

Principles of Biology I - BIOL 1107K (Fall, 2013) Section F

1. Course Information

- Course number and section: BIOL 1107K (section: F) CRN: 81256
- Course name: Principles of Biology I
- Hours of credit: 4
- Lab location and room number: Bailey Science Center 1083, Friday 10:00 am - 12:50 pm;
- Department, College, University: Department of Biology, College of Arts and Sciences, Valdosta State University

2. Instructor Information

- Instructor name: Dr. Jonghoon Kang
- Instructor contact: BC 2217, 229-333-7140, jkang@valdosta.edu
- Instructor office hours: Mon and Tue 9:00 am - 10:00 am

3. Course Description

Lab Manual: Goddard, R.H. 2013. Methods and Investigations in Basic Biology. 6th edition.

4. Lab Conduct

- Arrive on time. Assignments are due at the start of lab. Students arriving 10 minutes late will not be able to turn in assignments and will receive a zero (0) on those assignments
- It is strongly advised to maintain a laboratory notebook with drawings, descriptions, data etc. of the laboratory exercises. The only requirements of the notebook are that it be a spiral bound notebook. The notebook will help you study for the quizzes.
- No eating or drinking during the lab.
- Attendance to lab is mandatory. Excused absences are usually given for medical emergencies and documentation must be provided; the professor determines whether or not an absence is "excused" or not. If a student misses three labs for any reason the student cannot earn higher than a "D" for his/her final grade. Except under extenuating circumstances, labs cannot be made up outside of scheduled laboratory sessions. Students are still responsible for all lab content even if they received an excused absence.
- Students must take care of lab equipment. Notify the professor if something is not working properly or if something breaks during the course of the lab
- Each student will be assigned a microscope. It is the student's responsibility to properly use the microscope. After lab the professor will check each scope to make sure that it was put away properly. Failure to do so will result in one point being subtracted from the student's total lab points (not the final percentage) each week it is not put away properly. Notify the professor if your microscope is not functioning properly.

- Cell phones are not allowed to be used in lab with the exception of using them as timers when necessary.

5. Lab assignments and Lab Practical Exams:

Throughout the semester lab assignments will be given. These assignments are due at the start of the following lab period. No late assignments will be accepted (see above).

6. Assessment or Evaluation Policy

10 quizzes (100) + A1 (10) + A2 (10) + R (10) +N (10)= 140.

7. TENTATIVE LAB SCHEDULE AND TOPICS

| Lab | Week of: | Topic: |
|-----|----------|--|
| 1 | Aug.16 | What is science |
| 2 | Aug. 23 | exercise 1: black box (Q1) |
| 3 | Aug. 30 | exercise 2: Basic light microscopy (Q2) |
| -- | Sept. 6 | Labor Day- NO LABS |
| 4 | Sept. 13 | exercise 3: Observation of living cells with light microscopy (Q3) |
| 5 | Sept. 20 | exercise 5: Cellular water relations (Q4) |
| 6 | Sept. 27 | exercise 4: Independent group microscopy projects (discussion about A1, read Appendix A) (Q5) |
| 7 | Oct. 4 | exercise 4 again, independent group microscopy projects (discussion about A2 read Appendix B) A1 Due: Group Proposal; Read Appendix C & D for the next lab |
| 8 | Oct. 11 | exercise 6: Protein extraction and quantification from living tissues |
| 9 | Oct. 18 | exercise 7: Enzymology α -amylase activity (Q6) A2 Due: Group Research Paper (Exercise 4) |
| 10 | Oct. 25 | exercise 8: Enzymology investigation of the effects of temperature and pH on α -amylase activity (Q7) |
| 11 | Nov. 1 | exercise 10: Cell reproduction- mitosis, meiosis and cytokinesis (Q8) |
| 12 | Nov. 8 | Mendelian genetics (Q9) |
| 13 | Nov. 15 | Crime scene lab (Q10) N: Notebook check |
| 14 | Nov. 22 | Interpret data; lab assessment (R=Result evaluation) |

| Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | A1 | A2 | R | N | Sum | Final |
|----|----|----|----|----|----|----|----|----|-----|----|----|---|---|-----|-------|
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Final = Sum/1.4