.

While group work is encouraged and expected on labs, note that sharing work so that others may copy it without doing the work themselves is considered cheating and will result in a 0 on the assignment for both groups.

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

Attendance:

- 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.
- Regular attendance in all classes is expected of all students. A student who misses two continuous weeks of class may be dropped from the course. If you will be absent for an extended period of time, it is your responsibility to communicate this with me as soon as possible.
- Absences attributed to the representation of the college at officially approved events (conferences, contests, and field trips) will be counted as 'excused' absences and will not count towards the two week cutoff.

Classroom Etiquette:

It is everyone's responsibility to create a fair, welcoming, productive, and collaborative learning environment. It falls on each of us to make sure the learning environment of our classroom is free from unnecessary distractions, personal attacks, and other disrespectful behavior. Distracting and/or inappropriate behavior is not permitted and will be met with a warning or being asked to leave the room.

Classroom Rules:

- Cell phones must be on silent and should not be used for distraction. If you need to take or make a call, please do so outside the classroom and return to class when you are done.
- No talking during lecture or other presentation portions of the class. It is distracting to everyone. If you have a question please raise your hand and I will happily address it. Students who continue to disrupt class after a warning will be asked to leave. Disciplinary procedures will be followed as outlined in the General Catalog.
- Due to college rules, no one who is not enrolled in the class may attend.

Additional Lab Safety Requirements:

Absolutely no food or drink (including water). If you need to drink water or eat you may step out and rejoin the class when you are done.

Wear closed toe shoes and other protective clothing. This is for your own safety.

Some labs will require safety goggles for your protection. You will need to provide your own goggles.

Email Policy:

I will respond to emails within 1 business day. If a full business day has passed, send a follow-up email. Saturdays and Sundays are not business days. I do try to answer emails on the weekend, but I cannot guarantee them.

Financial Aid

Your Grades Matter! In order to continue to receive financial aid, you must meet the Satisfactory Academic Progress (SAP) requirement. Making 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

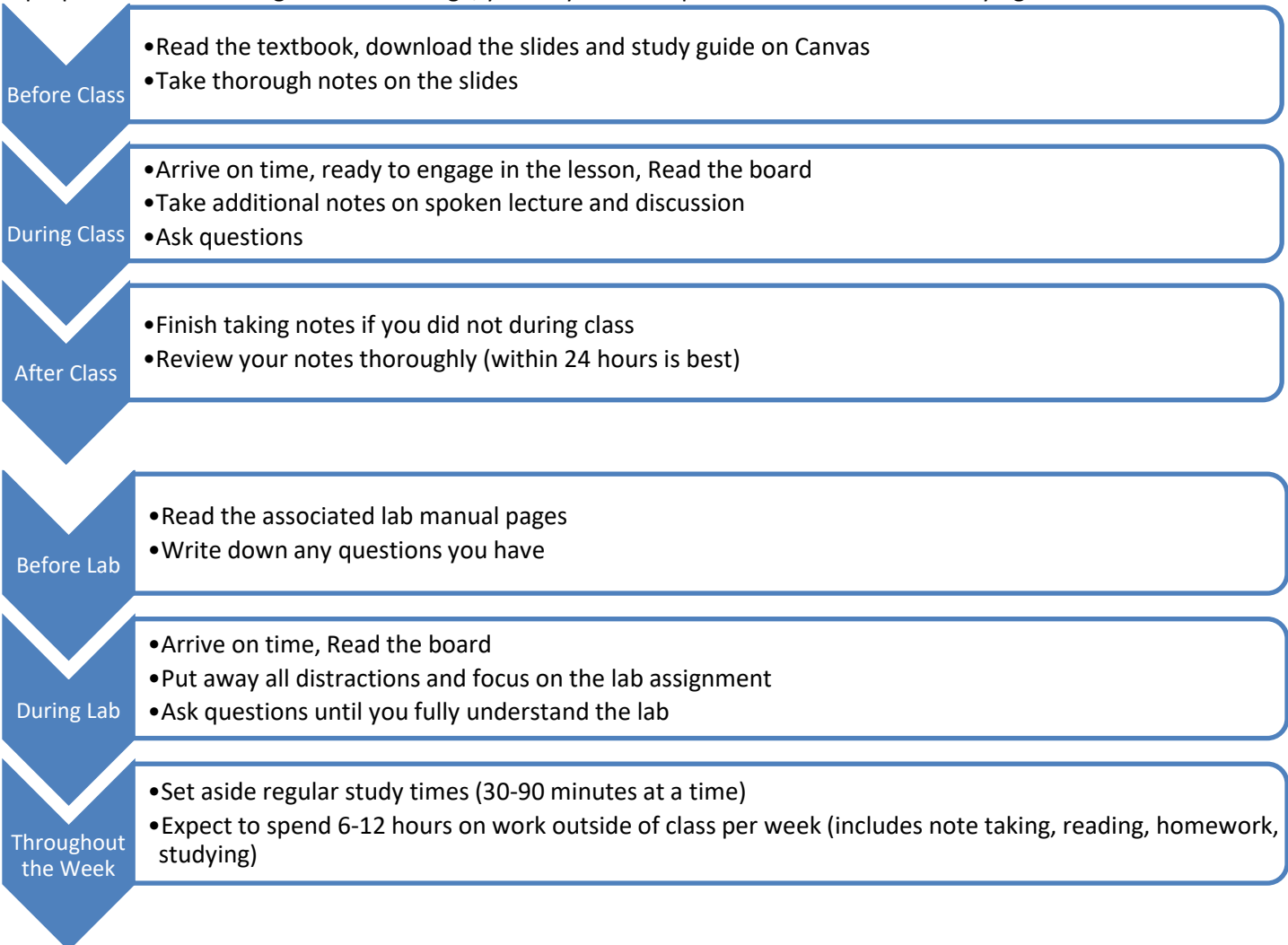
IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

If you are experiencing illness (physical or mental) the health center is here for you! They can be found here: <https://www.imperial.edu/student-support/student-health-center/>

Notes from the health center are one form of documentation accepted for excused absences. Remember they must excuse you from the day you missed the exam/lab to be accepted.

Roadmap to success!

Below is schedule to help you succeed in my course. Note that a general guideline for college courses is to expect to spend 2-3 hours on work outside of class for each unit the class is worth. This is a 4-unit class. Depending on your level of preparedness and background knowledge, you may need to spend more or less time studying.



Anticipated Class Schedule/Calendar

Week	Lecture Topic & Associated Textbook Reading	Lab Topic and Associated Lab Manual text
Week 1 Feb 16 - 20	No Class - HOLIDAY	Course Orientation - Syllabus Lab Safety and Expectations – page xiii Measurements in Biology – Procedure 2.1, 2.3, 2.5 - 2.6 Scientific Method – Procedure 1.1-1.3
Week 2 Feb 23 - 27	What is an Organism? Chapter 1 - The Scientific Study of Life – Scientific Method Chapter 4 Cell Structure	The Microscope – Procedure 3.1-3.3, 3.5 Cells – Procedure 4.1, 4.8
Week 3 Mar 2 - 6	Chapter 2 The Chemical Foundation of Life Chapter 5.1-5.3 Structure and Function of Plasma Membrane Self-Assessment 1 Due Tuesday by 11:59 pm	Diffusion and Osmosis – Procedure 9.1; 9.3-9.5
Week 4 Mar 9 - 13	Chapter 10 - Cellular Reproduction Chapter 18 - Evolution and the origin of species	Cell Reproduction – Procedure 14.1-14.4
Week 5 Mar 16-20	Chapter 21 – Viruses Lecture Exam 1 (Weeks 1-4)	Mini project: Science writing and the scientific method
Week 6 March 23-27	Chapter 19 - Evolution of populations Chapter 20 - Phylogenies and the history of life Self-Assessment 2 Due Tuesday by 11:59 pm	Evolution – Procedure 18.1-18.4
Week 7 Mar 30 - Apr 3	Chapter 23 Protists Chapter 25 Seedless Plants	Protist Diversity Lab – Procedure 25.1, 25.3; 26.1, 26.6
SPRING BREAK Apr 6-10	No class	No Class
Week 8 Apr 13-17	Chapter 26 - Seed Plants Chapter 30 - Plant Form and Physiology	Plant Diversity Lab – Procedure 28.4, 30.1, 31.1
Week 9 Apr 20 - 24	Chapter 24 – Fungi Lecture Exam 2 (Weeks 5-8) Self-Assessment 3 Due Tuesday by 11:59 pm	Fungi Diversity Lab – Procedure 27.1, 27.6, 27.8, 27.10 Lab project Introduction and Group Formation – Determining a Question
Week 10 Apr 27 - May 1	Chapter 27 - Introduction to Animal Diversity Chapter 28 Invertebrates	Lab Exam (Weeks 1-9)
Week 11 May 4-8	Chapter 29 Vertebrates Chapter 33 Form and Function Self-Assessment 4 Due Tuesday by 11:59 pm	Animal Diversity Lab – Procedure 36.2, 37.1, 40.1
Week 12 May 11- 15	Chapter 35 Nervous System Chapter 36 Sensory System Lecture Exam 3 (Weeks 9-11)	Lab project Literature Search – What is peer reviewed literature and where to find it?
Week 13 May 18 - 22	Chapter 38 Musculoskeletal Chapter 40 Circulatory System Self-Assessment 5 Due Tuesday by 11:59 pm	Human Biology – Sensory Perception – Procedure 46.1 – 46.4, 46.7, 46.12

Week	Lecture Topic & Associated Textbook Reading	Lab Topic and Associated Lab Manual text
Week 14 May 25 - 29	No Class - HOLIDAY	Human Evolution – Skeletal System – Skull Examination – Procedure 19.1-19.4
Week 15 June 1 - 5	Chapter 44 - Ecology and the Biosphere Chapter 45 - Population and Community Ecology	Lab Project Good Science Communication and Creation of your Presentation
Week 16 June 8 - 12	Final Exam (Weeks 12-15 + Lab weeks 11 – 15)	Lab Project Presentations

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

Instructor Introduction

Hello! It's so wonderful to meet you! I know sometimes instructors can seem intimidating so I want to take some space to introduce myself and showcase that I'm just another person you will be interacting with.

My name is Peggy. You can call me Peggy, Dr. Brady, Professor Brady, Dr. Peggy, Professor Peggy, whichever of these you are most comfortable with! It has been my privilege to be involved in undergraduate education for the last 8 years. During my time in graduate school, I've been involved in classes ranging from general biology to disease ecology from systematics to comparative anatomy! I studied at UC Santa Cruz where I received my Bachelor of Science degree in General Biology. After that, I attended CSU Sacramento and obtained a Master of Science degree in Ecology, Evolution, and Conservation Biology. It was at CSU Sacramento that I developed a love for teaching science. Finally, I attended UC Riverside where I earned a PhD in Evolution, Ecology, and Organismal Biology. Over my time in graduate school, I've conducted research centered on kin selection in fruit flies and mammalian phylogenetics. I'm happy to discuss any of these experiences with you or answer questions you may have about higher education in biology. My office hours are a great time for these kinds of questions. I'm looking forward to meeting all of you soon!



This is a picture of me standing next to Max Mastodon! Max is a Pacific Mastodon who is typically on display at the Western Science Center in Hemet CA. He has his own twitter page @MaxMastodon if you want to learn more about this fossil!