



## BIO 011: General Biology I

Term: 2020 Winter Session
Instructor: Staff
Language of Instruction: English
Classroom: TBA
Office Hours: TBA
Class Sessions Per Week: 6
Total Weeks: 4
Total Class Sessions: 25
Class Session Length (minutes): 145
Credit Hours: 4

### Course Description:

BIO 011 is an introductory Biology course, offering an introduction to the principles and concepts of biology. Topics in this course cover Unit 1,2, 3, 4 in textbook, including introduction to Biochemistry, molecules of life, cell structure and function, metabolism, respiration and photosynthesis, molecular genetics, heredity and human genetics, and evolution of life. Upon completion, students are expected to understand life at the molecular and cellular levels.

### Course Materials:

**Textbook:** *Campbell Biology*, Reece, 10th Edition

### Course Format and Requirements:

Students should do the assigned readings before coming to the lectures. During some of the lectures there will be in-class discussions, with two or three students discussing the problem together for a few minutes before discussing the problem as a whole class. An active participation in lecture will help a student to better understand the material and prepare for exams.

#### **Attendance**

Attendance is mandatory. More than three unexcused absences will result in an automatic reduction in your participation grade, for instance from A- to B+. Your active participation in the class is expected and constitutes part of your grade.

Grading Scale:**A+: 98%-100%****A: 93%-97%****A-: 90%-92%****B+: 88%-89%****B: 83%-87%****B-: 80%-82%****C+: 78%-79%****C: 73%-77%****C-: 70%-72%****D+: 68%-69%****D: 63%-67%****D-: 60%-62%****F: Below 60%**Course Assignments:**Homework assignment****6 Quizzes****Exams:**

Two midterm exams and a final exam are scheduled. Exams are a combination of multiple choice, short answer questions and true/false questions. Only the final exam is cumulative. Students are responsible for all notes in posted lecture presentations and material discussed in lecture. The textbook is a critically important supplement to your learning and will enhance understanding of material presented in lecture. There are no makeup exams or re-scheduling of exams.

Course Assessment:

Homework Assignment	15%
6 Quizzes	15%
Midterm Exam 1	20%
Midterm Exam 2	20%



Final Exam	30%
<b>Total</b>	<b>100%</b>

### Course Schedule:

Week	Topics	Activities
1.	Go through syllabus Course overview Introduction to Biochemistry: A Chemical Connection to Biology Water and life Carbon and The molecular Diversity of Life Structure and Molecular of Large Biological Molecules Basic Introduction to Cells Cell Structure and Functions	Homework Assignment Quiz 1 Quiz 2
2.	Membrane Structure and functions Metabolism Cellular Respiration Photosynthesis Cellular Signaling	Homework Assignment Quiz 3 Midterm 1



3.	Cell cycle and division Meiosis and Sexual Life Cycles Genetics: Mendel's laws Genetics: Beyond Mendelian Basics of Inheritance	Homework Assignment Quiz 4 Midterm 2 Quiz 5
4.	Gene Expression and Regulation Viruses, Genomes and Their Evolution Evolution: A Darwinian View The Evolution of Populations The Origin of Species and History of Life Course Summary	Homework Assignment Quiz 6 Final exam

### Academic Integrity:

Students are encouraged to study together, and to discuss lecture topics with one another, but all other work should be completed independently.

Students are expected to adhere to the standards of academic honesty and integrity that are described in the Shanghai Normal University's *Academic Conduct Code*. Any work suspected of violating the standards of the *Academic Conduct Code* will be reported to the Dean's Office. Penalties for violating the *Academic Conduct Code* may include dismissal from the program. All students have an individual responsibility to know and understand the provisions of the *Academic Conduct Code*.



**Special Needs or Assistance:**

Please contact the 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. Our goal is to help you learn, not to penalize you for issues which mask your learning.