

# Columbia-Greene Community College – Course Syllabus

BI 102: General Biology 2 Lecture and Lab

## A. Class Information

<u>Semester:</u> Spring 2023 <u>Section ID:</u> BI 101 – (Lecture)/ (Lab) <u>Credit Hours:</u> 4 <u>Lecture Meeting Time</u>: Monday-Friday 12:27-1:11 pm, room 217 <u>Lab Meeting Time</u>: Tuesday/Thursday and every other Friday 1:14-1:58pm, room 217

### **B.** Important Dates

Last Drop Date: Monday 2/6 Last Withdrawal Date: Tuesday 4/4 Holidays (no classes): Jan. 15, Feb. 19-23, April 1-5, May 24-27

# C. Instructor Information and Office Hours

Danqing Li <u>Telephone/Office</u>:518-734-3400, Room 217 <u>Email</u>: <u>dli@wajcs.org</u> <u>Office Hours</u>: 11th period, after school, and other times by appointment

# **D.** Course Description

**BI 102** is the second 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 evolution and cladistics analysis, history of life on Earth, a survey of anatomy and physiology of major groups of living organisms, and an introduction to ecological principles. 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 will include some dissections of animals or mammalian organs. Lab activities will complement the lecture topics.

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* KroghISBN-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. Recognize and describe the concept of cell respiration

- 2. Recognize and describe the basic steps in cell division.
- 3. Recognize and describe the processes of Mendelian and molecular genetics
- 4. Recognize and describe the structure, significance, and role of DNA
- 5. Describe the processes of natural selection and evolution, the methods of cladistics (taxonomy), and apply them to the study of the history of life on Earth
- 6. Recognize and describe the diversity of morphology, physiology, and ecology of different classification systems

#### G. Tentative Course Schedule:

Unit	Торіс	Lab/Majo	Biology Textbook	
1	Cell Respiration	Cell Respiration Lab	Cell Respiration Inquiry Lab and Lab Report	Chapter 6: An Introduction to Energy
		Mystery of the	Chapter 7: Vital Harvest	
2	Cell Division	Mitosis and Meiosis Lab Meiosis Movie Project		Chapter 9: The Links in Life's Chain
				Chapter 10: Preparing for Sexual Reproduction
3	Genetics	Punnett Square Lab	Mendelian Genetics Lab	Chapter 11: Mendel and His Discoveries
		Genetic Disease Project		Chapter 12: Units of Heredity
4	Protein Synthesis	Protein Synthesis Project		Chapter 13: Passing on Life's Information

				-		Chapter 14: How Proteins are Made
5	Evolution		Natural Selection Lab		Chapter 16: An Introduction to Evolution	
				Evidence of Evolution Lab		Chapter 17: The Means of Evolution
			Population Genetics and Evolution Lab		Chapter 18: The Outcomes of Evolution	
6		Classification	Anim: Lab	al Behavior	Animal Dissection Lab	Chapter19: A Slow Unfolding
			Bacteria Report		Chapter 23: Animals	

\*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.

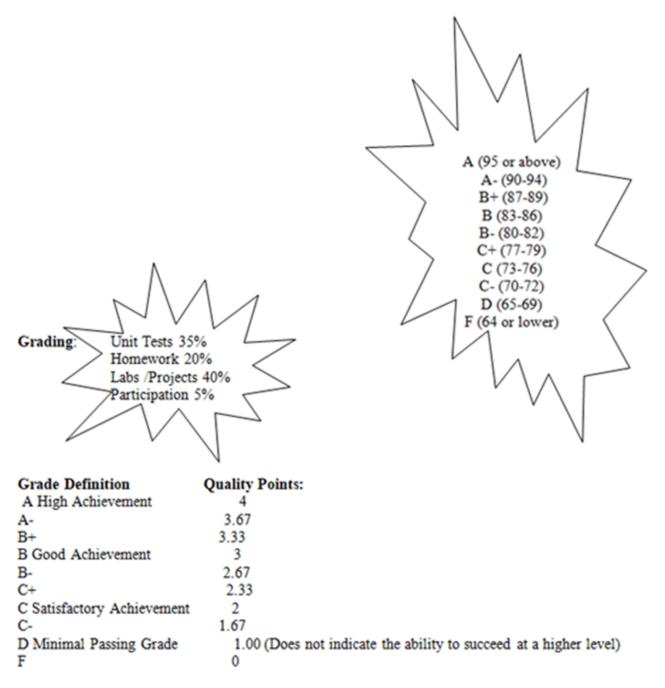
Labs: This is a lab class and therefore labs are extremely important. They serve as an applied aspect of the

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 <u>zero recorded</u> as the grade for that exam, with <u>no make-up</u> 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



\*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. <u>Multiple</u> <u>absences</u>, <u>beyond 3 weeks of</u> <u>lecture time (6 classes)</u>, <u>or two weeks of lab time (2 labs) will decrease</u> <u>the overall course grade</u>. 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 <u>absence</u>, at the discretion of the instructor. n ½ hour during the lab, it will be considered an <u>absence</u>, 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 <u>sscweb@sunvcgcc.edu</u>.

#### 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 <u>catherine.carlson@sunycgcc.edu</u>. 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.

<u>Students and Parents please note:</u> 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 \_\_\_\_\_