PELLISSIPPI STATE TECHNICAL COMMUNITY COLLEGE
MASTER SYLLABUS

HUMAN ANATOMY & PHYSIOLOGY II
BIOL 2020

Class Hours: 3.0
Credit Hours: 4.0
Laboratory Hours: 3.0
Date Revised: Spring 09

Catalog Course Description:
A study of the anatomy and physiology of blood, the circulatory, immune, respiratory, digestive, excretory, endocrine and reproductive systems.

Entry Level Standards:
Eligible for enrollment in ENGL 1010 and DSPM0897,0898,0899.

Prerequisite:
BIOL 2010

Corequisite:
None

Textbook(s) and Other Course Materials:


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, Ex. 33 |
| 2    | Endocrine , Ch 18 cont.  
     | Lab: Reproduction Ex. 45 |
| 3    | Reproduction Ch 28 |
### Practical 1

4. Heart Ch. 20  
   Lab: Heart Anatomy Ex. 35

5. Heart Ch. 20 cont, BV Ch.21  
   Lab: Blood Vessels Ex. 36

6. BV Ch. 21 cont, Blood Ch. 19  
   Lab: CVS Physiology Ex. 37

7. Blood Ch. 19 cont.  
   **Practical 2**

8. Body Defenses Ch. 22  
   Lab: Blood Ex. 34

9. Defenses Ch. 22 cont., Respiration Ch. 23  
   Lab: Lymphatic System Ex. 38

10. Respiration Ch. 23 cont, Urinary Ch. 26  
    Lab: Respiration Ex. 39,40

11. Urinary Ch. 26 cont., Fluids Ch. 27  
    **Practical 3**

12. Fluids Ch. 27 cont, Digestion Ch. 24  
    Lab: Urinary System Ex. 43,44

13. Digestion Ch. 24  
    Lab: Digestive System Ex. 41,42

14. Metabolism Ch. 25  
    **Practical 4**

15. Final Exam  
    Lab: No Lab

### II. Course Objectives*

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:

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 objectives reference TBR’s general education goals.

III. Instructional Processes*:

Students will:

1. Use critical thinking to solve medical case histories and other related problems. Transitional Strategy, Technological Literacy Outcome, Active Learning Strategies

2. Locate and become more proficient at using medical resources in the library and on the Internet. Transitional Strategy, Technological Literacy Outcome

3. Participate in group activities to facilitate cooperative learning. Active Learning Strategies

4. Use related laboratory equipment and tools for making physiological measurements and observations. Natural Sciences Outcome

5. Develop a body of knowledge that helps ensure success in upper-level health-related classes and careers. Natural Sciences Outcome, Transitional Strategy

*Strategies and outcomes listed after instructional processes reference TBR’s goals for strengthening general education knowledge and skills, connecting coursework to experiences beyond the classroom, and encouraging students to take active and responsible roles in the educational process.

IV. Expectations for Student Performance*:

Upon successful completion of this course, the student should 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

*Letters after performance expectations reference the course objectives listed above.

V. 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 50 points of vocabulary quizzes and 100 points of case study quizzes given throughout the semester. There will also be a 100 point comprehensive assignment due at the end of the semester.

Exam Ch. 18,28 = 100 pts.            Exam Ch. 24,25 = 100 pts.
Exam Ch. 20,21 = 100 pts.            Comprehensive Assn. = 100 pts.
Exam Ch. 19,22 = 100 pts.            Exam Ch. 23,26,27 = 100 pts
Case Study Quizzes = 100 pts.       Vocabulary Quizzes = 50 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 Technical Community College expects students to attend all scheduled instructional activities. As a minimum, students in all courses must be present for at least 75 percent of their scheduled class and laboratory meetings in order to receive credit for the course.

B. Academic Dishonesty:

Plagiarism, cheating or other forms of academic misconduct will not be tolerated. Students will receive a zero for the assignment. A second offense will result in automatic failure of the course.

C. Accommodations for disabilities:

If you need accommodations because of a disability, if you have emergency medical information to share, or if you need special arrangements in case the building must be evacuated, please inform the instructor immediately. Please see the instructor privately after class or in his/her office. Students must present a current accommodation plan from a staff member in Services for Students with Disabilities (SSWD) in order to receive accommodations in this course. Services for Students with Disabilities may be contacted by going to Goins 127 or 131 or by phone: 694-6751(Voice/TTY) or 539-7153.

D. Other Policies:

**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.

**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 Policy:** Because 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. Also, shoes will have a covered heel and covered toe design. Students are expected to attend the lab section they are assigned to. 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.

**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.

**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 tolerated and will result in disciplinary action.