#### **Levelland Campus**

## **Course Syllabus**

COURSE: SCIT 1407 Applied Human Anatomy and Physiology (4:3:3)

SEMESTER: Fall 2022

CLASS TIMES: Monday / Wednesday LAB TIMES: No official lab times

INSTRUCTOR: Jackie Underwood PTA, MS PTA Associate Professor

OFFICE: Allied Health Building 103 B
OFFICE HOURS: Tuesday 2-4, Thursday 2-4, Friday 10-12

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"South Plains College improves each student's life."

#### **GENERAL COURSE INFORMATION**

\*It is the responsibility of each student to be familiar with the content and requirements listed in the course syllabus.\*

#### **COURSE DESCRIPTION**

An applied systematic study of the structure and function of the human body. Includes anatomical terminology, cells, tissues, and the following systems: integumentary, skeletal, muscular, nervous, and endocrine. Emphasis on homeostasis.

#### STUDENT LEARNING OUTCOMES

At the completion of the semester students will: Identify the structure and explain the function of cells and tissue; identify the components and explain the physiological mechanisms of the following body systems: integumentary, skeletal, muscular, nervous, and endocrine; and apply anatomical terminology to describe the processes these systems use to maintain homeostasis of the human body.

- 1. Construct, define, and utilize medical terms related to anatomy & physiology using word roots, suffixes, prefixes.
- 2. Explain anatomical planes, positions and movements related to anatomy & physiology
- 3. Describe the basic function of the cardiovascular and respiratory systems.
  - a. Identify the anatomy of the human heart
  - b. Describe the path the blood takes through the vascular system
  - c. Differentiate between arterial and venous components of the vascular system
  - d. Explain the blood flow through the heart
  - e. Identify the basic components of the respiratory system
  - f. Describe the various skeletal structures related to the respiratory system
  - g. Explain the process of breathing
- 4. Describe the basic function of the integumentary system.
  - a. Explain the importance of our skin
  - b. Identify the components of the skin and the major structures within it
- 5. Describe the basic function of the Endocrine system.
  - c. Explain the importance of our hormones
  - d. Identify the major producers and effects of hormones
- 6. Describe the basic function and anatomy of the neuro-muscular system
  - a. Identify the major structures of the nervous system
  - b. Differentiate between sensory, motor and autonomic nerves and their role in physiology
  - c. Differentiate between the central and peripheral nervous systems
- 7. Identify the major bones and muscles and their actions related to movement of the regions of the body.
  - a. Identify the bones by name and location of the head / neck, back, upper extremity and lower extremity.

- b. Recognize important surface anatomy and landmarks associated with all the regions of the body.
- c. Demonstrate action of the muscles of the head / neck, back, upper extremity, and lower extremity.
- d. Identify the origin & insertion of each of the muscles
- e. Identify the innervation of each of these muscles.
- 8. Identify the innervations of the muscles of the regions of the body including head / neck, back, lower extremity, and upper extremity.
  - a. Identify nerves making up the Brachial Plexus
  - b. Identify innervations for the upper extremities and lower extremities
  - c. Demonstrate knowledge of cranial nerves

**COURSE OBJECTIVES** - Outline form (C-1, C-5, C-6, C-7, C-8, C-9, C-12, C-13, C-14, C-18, C-20; F-1, F-2, F-5, F-7, F-8, F-9, F-11, F-12, F-13, F-16, F-17)

## At the completion of this course the student will have:

The cognitive, psychomotor, and affective competencies to

- Understand terminology related to anatomy & physiology
- > Identify planes and axis of the body
- Understand the basic function and structures of the cardiovascular and respiratory systems.
- > Understand the basic function and structures of the integumentary system.
- Describe the basic function of the Endocrine system.
- ➤ Understand the basic function and structures of the Neuro-muscular system.
- Understand the basic function and structures of the Musculoskeletal system.
- Identify the major bones of the regions of the body including head / neck, back, lower extremity, & upper extremity.
- Identify the major muscles and their actions of the regions of the body including head / neck, back, lower extremity, & upper extremity.
- Identify the innervations of the muscles of the regions of the body including head / neck, back, lower extremity, and upper extremity.

#### **EVALUATION METHODS**

Computer-based exams, written assignments, quizzes, and other projects as assigned.

## **ACADEMIC INTEGRITY**

It is the aim of the faculty of South Plains College to foster a spirit of complete honesty and a high standard of integrity. The attempt of any student to present as his or her own any work which he or she has not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offender liable to serious consequences, possibly suspension.

**Cheating** - Dishonesty of any kind on examinations or on written assignments, illegal possession of examinations, the use of unauthorized notes during an examination, obtaining information during an examination from the textbook or from the examination paper of another student, assisting others to cheat, alteration of grade records, illegal entry or unauthorized presence in the office are examples of cheating. Complete honesty is required of the student in the presentation of all phases of coursework. This applies to quizzes of whatever length, as well as final examinations, to daily reports and to term papers.

**Plagiarism** - Offering the work of another as one's own, without proper acknowledgment, is plagiarism; therefore, any student who fails to give credit for quotations or essentially identical expression of material taken from books, encyclopedias, magazines and other reference works, or from themes, reports or other writings of a fellow student, is guilty of plagiarism.

#### **BLACKBOARD**

Blackboard is an e-Education platform designed to enable educational innovations everywhere by connecting people and technology. This educational tool will be used in this course throughout the semester.

#### **SPECIFIC COURSE INFORMATION**

#### **TEXT AND MATERIALS**

Visible Body Course Ware-You will find the link to purchase your Visible Body Course

Trail Guide to the body Student			
Workbook 5th edition	Biel	BOD	978-0-9829786-6-5
Trail Guide to the Body	Biel	BOD	978-0-9829786-5-8

#### **SUGGESTED TEXTS**

#### **ADDITIONAL CLASSROOM ITEMS**

Students should come to class prepared with pens, pencils, and a spiral notebook for taking notes or completed quizzes or assignments in class. Students should be prepared to take notes over lecture material if they choose. Please also purchase washable markers and a package of wet wipes for lab times.

## ATTENDANCE POLICY (\*READ CAREFULLY)

#### **Class Attendance**

Students are expected to attend all classes in order to be successful in a course. The student may be administratively withdrawn from the course when absences become excessive as defined in the course syllabus.

When an unavoidable reason for class absence arises, such as illness, an official trip authorized by the college or an official activity, the instructor may permit the student to make up work missed. It is the student's responsibility to complete work missed within a reasonable period of time as determined by the instructor. Students are officially enrolled in all courses for which they pay tuition and fees at the time of registration. Should a student, for any reason, delay in reporting to a class after official enrollment, absences will be attributed to the student from the first-class meeting.

Students who enroll in a course but have "Never Attended" by the official census date, as reported by the faculty member, will be administratively dropped by the Office of Admissions and Records. A student who does not meet the attendance requirements of a class as stated in the course syllabus and does not officially withdraw from that course by the official census date of the semester, may be administratively withdrawn from that course and receive a grade of "X" or "F" as determined by the instructor.

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate, and the student will owe any balance resulting from the adjustment.

## http://catalog.southplainscollege.edu/content.php?catoid=47&navoid=1229#Class Attendance

Due to the importance of the Anatomy and Physiology information being taught, the instructor of this course defines excessive absences as missing the 3 class days (or having equivalent tardies) in a course section. A student who meets this criterion can be administratively dropped from the course by the instructor.

- Tardies: (Definition): arriving any time after the class has started or not returning from an approved break after class has started.
- Two tardies will be considered missing one class day and counted as such.
- Work schedule is not an excuse for missing class.
- Any exceptions to this policy must be discussed on an individual basis with the course instructor and the PTA Program Director. (i.e. – student hospitalization, immediate family member death, etc.)

#### **ASSIGNMENT POLICY**

All assignments must be completed by the assigned due date. <u>Late and/or incomplete work will not be accepted and a grade of zero will be recorded.</u> Assignments, quizzes, exams, and skills that are missed due to an unexcused absence may not be made up. See the instructor for more specific information.

#### **COMPUTER USAGE**

As computer technology in the field of health occupations continues to become more popular, computers will be used in this course for several assignments. All students have access to computers and printers on the South Plains College campus. Students will be expected to utilize computers to access assignments and classroom resources. All registered students are supplied with a working email account from South Plains College. In order to take exams, students must have their username and password.

ALL STUDENTS ARE EXPECTED TO KNOW THEIR SPC STUDENT USERNAME AND PASSWORD.

#### **COMPUTER LAB USAGE**

The computer lab(s) on any campus may be used by students during scheduled open hours or as assigned by an instructor. Printer paper will not be provided for students to print materials, but students may seek assistance from faculty or staff to request lab paper from the college if needed. Lack of computer lab paper is not an excuse for not having homework assignments, skills lab sheets, or any other required documents. Students should come prepared for class.

#### **EXAMS**

The majority of student 'written' exams will be administered via computer. Students should practice proper spelling and grammar when answering a written exam. Additionally, many exam questions will be constructed in the same manner as NPTE-PTA questions, allowing students to prepare for that testing format used in the PTA Program.

- There are no retests for Lecture Exams.
- Students are required to make a 70% on the final exam and maintain a 70% or higher for the course weighted total grade to be considered passing
- The majority of exams are administered in a campus computer lab which must be reserved by the instructor in advance. Students are expected to arrive on time to exams and complete the exams within the time frame allowed.

## **GRADING POLICY**

A minimum of 70% on all exams and assignments is required to receive a passing grade for that exam or assignment. Students must earn an overall grade of 70% or better for each course section to pass that section. **Students scoring below 80 on any lecture exam is expected to contact instructor to review and correct exam.** 

#### Final semester grades will be based on the following:

F

Class preparation / attendance	= 5 %
Written Assignments	=15%
Weekly quizzes	=10 %
Exams	=50%
Comprehensive Final exam	=20%
	= 100 %

Grading Scale: 90-100 A 80-89 B 79-70 C 69-60 D

## SPECIAL REQUIREMENTS (\*Read Carefully)

59 or Below

• Students must complete acknowledgment that the student has read and understands the content of syllabus, grievance policy, and appeals process.

- This acknowledgement can be found in the Start Here content area on Black Board and will be due Sunday by 11:59 PM.
- Cell Phones Cell phones are to be turned OFF or silenced during scheduled class periods. Text messaging is not allowed during scheduled class/lab times. Cell phones are to be used <u>outside</u> the classroom or lab only on designated breaks. <u>Students are not allowed to have cell phones on their person during exams.</u>
- Class Dress Code Students are expected to wear clothing that will not provide distraction during class and Lab. You are looking to apply to a professional program and you will be expected to apply professional standards to dress, behavior, and language. Occasionally you will be requested to wear lab attire that will allow classmates to access body parts, as an example drawing boney landmarks and muscles on the back, shoulder, or leg.

WHAT NOT TO WEAR: low cut blouses, "booty" shorts, T shirts with offensive slogans or inappropriate images.

#### **COMMUNICATION POLICY**

• Electronic communication between instructor and students in this course will utilize the South Plains College "My SPC" and email systems. I will utilize text messaging and you may communicate with me this way also. The instructor will not initiate communication using private email accounts. Students are encouraged to check SPC email on a regular basis each week of class. Students will also have access to assignments, web-links, handouts, and other vital material which will be delivered via Blackboard. Any student having difficulty accessing the Blackboard or their email should immediately contact their instructor for directions. The instructor will work with any student to ensure the student has access to a computer on campus and can obtain the needed class content that is located on Blackboard. Email communication is expected to follow professional standards.

#### **EMERGENCY MESSAGES**

The student should notify his/her family that in case of an emergency during normal class schedule, they should call the Nursing Office at (806)716-2391 or (806)716-2193. Class will not be interrupted unless it is an emergency, so they must identify themselves and say it is an emergency to get immediate action.

The student should notify his/her family that in the case of an emergency during clinical rotations, they should call and leave a message or text (who they are and who they need to get in touch with for an emergency) to the number or numbers provided to them in the clinical course syllabus and/or on the clinical course schedule..

## **Dropping a class**

Students should submit a Student Initiated Drop Form online.

**Students will not be required to obtain an instructor signature to drop**, however, we do encourage students to communicate with instructors or advisors prior to dropping a course when they are able. **There will be no charge for drops for the fall or spring semesters**.

## Withdrawing from all classes

If a student wishes to withdraw from all courses, they should initiate that process with the Advising Office. They can schedule an appointment with an advisor by visiting <a href="http://www.southplainscollege.edu/admission-aid/advising/spcadvisors.php">http://www.southplainscollege.edu/admission-aid/advising/spcadvisors.php</a> or by calling 806-716-2366.

## Schedule Change (after late registration and before census date)

To make a schedule change after late registration (August 28) and before the census date (September 9), students should submit a **Schedule Change Form.** 

After late registration, adding a class requires instructor approval. If a student is requesting to be added to one of your courses and you approve, please email <a href="mailto:registrar@southplainscollege.edu">registrar@southplainscollege.edu</a> with your approval. This can take the place of signature on the Schedule Change Form that we have required in the past.

For additional information regarding schedule changes, drops and withdrawals, click here.

#### **COURSE DISCLAIMER**

Working with the public in healthcare situations is stressful and requires a mentally tough individual to provide medical care in the clinical environment. This course is designed to prepare students to enter the PTA Program and be successful in the rigorous technical program.

Additionally, enrollment in this course does not guarantee a passing grade, or admission to the PTA Program.

Jackie Underwood PTA, MS Associate Professor PTA Program Director

## **ACCOMMODATIONS**

For information regarding official South Plains College statements about intellectual exchange, disabilities, non-discrimination, Title V Pregnancy Accommodations, CARE Team, and Campus Concealed Carry, please visit: https://www.southplainscollege.edu/syllabusstatements/

#### **FOUNDATION SKILLS**

## BASIC SKILLS-Reads, Writes, Performs Arithmetic and Mathematical Operations, Listens and Speaks

- F-1 Reading—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules.
- F-2 Writing—communicates thoughts, ideas, information and messages in writing and creates documents such as letters, directions, manuals, reports, graphs, and flow charts.
- F-3 Arithmetic-performs basic computations; uses basic numerical concepts such as whole numbers, etc.
- F-4 Mathematics—approaches practical problems by choosing appropriately from a variety of mathematical techniques.
- F-5 Listening—receives, attends to, interprets, and responds to verbal messages and other cues.
- F-6 Speaking—organizes ideas and communicates orally.

# THINKING SKILLS—Thinks Creatively, Makes Decisions, Solves Problems, Visualizes and Knows How to Learn and Reason

- F-7 Creative Thinking–generates new ideas.
- F-8 Decision-Making—specifies goals and constraints, generates alternatives, considers risks, evaluates and chooses best alternative.
- F-9 Problem Solving—recognizes problems, devises and implements plan of action.
- F-10 Seeing Things in the Mind's Eye-organizes and processes symbols, pictures, graphs, objects, and other information.
- F-11 Knowing How to Learn—uses efficient learning techniques to acquire and apply new knowledge and skills.
- F-12 Reasoning—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem.

## PERSONAL QUALITIES—Displays Responsibility, Self-Esteem, Sociability, Self-Management, Integrity and Honesty

- F-13 Responsibility—exerts a high level of effort and perseveres towards goal attainment.
- F-14 Self-Esteem—believes in own self-worth and maintains a positive view of self.
- F-15 Sociability—demonstrates understanding, friendliness, adaptability, empathy and politeness in group settings.
- F-16 Self-Management—assesses self accurately, sets personal goals, monitors progress and exhibits self-control.
- F-17 Integrity/Honesty-chooses ethical courses of action.

#### **SCANS COMPETENCIES**

- C-1 **TIME** Selects goal relevant activities, ranks them, allocates time, prepares and follows schedules.
- C-2 MONEY Uses or prepares budgets, makes forecasts, keeps records and makes adjustments to meet objectives.
- C-3 MATERIALS AND FACILITIES Acquires, stores, allocates, and uses materials or space efficiently.
- C-4 **HUMAN RESOURCES** Assesses skills and distributes work accordingly, evaluates performances and provides feedback.

#### **INFORMATION - Acquires and Uses Information**

- C-5 Acquires and evaluates information.
- C-6 Organizes and maintains information.
- C-7 Interprets and communicates information.
- C-8 Uses computers to process information.

## **INTERPERSONAL-Works With Others**

- C-9 Participates as a member of a team and contributes to group effort.
- C-10 Teaches others new skills.
- C-11 Serves Clients/Customers—works to satisfy customer's expectations.
- C-12 Exercises Leadership—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies.
- C-13 Negotiates-works toward agreements involving exchanges of resources; resolves divergent interests.
- C-14 Works With Diversity—works well with men and women from diverse backgrounds.

## **SYSTEMS-Understands Complex Interrelationships**

- C-15 Understands Systems—knows how social, organizational, and technological systems work and operates effectively with them.
- C-16 Monitors and Corrects Performance—distinguishes trends, predicts impacts on system operations, diagnoses systems performance and corrects malfunctions.
- C-17 Improves or Designs Systems–suggests modifications to existing systems and develops new or alternative systems to improve performance.

## **TECHNOLOGY–Works with a Variety of Technologies**

- C-18 Selects Technology—chooses procedures, tools, or equipment, including computers and related technologies.
- C-19 Applies Technology to Task–understands overall intent and proper procedures for setup and operation of equipment.
- C-20 Maintains and Troubleshoots Equipment–prevents, identifies, or solves problems with equipment, including computers and other technologies.

## **Course Schedule**

# SCIT 1407 Applied Anatomy and Physiology 1 [2023] M / W 1:00-3:00

M / W 1:00-3:00								
DATE	TOPIC-	TOPIC	READING	ASSIGNMENTS &				
	Monday	Wednesday	Visual Body App	Visible Body Weekly Quizzes				
	, and the second	·		Due Sunday				
				11:59 PM				
		Exam 1 materials						
WEEK 1	Syllabus Review	Cells and Tissues	Chapters 1-4	RQ -Terminology Visible Body				
8/28-9/3	Get to know you		Getting started					
	Intro to Anatomy		The basics	Complete the VB Scavenger				
	Terminology		Tissues	Hunt				
WEEK 2	Labor Day	Integumentary	Chapter 5-6	RQ -Integumentary system				
9/4 -9/10	Holiday	System		it Q intogumentally system				
WEEK 3	Integumentary	Endocrine System	Chapter 24-26	RQ Endocrine system				
9/11-9/17	Worksheet	Endocrine System	Chapter 27-30	TiQ Endoerme system				
WEEK 4	Circulatory/	Exam 1	Chapter 31-33	Assign 1 Due				
9/18-9/24	Lymphatic	9/20 1-3 PM		RQ Circulation VB				
J/10 J/24	System	)/20 1-3 T W		RQ Circulation VB				
	System	Exam 2 materials						
WEEK 5	Respiratory	Respiratory System	Chapter 34-37	RQ Respiratory VB				
<u>WEEK 5</u> 9/25-10/1	System		-					
WEEK 6	Digestive System	Digestive System	Chapter 38-42	Assign 2 Due				
10/2 -10/8				RQ Digestive VB				
<u>WEEK 7</u>	Urinary System/	Skeletal System	Chapter 43-47.1	RQ Urinary System VB				
10/9 -10/15	Reproductive							
	system							
WEEK 8	Skeletal system	Exam 2	Chapter 9-9.15	RQ Skeletal System VB				
10/16 -10/22		10/18 1-3 PM	Begin using TGB					
		Exam 3 Materials						
WEEK 9	Nervous System	Out of class work	Chapter 10-12	Assign 3 Due				
10/23-10/29	and special senses	time for Movement	_	RQ Nervous System VB				
		Project						
WEEK 10	Muscular System	Head & Neck	Chapter 17-23	RQ Muscular System VB				
10/30 - 11/5	·			Build your muscles flash cards				
<b>WEEK 11</b>	Trunk	UE	Chapter 13-16.5	Assign 4 Due				
11/6 -11/12				RQ Head, Neck, & Trunk VB				
<b>WEEK 12</b>	UE	Exam 3	Chapter 16.6-16.32	RQ UE VB				
11/13 -11/19		11/15 1-3 PM						
		Exam 4 Materials						
<b>WEEK 13</b>	LE	Thanksgiving	Chapter 16.33-16.45					
11/20-11/26								
<b>WEEK 14</b>	LE	Open Lab Day	Chapter 16.46-16.62	Assign 5 Due				
11/27-12/3				RQ LE VB				
WEEK 15	Movement	Review						
12/4 -12/10	Project							
	presentations							
Week 16	Exam 4	<u> </u>						
12/11-12/17	Comprehensive							
	Final 12/11 1-3							
	PM							
-	•		•	•				

## **Check List for A & P Classroom**

Classroom requirement Prior to Discussion and Lab	Completed
Reading for this week completed-Visible Body	process
Power Point for this week reviewed	
Videos for this week's topic watched	
I have made notes/cards/etc	
I have compared this week's information to what I already	
know	
I have highlighted information that is new to me.	
I have put the material/information into my own words	
and created a study guide	
I have done additional research to improve my	
understanding of information. [Example: additional videos,	
quality research site]	
End of chapter questions for this week's reading	
I have thought about how this information will be used in	
the clinical setting	
I have formulated questions and discussion points for Class	
discussion on Wednesday	
I have taken my weekly quiz-Visible Body	
I submitted my weekly assignment [s]	