WILLIAM PATERSON UNIVERSITY
COLLEGE OF SCIENCE & HEALTH
DEPARTMENT OF BIOLOGY

BIO 1130 - GENERAL ANATOMY AND PHYSIOLOGY II
Winter 2022
Dr. Jeung Woon Lee
Lectures: Asynchronous
Laboratory: Asynchronous
Office Hours: M T W 7pm or TBD

1. TITLE OF COURSE AND COURSE NUMBER: BIO 1130

General Anatomy and Physiology II
Credits: 4

2. DESCRIPTION OF COURSE:

A study of the structural and functional relationships of the human body. First semester: detailed study of the individual organism, cell functions, histology, integumentary, skeletal, muscular, respiratory, and circulatory systems. Second semester: nervous, endocrine, reproductive, urinary, and digestive, systems. First-semester laboratory: dissection of the cat, human skeleton. Second semester: nervous, endocrine, reproductive, digestive, and urinary systems; metabolism, acid-base balance, and water and electrolyte balance. Open to all, required of nursing and community health majors.

3. COURSE PREREQUISITES: General Anatomy and Physiology I Bio 1120-

Text book: PRINCIPLES OF ANATOMY AND PHYSIOLOGY by Tortora and Derickson, 16th edition, John Wiley and Sons, 2020 with **REAL ANATOMY CD by Mark Nielsen and Shawn Miller**

Lab Manual: to be purchased on-campus; handouts may be provided

4. COURSE OBJECTIVES:

To develop a thorough understanding of the anatomy and physiology of the human body so that the student is not only aware of the structure and function of the individual parts, but that he/she will also have a realization of the human body acting as a unified organism.

Students will be able to

A. Learn basic human anatomy and physiology of the following systems: nervous and special senses, endocrine, reproductive, urinary, digestive
B. Understand the interactions of various systems in water and electrolyte balance and in acid-base balance.
C. Understand the interrelationships of the various systems in metabolism.
D. Use the microscope for histological observations.
E. Learn clinical techniques in testing and measuring physiological function.

5. STUDENTS LEARNING OUTCOMES:

At the end of this course a student should be able to:

a. Critically analyze biological information
b. Organize and synthesize biological information into a logical sequence
c. Assess ethical issues in science
d. Communicate clearly and in organized fashion in writing
e. Make observations and record data
f. Interpret the data using statistical methods where applicable
g. Draw valid conclusions from the experiment
h. Use graphs, charts, and tables for written presentation
i. Work effectively with others
j. Write accurate and coherent lab reports
k. Demonstrate competence in using the light microscope
l. Prepare and stain histological materials

6. TOPICAL OUTLINE OF THE COURSE CONTENT

NOTE: Changes WILL be made if necessary and will be announced as available.

Lec #	TENTATIVE WEEKLY LECTURE SCHEDULE		Chapters (14th Ed)
1	Nervous system: Intro- spinal cord	13-Dec	12 (pg 399-434)
2	Spinal cord and spinal nerves	14-Dec	13 (pg 442-470)
3	Brain and cranial nerves	15-Dec	14 (pg 473-514)
4	CSF, pathways	16-Dec	16 (pg 546-569)
5	ANS	20-Dec	15 (pg 523-541)
6	EXAM I	21-Dec	
7	Special senses: Eye, Ear	22-Dec	17 (pg 572-608)
8	Taste, Smell	23-Dec	17 (pg 572-608)
9	Endocrine system: intro; pancreas	27-Dec	18 (pg 615-650)
10	Parathyroids and thyroid	28-Dec	18 (pg 615-650)
11	Hypothalamus, Pituitary	29-Dec	18 (pg 615-650)
12	Adrenals, other hormones	30-Dec	18 (pg 615-650)
13	EXAM 2	03-Jan	
14	Reproductive system: intro; male	04-Jan	28 (pg 1041-1079)
15	Male physiology	05-Jan	28 (pg 1041-1079)
16	Female physiology	06-Jan	28 (pg 1041-1079)

17	Developmental Embryology	10-Jan	29 (pg 1181-1417)
18	Urinary system	11-Jan	26 (pg 979-1014)
19	EXAM 3	12-Jan	
20	Water-electrolyte; acid base balance	13-Jan	27 (pg 1023-1037)
21	Acid Base balance	17-Jan	27 (pg 1023-1037)
22	Digestive system	18-Jan	24 (pg 886-931)
23	Metabolism	19-Jan	25 (pg 940-968)
24	Final Exam (cumulative: AP 1 & 2)	20-Jan	

Final Exam (cumulative: A&P 1 AND 2): Jan 12 2022

- **LAST DAY FOR ACADEMIC WITHDRAWAL (check school website for details)**
- **Must PASS both LECTURE TESTS and LAB TESTS to pass course**

TENTATIVE LABORATORY SCHEDULE

Lab #		TENTATIVE LABORATORY SCHEDULE
1	13-Dec	Pressure/Human Circulation
2	14-Dec	Electrocardiogram
3	14-Dec	Nervous system anatomy and histology
4	20-Dec	Nervous system pathways
5	21-Dec	LAB PRACTICAL I
6	22-Dec	Human Reflexes; Special senses
7	27-Dec	Endocrine system
8	28-Dec	Examination of blood; Reproduction
9	29-Dec	Reproductive system; Development
10	03-Jan	LAB PRACTICAL II
11	04-Jan	Embryology
12	05-Jan	Urinalysis
13	10-Jan	Genetics; Digestion
14	11-Jan	LAB PRACTICAL III

Note: must ACHIEVE minimum lab test score (65 points) to PASS the course.

7. GUIDELINES/ SUGGESTIONS FOR TEACHING METHODS AND STUDENT LEARNING ACTIVITIES

Lecture and Laboratory exercises- VIEWING OR RECORDED LESSONS AND COMPLETION OF ASIGNMENTS ARE MANDATORY.
All EXAMS are announced in advance and instructions posted on Blackboard.

Students absent from an examination:

- will receive a grade of zero, unless excused by the instructor beforehand.
- Make up examinations will only be given at the discretion (time, length, day, format) of the instructor based on the departmental policy.

- The general policy is that make-up examinations will not be given except under unusual circumstances supported by an official medical note or a certificate of death in the family.

Examination Format

The Lecture counts 75% of course grade. The Lab counts 25% of the course grade.

The lecture examinations may contain ALL or MIXTURE (some or all) of following formats:
-multiple choice
-fill-in the blank
-matching sets
-short answer
-true or false
-essay-type questions
-drawing-type questions

Overall, the exam format will emphasize the BIOLOGICAL AND CLINICAL ASPECTS, CRITICAL THINKING QESTIONS similar to those found at the end of the TEXTBOOK.

Generally, the lecture test materials will come primarily from the lecture notes, but additional test materials (e.g. A&P 1) may come from the textbook **and course pre-requisite materials.**

Grade Distribution for Lecture (75%):
Lecture exam 1 + 2 + 3 = 50%
Lecture Final Exam = 25%

Grade Distribution for Lab (25%):
Lab Practical 1 + 2 + 3
Lab Quiz

Grade Scale:
A = 90-100%
B = 80-90%
C = 70-80%
D = 60-70%
F < 60%

Extra Credit Assignments will be given every meeting day for the duration of semester. They are to be taken to supplement extra credit points towards the upcoming test. Completion and submission of these assignments (quizzes + written reports) are **STRONGLY RECOMMENDED**. **There is no make-up for missed in-class assignments.**

Final Lecture Examination is cumulative and WILL include material from General A&P I, mixed in with the current A&P II lectures and labs. Worth 25% of total course grade.

LABORATORY:
Lab quizzes are given every meeting day at the start of each lab session. These are not extra credit assignments. They are part of your lab grade.
Lab handout assignment: Each lab includes homework involving well written descriptions and/or definitions of clinical slides and other items. Each lab HW are to be uploaded in Bb for

grading and evaluated for completeness of answers and accuracy. This is part of each lab grade.

Lab practical 1, 2 and 3 will be of a practical nature, and may include anatomy models, histology photographs, clinical slides, views from the Real Anatomy CD and /or projections of such anatomical models and photographs

The final laboratory grade (3 lab Tests plus Quizzes and Homework/manuals) are worth 25% of total course

Rules of COURSE summarized below:

- **NO MAKE UP EXAMS/QUIZZES GIVEN**

ACADEMIC TUTORING IS STRONGLY RECOMMENDED.
CONTACT SEC in SCE 3023 TO REVIEW OR RECEIVE ASSISTANCE WITH STUDY MATERIALS FROM ACADEMIC TUTORS.

Honorlock Usage for tests and quizzes

This course will make use of the Honorlock for all quizzes and tests.
Honorlock is an online proctoring service that allows you to take your exam from the comfort of your home, on-campus etc. You DO NOT need to create an account, download software or schedule an appointment in advance. Honorlock is available 24/7 and all that is needed is a computer, a working webcam, and a stable Internet connection.
To get started, you will need Google Chrome and to download the Honorlock Chrome Extension. You can download the extension at www.honorlock.com/extension/install.
When you are ready to test, log into the Blackboard, go to your course, and click on your exam. Clicking Launch Proctoring will begin the Honorlock authentication process, where you will take a picture of yourself, show your ID, and complete a scan of your room. Honorlock will be recording your exam session by webcam as well as recording your screen. Honorlock also has an integrity algorithm that can detect search-engine use, so please do not attempt to search for answers, even if it's on a secondary device.
Good luck! Honorlock support is available 24/7/365. If you encounter any issues, you may contact Honorlock by live chat, phone (844-243-2500), and/or email (support@honorlock.com).

If you encounter issues within the Blackboard, you may contact WPUNJ IT department