1/22/2025 DATE
☑ REQUIRED COURSE
☐ ELECTIVE COURSE

MSD DIVISION
☐ NEW COURSE
☑ REVISION

Lake Land College

Course Information Form

COURSE NUMBER:	BIO-050		TITLE: *(30 Characters Max)*	Basic Anatomy & Physiology							
SEM CR HRS:	4.0	Lecture:	4.0	Lab:	0.0	ICCB Lab:	0.0	ECH:	4.0		
Course Level:	☐ Gen Ed / IAI ☐ Baccalaureate /Non-IAI ☑ Career/Technical ☐ Dev Ed/ Not in Degree Audit			Clinical Practicum:	0.0	Work-based Learning	0.0	WBL ECH:	0.0		
COURSE PCS #	12 - 51.3501		IAI Code	N/A				Contact Hours (Minutes/Week)			
Repeatable (Y/N):	N	Pass/Fail (Y/N):	N	Variable Credit (Y/N):	N	Min:		Max:		16 Wks	200	8 Wks	400
Prerequisites:	None										
Corequisites:	None										
Catalog Description: (40 Word Limit)	This course provides an understanding of anatomical structures and functions of the human body.										

List the Major Course Segments (Units)	Contact Lecture Hours	Contact Lab Hours	Clinical Practicum	Work-based Learning
Anatomy terms	4			
Cell biology	4			
Histology	4			
Integument	1			
Senses	3			
Nervous system	4			
Endocrine system	4			
Cardiovascular system	4			
Musculoskeletal system	8			
Respiratory system	4			
Urinary system	4			
Lymphatic/Immunity	4			
Reproduction/Development	4			
Digestion	4			
Medical terminology	4			
TOTAL	60	0	0	0

EVALUTION							
QUIZZES	☑	EXAMS	☐	ORAL PRES	☐	PAPERS	☑
LAB WORK	☐	PROJECTS	☑	COMP FINAL	☐	OTHER	☐

COURSE MATERIALS		
TITLE:	Anatomy and Physiology	
AUTHOR:	Betts et al.	
PUBLISHER:	OpenStax/Rice University	
VOLUME/EDITION/URL:	2nd edition, https://openstax.org/details/books/anatomy-and-physiology-2e	
COPYRIGHT DATE:	2022, Updated January 22, 2025	

MAJOR COURSE SEGMENT	HOURS	LEARNING OUTCOMES
		The student will be able to:
Anatomy terms	4	1. Discuss the basic layout of the human body in terms relative position, body movement and regions of the body.
Cell biology	4	1. Discuss the basic layout of the generalized cell, including the cell membrane, nucleus and cytoplasmic organelles. 2. Discuss the role of genes in cell function and the mechanisms of cell secretion.
Histology	3	1. Summarize the four basic tissue types of the human body. 2. Discuss functional and morphological differences between tissue types.

Integument	1	1. Discuss basic structure and function of human skin.
Senses	4	1. Discuss the general senses and their receptors in the skin. 2. Explain the special senses.
Nervous system	4	1. Discuss the anatomical structures and general organization of the nervous system. 2. Discuss neurological disorders.
Endocrine system	4	1. Explain the basic mechanism for hormone action. 2. Discuss the actions of major hormones.
Cardiovascular system	4	1. Discuss heart function and the cardiac cycle. 2. Explain circulation, blood pressure, and nutrient delivery.
Musculoskeletal system	8	1. Organize the bones of the adult human. 2. Organize the major muscle groups of the back, upper quadrant, lower quadrant, and torso. 3. Explain dynamic nature of bone.
Respiratory system	4	1. Discuss the mechanics and control of ventilation. 2. Explain oxygen transport.
Urinary system	4	1. Explain filtration, reabsorption, and secretion by kidney nephron. 2. Discuss hormonal control of the kidneys.
Lymphatic/Immunity	4	1. Discuss the major defense systems of the body. 2. Discuss nonspecific and specific defenses. 3. Explain the role of the lymphatic system.
Reproduction/Development	4	1. Diagram the anatomy of the reproductive system. 2. Explain functions of male and female reproductive structures. 3. Discuss hormonal influence.
Digestion	4	1. Diagram the anatomy of the digestive system. 2. Explain the breakdown of carbohydrates, proteins and triglycerides.
Medical terminology	4	1. Summarize all of the terminology discussed throughout the semester.
	60	

Outcomes*	At the successful completion of this course, students will be able to:
Course Outcome 1	Explain homeostasis throughout the organ systems.
Course Outcome 2	Discuss gross anatomy and physiology of human body.
Course Outcome 3	Outline medical terminology.
Primary Laker Learning Competency	Scientific Literacy: Students apply the scientific process to real-life situations.
Secondary Laker Learning Competency	Critical Thinking: Students connect knowledge from various disciplines to formulate logical conclusions.

**Course and program outcomes will be used in the software for outcomes assessment and should include at least 1 primary and 1 secondary Laker Learning Competency. Limit to 3-*