

**Valdosta State University, BIOL 1107K, Sections G-L (4 Credit Hours)**  
**Principles of Biology I ±FALL 2014**  
**Syllabus & Course Policies**

Lecture: BC 1011 ±Mondays, Wednesdays, & Fridays ±8:00-8:50

Instructor: Dr. Emily Cantonwine (Dr. Cantonwine)

Office: BC 2031

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Email: [egcantonwine@valdosta.edu](mailto:egcantonwine@valdosta.edu)

Office hours: Mondays & Wednesdays 11-2 (you may just show up or sign-up for a time on my office door; please do not email me to make an appointment).

Graduate Assistant (GA): See Blazeview for details

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 bu41 for

Freshman Biology majors.

Learning Goal

Students will demonstrate understanding of the physical universe (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)

x Lecture grade

7 of 8 - the lowest of these grades will be dropped

- o Unit Exams (5)
- o Cumulative Final Exam (1)
- o **Pooled** Clicker Grade (1)

Points

100 each

100

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## General Rules:

**Attendance Policy.** Attendance is not required in lecture. The attendance policy in the laboratory is per the discretion of the laboratory instructor and may significantly impact your potential grade. Refer to the lab syllabus for details.

**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 clicker usage. **You may 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!**

**Lecture Notes.** Powerpoint slides with fill-in blanks will be provided for printing at least 48-hours before the lecture (beginning the second week of class). Students are expected to print the slides and fill in the blanks during lecture.

### Student conduct

- ± Arrive on time and have all the materials you need (including your clicker) when class begins.
- ± Your full attention should be on the course material. If this is not possible, please be respectful of your fellow students by not being disruptive.
- ± You do not need my permission to leave class early. Please do so in a non-disruptive way.
- ± Disruptive students may be asked to leave the classroom. I consider listening to music, surfing the internet, obvious texting, and talking to your neighbor while material is being presented to be disruptive.

### Food and Drink

- ± Drinks and snacks are allowed in the lecture hall as long as their consumption and storage are not a disturbance to yourself or other students. Each student must clean up after him or herself; otherwise, this privilege will be revoked. Drinks and snacks are not allowed in lab!

### Electronic Devices

- ± Bring your clicker to lecture every day. Clickers will not be used in lab unless otherwise stated by your lab instructor.
- ± Turn off your cell phone during class!
- ± Turn off your MP3 player and

Tentative Lecture Schedule, BIOL1107K, Sections G-L, Fall 2014

Week	Subject	Chapters	Due on the due date by 8am
Aug 18	What is Biology? The cell theory; Main types of cells & organisms	1.1, 1.2	Vocabulary I Practice quiz I Due Aug 25
Aug 25	Cells: structure & function	5	Practice quiz I Due Weds Sept 3
Sept 1	Labor day, no class (Sept 1) Cells: structure & function; EXAM 1 (Sept 5)	5	Vocabulary II Due Sept 8
Sept 8	Cellular membrane structure & function; lipids;	6.1, 3.4	Vocabulary III Practice quiz II Due Sept 15
Sept 15	Proteins; covalent, hydrogen, & ionic bonds; chemistry of hydrophilic molecules; condensation reaction	3.1, 3.2, 3.3, 2.2	Vocabulary IV, Practice quiz IV Due Sept 22
Sept 22	Membrane transport	6.3-6.5	
Sept 29	EXAM 2 (Sept 29) Energy, Enzymes, & Metabolism	8	Vocabulary V Practice quiz V Due Oct 6
Oct 6	Carbohydrates; hydrolysis reaction; Pathways that harvest chemical energy	8, 3.1, 9	Vocabulary VI Practice quiz VI Due Oct 13
Oct 13	Pathways that harvest chemical energy; photosynthesis	9, 10	Vocabulary VII Practice quiz VII Due Oct 20
Oct 20	Photosynthesis; Nucleic acids Exam 3 (October 25)	10; 4	Vocabulary VIII Due Oct 27
Oct 27	DNA and its role in heredity; From DNA to protein	13.2, 14	Practice quiz VIII Due Nov 3
Nov 3	From DNA to protein; The cell cycle; DNA replication	14, 11, 13.3	Vocabulary IX Due Weds Nov 12
Nov 10	Exam 4 (Nov 10) Inheritance, genes, and chromosomes	12	Vocabulary X Practice quiz X Due Nov 17
Nov 17	Gen mutation and molecular medicine	15	Practice quiz X Due Weds Dec 3
Nov 24	Thanksgiving week no class		
Dec 1	Cell signaling and communication Regulation of Gene expression	7, 16	
Dec 8	Exam 5 (Dec 8) Final Exam (Dec 6, 12:30-3:30pm)		

## Valdosta State University General Educational Outcomes (GEO)

1. Students will demonstrate understanding of the society of the United States and its ideals.
2. Students will demonstrate cross-cultural perspectives and knowledge of other societies.
3. Students will use computer and information technology when appropriate.
4. Students will express themselves clearly, logically and precisely in writing and in speaking, and they will demonstrate competence in reading and listening.
5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices.
6. Students will demonstrate knowledge of diverse cultural heritages in the arts, the humanities, and the social sciences.
7. Students will demonstrate the ability to analyze, to evaluate, and to make inferences from oral, written and visual materials.
8. Students will demonstrate knowledge of principles of ethics and their employment in the analysis and resolution of moral problems.

## Department of Biology Educational Outcomes (BEO)

1. Develop and test hypotheses, collect and analyze data, and present the results and conclusions in both written and oral format used in peer-reviewed journals and at scientific meetings.
2. Describe the evolutionary process responsible for biological diversity, explain the phylogenetic relationships among the other taxa of life, and provide illustrative examples.
3. Demonstrate an understanding of the cellular basis of life.
4. Relate the structure and function of DNA/RNA to the development of form and function of the organism and to heredity
5. Interpret ecological data pertaining to the behavior of the individual organism in its natural environment; to the structure and function of populations, communities, and ecosystems; and to human impacts on these systems and the environment.