

## BIO 201 Syllabus Summer 2005

**Instructor:** Terri Stilson  
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**Office Hours:** Tuesday 2:30-3:30 or by appointment

**Course Hours:** M-Th 10:50 am – 12:10 pm, lab Wed 12:20pm – 3:20

### **Required Material:**

Biology, 7<sup>th</sup> ed., Campbell & Reece

### **Suggested Material:**

Photo Atlas for General Biology, Strete & Vodopich

**Course Description:** Initial course in the Biology 200 series. Emphasis on cellular biology including cell structure, organization, metabolism, energetics, and the gene including molecular, chromosomal, Mendelian, and microbial genetics.

**Prerequisites:** Chemistry 101; a base level of chemistry is assumed for this course. Eligibility for ENG 101 is strongly recommended.

### **Course Goals (by the end of the course, you should be able to):**

- ◆ Explain what is meant by the statement "life is chemistry".
- ◆ Explain what is meant by the statement "the cell is the basic unit of life".
- ◆ Explain basic cellular structure and processes.
- ◆ Explain basic biochemical reactions.
- ◆ Explain how enzymes catalyze biological reactions, and what regulates enzymatic activity.
- ◆ Explain the processes and outcomes of photosynthesis and respiration, and how they are linked.
- ◆ Explain the genetic code and how it is translated into proteins.
- ◆ Explain how genetic information is stored and passed on from generation to generation.
- ◆ Explain what genetic variation is, why it is important, and how it is created.
- ◆ Correctly use a microscope.
- ◆ Use correct sterile techniques.
- ◆ Describe the basic methodology of doing science, including hypothesis testing.
- ◆ Discuss the human implications for some of the topics we cover.

## **ATTENDANCE, ACADEMIC DISHONESTY, MISSED/LATE ASSIGNMENTS:**

**Academic Dishonesty will not be tolerated.**

**Attendance** to all classes is expected. If you must be absent, please contact me and a classmate to get missed material as soon as possible. **I will be covering some material which is not covered in the text, and I will be omitting some material from the text.** Therefore, attendance is extremely important.

**Make-up quizzes or exams will be granted only for emergency situations.** If you have an emergency and must miss a quiz or an exam, contact me as soon as possible. Please attempt to contact me before the quiz or exam. If you do not contact me within 24 hours of the quiz or exam, I will not grant a make-up. Make-up quizzes and exams will not necessarily be the same as that given in class.

**Laboratory Reports turned in late will be penalized as such:**

Each day late: -5% (ex, if 2 days late -10%)

**GRADES will be determined by the following:**

**Exams** 50%

Exams may include Multiple Choice, Fill In The Blank, Short Answer and Essay questions. All material presented in the notes may show up on the exams. Exams are not technically cumulative; however, understanding the material early in the course is essential for understanding material later in the course. Therefore, you will need to review old material to ensure a thorough understanding of current material.

**A Scantron and #2 pencil will be required for each exam.**

**Quizzes** 30%

Quizzes will cover 100% new material from the previous week. Quizzes may include both laboratory and lecture material. Quizzes will be given in the first 15 minutes of class; quiz time will not be extended for students who are tardy.

**Laboratory Reports** 10%

Reports must be COMPLETE, ORGANIZED, AND ACCURATE to receive full credit. Lab reports will be due each Wednesday, one week after the labs are completed.

**Participation/Group discussion** 10%

Occasionally we will conduct group discussions/projects relevant to the subjects we are studying. These discussions will be held on Thursdays. Active participation and attendance is expected. Participation grade includes attendance, leaving your work station clean after labs, turning in original work on lab reports, etc. You may inquire at any time about the status of your participation grade.

**Grades will be assigned as follows:**

4.0-3.5	A/A-	90-100%
3.4-2.9	B/B+	80-89%
2.8-2.2	B-/C+	70-79%
2.1-1.5	C/C-	60-69%
1.4/0.9	D+/D	50-59%
0.8-0.0	D-/E	below 50%

**THE WEBSITE-** Will be used for **announcements** and:

**Possible short essay questions** will be posted on the website approximately one week prior to each exam. Generally, I will post about 8 possible questions; 3-5 will show up on the exam almost word-for-word. Use these questions to help with studying, and to test your readiness for the exam. The posted questions will **NOT** cover all material that will be on each exam.

**Quiz focus points** will be posted on the website approximately 2 days prior to each quiz.

**Powerpoints** for each lecture will be posted on the website. They will often be more in-depth than those I use in class. I strongly suggest that you access these powerpoints to aid in your studying. When printing, I suggest that you delete the slides with pictures, then choose the option that allows you to print 4 frames per page. This will save on ink and paper. I will try to have the powerpoints posted for each lecture before I begin the lecture in class, but I cannot guarantee it.

**Laboratory write-ups-** these will be available before each lab. You will be expected to print and read each write-up before attending lab.

## **COMMITMENT**

This is an extremely fast-paced, intensive course. To successfully complete this course you must commit to attend all lectures and laboratory sessions as well as **at least** 15 hours per week of studying time. Please utilize the instructors' and tutor's office hours (or make appointments) if you feel you are struggling despite reasonable effort. If you feel you require help developing study skills, the advising office has resources for you to use (of course you can consult us as well!).

You will be expected to have read the material previous to lecture.

**SCHEDULE** (Subject to change)

<u>Week of</u>	<u>Text</u>	<u>Lab/s (tentative)</u>	<u>Exams</u>	<u>Quizzes</u>
06/27	1, 6	Microscopes, chemistry review		
07/04 no school 7/4	6, 7, 8	Cell diversity		Q1- 7/6
07/11	8, 9, 10	Membranes, enzymes	EI- 7/11	
07/18	10, 11, 17	Respiration, Photosynthesis		Q2- 7/20
07/25	17, 16, 12	Proteins I	EII- 7/25	
08/01	12, 13, 14	Proteins II		Q3- 8/3
08/08	14, 15, 18`	Mitosis, Meiosis, Inheritance	EIII- 8/8	
08/15	18, 19, 20	Restriction Digest of Plasmid DNA and Electrophoresis	EIV- 8/18	Q4- 8/17