



Introduction to the Biological World

Course Title: Introduction to the Biological World

Instructor Email:

Course Number: BIOL 100000

Office Hours:

Instructor Name:

Last Updated: Fall 2026

Course Description:

Biology II/ BIOL 10000 is an advanced laboratory course that will introduce you to the fundamental principles that unify diversity of life on Earth. This includes cell biology, metabolism, genetics, evolutionary theory, reproduction and development, plant biology, and ecology.

Course Prerequisites:

None

Course Access:

All assignments and assessments will be turned in through Canvas

Course Goal:

The main purpose of this course is to teach you about life's diversity and its underlying unity. My lectures will focus on key concepts, scientific methods, current understandings, and research trends for major fields of biological inquiry. It will also deal with the principles of biochemistry, inheritance, and evolution. Comparative anatomy and physiology of plants and animals will also be dealt with. Overall, the principles of biological organization from molecules to ecosystems will be taught. Focus will also be given to patterns and consequences of organisms interacting with one another and with the environment.

Student Learning Objectives:

1. Understand the process of science, the scientific method, differences in scientific and nonscientific explanations, and how science is commonly used in your everyday life.
2. Understand that all life is composed of cells that define the structure and function of living organisms.
3. Explain how genetic information translates into organismal development and behavior and drives the diversity of life.
4. Understand the various theories and evidence for the origin of life and evolution.
5. Know that all ecosystems are interconnected and interact with one another.
6. Understand the basic principles of animal development and the different systems within an animal

Learning Resources & Texts

Campbell Biology in Focus, 2nd Edition. Urry, Cain, Wasserman, Minorsky, and Reese.

Assignments

Assignments and lab work are due on the assigned date. Late work will be for 50% credit.

Classroom Expectations

1. Be in your seat at the bell.
2. Come prepared for class (notebook, folder, pencil, and fully-charged Chromebook)
3. Be respectful.
4. Understand that this is a dual-credit with high expectations for work and focus.
5. Do your own work. Plagiarism and cheating will not be tolerated.

Grading Scale:

Grade	Percentages
A	90 - 100%
B	80 - 89%
C	70 - 79%
D	60 – 69%
F	≤ 59%

Academic Misconduct / Plagiarism / AI:

Academic Misconduct, including plagiarism (using other people's ideas/words and not giving them credit thus implying the work is your own original work) or using your own work from a previous course without the express permission of the instructor, is taken very seriously at any learning institution. It is taken very seriously in this class. Please be aware of what behaviors constitute academic misconduct ([See Bulletin, Code of Students Rights, Responsibilities and Conduct Part II. A.](#)) If caught cheating or plagiarizing, a student may receive no credit on the assignment and may result in an F for the course. Any instances of academic dishonesty will be reported to the Office of Student Conduct and Care and your Department Chair and may result in expulsion from the University. Additional potential consequences can be found under: potential consequences (See Bulletin, [Code of Students Rights, Responsibilities and Conduct, Part III. A.](#): i.e., failure of the assignment, failure of the course and/or dismissal from the university) of such behavior.

Student Support Services

Purdue University Fort Wayne is committed to your academic and personal success. Visit the [Student Support Services](#) page for a list of student support services, including academic services, technology services, health and wellness, and support from administrative offices. For help with technology, including Brightspace, visit the [IT Services Student Technology Support](#) page.

If you observe and/or are made aware of student behavior that leaves you feeling concerned, worried, and/or alarmed, trust your instincts and say something. The CARE Team can assist with the student of concern, whether that's you or someone you are referring. Report the concern through the online CARE referral form. Please note that this form is not for emergencies. If you know of a student who is injured, is injuring themselves or others, or is threatening injuries to themselves or others, please call 911 immediately.

Your emotional wellness and mental health are important. If you have a mental health disorder, are struggling with your mental health, your stress overwhelms your ability to cope with it, or you find yourself needing emotional support, please talk to someone. If you or someone you know is in a mental health crisis situation, call 911 or go to the local emergency room. Otherwise, please reach out to our Center for Student Counseling (CSC). All currently enrolled PFW and IUFW students have access to free counseling at the center. To make an appointment to talk with a counselor call 260-481-6200 or email csc@pfw.edu.

Course Schedule

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Chapter(s)	Subject	Lab(s)
Chapter 1	Introduction	Microscope Lab
Chapters 2 & 3	Chemistry of Life	Enzyme Catalysis
Chapters 4 & 5	Cell Structure and Function	Osmosis and Diffusion
Chapter 7	Cell Respiration and Fermentation	
Chapter 8	Photosynthesis	Photosynthesis Inquiry
Chapter 9	The Cell Cycle	Environmental Effects on Mitosis
Chapter 10	Meiosis	
Chapters 11 & 12	Genetics	Genetics Case Study
Chapter 14	Gene Expression	
Chapter 16	Biotechnology	Electrophoresis /Blast Lab
Chapter 22	Evolution	Natural Selection
Chapter 36	Reproduction and Development	
Chapter 29 & 30	Plant Biology	Transpiration
Chapters 40, 41 & 42	Ecology	Isopod Behavior

Additional Information: