

**Valdosta State University, BIOL 1107K, Sections A-G & P (4 Credit Hours)**  
**Principles of Biology I – Fall 2017**  
**Syllabus & Course Policies**

Lecture: BC 1011 – MWF, 8:00-8:50 am

Lecture Instructor: Dr. Emily Cantonwine (Dr. Cantonwine), Office: BC 2031, Phone: (229) 333-5337

Email: [egcantonwine@valdosta.edu](mailto:egcantonwine@valdosta.edu) You are welcome to send me an email, but I may not respond beyond a note that your email was received. If you would like a meaningful response from me, see me during office hours!

Office hours: No appointment required! Just show-up... Monday 1:30-3:00, Thursday 2-4, & Friday 10:00-11:30

If you are not available during office hours, find me in my office and we will set-up an appointment for a different time.

Graduate Assistants (GAs):

- Josh Brown ([joshuabrown@valdosta.edu](mailto:joshuabrown@valdosta.edu), BC2047) - Assigned seats, attendance, clickers & excused absences
- Brandi Griffin ([bmgriffin@valdosta.edu](mailto:bmgriffin@valdosta.edu), BC2025) - LaunchPad resources, chapter assessments & procedure grade

Embedded Tutor: Drew Johnson ([drewjohnson@valdosta.edu](mailto:drewjohnson@valdosta.edu))

Lab Sections: BC 1083

P Monday, 1-3:50, Dr. Elder	A Tuesday, 9:30-12:20, Dr. Elder
B Tuesday, 2:00-4:50, Dr. Cantonwine	C Wednesday, 10:00-12:50, Dr. Cantonwine
D Wednesday, 2:00-4:50, Dr. Calestani	E Thursday, 9:30-12:20, Dr. Blackmore
F Thursday, 1:00-3:50, Dr. Blackmore	G Friday, 9:00-11:50, Dr. Calestani

*Welcome to Principles of Biology I.* This is the first course in a series designed to help you develop a strong foundation in the biological sciences to build on throughout your studies at VSU and beyond.

*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 1100 is a co-requisite for Freshman Biology majors that have not yet completed this course (offered Fall semesters only)

Required Resources:

9781934931523 Turning Technologies QT Clicker Device & Turn Tech 1yr Acct	Turning Technologies	Required	
9780738060064 Methods & Investing (Valdosta Custom)	Goddard	6th	Required
9781319025311 Life: The Science of Biology (w/eBook + Access)	Sadava	11th	} Choose one version
9781319126193 Life (LoosePgs)(w/LaunchPad Access)	Sadava	11th	
9781319125714 Life: Biology (w/LaunchPad Acc)	Sadava	11th	

Learning Goal

Students will demonstrate understanding of the physical universe and the nature of science, and they will use scientific methods and/or mathematical reasoning and concepts to solve problems.

Course Objectives and Outcomes (refer to Outcome section at end of syllabus for more information)

By the end of this course, students will be able to

- 1) answer questions that demonstrate an understanding of fundamental concepts of biology, including the scientific method and experimental design; cellular structure, function, metabolism, and reproduction; the nature of the gene and its action; and the mechanisms of evolution (GEO 5; BEO 1-4)
- 2) perform a variety of standard lab techniques used in biological research (GEO 5)
- 3) use critical thinking skills and written communication skills to present the results and conclusions of data collected in the lab in standard scientific writing format (GEO 4 & 7; BEO 1)

## Assessments:

Lecture (75% of final grade; 750 points)

<u>Assessments</u>	<u>Points</u>	<u>SCALE Unit</u>
○ Unit Exams (5)	100 each	A ≥ 90.0%
○ Cumulative Final Exam (1)	100	B ≥ 80.0%
○ Chapter Assessments (10 out of 13)	10 each (100 total)	C ≥ 70.0%
○ Clicker Grade (1)	100 total	D ≥ 60.0%
○ Dropped Grade (lowest of above)	-100	F ≤ 59.99%
○ Classroom Procedure Grade	50	
<b>TOTAL POSSIBLE POINTS</b>	<b>750</b>	

Lab (25% of final grade)

- Refer to your lab syllabus for assessment details

## Explanation of Lecture Assessments:

**Unit Exams.** Unit exams are not cumulative. Make-up opportunities are not guaranteed. If you wake up late on exam day, come to the classroom. As long as this happens only once, you can complete the exam. If you completely miss the exam, see Dr. Cantonwine ASAP to see if a make-up is possible.

**Final Exam.** The final exam is cumulative.

**Clicker Grade.** Beginning the second or third week of class, lectures will include an assessment using clicker questions. Each correct answer will count 2 points, incorrect answers will count 1 point, and questions that are not answered will count 0 points. To participate, students must be counted as present (see Attendance/Tardy Policy). *Individual clicker assessments* will be posted to Blazeview following the lecture. At the end of the semester, your *Clicker Grade* will be calculated using the following equation:

$$\sum \left( \frac{\text{individual clicker grades converted to a percentage} - (\text{lowest individual clicker grade percentage} + \text{any clicker grades where the absence was excused and documented by GA})}{\# \text{ of individual clicker grades used}} \right)$$

*\* The lowest individual clicker grade is dropped from the pooled grade to allow for a forgotten clicker or malfunctioning clicker. Students are therefore allowed one pass for unintended errors. It is your responsibility to fix any clicker issues in a timely manner.*

*\* It is your responsibility to get my approval for an excused absence and to make sure that the GA receives documentation of my approval.*

*\* If you allow someone to use your clicker in your absence, or if you use someone's clicker in his or her absence, the Pooled Clicker Grade will be the "dropped grade".*

**Chapter Assessments.** This grade will be the sum of your 10 highest book chapter assessments (13 chapters will be assessed). Each chapter will have two assessment opportunities: a 10 question Summative Quiz and an adaptive reading quiz called LaunchPad. Summative quizzes will be open for 24hr, and students will have one attempt. To earn a grade with the Summative Quiz, a score of 7 must be achieved. Anything less than a 7 is a 0! If you are not happy with your quiz grade, you can complete the LaunchPad chapter assignment. LaunchPad assignments for each unit open at the beginning of the unit and are due 24 hours before the unit exam. Completion of the LaunchPad assignment will result in a 10. Partial completion is a 0.

*\* Each student must complete the Chapter Assessments on his or her own! No Team Work! If you are caught working together in any way, the Chapter Assessment grade will be the grade that is dropped.*

**Dropped Grade.** The lowest 100pt grade will be dropped. If you are happy with your grades prior to the final exam, you do not need to take the final exam.

**Classroom Procedure Grade (CPG).** This grade will evaluate how well the class follows course policies and procedures.

CPG RUBRIC	Points	Frequency
Syllabus Quiz on Blazeview (individual grade)	≤1 (score/10)	1
If 90% of class is in attendance @ 8am sharp	0.25	45
If fewer than 3 infringements occur during the lecture period. Infringements include unapproved use of a laptop or smart device*, listening to music, talking to your neighbor while material is being presented, distracting the instructor or a neighbor in any way, cell phone alarm, & consumption of noisy or odorous food or beverage. Exam day infringements are based on the exam day guidelines posted to BV.	0.75	45
If NO infringements occur for 5 straight lecture periods	1	9
If 100% of clickers are properly licensed and registered by September 1	1	
Possible score	56/50	

\* If you have an emergency and need access to your cell phone during class, you may sit in one of the seats at the back of the classroom. Please see a GA on the morning that you need access. There are a limited number of seats where laptops or other note taking devices may be used during lecture. See a GA to select an approved seat.

### Monitoring and computing your grade

Exam, clicker, & CPG grades will be posted to the combined Blazeview page (**Principles of Biology I Section X01 FALL 2017 CO**). Summative Quiz and LaunchPad grades will be posted on the LaunchPad gradebook. Your grade can be computed at any time using the following equation (see me during office hours if you would like help with this calculation):

$$\text{Final Grade} = [(\text{Exam 1} + \text{Exam 2} + \text{Exam 3} + \text{Exam 4} + \text{Exam 5} + \text{Pooled Clicker Grade} + \text{Chapter Assessment Grade} + \text{Final Exam} - \text{lowest of these grades}) + \text{Classroom Procedure Grade} + (\text{average \% lab grade} \times 2.5)]$$

Lab communications will be made using the section specific Blazeview page. For example, if you are in BIOL 1107K Section A, your Blazeview page for lab is **Principles of Biology I Section A Fall 2017 CO**.

### Course Policies and Procedures for Lecture:

**Attendance/Tardy Policy.** Attendance is not required in lecture, but it is expected, and you must be present to earn a clicker grade each day. You will be automatically counted present if you are sitting in your assigned seat by 8:00am. If you arrive late, make sure the GA notices your entrance.

**Assigned seats.** Assigned seats will be used (beginning the second or third week of class) to keep track of student attendance for the purpose of monitoring attendance and clicker usage. *You are welcome to change seats (temporarily or permanently) during the semester, but it is your responsibility to inform the graduate assistant of this change prior to making the move; otherwise, your pooled clicker grade may be dropped if you are counted absent but your clicker is detected!*

**Expectations of conduct.** I expect students to pay attention to the lecture and take notes. Students should not be disruptive to the instructor or other students. Only drinks and snacks that can be consumed quietly are acceptable (breakfast is not acceptable!). Cell phones and other smart devices are prohibited once class begins. Laptops are not permitted without prior approval.

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

Title IX Statement: Valdosta State University (VSU) is committed to creating a diverse and inclusive work and learning environment free from discrimination and harassment. VSU is dedicated to creating an environment where all campus community members feel valued, respected, and included. Valdosta State University prohibits discrimination on the basis of race, color, ethnicity, national origin, sex (including pregnancy status, sexual harassment and sexual violence), sexual orientation, gender identity, religion, age, national origin, disability, genetic information, or veteran status, in the University's programs and activities as required by applicable laws and regulations such as Title IX. The individual designated with responsibility for coordination of compliance efforts and receipt of inquiries concerning nondiscrimination policies is the University's Title IX Coordinator: Maggie Viverette, Director of the Office of Social Equity, [titleix@valosta.edu](mailto:titleix@valosta.edu), 1208 N. Patterson St., Valdosta State University, Valdosta, Georgia 31608, 229-333-5463.

Access Statement: Students with disabilities who are experiencing barriers in this course may contact the Access Office for assistance in determining and implementing reasonable accommodations. The Access Office is located in Farbar Hall. The phone numbers are 229-245-2498 (V), 229-375-5871 (VP) and 229-219-1348 (TTY). For more information, please visit VSU's Access Office or email: [access@valdosta.edu](mailto:access@valdosta.edu).

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](http://www.valdosta.edu/academic/AcademicHonestyPoliciesandProcedures.shtml) and [www.valdosta.edu/biology/documents/biologyplagiarism.doc](http://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:

- For Biology majors, a grade of C or higher is required to move on.
- October 5 is the last day to withdraw from the course.

## Tentative Lecture Schedule, BIOL 1107K, Sections A-G & P, Fall 2017

Week	Subject	Chapters	
Aug 14	Syllabus Living organisms are similar Evolution	Introduction 1.1 Evolution	
Aug 21	Investigating life through experiments Cellular structure & function Cellular structure & function	1.2 5.1-5.3 5.3	Ch.1 Quiz Aug 22 (Tues)
Aug 28	Extracellular structure & evolution of eukaryotic cells; Cellular membrane structure & function <b>EXAM 1 (Friday, Sept. 1, Chapters 1 &amp; 5);</b>	5.4-5.5 6.1 EXAM 1	Ch.5 Quiz Aug 29 (Tues)
Sept 4	<i>Labor day, no class (Sept 4);</i> Basic chemistry Macromolecule intro & lipids	No Class 2.1-2.3 3.1 & 3.4	Ch.2 Quiz Sept 7 (Thurs)
Sept 11	Proteins Carbohydrates Cell membrane adhesion & recognition, Passive transport	3.2 3.3 6.2-6.3	Ch.3 Quiz Sept 14 (Thurs)
Sept 18	Active transport pH & basic physics <b>EXAM 2 (Friday, Sept 22, Chapters 2.1-2.3, 3 &amp; 6)</b>	6.4-6.5 2.4 & 8.1 EXAM 2	Ch.6 Quiz Sept 19 (Tues)
Sept 25	Energy, Enzymes, & Metabolism Enzymes, & Metabolism cont. Glycolysis & Krebs cycle (no class, recorded lecture on BV)	8.2-8.3 8.4-8.5 9.1-9.2	Ch.8 Quiz Sept 28 (Thurs)
Oct 4	Cellular respiration cont. Photosynthesis part 1 Photosynthesis part 2	9.3-9.5 10.1-10.3 10.5	Ch.9 Quiz Oct 5 (Tues)
Oct 9	FALL BREAK (Oct 9-10) Catch-up or Review Ch. 8-10 <b>(EXAM 3, Oct 13, Ch. 2.4, 8-10)</b>	No Class Catch-up or Review Exam 3	Ch.10 Quiz Oct 11 (Wed)
Oct 16	Nucleic acids; DNA and its role in heredity From DNA to protein (transcription) From DNA to protein (translation)	4.1, 13.1-13.2 14.2-14.4 14.5-14.6	Ch.14 Quiz Oct 22 (Sun)
Oct 23	The cell cycle – mitosis & cytokinesis DNA replication Sexual life cycle – meiosis	11.1, 11.3 13.3 11.4-11.5	Ch.13 Quiz Oct 26 (Thurs) Ch.11 Quiz Oct 29 (Sun)
Oct 30	Catch-up or Review <b>(EXAM 4, Nov 1, Ch 4.1, 11, 13, 14)</b> Basic Mendelian Genetics	Catch-up or Review Exam 4 12.1	
Nov 6	Mutations Mutations and diseases How mutations are analyzed & PCR	15.1 15.2 15.3 & 13.5	
Nov 13	Genetic disease screening & treatment Cell communication Communication & multicellularity	15.4-15.5 7.1-7.2 7.3-7.5	Ch.15 Quiz Nov 14 (Tues)
Nov 20	Putting it all together – Cancer case study part 1 Thanksgiving Break (Nov 22-24)	11.2 & 11.7	Ch.7 Quiz Nov 20 (Mon)
Nov 27	Putting it all together – Cancer case study part 2 Catch-up or Review <b>(EXAM 5, Dec 1, Ch.12.1, 15, 7, 11.2 &amp; 11.7)</b>	11.7 Catch-up or Review EXAM	
Dec 4	Review <b>Final Exam (Weds. Dec 6, 8:00-10:00am)</b>	Review Final Exam	