

COURSE SYLLABUS

Course Title:	Anatomy and Physiology II	Date submitted:	November 2017 (AAC: 17-61)
Department:	Mathematics and Science		
Curriculum:	Biology		
Course Descriptors: Make certain that the course descriptors are consistent with college and Board of Trustees policies, and the current course numbering system.	Course Code: (eg. ACC 101)	BIO*212	Prerequisites: C- or better in Anatomy & Physiology I (BIO*211)
	Course Type:	X	
	A: Clinical B: Lab D: Distance Learning I: Individual/Independent L: Lecture N: M: Seminar Internship P: Practicum U: Studio X: Combined Lecture/Lab Y: Combined Lecture/Clinical/Lab Z: Combined Lecture/Studio		
	Elective Type:	G/LAS/S	
	E: English FA: Fine Arts FL: Foreign Language G: General HI: History HU: Humanities LAS: Liberal Arts & Sciences M: Math S: Science SS: Social Science		
	Credit Hours:	4	Corequisites: None
	Developmental: (yes/no)	NO	
	Lecture:	3	
	Clinical:	0	
	Lab:	3	
Studio:	0		
Other:	0		
Contact Hours:	TOTAL: 6		
Class Maximum:	20	Other Requirements: Technology Skills Lab Coat Dissection Kit Nitrile Gloves Safety Glasses	
Semesters Offered:	F/Sp/Su		
Catalog Course Description:	Continuation of Anatomy and Physiology I. Lecture and Laboratory. Dissection is required.		
Topical Outline: List course content in outline format.	1. Endocrine System <ul style="list-style-type: none"> a. Chemistry of Hormones b. Pituitary c. Thyroid d. Parathyroid e. Adrenals f. Pancreas g. Glandular Disorders 2. Cardiovascular System: Blood		

- a. Blood Cells and Plasma
- b. Clotting Mechanism
- c. Blood Types and Transfusions
- d. Lymph and Interstitial Fluid
3. Cardiovascular System: Heart
 - a. Anatomy of the Heart
 - b. Conduction System
 - c. Blood Supply
 - d. Regulation of Heart Rate
 - e. Disorders
4. Cardiovascular System: Vessels and Routes
 - a. Blood Vessels: Arteries, Veins, and Capillaries
 - b. Circulatory Routes
 - c. Physiology of Circulation
 - d. Disorders
5. Lymphatic System
 - a. Vessels
 - b. Lymphoid Tissues
 - c. Lymphoid Organs
 - d. Lymphatic Circulation
 - e. Immunity
6. Respiratory System
 - a. Anatomy
 - b. Mechanics of Respiration
 - c. Internal and External Respiration
 - d. Disorders
7. Digestive System
 - a. Processes: Chemical and Mechanical Digestion
 - b. Anatomy of the Digestive Tract and Accessory Organs
 - c. Disorders
8. Metabolism
 - a. Anabolic and Catabolic Reactions
 - b. Redox Reactions
 - c. Carbohydrate Metabolism
 - d. Lipid Metabolism
 - e. Protein Metabolism
9. Urinary System
 - a. Anatomy of Kidneys and their Circulation
 - b. Transport of Nutrients, Wastes, and Ions
 - c. Urine Formation
 - d. Disorders
10. Fluid and Electrolytes
 - a. Fluid Compartments
 - b. Movement of Water and Electrolytes
 - c. Acid-Base Homeostasis
 - d. Disorders

	<p>11. Reproductive System</p> <ul style="list-style-type: none"> a. Male and Female Systems b. Comparative Anatomy c. Comparison of Hormonal Controls d. Birth Control <p>12. Development and Inheritance</p> <ul style="list-style-type: none"> a. Spermatogenesis and Oogenesis b. Fertilization c. Embryological Development d. Fetal Development e. Inheritance: Genetic Disorders <p>Laboratory:</p> <ul style="list-style-type: none"> 1. The Endocrine Glands 2. Blood 3. Cardiovascular Anatomy and Physiology 4. Respiratory Anatomy and Physiology 5. Digestive Anatomy 6. Urinary Anatomy and Physiology 7. Reproductive Anatomy and Physiology
<p>Outcomes: Describe measurable skills or knowledge that students should be able to demonstrate as evidence that they have mastered the course content.</p>	<p>COURSE: Upon successful completion of this course, the student will be able to do the following:</p> <ul style="list-style-type: none"> 1. demonstrate a written understanding of the following systems: endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive 2. explain the structure and function of the following systems: endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive 3. integrate the principles of immunity, metabolic processes, bioenergetics, fluid and electrolyte function and acid-base balance with homeostatic mechanisms of the human being in health and in disease 4. apply the principles of anatomy and physiology to analyze case studies <p>PROGRAM: <i>(Numbering reflects Program Outcomes as they appear in the college catalog)</i> N/A</p> <p>COMPETENCY FULFILLED: Scientific Knowledge & Understanding (SCKX) OR Scientific Reasoning (SCRX)</p>
<p>Evaluation: List how the above outcomes will be assessed.</p>	<p>Assessment will be based on the following criteria:</p> <ul style="list-style-type: none"> examinations quizzes assignments during class and laboratory periods
<p>Instructional Resources: List library (e.g. books, journals, on-line resources), technological (e.g. Smartboard, software), and other resources (e.g. equipment, supplies, facilities)</p>	<p>Required:</p> <ul style="list-style-type: none"> Histology Slides Anatomical Models Preserved Specimens Software <p>Desired: None</p>

required and desired to teach this course.	
Textbook(s)	<i>Visual Anatomy & Physiology</i> , Frederic H Martini; latest edition <i>Laboratory Manual for Anatomy & Physiology (Cat Version)</i> ; Michael G Wood; latest edition