BIOL 1107K: Principles of Biology I (Spring Semester 2011)

1. Course Information

- Course number and section: BIOL 1107K (two sections: D, E)
- Course name: Principles of Biology I
- Hours of credit: 4
- Pre-requisites or co-requisites as listed in university catalogue: Co-requisite for Biology majors: BIOL 1100
- Classroom location and room number: BC 1023 (for the lecture, 11:00 am - 12:15 pm, TR), BC 1083 (for the lab schedule, see the table below)

Section	Instructor	Day	Time
D	Dr. Brian C. Ring	T	2:00 pm - 4:50 pm
E	Dr. Brian C. Ring	R	8:00 am - 10:50 am

2084, 229-333-7140, jkang@val

- Instructor office hours: MTW 8:30 am – 9:30 am

3. 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.
- Required texts, resources, and materials:

Textbook: Sadava, A., H. C. Heller, G. H. Orians, W. K. Purves, D. M. Hillis. 2011. Life: The Science of Biology. 9th edition. Sinauer.

For the lab materials please refer to the lab syllabus which will be provided by Dr. Ring.

- Required out-of-class activities: Reading assigned lecture notes, presentation materials, and textbook.

4. Standards, Goals, Objectives, or Outcomes

- outcomes:

The General Education Outcomes (http://www.valdosta.edu/academic/VSUGeneralEducationOutcomes.shtml).

5. Students will demonstrate knowledge of scientific and mathematical principles and proficiency in laboratory practices. They will understand the basic concepts and principles underlying scientific methodology and be able to collect, analyze, and interpret data. They will learn a body of scientific knowledge and be able to judge the merits of arguments about scientific issues. They will be able to perform basic algebraic manipulations and to use fundamental algebraic concepts to solve word problems and equations. They will be able to use basic knowledge of statistics to interpret and to analyze data. They will be able to evaluate arguments

Total score (%)	Grade
>= 90%	A
>= 80%	B
>= 70%	C
>= 60%	D
< 60%	F

7. Schedule of Activities or Assignments, including university -scheduled final exam time (all schedule is tentative and may be subject to change)

week	Date	Chapter or Exam
1	1/11	Introduction, Basic Mathematics
	1/13	Ch1. Studying Life
2	1/18	Ch2. Small Molecules and Chemistry
	1/20	Ch2. Small Molecules and Chemistry
3	**1/25**	**Test 1 (100 point)**
	1/27	Ch3. Proteins Carbohydrates Lipids
4	2/1	Ch3. Proteins Carbohydrates Lipids
	2/3	Ch4. Nucleic Acids
5	**2/8**	**Test 2 (100 point)**
	2/10	Ch5. Cells
6	2/15	Ch6. Membranes
	2/17	Ch7. Signaling
7	**2/22**	**Test 3 (100 point)**
	2/24	Ch8. Energy
8	3/1	Ch8. Energy
	3/3	Ch9. Pathways (*Midterm: withdrawal due*)
9	3/8	Ch9. Pathways
	3/10	Ch10. Photosynthesis
10	3/15	Spring Break
	3/17	Spring Break
11	3/22	Ch10. Photosynthesis
	3/24	**Test 4 (100 point)**
12	3/29	Ch11. Cell Cycle
	3/31	Ch11. Cell Cycle
13	4/5	Ch13. DNA
	4/7	Ch13. DNA
14	**4/12**	**Test 5 (100 point)**
	4/14	Ch14. Gene Expression
15	4/19	Ch14. Gene Expression
	4/21	Ch16. Regulation of

8. Classroom Policies

- Attendance and tardiness: Any absence policy should conform to the university policy. University Attendance Policy from the VSU catalogue: