**BIOL 6500: Cell Biology (Fall 2011)**

1. Course Information

- Course number and section: BIOL 6500 A or B
- Course name: Cell Biology
- Hours of credit: 4
- Pre-requisites or co-requisites as listed in university catalogue: Admission into the graduate program or permission of the instructor.
- Classroom location and room number: BC 2022 (for the lecture, MWF 8:00 am - 8:50 am), BC 2071 (for the lab, R 8:30 am - 11:20 am (section A), 12:30 pm - 3:20 pm (section B))
- Department, College, University: Department of Biology, College of Arts and Sciences, Valdosta State University

2. Instructor Information

- Course description as printed in university catalogue: The organization and function cellular structures in animal, Essential *Cell Biology, 3rd Edition* by Bruce Alberts et al. from Garland Science. (ISBN-13: 978-0815341291)
- Required out-of-class activities: In addition to attending the lectures you need to

V

Read your notebook (very important).

V Read the textbook (3.5m x 4w/m x 5d/w = 70 days and the textbook size is about 700 pages. That means 10 pages per day reading is necessary

3. To produce a systematic and thoroughly researched thesis suitable for publication and appropriate to the thesis sub-discipline.

- Course objectives or outcomes:
  - ü Describe basic terminology in cell biology.
  - ü Describe the underlying physical and chemical principles in cell biology.
  - ü Demonstrate an understanding of basic experimental techniques in cell biology.
  - ü Demonstrate competency for the cell biology part in standard tests such as GRE, MCAT.
  - ü Demonstrate literature analysis capability.

5. Assignments (explicitly aligned with the goals, objectives, or outcomes)

- General description of the assignments: You need to read the textbook before and after the lecture. Also doing the exercise questions should enhance your understanding of the subject.
- Policies for missed assignments, make-up assignments, late assignments, and/or extra credit: There will be no extra credit in this course.

6. Assessment or Evaluation Policy

- Explanation of how grades are assigned: Grading will be based on the scores you get from the tests.
  Class points (CP) = (∑ Test i score + Final Test score + Lab Test + Term Paper)/9, where i is I to IV.
  The maximum score of the Test i is 100, where i is I to IV. The maximum score of the final is 200. The maximum score of Lab Test is 200 (= 12 quizzes of 10 points each and 80 points of the lab final). The maximum score of the term paper is 100.
  If CP >= 90% then A for the final grade, if CP >= 80% then B, if CP >= 70% then C, if CP >= 60% then D and anything below will be F.
- Grading standards: You may get partial credit for answers that show logical developments but fail to derive the correct answers due to operational errors.

**Record your scores in the table.**

| Exam | I | II | III | IV | Final | Sum 1 |
|---|---|---|---|---|---|---|
| Score | | | | | | |

| Lab | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 |
|---|---|---|---|---|---|---|---|
| Score | | | | | | | |
| Lab | Q8 | Q9 | Q10 | Q11 | Q12 | Final | Sum 2 |
| Score | | | | | | | |

**Your score = (Sum 1 + Sum 2 + Term Paper Score)/9**

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

| Date | Class | Date | Lab |
|---|---|---|---|
| 8/15 | Introduction to Cells | 8/18 | Basic Lab Mathematics (log, exponential) |
| 8/17-19 | Chemical Components of Cells | 8/25 | Basic Lab Tech (pipeting, solution) **Q1** |
| 8/22-24 | Energy, Catalysis, and Biosynthesis | 9/1 | Enzyme Microarrays **Q2** |
| 8/26-29 | Protein Structure and Function | 9/8 | Introduction to ELISA Reactions **Q3** |
| 8/31 | DNA and Chromosomes k | /# | 8/22ɑn / ! Ṅ ŋ ضُ Ṛ ɾ δ |

8. Classroom Policies

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