



# Columbia-Greene Community College – Course Syllabus

## BI 101: General Biology 1 Lecture and Lab

### A. Class Information

Semester: Fall 2023 Section ID: BI 101 –80857 (Lecture)/ 80858 (Lab) Credit Hours: 4

Lecture Meeting Time: Monday-Friday 12:27-1:11 pm, room 217

Lab Meeting Time: Tuesday/Thursday and every other Friday 1:14-1:58pm, room 217

### B. Important Dates

Last Drop Date: Monday 9/18 Last Withdrawal Date: Monday 11/6

Holidays (no classes): October 9, November 10, November 22-24

### C. Instructor Information and Office Hours

Danqing Li Telephone/Office: 518-734-3400, Room 217 Email: [dli@wajcs.org](mailto:dli@wajcs.org)

Office Hours: 11th period, after school, and other times by appointment

### D. Course Description

**BI 101** is the first in a two-course sequence (BI 101 and 102) designed for students who plan to **major in the life sciences**. Topics covered in this course include the chemical basis of life, cell structure, cellular metabolism, cell division, as well as Mendelian and molecular genetics. The laboratory portion of the course focuses on the scientific method, use of the microscope and other lab equipment, and methods for data analysis and presentation. Lab activities will complement the lecture topics.

Prerequisites 80% or Higher in HS Science Courses and L.E. Regents

**This course fulfills the SUNY General Education requirements for Natural Sciences (and Scientific Reasoning).**

**E. Textbook:** *Biology: A Guide to the Natural World, Technology Update, 5/E* Krogh ISBN-10: 0321946766 • ISBN-13: 9780321946768

- **Three-ring binder (1-1.5" thick)**
- **Paper**
- **1-subject spiral**
- **Scientific Calculator**
- **Pens/pencils**
- **Folder**

### F. Learning Outcomes

Students who complete this course successfully will be able to:

1. Demonstrate scientific reasoning applied to the natural world, including an understanding of the methods scientists use to explore natural phenomena, including observation, hypothesis development, measurement and data collection, experimentation, evaluation of evidence, and employment of data analysis or

mathematical modeling; and application of scientific data, concepts, and models in one of the natural sciences.

2. Describe the chemical basis of life
3. Recognize and describe macromolecules
4. Recognize and describe the basic structure of the cell
5. Recognize and describe the concept of photosynthesis.

**G. Tentative Course Schedule:**

Unit	Topic	Lab / Major Project			Textbook
1	Introduction to Biology	Characteristics of Life Lab			
		Mythbusters : <u>Who Gets Wetter?</u>			Chapter 1: Science as a Way of Learning
		Data Analysis Lab			
2	Basic Chemistry	ChemThink Virtual Lab			Chapter 2: Fundamental Building Blocks
		Nova: Origins Part II-How Life Begun Project			
		Origin of Life Lab and Inquiry Lab			
3	Macromolecules and Enzymes	Evolving Enzymes Lab and Inquiry Lab	Macromolecules Indicator Lab	Testing Unknown Substance Lab	Chapter: 3: Life's Components
		Macromolecule brochure	Macromolecules Indicator Lab #2		
4	Cells	Diffusion and Osmosis Lab			Chapter 4: Life's Home

		<b>Cell Comparison Lab</b>	<b>Chapter 5: Life's Border</b>
		<b>Cell Communication Lab</b>	
		<b>Cell Analogy PowerPoint Project</b>	
<b>5</b>	<b>Photosynthesis</b>	<b>Transpiration Lab</b>	<b>Chapter 8: The Green World's Gift</b>
		<b>Transpiration Inquiry Poster</b>	

**\*This is a working syllabus and may be modified as needed. Only major assignments are listed. Any changes will be announced in class.**

## **H. Course Assignments**

**Reading Assignments:** Students are assigned reading along with a set of questions from the textbook that goes along with each unit. It is pertinent that the reading is done prior to class in order for students to participate in the discussion and have a general idea of the topic.

**Exams:** Unit tests will be given upon completion of each unit. There are 6 in total.

**Homework:** Homework will consist primarily of selected weekly chapter questions from the textbook and completion of labs. Additional assignments may be assigned throughout the semester.

**Lecture:** I expect student participation and interaction during lecture. If students have a question or something doesn't make sense, don't hesitate to ask. At the beginning of every class, a warm-up questions will be posted. Students are expected to complete daily warm-ups in their spiral notebooks. Warm-ups are checked at the end of the week for a participation grade.

**Labs:** This is a lab class and therefore labs are extremely important. They serve as an applied aspect of the material that we cover during the lecture and allow us to actually experience science, rather than just read about it.

• **Penalties for Cheating (Academic Dishonesty) on quizzes or exams:**

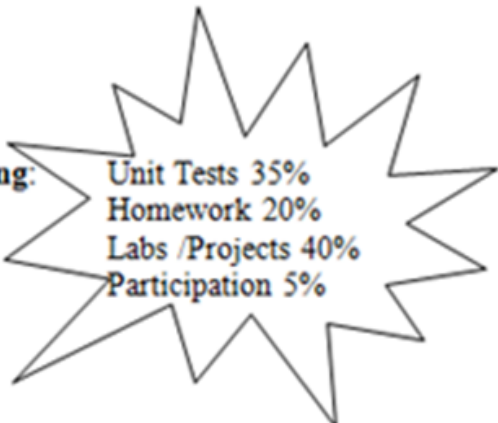
- o Presence or use of cell phones, smart devices (e.g. watches) or other electronic devices during an

Exam or Lab Quiz will be considered cheating (compromising the exam).

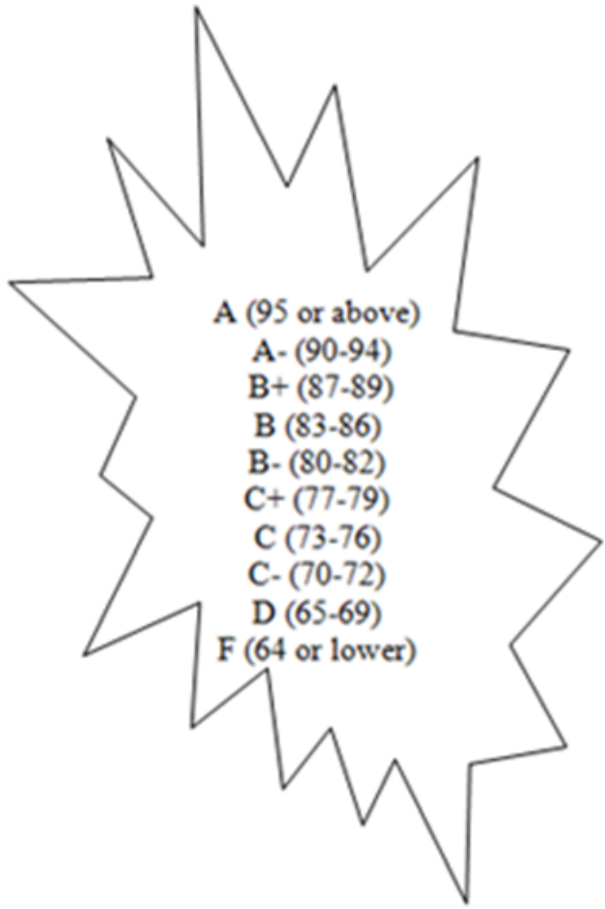
- o A student caught compromising an exam *IN ANY WAY* will have a **zero recorded** as the grade for that exam, with **no make-up** opportunities.
- o PLEASE NOTE: Instructors will check for evidence of the use of Google and other outside sources to complete class assignments, quizzes, and exams. Use of outside materials during quizzes or exams is considered a violation of the Academic Integrity Policy

## I. Evaluation and Grading

### Grading:



Unit Tests 35%  
Homework 20%  
Labs /Projects 40%  
Participation 5%



A (95 or above)  
A- (90-94)  
B+ (87-89)  
B (83-86)  
B- (80-82)  
C+ (77-79)  
C (73-76)  
C- (70-72)  
D (65-69)  
F (64 or lower)

### Grade Definition

A High Achievement

A-

B+

B Good Achievement

B-

C+

C Satisfactory Achievement

C-

D Minimal Passing Grade

F

### Quality Points:

4

3.67

3.33

3

2.67

2.33

2

1.67

1.00 (Does not indicate the ability to succeed at a higher level)

0

\*W=Student-initiated withdrawal from a course

\*I= Incomplete. A temporary grade issued by an instructor when a student has not completed course requirements due to illness or extenuating circumstances and when the instructor believes that the course requirements can be completed. Arrangements to complete the course must be made by contract between the student and the instructor prior to the final grading period. The course work must be made up within 60 days from when final grades are due in a given semester or session or the of I will automatically become a grade of F.

## **J. Attendance Policy**

Attendance will be taken during each class session. **Multiple absences, beyond 3 weeks of lecture time (6 classes), or two weeks of lab time (2 labs) will decrease the overall course grade.** For any absences greater than the above in either lecture OR lab, the **penalty will be a loss of 5% from the total course grade per week of absences.**

**Lateness, leaving early, or leaving for extended periods in the middle of LAB, are not acceptable.** These behaviors disrupt the class and are disrespectful to your classmates. Therefore, if a student is **more than ½ hour late, leaves more than ½ hour before the end of class, or is out of the room for more than ½ hour during the lab,** it will be **considered an absence,** at the discretion of the instructor.

## **K. Academic Integrity**

All students must do their own work. Cheating, plagiarism, and other forms of academic dishonesty may result in a failing grade in the course and possible suspension or dismissal under college judiciary procedures. Examples include, but are not limited to, working with someone else or utilizing artificial intelligence on assignments that are intended to be completed by oneself, copying content from the internet or other source without proper citation, adjusting copied work in an effort to mislead plagiarism detection software, or contracting with a third-party to complete assignments. All matters of this type may be brought to the Dean of Academic Affairs. Plagiarism is avoidable; students who are struggling with course concepts are encouraged to contact the instructor to strengthen their understanding of the material.

## **L. Diversity, Equity, and Inclusion**

The College is committed to creating a learning environment that is safe, respectful, intellectually stimulating, and representative of multiple perspectives, experiences, and voices. As your instructor, I believe in the capability of all humans to learn and fulfill their potential. I pledge to address the marginalization, discrimination, and oppression of humans through the lens of our course, and I vow to foster a space where multicultural perspectives are valued as evidenced by our course materials, our assignments, and our discussions.

## **M. Student Success Center**

The Student Success Center delivers a range of services and programs that support students' academic experiences, including tutoring, academic coaching, computer labs, and assistance with utilizing student technology (Microsoft 365, Brightspace, NetTutor, as well as calculator/laptop loaner programs). The College also offers students access to CircleIn, an online space where you may gather to study, share skills, work collaboratively on difficult problems, build better study habits, and push others to succeed, all while having the chance to earn rewards. If you have any questions or need assistance, please visit Suite 113 in the Main Building or email [sscweb@sunycgcc.edu](mailto:sscweb@sunycgcc.edu).

## **N. Academic Adjustments for Students with Disabilities**

Columbia–Greene is committed to providing learning materials that allow all students to access and engage the curriculum. If a student with a documented disability wishes to request academic adjustments, the student should contact the Director of the Accessibility Services as early as possible by emailing [catherine.carlson@sunycgcc.edu](mailto:catherine.carlson@sunycgcc.edu). All information regarding a student's disability will remain confidential.

**AFTER READING AND DISCUSSING THIS SYLLABUS WITH YOUR CHILD, PLEASE SIGN BELOW AND RETURN THE SYLLABUS WITH YOUR CHILD. THE BEST WAY TO REACH ME IS VIA EMAIL. PLEASE CHECK MY WEBSITE: WAJCS.ORG -->SCHOOL STAFF--> LI,DANQING FOR INFORMATION ON DAILY HW ASSIGNMENTS, UPCOMING EXAMS, AND ELECTRONIC COPIES OF MAJOR ASSIGNMENTS.**

**Students and Parents please note: Since this is a college level course and to best prepare you for the rigor of college level standards, I will not be in regular communication with your parents or guardians to discuss late and/or missing assignments. It will be your responsibility to check e-school and keep up to date with your assignments. My door is always open if you have any questions or concerns. Don't hesitate to reach out to me anytime via email.**

**Parent/Guardian signature \_\_\_\_\_**

**Print Student's Name \_\_\_\_\_**

**Telephone Number \_\_\_\_\_ Best time to call \_\_\_\_\_**

**Your Email Address \_\_\_\_\_**

