

Valdosta State University, BIOL 1107, Section A

(3 Credit Hours)

Principles of Biology I – Spring 2024

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 2218 – second floor, southeast corner of the Bailey Science Center

Phone: (229) 333-5337

Email: egcantonwine@valdosta.edu

Office hours: BC 2218, TWRF 2:00-3:00. 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.

PAL embedded tutor:

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
- develop and apply academic skills critical to success in upper-division science courses and intended careers, including:
 - accurate interpretation of graphs and diagrams
 - fluent use of scientific terminology
 - effective listening, notetaking, and 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	40	+4.7%	

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 0.047)**] 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 understanding of lecture material will be assessed during class using iClicker. The number of clicker questions will vary by lecture. At the end of the semester, the lowest 10 iClicker grades will be dropped from the gradebook. These dropped grades will account for excused and unexcused absences, as well as user-errors, including with the app.

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 24 hr 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 four extra credit (bonus) assignments worth 40pt total that will be provided. 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 40 bonus points. Do not miss these opportunities!

CURVE – Final grades are automatically curved to the nearest percent, meaning 89.5 = 90. An additional curve may be applied if the number of students earning an A does not meet my target number. If there is an additional curve, the curve will be the same for all students.

Course Policies, Procedures, & Expectations:

Expectations.

- Attend class regularly, arrive on time & stay the entire class period.
- 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.
- Notetaking is a professional skill that all college students must develop. It is your responsibility to take notes that you can use to study for the exams. I do not share my PowerPoint slides; however I do record my lectures and you are welcome to prepare your own PPT notes via screen shots of the recordings.
- If I lecture faster than you can listen and write, jot down as much as you can while still being able to follow the lecture, then 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 (BC2218) 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 2024

Dates	Subject	Chapters	Homework due 11:59pm on the following dates
Jan 8 Jan 10 Jan 12	Introduction/Syllabus Introduction to life Classification of life & cellular diversity	Introduction 1 1	<i>BV QUIZ Bonus 1</i> (due Fri)
Jan 15 Jan 17 Jan 19	<i>MLK Jr. Day – No Class</i> Theory of Biological Evolution Evolution of life on Earth	No Class 22.1 & 23.1 22.1 & 23.1	Achieve HW 1 (due Fri)
Jan 22 Jan 24 Jan 26	Cellular structure & function Cellular structure and function Cellular membrane structure & function	4 4 5.1	Achieve HW 2 (due Weds)
Jan 29 Jan 31 Feb 2	EXAM 1 (Ch 1, 22.1, 23.1, 4) Basic chemistry Macromolecule	EXAM 1 2 2	Achieve HW 3 (due Fri)
Feb 3 Feb 7 Feb 9	Macromolecules Macromolecules Cellular transport	3 3 5	Achieve HW 4 (due Fri)
Feb 12 Feb 14 Feb 16	Cellular transport Catch-up or Review EXAM 2 (Ch 2, 3 & 5)	5 Catch-up/Review EXAM 2	Achieve HW 5 (due Weds)
Feb 19 Feb 21 Feb 23	Enzymes & Metabolism Enzymes & Metabolism Enzymes & Metabolism	6 6 6	Achieve HW 6 (due Fri)
Feb 26 Feb 28 March 1	Cellular respiration Cellular respiration ----- Midterm is February 29 Photosynthesis	7 7 8	Achieve HW 7 (due Fri)
March 4 March 6 March 8	Photosynthesis Catch-up or Review Ch 6-8 EXAM 3 (Ch 6, 7 & 8)	8 Catch-up/Review EXAM 3	Achieve HW 8 (due Weds)
March 11-15	- SPRING BREAK -	-----	-----
March 18 March 20 March 22	Genes and Proteins Genes and Proteins Gene Expression	15 15 16	<i>BV Quiz Bonus 2</i> (due Fri) Achieve HW 9 (due Fri)
March 25 March 27 March 29	Gene Expression The Cell Cycle – Mitosis & Cytokinesis Sexual Life Cycle – Meiosis & Fertilization	16 10 11	Achieve HW 10 (due Fri)
April 1 April 3 April 5	DNA Replication Catch-up or Review EXAM 4 (Ch 15, 16, 10, 11, 14)	14 Catch-up/Review EXAM 4	Achieve HW 11 (due Weds)
April 8 April 10 April 12	Basic Mendelian Genetics Basic Mendelian Genetics Mutations	12 12 14	Achieve HW 12 (due Weds)
April 15 April 17 April 19	Mutations Cell communication Topic TBD	14 9	<i>BV Quiz Bonus 3</i> (due Mon) Achieve HW 13 (due Weds)
April 22 April 24 April 26	Topic TBD Catch-up or Review EXAM 5 (Ch.12.1, 15, 7, 11.2 & 11.7)	EXAM 5	<i>BV Quiz Bonus 4</i> (due Mon)
April 29 May 3	Review for Final Cumulative Final Exam (Friday, May3, 8:00-10:00am)	FINAL EXAM	