

Valdosta State University, BIOL 1107, Section A

(3 Credit Hours)

Principles of Biology I – Spring 2023

Syllabus & Course Policies

For Science, Math, and Some
Health Science Majors

Lecture: BC 1011 - MWF, 9:00-9:50 am

Lecture Instructor: Dr. Emily Cantonwine (Dr. Cantonwine)

Office: BC 2087 – In an office cubby on the Northeast corner of Bailey on the second floor

Phone: (229) 333-5337

Email: egcantonwine@valdosta.edu

Office hours: BC 2087, MW 3:30-5:00 and F 10:30-12:00. You are welcome to stop by my office at other times too. If I have time to meet, we can do so. If not, we will make an appointment.

Supplemental Instructor: Nicole Woodridge newoolridge@valdosta.edu

Welcome to Principles of Biology I. This is the first course in a series at VSU designed to develop a strong foundation in the biological sciences.

BIOL 1107 Course Description. An introduction to the principles of biology for science majors, with an emphasis on the cellular nature of life. Concepts covered include the origin and early evolution of cellular life; cell structure, function, metabolism, and reproduction; cell signaling; and gene regulation in bacteria and eukaryotes. There are no prerequisites for this course. BIOL 1107 lab is a co-requisite for students who have not already completed that course and BIOL 1100 is a co-requisite for Freshman Biology majors (offered Fall semesters only)

Required Resources:

OpenStax Biology – Free – Integrated into Achieve and available online at

www.openstax.org/details/books/biology-2e

Macmillan Achieve with iClicker – DayOne Access – You have already paid, you just need to opt-in though Blazeview to access.

Course Objectives and Outcomes: By the end of this course, students will be able to

- demonstrate an understanding of fundamental concepts of biology, including
 - cellular structure, function, metabolism, and reproduction
 - the nature of the gene and its action
 - the mechanisms of evolution
- apply academic skills critical to success in upper-division science courses and intended careers, such as
 - accurate interpretation of graphs and diagrams
 - fluent use of scientific terminology
 - effective study skills

ASSESSMENTS

<u>Assessments</u>	<u>Possible Points</u>	<u>Percentage</u>	<u>SCALE</u>
Achieve HW (10 of 13)	150 (15pt each)	17.4%	A ≥ 90%
Lecture Assessment	100	11.8%	B ≥ 80%
Unit Exams (5)	500 (100pt each)	59.0% (11.8% each)	C ≥ 70%
<u>Final Exam*</u>	<u>100</u>	<u>11.8%</u>	D ≥ 60%
TOTAL	850	100%	F < 60%
Extra credit	50	+5.88%	

Monitoring and computing your grade. All grades will be posted to Blazeview. Your grade can be computed at any time [**Grade = points earned/possible points x 100**] using details above and below, or [**Grade = (average unit exam grade x 0.59) + (final exam x 0.118) + (lecture assessment percentage x 0.118) + (Achieve HW percentage grade x 0.174) + (extra credit percentage grade x 0.0588)**] using the category percentage grades in the BV gradebook.

ACHIEVE GRADED WORK (HOMEWORK) - There will be thirteen graded HW assignments conducted through Achieve, a supplemental learning system. Most will be available on Mondays with Friday due dates, or Fridays with Wednesday due dates. See the Tentative Schedule for Due Dates. The 3 lowest scores will be dropped from the gradebook at the end of the semester. HW is worth 150 points and cannot be completed late for a grade. Achieve HWs will be reopened after the due date for student practice/reference. Be aware that there are other helpful resources within Achieve that you may find helpful.

LECTURE ASSESSMENTS (Clicker) – Beginning the second week of class, your attendance and understanding of lecture material will be assessed during class using iClicker. The number of clicker questions will vary by lecture, but lectures will usually begin with a question that you can only answer if you are in the classroom. This beginning question is designed to encourage on-time arrival. At the end of the semester, the lowest 10 iClicker grades will be dropped from the gradebook. These dropped grades will account for illness, mental health days, excused absences, absences that are not excused, and user-error during lecture. **IMPORTANT:** The number of responses to questions may not exceed the number of students in the room. If this happens, I decrease the number of iClicker grades that will be dropped – for everyone!

UNIT EXAMS AND FINAL EXAM – All examinations are required, including the final. All examinations must be taken in-person. If you miss an exam, you have 24hr to set-up a make-up exam. If you fail to contact me within this timeframe, or if you have already completed one make-up test, you forfeit the opportunity to take the original exam as a make-up. The alternative make-up exam will include fewer multiple-choice questions and more short answer questions. *Exams will not be passed back, but there will be opportunities to review your exam the week after the exam date. Exam reviews can occur any time after this date during office hours.*

EXTRA CREDIT (BONUS)- There are five extra credit (bonus) assignments worth 50pt total that will be provided throughout the semester. All will be assessed through BV Quizzes. See tentative schedule. On the last day of class, an *in-lecture only* opportunity will be provided for students to make-up or replace one bonus quiz. Students cannot earn more than 50 bonus points. Do not miss these opportunities!

CURVE – Final grades are automatically curved to the nearest 10th of a percent, meaning 89.5 = 90. I will curve more if the number of A grades do not meet my target number. If this happens, all students will receive the same curve. I will not know if a curve is needed until after the final exam.

Course Policies, Procedures, & Expectations:

Expectations.

- Attend class regularly, arrive on time & stay the entire class period.
- Do not complete Lecture Assessment (iClicker) questions unless you are in the classroom.
- Pay attention (avoid distractions). The skill of attention and self-discipline is yours to develop, not mine to police. I wish you all good fortune with these skills!
- If you miss a lecture, watch the recording in Kaltura before the next lecture period.
- It is your responsibility to take notes – I do not share my PowerPoint slides.
- I may lecture faster than you can take notes. Write down as much as you can while still being able to follow the lecture, and use the lecture recording in Kaltura Media Gallery to fill in the rest of your notes after class. If your notes are complete before the next lecture period, you have met my expectations.
- If you arrive late or must leave early, use the second-floor doors to reduce distractions. THANK YOU!

Laptop/Tablet policy. Off-task laptop/tablet use is distracting to others in the class, so these devices may be used for notetaking ONLY. Visitors will occasionally enter the room to monitor this policy. One violation is enough for me to ban your Laptop or Tablet. **Cell phone/Smart device policy.** I encourage you to use your cellphone for the iClicker app, and to only use your cellphone for this purpose while class is in session. **Earbuds/Headphones.** Earbuds/headphones are not allowed during lecture.

Food and drink policy. Drinks and snacks are allowed if they can be consumed quietly and without distracting others. **Breakfast is not acceptable!**

Office hours and emails. The best time to come to my office (BC2087) is during office hours. Just show up. If my office hours do not work for you, please come by at your convenience to see if I am free to meet. I can usually find time for you! But if not, we will set-up an appointment. **I prefer not to set-up appointments via email. Please just show up!**

Concealed Carry: Firearms are not permitted in BIOL 1107 lecture because the course includes some students who are minors.

Non-Discrimination and Title IX Statement Valdosta State University (VSU) upholds all applicable laws and policies regarding discrimination on the basis of race, color, sex (including sexual harassment and pregnancy), sexual orientation, gender identity or expression, national origin, religion, age, veteran status, political affiliation, or disability. The University prohibits specific forms of behavior that violate Title IX of the Education Amendments of 1972. Title IX of the Education Amendments of 1972 prohibits discrimination on the basis of sex in education programs and activities that receive federal funding. VSU considers sex discrimination in any form to be a serious offense. Title IX refers to all forms of sex discrimination committed against others, including but not limited to: sexual harassment, sexual assault, sexual misconduct, and sexual violence by other employees, students or third parties and gender inequity or unfair treatment based on an individual's sex/gender. The designated Title IX Coordinator for VSU is Mr. Darius Thomas. To view the full policy or to report an incident visit: <https://www.valdosta.edu/administration/student-affairs/title-ix/>

Accommodations Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office (<https://www.valdosta.edu/student/disability/>) for assistance in determining and implementing reasonable accommodations. The Access Office is located in University Center Room 4136 Entrance 5. The phone numbers are 229-245-2498 (V), 229-375-5871. For more information, please visit VSU's Access Office or email: access@valdosta.edu. To request reasonable accommodations for pregnancy and childbirth, contact Christina Kidd, Student Conduct Coordinator at chkidd@valdosta.edu. Please note, you will be required to provide documentation from an appropriately licensed medical professional indicating the requested accommodations are medically necessary.

Academic Integrity: I follow the Academic Honesty Policies and Procedures of the University and the Department of Biology's Policy on Plagiarism. For more information, refer to www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml and www.valdosta.edu/biology/documents/biologyplagiarism.doc. "Academic Integrity/ Honesty" means performing all academic work without plagiarism, cheating, lying, tampering, stealing, receiving unauthorized or illegitimate assistance from any other person, or using any source of information that is not common knowledge.

Important information: A grade of C or higher may be necessary for your major.

Tentative Lecture Schedule, BIOL 1107K, Section A, Spring 2023

Dates	Subject	Chapters	Homework due 11:59pm on the following dates
Jan 9	Introduction/Syllabus	Introduction	
Jan 11	Introduction to life	1	
Jan 13	Classification of life & cellular diversity	1	<i>BV QUIZ Bonus 1</i> (due Fri)
Jan 16	<i>MLK Jr. Day – No Class</i>	No Class	
Jan 18	Theory of Biological Evolution	22.1 & 23.1	
Jan 20	Evolution of life on Earth	22.1 & 23.1	Achieve HW 1 (due Fri)
Jan 23	Cellular structure & function	4	
Jan 25	Cellular structure and function	4	Achieve HW 2 (due Weds)
Jan 27	Cellular membrane structure & function	5.1	
Jan 30	EXAM 1 (Lectures 1/9-1/25; Ch 1, 22.1, 23.1, 4)	EXAM 1	
Feb 1	Basic chemistry	2	
Feb 3	Macromolecule	2	Achieve HW 3 (due Fri)
Feb 6	Macromolecules	3	
Feb 8	Macromolecules	3	
Feb 10	Cellular transport	5	Achieve HW 4 (due Fri)
Feb 13	Cellular transport	5	<i>BV Quiz Bonus 2</i> (due Weds)
Feb 15	Catch-up or Review	Catch-up/Review	Achieve HW 5 (due Weds)
Feb 17	EXAM 2 (Lectures 1/27-2/15; Ch 2, 3 & 5)	EXAM 2	
Feb 20	Enzymes & Metabolism	6	
Feb 22	Enzymes & Metabolism	6	
Feb 24	Enzymes & Metabolism	6	Achieve HW 6 (due Fri)
Feb 27	Cellular respiration	7	
March 1	Cellular respiration ----- Midterm is March 2	7	
March 3	Photosynthesis	8	Achieve HW 7 (due Fri)
March 6	Photosynthesis	8	
March 8	Catch-up or Review Ch 6-8	Catch-up/Review	Achieve HW 8 (due Weds)
March 10	EXAM 3 (Lectures 2/20-3/8; Ch 6, 7 & 8)	EXAM 3	
March 13-17	- SPRING BREAK -	-----	-----
March 20	Genes and Proteins	15	
March 22	Genes and Proteins	15	<i>BV Quiz Bonus 3</i> (due Fri)
March 24	Gene Expression	16	Achieve HW 9 (due Fri)
March 27	Gene Expression	16	
March 29	The Cell Cycle – Mitosis & Cytokinesis	10	
March 31	Sexual Life Cycle – Meiosis & Fertilization	11	Achieve HW 10 (due Fri)
April 3	DNA Replication	14	
April 5	Catch-up or Review	Catch-up/Review	Achieve HW 11 (due Weds)
April 7	EXAM 4 (Lectures 3/20-4/5; Ch 15, 16, 10, 11, 14)	EXAM 4	
April 10	Basic Mendelian Genetics	12	
April 12	Basic Mendelian Genetics	12	Achieve HW 12 (due Weds)
April 14	Mutations	14	
April 17	Mutations	14	<i>BV Quiz Bonus 4</i> (due Mon)
April 19	Cell communication	9	Achieve HW 13 (due Weds)
April 21	Topic TBD		
April 24	Topic TBD		<i>BV Quiz Bonus 5</i> (due Mon)
April 26	Catch-up or Review		
April 28	EXAM 5 (Friday, May 1, Ch.12.1, 15, 7, 11.2 & 11.7)	EXAM 5	
May 1	Review for Final		
May 5	Cumulative Final Exam (Friday, May5, 8:00-10:00am)	FINAL EXAM	