Salem State University
Course Outline: Biology 201 - Anatomy and Physiology II
Fall 2015

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Course Description: This course is a continuation of Anatomy and Physiology I and will focus on the circulatory, respiratory, digestive, excretory, endocrine, immune, lymphatic, and reproductive systems.

Prerequisite: Bio 200. You are NOT permitted to take this course if you have not received a passing grade in Bio 200.

Course Goals: To become familiar with human anatomy and physiology.

Global Goals:
1. To learn the physiology of the organ systems not previously covered in Biology 200.
2. To learn the gross and microscopic anatomy of the human organ systems covered.
3. To apply knowledge gained in this course to biomedical science.

Course Objectives: This course is an introduction to human anatomy and physiology. It is the second half of a two-course sequence within which the various systems of the body will be studied. By the end of this semester you should be able to:
1. Explain how chemistry, biochemistry, and cell biology are relevant to the study of human physiology.
2. Describe the organization of living matter as cells, tissues, organs, and organ systems.
3. Use the language of anatomy and physiology.
4. Describe the characteristics of living things.
5. Describe the basic types of tissue within the body, their locations, principal characteristics, and functions.
6. Describe the anatomy and functions of the cardiovascular system.
7. Describe the anatomy and functions of the respiratory system.
8. Describe the anatomy and functions of the digestive system and relate this knowledge to the study of nutrition.
9. Describe the anatomy and functions of the urinary system.
10. Describe the anatomy and functions of the male and female reproductive systems.
11. Describe the processes of pregnancy, embryonic development, and childbirth.
12. Describe the anatomy and functions of the lymphatic and immune systems.
13. Describe the anatomy and functions of the endocrine system.

Lectures: Lectures will cover some topics not in your readings, and vice-versa; you will not do well if you neglect either. If you can, try to at least take a look at the readings before the corresponding lecture. Ask questions in lecture! Asking questions will help you to understand the material and will slow down the (often too rapid) pace of the lecture. In order to pass this course, you should expect to need to spend at least as much time studying as we have lecture time.

Studying should consist of:
1 - a review and rewrite of your lecture notes
2 - a review of the notes
3 - doing your assigned readings from the text
4 - doing the practice exams on the textbook website
5 - studying the lab manual

You will not do well (probably not even pass) if you rely on the lectures alone without outside work. The formation of study groups has helped a lot of students pass this course - strongly consider forming and/or joining a group. A lot of your grade in the course will come from your understanding of scientific terminology. Every time you see a scientific term in your studies, write it down and look up a definition.

Lecture Exams: There will be two lecture exams and a comprehensive final exam (tentative dates listed below). The lecture exams will each count as 25% of your grade; the final 50%. All grades will count; none will be dropped (don't even ask!). The exams may have a combination of multiple-choice questions, fill-ins, short essays, and definitions. Material from lab will be included on the lecture exams. If class is canceled on a scheduled exam day, the exam will be given on the day of the next class meeting. Make-up exams will be given at my discretion. If you miss an exam, you must notify me within 24 hours to arrange for a make up. Make-up exams will be ESSAY format, and, since you will have additional time to study for them, will be more difficult than the regularly scheduled exams.
**Lecture Attendance:**
Attendance in lecture is mandatory.
If you have **more than two** absences, you will not receive a grade - you must withdraw from the course.
There are no excused absences; do not bring notes or otherwise try to explain your absences.
There will be a sign-in sheet at the front of the room at each class meeting. If you arrive late, sign in after the lecture. It is your responsibility to sign the sheet; do not ask to be marked present for days you forgot to sign in. Signing the sheet for another student is equivalent to cheating on an exam and will be dealt with accordingly.

**Cell Phones, Pagers, Laptop Computers, I-Pods, etc.:** Controlled studies have shown that multitasking results in multiple tasks done poorly. Using electronic devices during class is a distraction to the user, classmates, and the instructor and is therefore unacceptable. To facilitate a learning environment you will be required to turn off ALL electronic devices (including computers) and put them away and out of sight, **BEFORE ENTERING THE CLASSROOM.**
*Cell phones are to be put inside a bag or your pocket, not on your belt or your desk; they are not to be used inside the classroom, including the time before and after class.* If you use any electronic device inside the classroom, or if one makes an audible sound during class, quietly leave the room immediately; do not wait for me to ask you to leave. A second offense will result in your being barred from class for one week and will result in a grade reduction.

**Information for students with disabilities:** Salem State College is committed to providing equal access to the educational experience for all students in compliance with Section 504 of the Rehabilitation Act and the Americans with Disabilities Act and to providing all reasonable academic accommodations, aids and adjustments. Any student who has a documented disability requiring an accommodation, aid or adjustment should speak with the instructor immediately. Students with disabilities who have not previously done so should provide documentation to and schedule and appointment with the Office for Students with Disabilities and obtain appropriate services.
### Biology 201 Fall 2015 Tentative Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Text Chapters</th>
<th>Lab Exercises</th>
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| 9/2   | Lecture: Introduction; The Cardiovascular System I: blood; diseases of the blood; heart anatomy  
Laboratory: Syllabus; Review of The Metric System, The Microscope, Anatomical Language: Blood | 17            | 1, 26         |
| 9/9   | Lecture: The Cardiovascular System II: heart physiology  
Laboratory: The Heart: structure and function; heart pathology; heart function; The EKG | 18            | 27, 28        |
| 9/16  | Lecture: The Cardiovascular System III: blood vessels and blood pressure  
Laboratory: Blood Vessel Structure and Function; Blood Pressure | 19            | 29, 30        |
| 9/23  | **Exam 1**  
Lecture: The Respiratory System I: anatomy; mechanics of breathing; gas exchange and transport; disorders  
Laboratory: Respiration: Structure; Respiration: Functions; Lung Volumes and Capacities | 22            | 32, 33        |
| 9/30  | Lecture: The Digestive System I: anatomy; physical aspects of digestion  
Laboratory: Pig Dissection 1 | 23            | Pig dissection guide |
| 10/7  | Lecture: The Digestive System II; Nutrition: nutrients and dietary requirements  
Laboratory: Digestive System; anatomy; chemical aspects of digestion; endocrine control | 23, 24        | 34, 35        |
| 10/14 | Lecture: The Urinary System: anatomy and physiology  
Laboratory: Nutrition | 25            | Nutrition handout |
| 10/21 | Lecture: The Reproductive Systems I  
Laboratory: Kidney and Urinary System Anatomy; Urine Formation and Urinalysis | 27            | 36, 37        |
| 10/28 | **Exam 2**  
Lecture: The Reproductive Systems II  
Laboratory: Reproductive Systems | 28            | 38, 39        |
| 11/4  | The Reproductive System III  
Laboratory: Reproductive Systems | 28            | 38, 39        |
Laboratory: Development | 20-21         | 40            |
| 11/18 | Lecture: The Immune System II: humoral response and disorders of the system; AIDS  
Laboratory: Pregnancy and Development (Video) | 21            |               |
| 12/2  | Lecture: The Endocrine System I  
Laboratory: Pig Dissection 2 | 16            | Pig dissection guide |
| 12/9  | Lecture: The Endocrine System II  
Laboratory: Review for Final | 16            |               |
| 12/16 | **Comprehensive Final Exam** |               |               |