



蘇州大學
Soochow University

Soochow University

BIO 101 Introduction to Biology I

Summer 2021

Course information

Course Credits: 4

Contact Hours: 55 hours

Class Time: 8:30 - 10:20

Instructor: TBA

Course Format: Online

Course Description

The course offers an introduction to the general biology, starting from basic scientific concept and nature laws that govern life and all living things. The major unifying concepts and fundamental principles of biology in the wonderful living world will be the core content of this course. Learners will see how their own existence are associated with the world they habit. The main topics include Cell Biology, Physiology, Genetics, evolution, biodiversity, ecology and the interaction between organisms and the environment.

Prerequisite(s)

None



Learning Objectives

Upon completion of this course, students will be able to:

1. Understand biological concepts and major assumptions;
2. Connect their life to the biological theories;
3. Explain the concept of evolution, natural selection and the factors that may have influenced the arising of these characteristics in the organisms concerned;
4. Demonstrate the evolution of animal and animal behaviors;
5. Use a functional approach to the understanding of ecology and the adaptations in various organisms.

Methodology

Methodology	Hours	Hours of work During class	Hours of work After class
Online Video	50	88 hours (60%)	
Online Forum Discussion	8		
Assessment	30		
Personal study	30		68 hours (40%)
Tasks	22		
Practical teaching preparation	10		
Bibliographic search	6		
Total	156	88	68



Textbook(s)

Jane B. Reece, Martha R. Taylor, Eric J. Simon, Jean L. Dickey & Kevin G-E. Scott, 2015, *Campbell Biology: Concepts & Connections*, Canadian Edition, Pearson Canada Inc. Press.

Tasks and Evaluation

2 Assignments	20% (10% per assignment)
2 Labs	20% (10% per lab)
Midterm	25%
Final exam	35%

Students are required to attend online classes on the scheduled time. Missing classes without permission will lead to decrease in overall grade.

- Missing less than two classes: no penalty.
- Missing more than two classes: 7% will be taken off from the overall grade.

Online forum discussion is required. Students are required to post at least one question and answer at least one question on the forum weekly.

Online Tutorials are mandatory. Students will read and discuss academic articles provided. Students will also discuss the case studies for the week's lectures. Each Tutorial will be 1 hour.

All exams will be held online and the time of each exam will be limited to 1 hour. Exams must also be taken at the scheduled time. There will be no make-up exams



Rating system:

1. Assessment

ASSESSMENT ITEM	PERCENT OF FINAL GRADE
2 Assignments	20% (10% per assignment)
2 Labs	20% (10% per lab)
Midterm	25%
Final exam	35%

2. Grading Scale

A+ 96-100	A 90-95	A- 85-89
B+ 82-84	B 78-81	B- 75-77
C+ 71-74	C 66-70	C- 62-65
D 60-61	F < 60	

Class Schedule

Week	Lesson	Content
1	1	Course Introduction Exploring Biology
	2	The Essential Chemistry of Life
	3	The Compounds of Cells
	4	Cellular Structure
	5	Cellular Function Assignment 1 due
2	6	How Cells Harvest Chemical Energy
	7	How Cells Harvest Chemical Energy (Cont.)



	8	Photosynthesis
	9	The Cellular Basis of Reproduction and Inheritance
	10	The Cellular Basis of Reproduction and Inheritance (Cont.) Assignment 2 due
3	11	Midterm Test
	12	Patterns of Inheritance
	13	Molecular Genetics
	14	Gene Expression
	15	DNA Technology and Genomics Lab 1: Patterns of Inheritance
4	16	Evolution: In the Beginning
	17	Mechanisms of Evolution
	18	Speciation and Phylogeny
	19	Viruses and Other Acellular “Life”
	20	Biodiversity of Protists and Fungi Lab 2: Biodiversity
5	21	Biodiversity of Plants
	22	Biodiversity of Invertebrate Animals
	23	Biodiversity of Vertebrate Animals
	24	Final Exam Reviews and Question Session (<i>Zoom Meeting</i>)
	25	Final Exam



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University Regulations and Services

Soochow University highly values the academic integrity and aims to promote the academic fairness, honesty and responsibility. Any academic dishonesty behaviors and any attempts to cheats and plagiarism will be reported to the university administration office. A written warning and the relevant penalties will be imposed. The record might be shown on the official university transcript.

Soochow University also highly respects students' accommodation for disabilities and religions. You might contact the Student Accessibility Office if you have any questions, concerns or if you would like to report any offensive behaviors.

Note:

Please contact the University Administrative Office immediately if you have a learning disability, a medical issue, or any other type of problem that prevents professors from seeing you have learned the course material.