

BASIC HUMAN ANATOMY 3RD EDITION ONLINE

THE DEAN VAUGHN TOTAL RETENTION SYSTEM™

COURSE OUTLINE

The Dean Vaughn Total Retention System® applied to *Basic Human Anatomy 3rd Edition* is designed to be the fastest and most effective method to teach anatomical terminology, direction, location, and the primary function of each body system – as well as the names and locations of all the major parts in each body system. It works in conjunction with the natural learning process of the brain by converting abstract medical word elements into images of real and familiar objects that make it incredibly easy to learn and remember program content.

MATERIALS

Basic Human Anatomy 3rd Edition consists of the following components:

- Master Administrator – Single-use license with access to course content and *Boost Dashboard* (i.e., learning platform oversight and management, create and assign "educator" roles)
- Student Course – Single-use license with access to course content

ASSIGNMENTS

As active learners in *Basic Human Anatomy 3rd Edition*, students will be expected to:

- Complete the Pre-test to establish a basis for measuring individual accomplishment
- View and carefully participate (i.e., pronouncing the anatomical term or part and audionym along with the narrator – visualizing the audionym, association, and location) in the video presentation for each lesson
- Complete all lesson-based learning activities and reading assignments
- Perform a final review of basic human anatomy – anatomical terminology, direction, location, and the primary function of each body system, as well as the names and locations of all the major parts in each system
- Complete the Final Test to assess knowledge and understanding of basic human anatomy

OBJECTIVES

On completion of *Basic Human Anatomy 3rd Edition* students will be able to:

- Understand the terminology and fundamental concepts of basic human anatomy
- Identify the structures of the human body – including anatomical positions, body planes, abdominopelvic quadrants, regional subdivisions, and body cavities – through concepts of organ and system structure
- Identify the names and locations of all the major parts in each principal body system, including all 206 bones of the skeletal system and the structures of the eye and the ear
- Understand the primary functions of each principal body system
- Complete a final test and achieve a percentage score of 70 percent or better

MODULE 1 – INTRODUCTION

- The Dean Vaughn Total Retention System®
- Importance of the Learning Activities
- Important Definitions

MODULE 2 – INTRODUCTION TO ANATOMY & PHYSIOLOGY

- Chemical Composition Molecules
molecules Nucleic acids carbohydrates proteins lipids
- Cell Structure
cellular membrane nucleus nucleolus cytoplasm organelles
- Tissue
connective epithelial muscle nerve
- Anatomical Location
cranial cephal caudal superior inferior
epi-
hypo- proximal distal ventral anterior
dorsal posterior lateral renal chondr-
axillary brachial inguinal cubital popliteal
pulmonary viscera
- Review Activities

MODULE 3 – ANATOMICAL TERMS, POSITION & DIRECTION

- Anatomical Terms, Position & Direction
anatomical position body planes midsagittal plane
sagittal plane horizontal plane frontal plane
lumbar umbilical iliac
abdominopelvic area quadrants epigastric region
hypochondriac region thoracic abdominal
pelvic abdominopelvic cavity ventral cavity
dorsal cavity
- Review Activities

MODULE 4 – THE SKELETAL SYSTEM

- Basic Function & Structure of the Skeletal System

- Bones of the Cranium & Face (The Skull)

frontal bones
temporal bones

parietal bones
sphenoid bone

occipital bone
ethmoid bone

zygomatic (malar) bone
vomer bone
maxilla bone

lacrimal bone
concha bone
mandible bone

nasal bone
palatine bone

- Bones of the Ear, Neck & Trunk

malleus (hammer)

incus (anvil)

stapes (stirrup)

hyoid bone
lumbar vertebrae

cervical vertebrae
sacrum

thoracic vertebrae
coccyx

sternum

ribs

- Bones of the Upper & Lower Extremities

clavicle
ulna
metacarpals

scapula
radius
phalanges

humerus
carpals

hip
tibia
metatarsals

femur
fibula

patella
tarsals

- Diseases & Disorders of the Skeletal System

- Review Activities

MODULE 5 – THE MUSCULAR SYSTEM

- Basic Function & Structure of the Muscular System

- Muscle fibers
- Types of muscles
- Movements performed by muscles

- How Muscles are Named

my- location shape	myo- size origin; insertion	direction number action
rectus longus minor biceps	transverse brevis maximus triceps	oblique major minimus quadriceps

- Muscles Named by Action

flexor adductor supinator plantar flexor sphincter	extensor levator pronator invertor tensor	abductor depressor dorsiflexor evertor rotator
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- Diseases & Disorders of the Muscular System

- Review Activities

MODULE 6 – THE INTEGUMENTARY SYSTEM

- Basic Function & Structure of the Integumentary System

- Skin layers
- Skin color

- Major Structures of the Integumentary System

dermat- epidermis	cutis- dermis	skin hypodermis
hair hair follicle	shaft	root
sebaceous glands	sweat glands	
nail body nail bed	free edge	nail root

- Diseases & Disorders of the Integumentary System

- Review Activities

MODULE 7 – THE CARDIOVASCULAR SYSTEM

- Basic Function & Structure of the Cardiovascular System

- Diastole, systole & electrical impulses
- Blood

- Major Structures of the Cardiovascular System

atrium	ventricle	chambers
blood vessels	artery	arteriole
capillary	venule	vein
pulmon	aorta	vena cava

- How Arteries and Veins are Names

coronary	carotid	jugular
saphenous		

- Diseases & Disorders of the Cardiovascular System

- Review Activities

MODULE 8 – THE LYMPHATIC SYSTEM

- Basic Function & Structure of the Lymphatic System

- Major Parts of the Lymphatic System

vessels	nodes	tonsils
thymus	spleen	cervic
axillary	inguinal	spleen
thymus	tonsils	

- Diseases & Disorders of the Lymphatic System

- Review Activities

MODULE 9 – THE RESPIRATORY SYSTEM

- Basic Function & Structure of the Respiratory System
- The Process of Breathing
 - External respiration
 - Internal respiration
 - Cellular respiration
- Major Parts of the Respiratory System

lungs	nose	mouth
pharynx	larynx	trachea
bronchi	bronchioles	

- Diseases & Disorders of the Respiratory System
- Review Activities

MODULE 10 – THE NERVOUS SYSTEM

- Basic Function & Structure of the Nervous System
 - Central nervous system
 - Peripheral nervous system
 - Neurons
 - Sympathetic & parasympathetic nervous system

- Major Parts of the Nervous System

- Central Nervous System

cerebellum	cerebrum	thalamus
hypothalamus	midbrain	pons
medulla	brain stem	spinal cord
white matter	gray matter	central canal

- Peripheral Nervous System

nerve plexuses	afferent nerves	efferent nerves
sympathetic nerves	parasympathetic nerves	sciatic nerve
somatic nervous system		

- Diseases & Disorders of the Nervous System
- Review Activities

MODULE 11 – THE SENSORY ORGANS (SPECIAL SENSES)

- Basic Function & Structure of the Eye
 - Outer layer
 - Middle layer
 - Inner layer
 - Lens, aqueous & vitreous humor, and conjunctiva
- Major Parts of the Eyeball

optic nerve	sclera	choroid
retina	posterior cavity	lens
suspensory ligament	ciliary body	conjunctiva
pupil	iris	anterior cavity
cornea	aqueous humor	vitreous humor
- Basic Function & Structure of the Ear
 - External (Outer) Ear
 - Middle Ear
 - Inner Ear
- Major Parts of the Ear

external (outer) ear	middle ear (tympanic cavity)	internal (inner) ear
pinna	auditory canal	tympanic membrane
vestibule	cochlea	semi-circular canals
- Diseases & Disorders of the Sensory Organs
- Review Activities

MODULE 12 – THE ENDOCRINE SYSTEM

- Basic Function & Structure of the Endocrine System
 - Pituitary gland
 - Thyroid gland
 - Adrenal gland
 - Insulin & glucagon
- Glands of the Endocrine System

hypothalamus	pituitary	pineal
thyroid	parathyroids	adrenals
ovaries	testes	pancreas
- Diseases & Disorders of the Endocrine System
- Review Activities

MODULE 13 – THE DIGESTIVE SYSTEM

- Basic Function & Structure of the Digestive System

- Major Parts of the Digestive System

alimentary canal	accessory organs	esophagus
small intestine	large intestine	duodenum
jejunum	cecum	colon
sigmoid	rectum	anus
pancreas	liver	cholecyst

- Diseases & Disorders of the Digestive System

- Review Activities

MODULE 14 – THE URINARY SYSTEM

- Basic Function & Structure of the Urinary System

- Major Parts of the Urinary System

kidneys	ureters	urinary bladder
urethra		

- Diseases & Disorders of the Urinary System

- Review Activities

MODULE 15 – THE REPRODUCTIVE SYSTEM

- Basic Function & Structure of the Reproductive System

- Male Reproductive System

- Testes
- Epididymis
- Seminal vesicles & prostate gland
- Penis

- Female Reproductive System

- Ovaries
- Uterine Tubes
- Uterus
- Vagina
- Vulva
- Mammary Glands

- Major Parts of the Reproductive System
 - Male Reproductive System

testis	scrotum	penis
glans penis	seminal vesicle	bulbourethral gland
prostate gland	epididymis	ductus deferens
ejaculatory duct	prostatic urethra	membranous urethra
spongy urethra	urethral orifice	
 - Female Reproductive System

ovaries	uterine tube	uterus
cervix	vagina	clitoris
labium minor	labium major	mammary glands
- Diseases & Disorders of the Reproductive System
- Review Activities

MODULE 16 – CONCLUSION

- Conclusion to the Dean Vaughn Total Retention System® – *Basic Human Anatomy 3rd Edition* Course
- Final Test