BIO 201 FUNDAMENTALS OF BIOLOGY: Organisms to Ecosystems
Spring 2025
TUE & THU, 3:30PM - 4:50PM; C103

Instructor: Hye-Joo Kwon, Ph.D.
Email: hyejoo.kwon@utah.edu
Phone Number: 032-626-6238
Office Hours: FRI, 10:00 AM – 12:00 PM or by appointment
Office Location: U827
TA: Eunmin Lee (Eunmin.Lee@stonybrook.edu)

Course Materials

• Required materials for the course, including reading materials, worksheets, videos, and assignments will be posted on Brightspace.

• ***Introductory Biology: Evolutionary and Ecological Perspectives.*** A free online biology textbook available for students needing basic biology background knowledge: https://pressbooks.umn.edu/introbio/

Course Description

An introduction to the major concepts in evolution, ecology, and biodiversity at the genetic, organismal, community, and ecosystem levels. Topics are presented in relation to five overall themes: Nature and Process of Science, Evolution, Information Flow, Systems, and Structure-Function.

By the end of this course, students will be able to:

- understand fundamental principles of biology.
- use the knowledge to analyze issues involving biology.
- apply the scientific method to questions related to biology.
- make decisions individually, socially, and ecologically responsible for life.

Teaching and Learning Methods

This course uses lectures, discussions, experiential learning, and problem-based learning to achieve learning outcomes.

Course Policies

Attendance & Punctuality:
The University expects regular attendance at all class meetings. Students are responsible for acquainting themselves with and satisfying the entire range of academic objectives and requirements defined by the instructor. As per the Korean government, an absence of over six classes will result in automatic failure. Please refer to the SUNY Korea SBU attendance policy:
https://www.sunykorea.ac.kr/convert/preview/1686573199142/index.html

Participation:
Students are expected to be active participants in the class. Students should read the reading materials before or after the lecture, contribute to discussions, and be willing to think.

Electronic Devices in Class:
If you use a computer, tablet, or phone in class, it must be used for purposes relevant to the course. All cell phones and other noisy devices are to be turned OFF or in a silent setting. Cell phone usage, texting, tweeting, checking email, etc., are not allowed at any time during class.

Brightspace:
Students are responsible for checking the Brightspace course website, which contains announcements, assignments, and/or any changes in the syllabus.

Grading Policy

The grade will be determined by the following:

Learning activities (40 %) + Exams (60 %) = Total (100 %)

- Learning activities include *in-class participation* and *assignments*.
- The exams will consist of multiple-choice, true-false, fill-in-the-blank, and short-answer essay questions.

Grading Scale

	Score (%)				
A:	93-100	A-:	90-92		
B+:	87-89	B:	83-86	B-:	80-82
C+:	77-79	C:	73-76	C-:	70-72
D+:	67-69	D:	63-66	D-:	60-62
F:	0-59				

Course Schedule

Week	Date		TOPIC		Reading
1	25-Feb	Tu	Introduction to Biology		1
	27-Feb	Th	Molecular Genetics	DNA	II. 4, 5
2	4-Mar	Tu		Replication	II. 6
	6-Mar	Th		Gene Expression	II. 7, 8, 9
3	11-Mar	Tu			
	13-Mar	Th		Biotechnology 1	II. 10
4	18-Mar	Tu		Biotechnology 2	
	20-Mar	Th	Cell Division and Cancer		III
5	25-Mar	Tu	The Cellular Basis of Inheritance		IV
	27-Mar	Th	**MIDTERM EXAM 1**		
6	1-Apr	Tu	Patterns of Inheritance		V
	3-Apr	Th	Natural Selection		VI, VII
7	8-Apr	Tu	Population Genetics		VIII
	10-Apr	Th	Phylogenies and the History of Life (Diversity of Life)		IX
8	15-Apr	Tu	Biology of Sex		XI, XII
	17-Apr	Th	Prokaryotes		XIII
9	22-Apr	Tu	Protists		XV
	24-Apr	Th	Fungi		XVI
10	29-Apr	Tu	Plants		XVII
	1-May	Th	**MIDTERM EXAM 2**		
11	6-May	Tu	**Substitute of Children's Day and Buddha's Birthday**		
	8-May	Th	Animals		XVIII
12	13-May	Tu	Viruses		XX
	15-May	Th	Population Ecology – Demographics and Population Growth		XXI
13	20-May	Tu	Aging		XXII
	22-May	Th	Community Ecology		XXIII
14	27-May	Tu	Ecosystem Ecology I: Energy Flow and Nutrient Cycles		XXIV
	29-May	Th	Ecosystem Ecology II: Global Change Biology		XXV
15	3-Jun	Tu	Sustainability & Biodiversity		XXVI
16	10-Jun	Tu	**FINAL EXAM (3:15 pm -)**		

Note: This syllabus is meant to serve as an outline and guide for our course. Please note that I may modify it with reasonable notice to you. I may also modify the Course Schedule to accommodate the needs of our class. Any changes will be announced in class and posted on Brightspace.

University Policies

1. **Professionalism and Interactions with Others:** Students are expected to be polite and respectful to both colleagues and professors at all times. Any member of the class who displays less-than-professional behavior will be addressed by the professor. A continued lack of professionalism will result in a grade deduction.

2. **Academic Integrity Statement:** Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. This includes work composed by AI, online resources, as well as other people, whether they are in the class or not. In this latter instance, both the person copying and the person sharing their work will be investigated and penalized. The first instance of cheating will earn a 0 for that assignment or exam, reducing your overall grade. The second instance will earn an F for the course. It is far better to lose the points for the question than to risk losing the points for the entire assignment. Furthermore, faculty are required to report any suspected instances of academic dishonesty to the Academic Judiciary, so it will also be recorded on your academic record. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary policy:
   https://www.stonybrook.edu/commcms/academic_integrity/policies.html

3. **Student Accessibility Support Center Statement:** If you have a physical, psychological, medical, or learning disability that may impact your course work, please contact the Student Accessibility Support Center, Stony Brook Union Suite 107, (631) 632-6748, or at sasc@stonybrook.edu. They will determine with you what accommodations are necessary and appropriate. All information and documentation is confidential. If you do have a disability that may impact your coursework, please let me know at the beginning of the semester. The university does not give instructors a list of students with disabilities in their classes, so it is the student's responsibility to self-disclose.

4. **Critical Incident Management:** Stony Brook University expects students to respect the rights, privileges, and property of other people. Faculty are required to report to the Office of Student Conduct and Community Standards any disruptive behavior that interrupts their ability to teach, compromises the safety of the learning environment, or inhibits students' abil9ity to learn.