

Human Anatomy & Physiology
2011-2012
Syllabus

Instructor: Pat Brunson

Conference period: by appointment during Friday tutorials

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Course Description:

Human Anatomy and Physiology is a college preparatory course designed for the high school student considering a degree in such areas as: biology, biochemistry, kinesiology, nutrition, medicine, or an allied health profession. The focus of this two-semester course is how the structure and function of each body system works to maintain homeostasis. The first semester cover such topics as: organization of the body on chemical, cellular, tissue, organ, and system levels, integumentary, skeletal, and muscular systems as well as the nervous and endocrine systems. Topics in the second semester include: the blood, cardiovascular and lymph systems, the respiratory, digestive, and urinary systems, the reproductive system and human development and inheritance. Students entering Biology II must have completed Biology I, and Chemistry I with a B average in both. Students with a C average in either may be admitted with approval of the instructor.

Objective: The students will understand that cell, tissue, and organ are parts of systems that work together to maintaining the overall health (homeostasis) of the body, *Corinthians 12:12-26*. Students will realize that the physical body that houses the soul and spirit of man is the best evidence of God's magnificent creative power, *Psalm 139:14; Genesis 1:27*. In this class the student will develop better lab skills, and improve their thinking skills through application of the information learned, *Matthew 22:37*.

Materials: Textbook – *Essentials of Anatomy and Physiology, Fifth Edition*
Labs – Lab handouts from various sources
Study Guide – Study Guide *Essentials of Anatomy and Physiology, Fifth Edition*
Handouts (students will receive these during class time)
Three-ring binder (may also be used for other classes)
Note taking materials – paper, blue or black pens, #2 pencils
Loose-leaf notebook paper
Colored pencils

Grading:

Weighted average components

Tests and quizzes	60%
Homework, participation	20%
Lab	20%

Weighted averages

- A = 90-100%
- B = 80 - 89%
- C = 70 - 79%
- F = below 70%

Test and quizzes – Test will usually be over several related chapters and cumulative knowledge. Test will include text information, supplemental lecture information, information from handouts and corresponding laboratory exercises. See Ren Web” for approximate test dates. Daily quizzes are over assigned and presented materials as noted. Quizzes may be given at any time.

Written work, participation – – This category include, but is not limited to home work, bell work, study guide questions, participation in class discussions and

Lab – laboratory exercises will from the lab manuals and other relevant sources. Pre lab preparations (reading, answering questions, setting up tables and graphs, etc.) are to be completed prior to lab day. Post lab work may include questions, sketches, tables; graphs, labeling and formal lab reports that will need to be completed outside of class. The lab grade will be calculated as follows: 20% pre lab completion, 30% lab participation, 10% lab clean up, 40% lab report. Labs requiring a formal typed lab report will be weighted more heavily. Lab information will be incorporated into test and quizzes. **NOTE:** The laboratory assignments in this course will sometimes require data gathering, observations, etc. before school and during enrichment time. Part of lab is learning to identify bones, muscles, major vessels, etc. It is to your advantage to come during enrichment time to work with the models as you learn the assigned anatomy.

Projects – There may be various types of projects throughout the year. Projects may require, but are not limited to any of the following: research with a written report, poster presentation, oral presentation, models and leading and participating in class discussion. Project grades will be calculated into the above grade categories as noted on each project.

Classroom policies:

1. You may have plain bottled water during class. No other drink, food or gum is allowed.
2. To avoid a loss of points, please be sure that all assignments contain the correct school heading. All written work should conform to the standard writing policies of the school. (Available from your English teacher). Assignments turned in without a name on them will be posted in "Whoville" and a zero will be posted on RenWeb.
3. Being on time is important as it allows you the full allotted time on your quiz and bell work and allows you to avoid the hassle of a tardy.
4. Come prepared to learn. This means that you will have completed the reading assignments and any other homework or lab work assignments as scheduled. Additionally, you will bring **all** books and supplies each day.
5. Be obedient, respectful and use good manners. Adhere to the Honor Code.
6. Please wait until you have my permission before you talk or move about the room/lab.
7. Students may have a maximum of two bathroom passes each semester at the teacher's discretion.
8. There is expectancy, that you, as young adults, will be responsible for any makeup work, (test, labs and other assignments). Students involved in co-curricular and extra-curricular activities are to get their assignments prior to their scheduled absence, and turn their assignments in by the scheduled due date. Makeup work for other students with an excused absence is to be completed as per the handbook. Students/parents are to use Ren Web or call and request assignments when students are absent.
9. **Copied, shared and plagiarized** work will receive a grade of zero and disciplinary action for all students involved. Assume an assignment is individual work unless you have been given clear instructions that it is group work.
10. Assignments are due when class begins. Assignments may be turned in up to 24 hours late, but the grade will be reduced by 30%. Assignments due on Friday will be accepted late on Friday 3:00 (with a 30 % reduction) or Monday (with a 50% reduction).
11. Homework policies - Homework will include, but not necessarily limited to:
Problem solving – application of formulas and principles. In order to receive full credit for math/formula based problems require that all assigned steps be followed.
Reading – Reading assignments include your text book, handouts, lab assignments, web source information and other supplemental materials.
Writing – Some problems applying concepts and formulas require a written response rather than/in addition to solving the problem. Written homework also includes Pre lab preparations, post lab analysis, conclusions, and questions. Some research projects will require a written report.

Research – Research topics may include, but are not limited to: physics and technology as a human endeavor, current topics in physics and technology, modern and ancient marvels, etc.

Other things to Know

General

- Assignments are posted on your quarterly daily schedule and Ren Web. You are responsible for changes announced in class or posted on Ren Web.
- You may check the status of your grade at any time by logging into Ren Web.
- Check off the course objectives as you accomplish them.

Written work

- Your written work is to: be done in blue or black ink, or a #2 pencil. All lab work is to be done in #2 pencil except where noted.
- Any assignment that requires notebook paper must be done on 8.5" x 11" notebook paper. These assignments will not be graded if done on other paper.
- Any paper you are assigned to type is to be done according to the school standards.

Reading

- Complete the reading as assigned.
- It is in your best interest to review the reading by going over the questions at the end of each section.

Extras

- Use the Interactive Physiology CD
- Visit the web site <http://www.aw-bc.com/applace/> and view the materials for your text

Lab Policies:

Safety

1. All classroom policies apply to the lab.
2. A signed lab safety contract must be on file before you can participate in lab. Use the safety procedures as noted in the labs or indicated by the instructor.
3. Horseplay is not allowed. Horseplay will result in a significant grade reduction for that lab.
4. Instruments, tools, and specimens are to be handled carefully. You are responsible for breakage or damage due to irresponsibility.
5. Unless instructed do not touch, turn on, or move anything (chemicals, equipment, switches, tools, or appliances).
6. Wear safety gear when instructed to do so.
7. Closed toe shoes are always required in lab. You will not be able to participate in lab if you do not wear properly fitting closed toe shoe.
8. Long hair or hair that falls forward must be pulled back in a secure manner. You will not be able to participate in lab if your hair is not properly secured.

Lab preparations, procedures and reports

1. Pre lab preparations and lab completion will be part of homework. You will be allowed to only observe a lab that you have not prepared for. You will receive no credit for the pre lab and your lab participation grade will be significantly reduced. Pre lab will consist of: reading through the entire assigned lab, answering any assigned pre lab questions, take the necessary measures to understand the pre lab objectives, preparing data tables and graph layouts, and other assigned pre lab preparations.
2. All lab work is to be done in pen unless otherwise noted. Charts and graphs may be enhanced/keyed with colored pencils. All formal labs are to be typed as per school policy. See LTF 4 handout.
3. Changes in lab materials or procedures will be announced by the teacher, or written on the board. You are responsible for making notes in you lab manual/handout of these changes.
4. Lab drawings/sketches are to be done as per given instructions. Students may be required to draw/ sketches some specimens in their lab notebook and others on white computer paper.
5. Clean up is part of lab exercises. Your station and equipment will be checked after each lab. Poor cleanup will lower your lab grade.
6. Missed labs must be made up within a week of the missed lab. If the teacher determines that a lab cannot be re set, then a written assignment will be given
7. Pre lab assignments and post lab analysis and conclusion are to be based on information from your lab book or lab handout, text book, lecture and lab experience. Unless you are specifically instructed you are not to obtain lab information from any other source. See classroom policy #9.