Valdosta State University, BIOL 1107K, Sections M-R (4 Credit Hours) Principles of Biology I FALL 2013 Syllabus & Course Policies

Lecture: BC 1011 - Mondays, Wednesdays, & Fridays - 11:00-11:50

<u>Instructor:</u> Dr. Emily Cantonwine (Dr. Cantonwine) <u>Office:</u> BC 2031 <u>Phone:</u> (229) 333-5337

Office hours: Tuesdays 10-12 & 2-4, or by appointment (arrange by email).

Graduate Assistant:

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 eukaryptes. There are no prerequisites for this course. BIOL 1100 is a co-requisite for Freshman Biology majors.

Required Resources:

Sadava, D., Hillis, D.M., Heller, & Berenbaum, M.R. 2009. LIFE: The Science of Biology. Ninth Edition. Sinauer Associates, Inc., Sunderland, MA, and W.H. Freeman & Co., Gordonsville, VA.

Turning Technologies Clicker NXT

R.H. Goddard. 2011. Methods and Investigations in Basic Biology. Sixth Edition. Hayden-McNeil Publishing, Plymreproduction; 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)

Lecture grade (100% of lecture grade; 75% of final grade)			<u>SCALE</u>	
7 of 8 ·	the lowest of these grades will be dropped	A	90.0%	
0	Unit Exams (5)	В	80.0%	
0	Cumulative Final Exam (1)	C	70.0%	
0	Pooled Clicker Grade (1)	D	60.0%	
0	Average quiz grade (pre-lecture & post-lecture) (1)	F	59.99%	

Bonus (up to +5% added to final grade)

o Learning logs (in class & blazeview)

Lab (25% of final grade)

Refer to your lab syllabus for assessment details

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Explanation of Lecture Assessments:

Unit Exams. A percentage score will be determined for each unit exam. There are no make-up exams, regardless of excuse. If you miss an exam, this will be the grade that is dropped. Students may not take exams early, with the exception of students with a university-related or religious excuse. The unit exams are not cumulative.

Final Exam. The final exam will be cumulative, and is weighed the same as the unit exams and the pooled clicker grade. Students may choose to not take the final, but in this case, none of the previous lecture grades will be dropped.

Pooled Clicker Grade. Beginning in the second week of class, lectures will include an assessment using clicker

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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

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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.
- 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.

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