Biology Laboratory

Course Number:	BIO 102	**Term:**	Summer, 2021
Instructor:	TBA	**Email:**	
Contact Hours:	25	**Meeting Times:**	TBA
Credits:	1.0		

Course Description:

In this course, students will conduct hands-on laboratory experiments related to topics discussed during each week of the BIO 101 - Introduction to Biology for Non-Majors course. Students will learn fundamentals of the scientific method, generation of hypotheses, experimental technique, making experimental observations, analyzing data and drawing conclusions for a wide range of biological experiments. Students will also participate in the oral presentation of scientific information for the development of skills in presenting scientific/technical information in an oral format.

Learning Objectives:

Upon successful completion of this course, students will be prepared to:

1. Explain the relationship between the scientific method and experimental research in developing and testing hypotheses
2. Apply basic principles of lab technique
3. Describe the role of scientific observation, data collection, and data analysis in conducting biology experiments
4. Analyze the results of biology experiments
5. Effectively present scientific information

Required Textbook and Course Materials:

Lab manual and text will be made available.

Language of Instruction:

This course is taught entirely in English, including lectures, homework, assignments and examinations. Teaching assistants will be fluent in both English and Mandarin.

Course Prerequisites:

Prerequisite of BIO 101 (or equivalent), or Corequisite with BIO 101.

University Policies

Class Format

In Person. Course activities, discussions, assignments and resources will be made available at the start of and during the course.

Attendance, Participation and Deliverables

Courses are very intensive and in order to be successful, students need to attend every class. Attendance is required for all lectures and class activities. Class participation is expected from every student and form a significant portion of the final course grade.

All course deliverables (homework assignments and tests) are due on time as assigned. This course includes *no* make-ups, postponements or additional assignments, except for verified medical emergencies. If you miss an exam/assignment due to a non-sanctioned absence, your score on that exam/assignment will be zero.

Academic Dishonesty

All cases of academic dishonesty will be diligently pursued. Academic dishonesty includes representing the work of another as one's own work or cheating by any means. Academic dishonesty also includes aiding, abetting, concealing or attempting such activity. The penalty is automatic failure of the course and possible suspension from the university.

Grading Scale

Grading Scale (%)

97 – 100	A+	77 – 79	C+
93 – 96	A	73 – 76	C
90 – 92	A-	70 – 72	C-
87 – 89	B+	67 – 69	D+
83 – 86	B	63 – 66	D
80 – 82	B-	60 – 62	D-
		0 – 59	F

Professor- and Course-Specific Policies (*Tentative*)

Homework

Assignments will be listed at the beginning of the course. The purpose is to prepare you for the exams. The homework is a very important part of the course. No matter how well you think you understand the material presented in class, you won't really learn it until you do the problems.

Exams

No make-ups will be given after the exam. The use of the textbook or any other written reference is not allowed during the exams. The purpose of the exams is to test your understanding of key concepts from the course lectures and materials.

Grade Components:

Lab Participation/Completion	20%
Lab Quizzes	80%
Total	100%

Course Schedule (*Tentative*)

Module	Topics
1	Introduction Lab 1 Food Macromolecules
2	Lab 2 Cell Structure Lab 3 Cellular Respiration
3	Lab 4 Cell Division Lab 5 Mendelian Inheritance
4	Lab 6 Photosynthesis and Pigment Extraction Lab 7 Behavioral Thermoregulation
5	Lab 8 Population Growth