

**Syllabus for Biology 5, Human Biology  
Spring Semester 2010, Section 72005**

Instructor: Holly Shugart

Contact Information:

Phone- 559-596-2928

E-mail: holly.shugart@reedleycollege.edu

---

**I. Course Description:**

- a. **Objectives:** Upon completion of this course, students will be able to:
- i. Understand the process of science and society, microscopy and the cell
  - ii. Identify human body levels of organization and homeostatic mechanisms
  - iii. Understand the chemical basis of life
  - iv. Evaluate scientific literature and current biological achievements
  - v. Apply the principles of genetics to humans and understand the outcome of normal and abnormal DNA and evolution
  - vi. Understand the structure and functions of the following body systems: circulation, digestive, respiratory, urinary, skeletal, muscular, nervous, sensory, endocrine and reproductive systems.
- b. Biology 5 is a 4 unit course with 2 hours of lecture, Monday, 6 pm-8:15 pm, and 2 hours of lab, Wednesday, 6 pm-8:15 pm.

**II. Required Materials:**

- a. Textbook: Human Biology, Mader, 11<sup>th</sup> edition, McGraw-Hill.
- b. Lab Manual: Human Biology Lab Manual, Mader, 11<sup>th</sup> edition, McGraw-Hill.
- c. Biology drawing paper (for lab plates).
- d. Protective eyewear.

**III. Recommended Materials:**

- a. Colored Pencils. Do not draw your lab plates with pen or crayon.

**IV. Additional Items:**

- a. No food or beverages allowed during class.
- b. No Profanity allowed at any time.
- c. Cell phones must be turned off and stored. Do not text or surf the web during class.
- d. Let's be serious. Goofing off, especially during lab, can create an unsafe learning environment for you and for other students.

V. **Attendance:**

You are expected to be on time for lecture and for laboratory sessions. **If you miss more than 4 session of class or lab, you may be dropped from the course.** If there are extenuating circumstances, please let me know. I will be much more understanding if you talk to me. I'll possibly allow make-up work, given appropriate circumstances (a death in the family, if you are seriously ill, etc...).

VI. **Class work & Exams:**

a. **Grading and points**

<b>Description</b>	<b>Points Possible</b>
5 lab plates @ 10 pts each	50
5 Exams @ 100 points each	500
17 Laboratory Assignments @ 20 pts each	340
Mini-paper-- Learn about your field	50
Research Paper—On a health topic of your choice	100
<b>Approx. Total Points =</b>	<b>1040</b>

INSTRUCTOR RESERVES THE RIGHT TO CHANGE THE TOTAL POINTS POSSIBLE  
AS NECESSARY DURING THE COURSE OF THE SEMESTER

b. **Grading scale:**

90%= A      80%= B      70%= C      60%= D      59% & below= F

**Exams** will include multiple choice questions, short answer and diagram labeling questions.

c. **Lab Plates** (drawings) will be due, without notice, at the beginning of lab. 5 plates are due throughout the semester. These are not about who is the best artist, rather full credit will be given to students who take time to include and label the details and for ease of interpretation.

d. **Make-up exams will only be given under approved circumstances. Do not miss an exam!**

e. **Extra Credit**—You may earn extra credit throughout the semester by writing a brief summary of a current news article (from the web, newspaper or magazine) related to biology for 5 points each. You may write up to 7 summaries for a possible 35 total extra points. Each summary should be one page long. Attach and turn in the article summarized.

f. **Mini-paper**—Get to know the area of biology/healthcare that you want to pursue. Your paper must be 2-3 pages, typed double spaced, in APA format.

- g. **Research Paper**—You must write a 5-7 page paper on a human disease/disorder of your choosing. It must be typed, double spaced, and in APA format. You must cite at least 2 original research articles.
- h. **Lab reports** are generally turned in at the end of lab. If, at the end of lab, you are not finished, you must have me sign or stamp the report and you must turn it in at the beginning of the next lab to receive full credit. Labs turned in late without a stamp or my initials will not receive credit.

- Plagiarism will not be tolerated. Turning in the work of someone else as your own will result in a 0 on the assignment and potentially further action by the college. Don't risk your academic future!
- If you have a need for an academic accommodation or materials in alternate media (i.e. Braille, large print, electronic text, etc...) per the Americans with Disabilities Act (ADA) or section 504 of the Rehabilitation Act, please contact me as soon as possible.

j. **Important Dates:**

January 22<sup>nd</sup>- Last day to drop full-term class with a full refund

January 29<sup>th</sup>- Last day to drop without receiving a "W"

January 29<sup>th</sup>- Last day to register for full-term class for Spring 2010

February 16<sup>th</sup>- Last day to change class to/from pass/ no pass

March 12<sup>th</sup>- Last day to drop without receiving a letter grade

<b>Week of the Semester</b>	<b>Lecture Topics (Mondays)</b>	<b>Lab Topics (Wednesdays)</b>
<b>Wk 1</b> Jan 11	Introduction, Syllabus & Lab Safety Ch 1—Human perspective & Ch 2—Chemistry of life	Ch 2—Metric Measurement
<b>Wk 2</b> Jan 18	<b>Martin King Luther, Jr. day NO CLASS</b>	Ch 3—Chemical composition of cells
<b>Wk 3</b> Jan 25	Ch 3—Cells & Ch 4—Body systems	<i>Plant &amp; Animal cell plates due</i> Ch 4—Microscopy, cell structure & function
<b>Wk 4</b> Feb 1	Ch 5—Human body tissues	Ch 5—Human body tissues <i>Study Session for Exam 1</i>
<b>Wk 5</b> Feb 8	<b>EXAM 1 (Ch 1-4)</b>	DVD on Healthcare
<b>Wk 6</b> Feb 15	<b>Washington Day NO CLASSES</b>	Research Lab—To get you ready for writing your papers.
<b>Wk 7</b> Feb 22	Ch 5—Heart & Blood vessels Ch 6—The blood	<i>Heart Plate Due</i> Ch—7 Cardiovascular system
<b>Wk 8</b> Mar 1	Ch 7—Defense against disease & Ch 8—Digestive system	Ch 8 & 9—Digestion & Nutrition
<b>Wk 9</b> Mar 8	Ch 9—Respiratory & Ch 10—Urinary System	<b>EXAM 2 (Ch 5-10)</b>
<b>Wk 10</b> Mar 15	Ch 11—Skeletal & Ch 12—Muscular systems	Ch 13—Musculoskeletal system
<b>Wk 11</b> Mar 22	<b>Mini Paper Due</b> Ch 13—Nervous System Lecture Ch 14—Senses	LECTURE: Ch 15—Endocrine System LAB: Ch 14—Nervous system & senses
Mar 29	<b>Spring Break NO CLASSES</b>	<b>Spring Break NO CLASSES</b>
<b>Wk 12</b> Apr 5	<b>EXAM 3 (Ch 11-15)</b>	Ch 16—Reproductive system & Ch 17—Development & Aging
<b>Wk 13</b> Apr 12	Ch 18—Cell Division Ch 20—Inheritance	Ch 14—Development & Human life cycle
<b>Wk 14</b> Apr 19	LAB: Ch 15—Mitosis & Meiosis	Ch 16—Inheritance
<b>Wk 15</b> Apr 26	<b>EXAM 4 (Ch 16-20)</b> <u>LECTURE AFTER EXAM-</u> Ch 21—DNA	<i>Mitosis &amp; Meiosis Plates Due</i> Ch 17--DNA Transcription & Translation
<b>Wk 16</b> May 3	Ch 22—Human Evolution	Ch 18—Human Evolution
<b>Wk 17</b> May 10	<b>Research Paper Due</b> Ch 23—Global Ecology	DVD on Global Ecology
<b>Wk 18</b> May 18	<b>EXAM 5 (Ch 21-23)</b>	<b>NO LAB—FINALS WEEK</b>