

Course Syllabus, Autumnal Semester 2009 C.E.

BIO202: Human Anatomy and Physiology II

Section Number 38413

24 August - 14 December 2008 C.E.

Lecture: Mondays and Wednesdays, 17:30-18:45, Room C205

Laboratory: Mondays (Sec. 38415) or Wednesdays (Sec. 39575), 19:00-21:50, Room DB114

Course Description:

This course is a continuation of the study of structure and function of the human body. Topics include the endocrine, circulatory, lymphatic, respiratory, digestive, urinary, and reproductive systems; and fluid and electrolyte balance. Prerequisites: A grade of "C" or better in BIO201.

Instructor Information:

Dr. Ty C.M. Hoffman

bio202@cox.net (electronic mail)

6022857610 (telephone message)

6022857349 (facsimile)

Dalby 205 (office)

Office Hours: By appointment

Free Tutoring: Success Center, B228

Course Objectives:

1. Identify the structure, location, and regulation of the body's various endocrine cells and glands.
2. Describe the functions of the body's various hormones, and cite examples of disorders that result from their imbalance.
3. Describe the structures of the digestive system and how they function in digestion, absorption, and metabolism.
4. Describe the structures and functions of the male and female reproductive systems, including gametogenesis.
5. Describe the various stages of embryonic, fetal, and placental development.
6. Describe changes that occur during pregnancy, parturition, and lactation.
7. Describe the composition and function of blood, including formed elements.
8. Describe the structures and functions of the cardiovascular system.
9. Describe the structures and functions of the lymphatic system as well as the mechanisms of defense and immunity.
10. Describe the structures of the respiratory system and how they accomplish ventilation, respiration, and gas transport.
11. Describe the structure of the urinary system and their involvement in the regulation of fluids, electrolytes, and nutrients.
12. Describe the regulation of water balance and the control and distribution of the ionic components of body fluids.
13. Explain the regulation of acid-base balance in the body and the complications of acidosis and alkalosis.

Course Website:

The following URL should be used to access my website.

<http://www.pc.maricopa.edu/Biology/thoffman>

Be sure to check it immediately and often. You should bookmark the section for this semester's class. Look through the various pages and links right away so you can determine which parts of the website will be most helpful to you. You will be able to check your scores, as well as your standing compared to the rest of the class, your maximum possible score, and your minimum score required on future assignments to receive the various grades. The website will include many other useful pages, some of whose addition to the website will not be announced by email. You are REQUIRED to check the website and the weblog OFTEN and REGULARLY, even if they don't change for a long time.

Supporting Texts (Be sure to see the website for my note regarding textbooks.):

PhysioEx 7.0 for Anatomy and Physiology, by Peter Zao, et al (ISBN 0321500652) **REQUIRED**
Anatomy and Physiology (8th ed.), by Seeley, Stephens, and Tate (7th Edition is ISBN 0073109428; 6th Edition is ISBN 0072932201)
Dictionary of Word Roots and Combining Forms, by Borror (ISBN 0874840538)
A Visual Atlas for Anatomy & Physiology (McGraw-Hill, ISBN 0072863781)
A Brief Atlas of the Human Body, by Matt Hutchinson, et al (ISBN 0805353364)
The Anatomy Coloring Book, by Wynn Kapit, Lawrence M. Elson (ISBN 0805350861)
Study Guide to Accompany Anatomy and Physiology, by Tate, Kennedy, and Seeley (ISBN 0072848782)

The textbook, though hefty, should be brought to laboratory periods, as it provides many useful visual illustrations.

Class Notes:

Overviews (notes) of main topics to be discussed during lecture and laboratory periods will be available to you for download from the class website. If you choose to use the lecture notes, you will have to print them out on your own, either from your own computer or at the library. The laboratory notes will be provided to you; if you need to print out a replacement copy, visit Patty Finkenstadt's website. The library will charge you per page.

You definitely should NOT assume that the provision of these notes absolves you from having to write your own notes during lecture and laboratory periods. Keep in mind that I did not write the class notes, and I almost certainly will present information not appearing in the prepared notes and omit some information that does appear. **By far, the most important source of information for successfully studying for my lecture examinations will be your own, well written notes from my lectures.**

Use of Animal Tissue:

Please be aware that this course involves the use of animal organ dissections and human remains, including human bones and cadavers. These materials comprise a large portion of this course's instruction; their use by you is therefore necessary for you to receive a passing grade. If you think you will have a problem with this, please talk to me immediately.

Attendance:

There is no strict requirement for attendance of lectures. However, I **strenuously** recommend that you attend every meeting. There is a strong correlation between attendance and performance on examinations.

Tardiness:

My lectures begin promptly at 17:30, and my laboratory periods begin promptly at 19:00. If you are unable to get to class on time, then you have registered for the wrong section, and you should withdraw. Tardiness is a distraction for the instructor and also for the punctual students who are trying to get their money's worth. Therefore, repeated tardiness will result in UNANNOUNCED LOSS OF POINTS, so just don't be late. Also, if you are late to an examination, then I might require you to take the make-up version of the examination.

My Absolutely Rigid Policy on Absence During Lecture Examinations:

It's important for everyone to be aware of the policy regarding make-up lecture examinations. If you are absent on the day of a scheduled lecture examination, there will be no official penalty for such absence. However, it is my strict policy that multiple-choice lecture examinations may be taken only when they are scheduled to be taken (i.e., per the syllabus). This means that all make-up lecture examinations will consist of short-answer or essay type questions. **NO MAKE-UP LECTURE EXAMINATION WILL EVER BE A MULTIPLE-CHOICE TEST.** To ensure that you fully understand my policy, please re-read the previous sentence. The material treated on a make-up examination will be the same material treated on the corresponding multiple-choice version. In that sense, one can say that the make-up examinations are therefore no more difficult. But for the vast majority of students in my experience, scores on short-answer tests are significantly lower than those on multiple-choice tests. This is because doing well on a short-answer test requires that you truly know what you're talking about. Guessing is much less likely to net you a correct answer. I'm telling you this, on the one hand, to make the official policy known. But even more importantly, I'm telling you this to **strenuously** dissuade you from missing a lecture examination for any but the most unavoidable of reasons. Doing well in this very demanding class **REQUIRES** that you make the class a priority. Therefore, if you'd like to receive a good grade, you would do well to save excuses for the other things that might coincide with the test dates, not vice-versa.

Schedule of Topics to be Covered:

| Week | Date | Lecture Topic | Laboratory Exercise* |
|------|---------|---|---|
| 01 | 24 Aug. | Introduction / Endocrine System I | Digestive System |
| | 26 Aug. | Endocrine System II | |
| 02 | 31 Aug. | Endocrine System III / Digestive System I | Digestive System |
| | 02 Sep. | Digestive System II | |
| 03 | 07 Sep. | Observance of Labor Day (No meeting) | Observance of Labor Day (No meeting) |
| | 09 Sep. | Digestive System III | |
| 04 | 14 Sep. | Examination 1 | Male Reproductive System |
| | 16 Sep. | Reproductive System I | |
| 05 | 21 Sep. | Reproductive System II | Female Reproductive System |
| | 23 Sep. | Reproductive System III | |
| 06 | 28 Sep. | Reproductive System IV | Review |
| | 30 Sep. | Examination 2 | |
| 07 | 05 Oct. | Endocrine Glands I | Practicum 1 |
| | 07 Oct. | Endocrine Glands II | |
| 08 | 12 Oct. | Endocrine Glands III | Arteries |
| | 14 Oct. | Examination 3 | |
| 09 | 19 Oct. | Hematology I | Veins |
| | 21 Oct. | Hematology II | |
| 10 | 26 Oct. | Lymphatic System I | Heart Anatomy |
| | 28 Oct. | Lymphatic System II | |
| 11 | 02 Nov. | Examination 4 | ECG / Review |
| | 04 Nov. | Cardiovascular System I | |
| 12 | 09 Nov. | Cardiovascular System II | Practicum 2 |
| | 11 Nov. | Observance of Veterans' Day (No Meeting) | |
| 13 | 16 Nov. | Cardiovascular System III | Respiratory System / Urinary System |
| | 18 Nov. | Cardiovascular System IV | |
| 14 | 23 Nov. | Examination 5 | Observance of Thanksgiving (No meeting) |
| | 25 Nov. | Respiratory System I | |
| 15 | 30 Nov. | Respiratory System II | Acid-Base Homeostasis / Hormone Presentations |
| | 02 Dec. | Respiratory System III | |
| 16 | 07 Dec. | Urinary System I | Practicum 3 |
| | 09 Dec. | Urinary System II | |
| 17 | 14 Dec. | Examination 6 (16:00!) | |
| | 16 Dec. | | |

*All students MUST check the website's Laboratory Schedule for complete information about laboratory exercises and due dates.

Disclaimer:

Course content and point allocation may vary from this outline to meet the needs of this particular group.

Point Distribution:

There will be six lecture examinations, each of which will be worth 100 points. The sixth of these will treat only the material from the final sixth of the semester, i.e., it will not be a comprehensive final examination. Various laboratory exercises (265 total points) will be assigned and discussed in the laboratory. In addition, three laboratory practica (200 total points) will be given. The total for the course will be approximately 1065 points.

Grades:

The minimum final scores for the respective letter grades are given below.

| | |
|-----|---|
| 86% | A |
| 76% | B |
| 66% | C |
| 56% | D |

Disability Statement:

The college will make reasonable accommodations for persons with documented disabilities. Students should notify Student Services and their instructors of any special needs.

You will not receive any credit on any assignment in this class until you submit the Rules Consent Form via the class website. You will first have to obtain your class ID by submitting the Bonus Points Form. If you haven't already done so, submit these electronic forms TODAY.