PELLISSIPPI STATE COMMUNITY COLLEGE
MASTER SYLLABUS

HUMAN ANATOMY & PHYSIOLOGY II
BIOL 2020

Class Hours: 3.0  Credit Hours: 4.0
Laboratory Hours: 3.0  Date Revised: Fall 2014

Catalog Course Description:

A study of the anatomy and physiology of blood, the circulatory, immune, respiratory, digestive, excretory, endocrine and reproductive systems. Course includes three hours of lecture and laboratory applications each week.

Entry Level Standards:

Eligible for enrollment in ENGL 1010 and MATH 1530.

Prerequisite:

BIOL 2010

Corequisite:

None

Textbook(s) and Other Course Materials:


Note: Textbook is bundled with the following required materials in PSCC bookstore:


3 & 4) Two Atlases by Martini and Marieb,

5) Interactive Physiology CD (accessible through Mastering A&P also)

6) PAL 3.0 CD (accessible through Mastering A&P also)

7) Student Access Kit to Mastering A&P (can be purchased separately through at www.masteringaandp.com ~ $50) Only required for online lecture students.

Cost of bundle (items 1-7 above) in PSCC bookstore ~ $240.00.


http://www.merckmanuals.com/professional/index.html, or ~$65 in hardback. There is a Merck Manual app that can be downloaded also.

I. Week/Unit/Topic Basis:

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic</th>
</tr>
</thead>
</table>
| 1    | Lecture: Endocrine System, Ch 18  
Lab: Endocrine System, Ch 1 |
| 2    | Endocrine, Ch 18 cont.  
Lab: Reproduction, Ch 2 |
| 3    | Reproduction, Ch 28  
**Practical 1** |
| 4    | Heart, Ch 20  
Lab: Heart Anatomy, Ch 3 |
| 5    | Heart, Ch 20, Blood Vessels, Ch 21  
Lab: Blood Vessels, Ch 4 |
| 6    | BV, Ch 21 cont., Blood, Ch 19  
Lab: CVS Physiology, Ch 5 |
| 7    | Blood, Ch 19 cont.  
**Practical 2** |
| 8    | Body Defenses, Ch 22  
Lab: Blood, Ch 6 |
| 9    | Defenses, Ch 22 cont., Respiration, Ch 23  
Lab: Lymphatic System, Ch 7 |
| 10   | Respiration, Ch 23 cont., Urinary, Ch 26  
Lab: Respiration, Ch 8 |
| 11   | Urinary, Ch 26 cont., Fluids, Cha 27  
**Practical 3** |
| 12   | Fluids, Ch 27 cont., Digestion, Ch 24  
Lab: Urinary System, Ch 9 |
| 13   | Digestion, Ch 24  
Lab: Digestive System, Ch 10 |
| 14   | Metabolism, Ch 25  
**Practical 4** |
| 15   | Final Exam  
Lab: No Lab |

II. Course Goals*:

This course is the second half of a sophomore level human anatomy and physiology sequence, primarily dealing with the structure and function of several internal body systems. Students will develop:
I. Course Goals:

A. An understanding of the relationship between cells, tissues, organs, and systems. (V4)
B. An understanding of the relationship between structure and function for each system covered. (V4)
C. A body of knowledge regarding the anatomy and physiology of the human systems covered. (V4)
D. An understanding of the homeostatic control of the human systems covered. (V4)
E. An understanding of how the systems covered function holistically to control the functioning of the human body. (V4)
F. An understanding of the relationship between abnormal anatomy and/or physiology and health-related problems. (V4, V5)
G. An ability to use medical resources to aid in the analysis of medical data and determination of a diagnosis and treatment of some health problems. (V2, V3, V4)
H. An understanding of various laboratory techniques and equipment common to the study of anatomy and physiology. (V1)

*Roman numerals after course goals reference TBR’s general education goals.

III. Expected Student Learning Outcomes*:

The student will be able to:

1. Explain the anatomy and physiology of the following systems: C, A, B
   A. Endocrine
   B. Cardiovascular
   C. Immune
   D. Lymphatic
   E. Respiratory
   F. Digestion
   G. Urinary
   H. Reproductive

2. Explain the homeostatic mechanisms involved in controlling the systems above. (D)

3. Describe how many of the body systems work holistically to control the functioning of the body. E

4. Interpret and analyze simple medical data. F, G

5. Consult leading medical references to aid in the understanding the diagnosis and treatment of health problems. F, G

6. Use the compound microscope to examine tissues and recognize various structures of tissues. H, C, A

7. Identify various anatomical parts on pictures, models and the cadaver. C, H, A

8. Perform various laboratory techniques, such as white blood cell count and urinalysis, successfully. H

* Capital letters after Expected Student Learning Outcomes reference the course goals listed above.
IV. Evaluation:

A. Testing Procedures:

There will be 5 lecture exams and 4 laboratory practical exams. The lecture exams will be made of multiple choice, short answer and/or essay questions, while the laboratory practical exams will be all short answer exams. All lecture exams are worth 100 points and all laboratory practical exams are worth 50 points. In laboratory, there will be an additional 50 points of lab activities.

In lecture, there will be a 50 point comprehensive assignment, 100 points of instructor discretion points (quizzes, assignment, etc.) and 100 points of unit projects given throughout the semester.

| Exam Ch. 18,28 = 100 pts. | Exam Ch. 24,25 = 100 pts. |
| Exam Ch. 20,21 = 100 pts. | Comprehensive Assn. > 50 pts. |
| Exam Ch. 19,22 = 100 pts. | Exam Ch. 23,26,27 = 100 pts. |
| Instructor Points = 100 pts. | Unit Projects = 100 pts. |

Lecture is worth 750 points or 75% of the grade.

B. Laboratory Expectations:

Students are expected to attend lab every week and complete the laboratory activities assigned to each lab. Student work will be checked by the lab instructor before the student may leave the laboratory each week. Completed laboratory activities are worth 20% of the lab grade. The remainder of the laboratory grade is earned on the laboratory practical exams worth 80% of the lab grade.

| Practical 1 = 50 pts. | Practical 2 = 50 pts. |
| Practical 3 = 50 pts. | Practical 4 = 50 pts. |
| Lab Activities = 50 pts. | Laboratory is worth 250 points or 25% of the grade. |

C. Field Work:

Case Histories assigned in laboratory require research using reference books in the library or on the World Wide Web.

D. Other Evaluation Methods:

Extra Credit is not available for this course.

E. Grading Scale:

There will be a total of 1000 points offered in the course (750 pts. in lecture, 250 pts. in laboratory). In order to pass the course, the student must earn 60% of the points offered in both lecture and laboratory sections of the course. If this has been achieved, then the points earned from lecture and laboratory will be added together and compared to the following grading scale:

- 900-1000 points (90%-100%) = A
- 870-899 points (87-89.9%) = B+
- 800-869 points (80-86.9%) = B
- 770-799 points (77-79.9%) = C+
700-769 points (70-76.9%) = C
600-699 points (60-69.9%) = D
599 or less points (<60%) = F

VI. Policies:

A. Attendance Policy:

Pellissippi State expects students to attend all scheduled instructional activities. As a minimum, students in all courses (excluding distance learning courses) must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course. Individual departments/programs/disciplines, with the approval of the vice president of Academic Affairs, may have requirements that are more stringent. In very specific circumstances, an appeal of the policy may be addressed to the head of the department in which the course was taken. If further action is warranted, the appeal may be addressed to the vice president of Academic Affairs.

B. Academic Dishonesty:

Academic misconduct committed either directly or indirectly by an individual or group is subject to disciplinary action. Prohibited activities include but are not limited to the following practices:

- Cheating, including but not limited to unauthorized assistance from material, people, or devices when taking a test, quiz, or examination; writing papers or reports; solving problems; or completing academic assignments.
- Plagiarism, including but not limited to paraphrasing, summarizing, or directly quoting published or unpublished work of another person, including online or computerized services, without proper documentation of the original source.
- Purchasing or otherwise obtaining prewritten essays, research papers, or materials prepared by another person or agency that sells term papers or other academic materials to be presented as one’s own work.
- Taking an exam for another student.
- Providing others with information and/or answers regarding exams, quizzes, homework or other classroom assignments unless explicitly authorized by the instructor.
- Any of the above occurring within the Web or distance learning environment.

Please see the Pellissippi State Policies and Procedures Manual, Policy 04:02:00 Academic/Classroom Conduct and Disciplinary Sanctions for the complete policy.

C. Accommodations for disabilities:

Students that need accommodations because of a disability, have emergency medical information to share, or need special arrangements in case the building must be evacuated should inform the instructor immediately, privately after class or in her or his office. Students must present a current accommodation plan from a staff member in Disability Services (DS) in order to receive accommodations in this course. Disability Services may be contacted by sending email to disabilitieservices@pstcc.edu, or by visiting Alexander 130. More information is available at http://www.pstcc.edu/sswd/.

D. Other Policies:

Course essentials related to students with disabilities. The course objectives include the requirement that students use correct terminology, to include correct spelling, when demonstrating that they recognize body structures and their functions. This course lays the foundational framework for further understand of the body in various health-related disciplines
such as Nursing and Radiology Technology. Essential to this understanding is the ability to quickly recognize structures and be able to correctly spell the names of those structures on patient records. As part of the test of this essential objective, lab practicals involve timed stations (90 seconds each) where students must recognize a structure, identify it and record that identity with correct spelling within the allotted time. Thus spelling and timely answers are part of the essential learning objectives and are not subject to accommodation. If a student’s accommodation allows for extra time on an exam it will be made available to the student after the regular timed portion of the lab exam is over. Lecture exams have the same spelling requirements, but since individual questions are not timed, extra time will be allotted per the student accommodation plan.

**Students with Medical Conditions:**
Please inform the instructor of any medical condition which may render you unable to attend or perform normally in the classroom. These medical conditions include, but are not limited to Diabetes, Epilepsy, Asthma, etc. In the event of a medical emergency, it is helpful if the instructor already has some knowledge of your condition so as to best assist you.

**Visitors:** No visitors are allowed in lecture or laboratory unless given permission by the instructor.

**Late Work:** No late work will be accepted unless otherwise indicated by the instructor.

**Lecture Make-Up Exams:** If a student knows ahead of time that he will miss an exam on a scheduled date, then arrangements may be made with the instructor for the student to take the exam before the rest of the class. However, if a student misses an exam and approaches the instructor after the class has taken the exam to make-up the exam, the make-up exam will only be given if the original exam was missed due to severe illness (must have a doctor’s or hospital note), court appearance (must have court papers) or death in the family (must have appropriate documentation). **Student must contact the instructor within 24 hours of the missed exam.**

**Laboratory Make-Up Practicals:** If a student misses a lab practical, then arrangements should be made with the instructor for the student to take the exam with another lab section. A make-up exam will only be given if the original exam was missed due to severe illness (must have a doctor’s or hospital note), court appearance (must have court papers) or death in the family (must have appropriate documentation). **Student must contact the instructor within 24 hours of the missed exam.**

**Laboratory Policies:**
1. The laboratory contains biohazardous materials, such as a human cadaver, there will be no food, tobacco, or drink consumption in lab nor open containers of these items.
2. Shoes will have a covered heel and covered toe design.
3. Students are expected to attend the lab section they are assigned to.
4. If a student must their assigned lab, they are expected to make up the lab the same week as the missed lab in another section. However, prior approval from both instructors must be granted before the make-up lab is attended. If a student attends another lab section, then that instructor should check out the student and initial the student’s work. The student should show completed work to the regular instructor upon return to the regularly scheduled lab class. If a student was unable to attend another lab section, then the student must complete work on his own and show the completed chapter (s) to the lab instructor upon returning.

**On-line Course Enhancement (D2L)**
1. This lecture course is enhanced with on-line material available through the Desire to Learn (D2L) on-line courses system. Your instructor will provide instructions for accessing on-line materials on the first day of class.
2. Information available on-line will include: Class Notes, Test Study Guides, Vocabulary Quizzes, Case Studies, Lab Supplements and links to useful sites related to A&P.

3. The college provides ample computer access for students that don’t own their own computer. Therefore, students are expected to be able to access on-line materials on a regular basis and are responsible for assignments posted there.

**Extended School Closure:**
In the case of an extended school closure, you are expected to continue to learn the material according to the semester schedule. You may be asked to perform labs using the PAL 3.0 CD in your lab manual or using the publisher website. Announcements about how to proceed will be posted on the online portion of the course under Course News.

**Classroom Etiquette: Students will respect each other and the instructor at all times.**

1. All cell phones and other electronic devices that make noise or distract students (such as MP3 players, iPods, etc.) must be turned off during class.
2. Students should be in their seats and ready to learn BEFORE class starts.
3. Tardy students should not walk in front of the instructor after class has begun and may need to sit in a seat different than normal to avoid disturbing other classmates.
4. No excessive talking during lecture, unless participating in a class discussion.
5. Students will not disturb the instructor or other students by putting away materials before class has ended.
6. Inappropriate or disruptive behaviors and language will not be tolerate and will result in disciplinary action.