HUMAN ANATOMY AND PHYSIOLOGY 1 (BIOL-2311-003 CRN:24308)

Course syllabus: Spring 2025

INSTRUCTOR: Alexander Friedman, Ph.D.

All electronic communications must be **done via email** afriedman@utep.edu

COURSE MEETINGS: Undergraduate Learning Center 126 3 pm to 4: 20 pm Monday and Wednesday
Or In CASE OF EMARGENSY
https://utep-edu.zoom.us/j/87548667740?pwd=WGZaTE53ZllzVkxaaFNpYm1VNnlSQT09

Office hours: 12:00 pm am – 4 :00 pm on Monday to Friday, pls set an appointment room 2.173 bioscience building

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PREQUISITES: BIOL 1305 and BIOL 1107

CREDIT HOURS: 3.0

Course Description:

Human Anatomy and Physiology I is the first part of a two-course sequence. It covers the structures and functions of the integumentary, skeletal, muscular, nervous, and endocrine systems.

You will be using the McGraw Hill Connect homework system for this class. You will access the Connect homework and eBook used for this class through Blackboard. It is essential you purchase access to the Connect website to be able to complete your assignments, read the book, and ensure your success in this challenging course.

REQURED TEXT and CONNECT SYSTEM:

- **Review the student registration video**
- **http://video.mhhe.com/watch/UZnyThhiZgbh3pKQFBiQUZ**

CXG Team (Tech Support)

- CXG Phone #: 800-331-5094
- Chat or Email: https://mhedu.force.com/CXG/s/ContactUs
- Available for Instructors and Students
- Hours Available(All times in EST)
  - Sunday: 12 PM – 12 AM
  - Monday – Thursday: 24 hours
  - Friday: 12 AM – 9 PM
  - Saturday: 10 AM – 8 PM

This class is critically important for your future in medical or dental school. It is also crucial for the advance of human biology work. This class will focus on “heavy pre-reading before the class” and will have reasonably heavy homework.

We will use the ELECTRONIC Saladin 10th ed Anatomy and Physiology: Unity Form and Function as the textbook, which is included in the McGraw Hill Connect digital platform.

YOU **NEED** PURCHASE **DIRECTLY** THROUGH THE COURSE PAGE IN **BLACKBOARD**

Video in Blackboard which will walk you through the registration steps to access Connect for the first time through Blackboard - http://video.mhhe.com/watch/UZnyThhiZgbh3pKQFBiQUZ?

Within the Connect digital system you will be assigned the SMARTBOOK ADAPTIVE READING assignment. The chapters you will read will also be followed by a set of questions to be answered, which will measure your comprehension level of the current reading material. The SMARTBOOK assignments will need to be completed before the beginning of the following scheduled class date.

Grade
Total **22500** Points
Grade A 22500*.70= 15,750
Grade B 22500*.60=13,500
Grade C 22500*.50=11,250
Grade D 22500*.40=9,000

Plan

1) Jan 22: Ch1

Ch 1-Major Themes of Anatomy and Physiology

- SB Ch 1 SmartBook
- Ch 1 Assignment
- Ch 1 Application Activity
- APR Atlas A: General Orientation to Human Anatomy-An APR Assessment
- Ch 1 Quiz

2) Jan 27 Ch2

Ch 2-The Chemistry of Life

- Ch 2-Chemistry of Life AP Prep
- Ch 2 SmartBook
- Chemical Composition of Cells - Test for Protein
- Chemical Composition of Cells - Test for Fat
- Chemical Composition of Cells - Test for Sugars
- Chemical Composition of Cells - Test for Starch
- Ch 2- The Chemistry of Life - pH
- How Enzymes Function - Effect of Temperature
- How Enzymes Function - Effect of Concentration
- How Enzymes Function - Virtual Lab
- Ch 2 Assignment
- Ch 2 Application Activity
- Ch 2 Quiz

3) Jan 29 Ch3

Ch 3- The Cellular Form and Function

- Ch 3-Cells AP Prep
- SB Ch 3 SmartBook
- Diffusion Across A Semipermeable Membrane
- Osmosis - Movement of Water Across a Semipermeable Membrane - Virtual Lab
- Ch 3- Cellular Form and Function -Tonicity of Blood Cells
- Passive and Active Transport - Concept Overview
- Ch 3 Assignment
- Ch 3 Application Activity
- APR Ch 3- The Cellular Form and Function -An APR Assignment
- Ch 3 Quiz

4) Feb 3 Ch4

Ch 4- Genes and Cellular Function

- [ ] SB Ch 4 SmartBook
- [ ] DNA and RNA Structure - Virtual Lab
- [ ] Virtual Lab: DNA - Transcription, Translation, and Mutation
- [ ] Cell Division - Examining Mitosis - Virtual Lab
- [ ] Cell Division - Examining Meiosis
- [ ] Human Genetics - Genetic Inheritance - Virtual Lab
- [ ] Chromosomal Inheritance During Meiosis - Virtual Lab
- [ ] APR Ch 4- Genes and Cellular Function -An APR Assessment
- [ ] Ch 4 Assignment
- [ ] Ch 4 Application Activity
- [ ] Ch 4 Quiz

Feb 5 Read Ch5

Ch 5- The Human Tissue

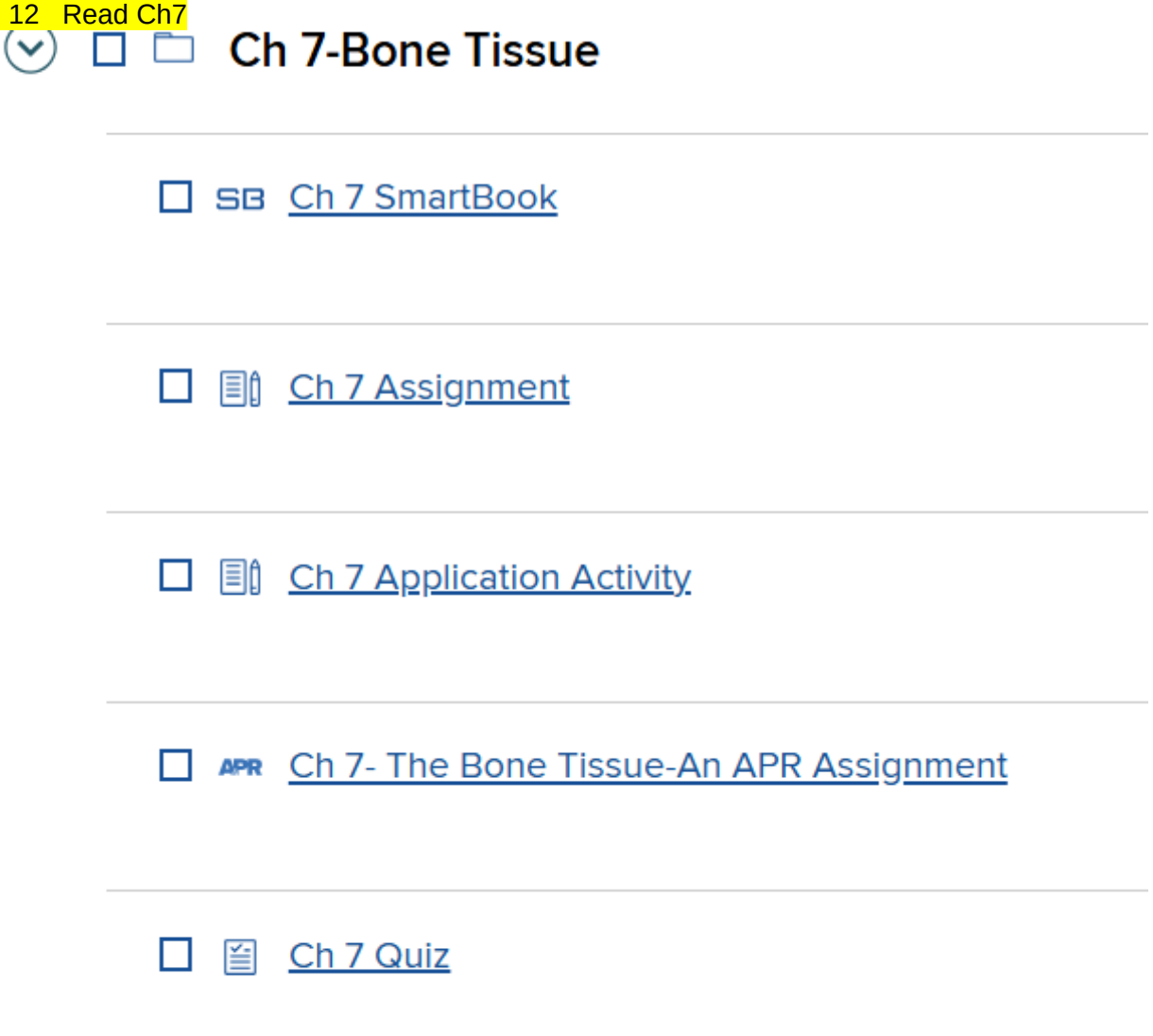
- [ ] Ch 5-Tissues AP Prep
- [ ] SB Ch 5 SmartBook
- [ ] Ch 5- The Human Tissue -Epithelial Tissue
- [ ] Ch 5- The Human Tissue - Connective Tissue
- [ ] Ch 5- The Human Tissue -Muscle Tissue
- [ ] Ch 5- The Human Tissue - Nervous Tissue
- [ ] Ch 5 Assignment
- [ ] Ch 5 Application Activity
- [ ] APR Ch 5- The Human Tissue-An APR Assessment
- [ ] Ch 5 Quiz

5) Feb 10 Read Ch6

Ch 6- The Integumentary System

- Integumentary System AP Prep
- SB Ch 6 SmartBook
- Ch 6 Assignment
- Ch 6 Application Activity
- APR Ch 6- The Integumentary System- An APR Assignment
- Ch 6 Quiz

6) Feb 12 Read Ch7



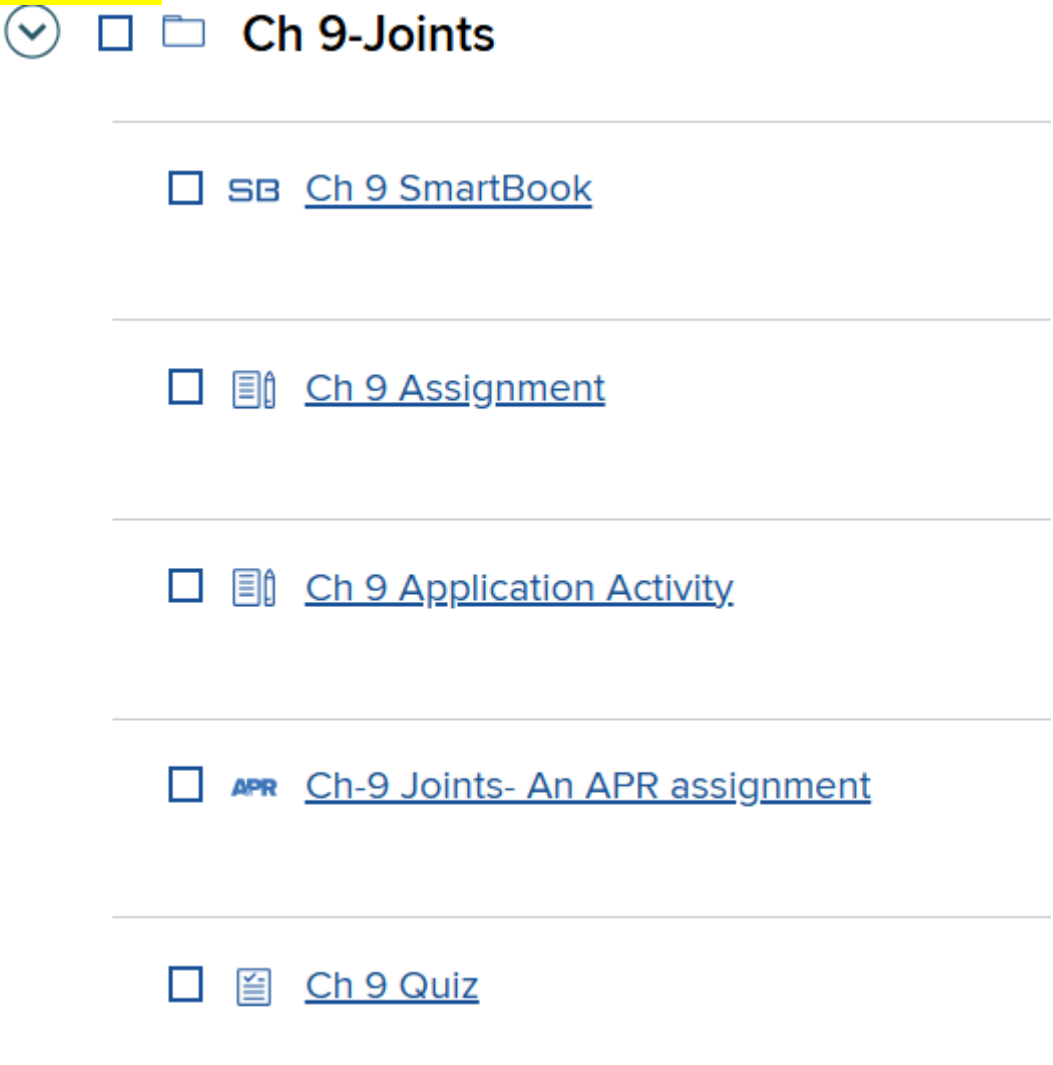
7)

8) Feb 17 Read Ch8

Ch 8: The Skeletal System

- Skeletal System AP Prep
- SB Ch 8 SmartBook
- Ch 8 Assignment
- Ch 8 Application Activity
- APR Ch 8- The Skeletal System - An APR Assignment
- Ch 8 Quiz

9) Feb 19 Read Ch9



10) Feb 24 Read Ch10

Ch 10-The Muscular System

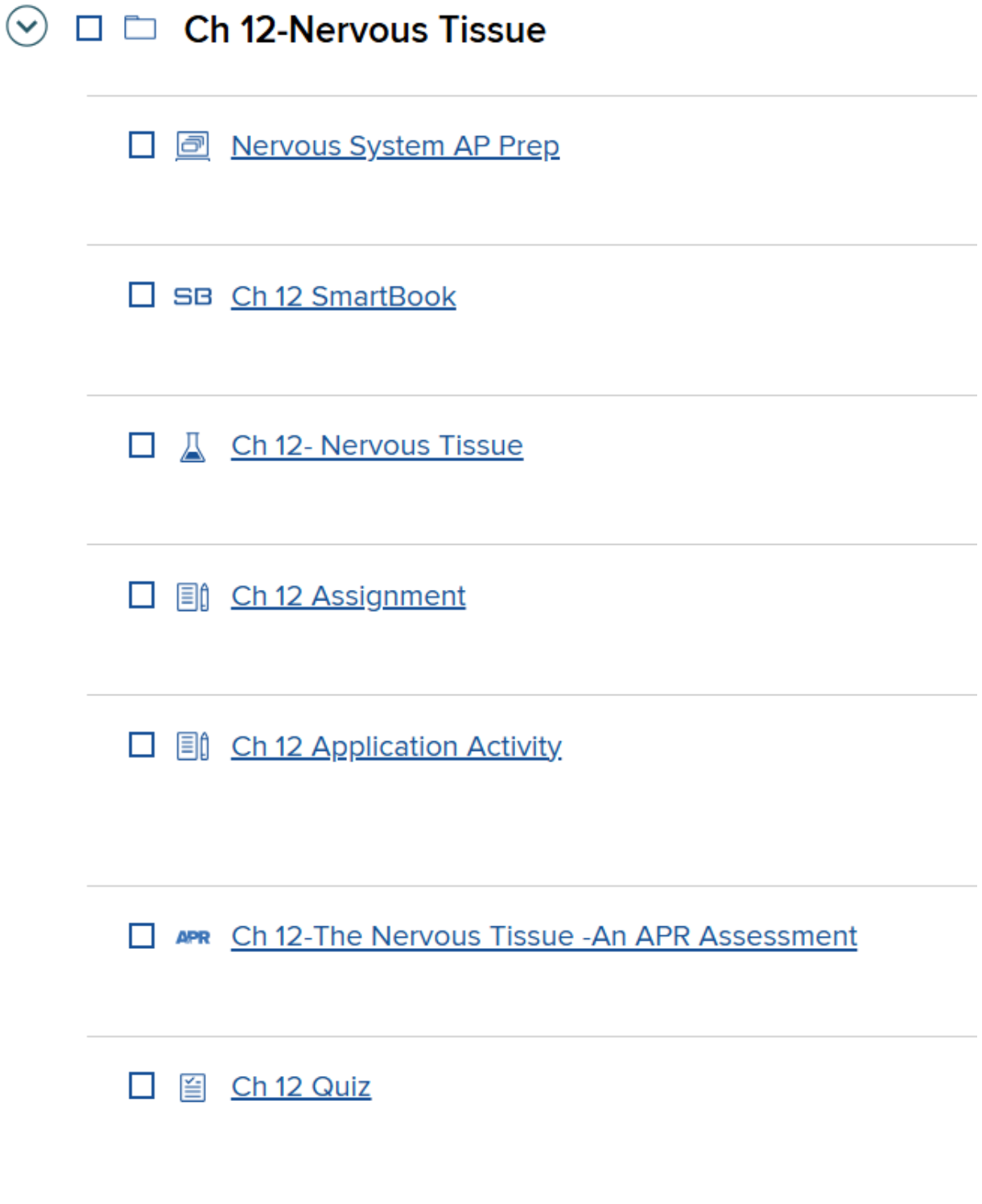
- [ ] Muscular System AP Prep
- [ ] SB Ch 10 SmartBook
- [ ] Ch 10 Assignment
- [ ] Ch 10 Application Activity
- [ ] APR Ch 10- The Muscular System-An APR Assessment
- [ ] Ch 10 Quiz

11) Feb 26 Read Ch11

Ch 11-Muscular Tissue

- Ch 11 SmartBook
- Ch 8- The Skeletal Muscle - Concept Overview
- Ch 11-Muscular Tissue
- Electromyography - Motor Unit Recruitment - Virtual Lab
- Shoulder and Elbow Movement Exercise - Virtual Lab
- Skeletal Muscle - Electrical Stimulation - Virtual Lab
- Electromyography - Time to Fatigue - Virtual Lab
- Ch 11 Assignment
- Ch 11 Application Activity
- Ch 11- The Muscle Tissue -An APR Assessment
- Ch 11 Quiz

12) March 3 Read Ch12



13)

14) March 5 Read Ch13

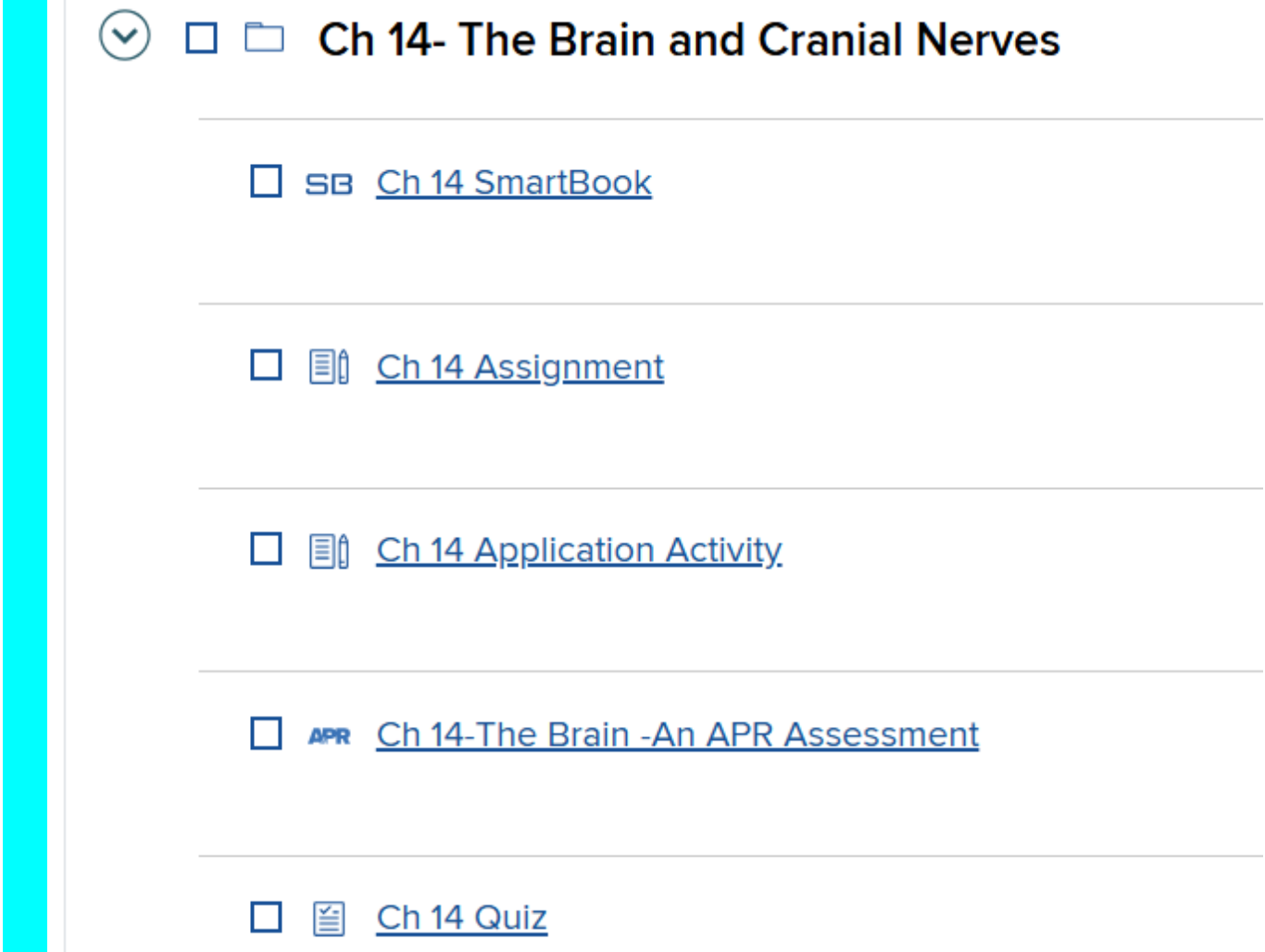
Ch 13-The Spinal Cord, Spinal Nerves, Somatic Reflexes

☐ SB	Ch 13 SmartBook	**Start -** 1/16/2
☐	Demonstrate Monosynaptic Reflexes - Virtual Lab	**Start -** 1/16/2
☐	Ch 13 Assignment	**Start -** 1/16/2
☐	Ch 13 Application Activity	**Start -** 1/16/2
☐ APR	Ch 13- The Spinal Cord, Spinal Nerves -An APR Assessment	**Start -** 1/16/2
☐	Ch 13 Quiz	**Start -** 1/16/2

15)

- **BREAK**

1) March 17 Read Ch14



2)

3) March 19 Read Ch15

Ch 15- The Autonomic Nervous Sys . and Visceral Reflex

SB Ch 15 SmartBook	Start - Due	1/16/25 - 5
Ch 15- The Autonomic Nervous Systems and Visceral Reflex	Start - Due	1/16/25 - 5
Ch 15 Assignment	Start - Due	1/16/25 - 5
Ch 15 Application Activity	Start - Due	1/16/25 - 5
APR Ch 15- The Autonomic N S-An APR Assessment	Start - Due	1/16/25 - 5
Ch 15 Quiz	Start - Due	1/16/25 - 5

4) March 24 Read Ch16

Ch 16-Sense Organs

- Ch 16 SmartBook
- Ch 16- The Sense Organs (Eye and Vision - Accommodation of the Lens)
- Ch 16- The Sense Organs (Eye and Vision - Eye Dissection)
- Astigmatism Test - Virtual Lab
- Pupillary Reflex Test - Virtual Lab
- Convergence Reflex Test - Virtual Lab
- Color Vision Test - Virtual Lab
- Blind Spot Demonstration - Virtual Lab
- Visual Acuity Test - Virtual Lab
- Ch 16 Assignment
- Ch 16 Application Activity
- Ch 16 Quiz
- Ch 16- The Sense Organs- An APR Assessment

5) March 26 Read Ch17

Ch 17- Endocrine System

- [ ] Endocrine System AP Prep
- [ ] SB Ch 17 SmartBook
- [ ] Ch 17- The Endocrine System (An Overview)
- [ ] Ch 17- The Endocrine System - Effects of Blood Glucose Level
- [ ] Ch 17-The Endocrine System - Influence of Thyroid Hormone on Temperature Regulation
- [ ] Ch 17 Assignment
- [ ] Ch 17 Application Activity
- [ ] APR Ch 17- The Endocrine System-An APR Assessment
- [ ] Ch 17 Quiz

6) March 31 Read Ch18

Ch18-The Circulatory System: Blood

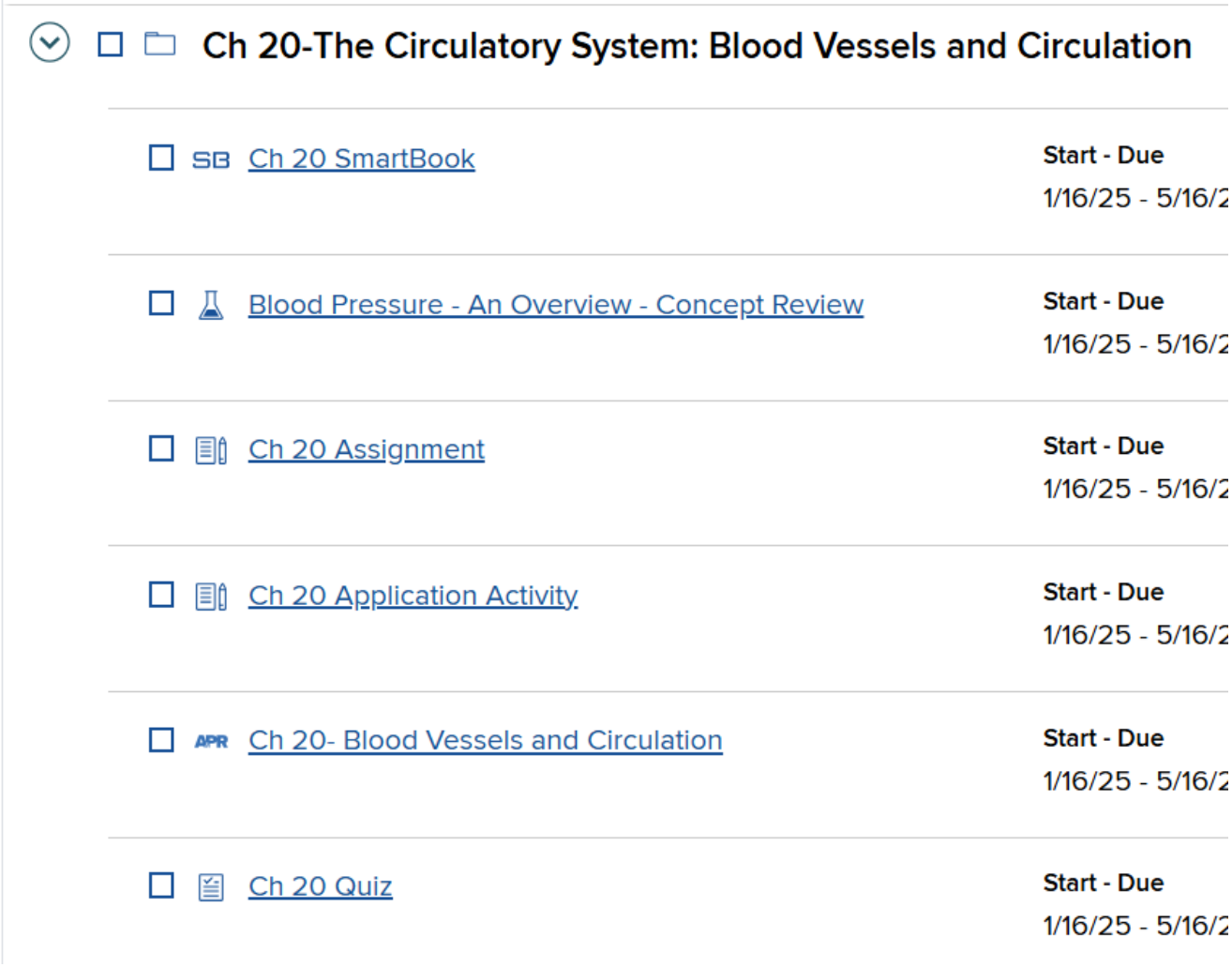
- [ ] Cardiovascular System AP Prep
- [ ] SB Ch 18 SmartBook
- [ ] Ch 18- The Cardiovascular System (Blood - Hematocrit)
- [ ] Differential White Blood Cell Count - Virtual Lab
- [ ] Ch 18- The Cardiovascular System (Blood - Hemoglobin Content)
- [ ] Ch 18- The Cardiovascular System - Blood Typing (Section 18.3)
- [ ] Ch 18 Assignment
- [ ] Ch 18 Application Activity
- [ ] APR Ch 18 & 20- The Circulatory System Blood -An APR Assessment
- [ ] Ch 18 Quiz

7) Apr 2 Read Ch19

Ch 19-The Circulatory System: Heart

- [ ] SB Ch 19 SmartBook
- [ ] Ch 19- The Circulatory System (Cardiac Cycle - An Overview)
- [ ] Ch 19- Cardiovascular Physiology - Heart Auscultation
- [ ] Pulse Rate - Virtual Lab
- [ ] Electrocardiography - Virtual Lab
- [ ] Ch 19 Assignment
- [ ] Ch 19 Application Activity
- [ ] APR Ch 19- The Circulatory System - The Heart
- [ ] Ch 19 Quiz

8) Apr 7 , Read Ch20



9) Apr 9 Read Ch21

Ch 21-The Lymphoid And Immune Systems

- Immune and Lymphatic System AP Prep
- SB Ch 21 SmartBook
- Ch 21-Innate Immunity - An Overview
- Ch 21-Adaptive Immunity - An Overview
- Ch 21 Assignment
- Ch 21 Application Activity
- APR Ch 21- The Lymphoid System - An APR Assignment
- Ch 21 Quiz

10) Apr 14 Read Ch22

Ch 22- The Respiratory System

- [ ] Respiratory System AP Prep
- [ ] SB Ch 22 SmartBook
- [ ] Ch 22- The Respiratory System (An Overview)
- [ ] Mechanism of Breathing - Virtual Lab
- [ ] Pulmonary Function Tests - Virtual Lab
- [ ] Ch 22 Assignment
- [ ] Ch 22 Application Activity
- [ ] APR Ch 22- The Respiratory System An APR Assessment
- [ ] Ch 22 Quiz

11) Apr 16 Read Ch23

Ch 23- The Urinary System

- Urinary System AP Prep
- SB Ch 23 SmartBook
- Ch 23- The Urinary System Urinary Glomerular Filtration (An Overview)
- Ch 23- Urinary Tubular Reabsorption and Secretion - An Overview Physiology
- Ch 23 Assignment
- Ch 23 Application Activity
- APR Ch 23- The Urinary System- An APR Assessment
- Ch 23 Quiz

12) Apr 21, Read Ch24

Ch 24-Fluid, Electrolyte, and Acid-Base Balance

- SB Ch 24 SmartBook
- Ch 24-Fluid, Electrolyte and Acid -pH Balance - Antacids as Buffers
- Ch 24-Oprion B- Fluid, Electrolytes and Acid-Base - Function of Buffers
- Ch 24 Assignment
- Ch 24 Application Activity
- APR Ch 24-Fluid, Electrolyte, and Acid-Base Balance
- Ch 24 Quiz

13) Apr 23 , Read Ch25

Ch 25- The Digestive System

- Digestive System and Metabolism AP Prep
- SB Ch 25 SmartBook
- Ch 25- The Digestive System (Enzymes and Digestion)
- Ch 25 Assignment
- Ch 25 Application Activity
- APR Ch 25-The Digestive System - An APR Assessment
- Ch 25 Quiz

14) Apr 28, Read Ch26

Ch 26-Nutrition and Metabolism

- Ch 26 SmartBook
- Ch 26- Nutrition and Metabolism: Emulsification of Lipids
- Ch 26- Nutrition and Metabolism: Digestion of Starch
- Ch 26 Assignment
- Ch 26 Application Activity
- Ch 26 Quiz

15) Apr 30 – Read Ch27

Ch 27-The Male Reproductive System

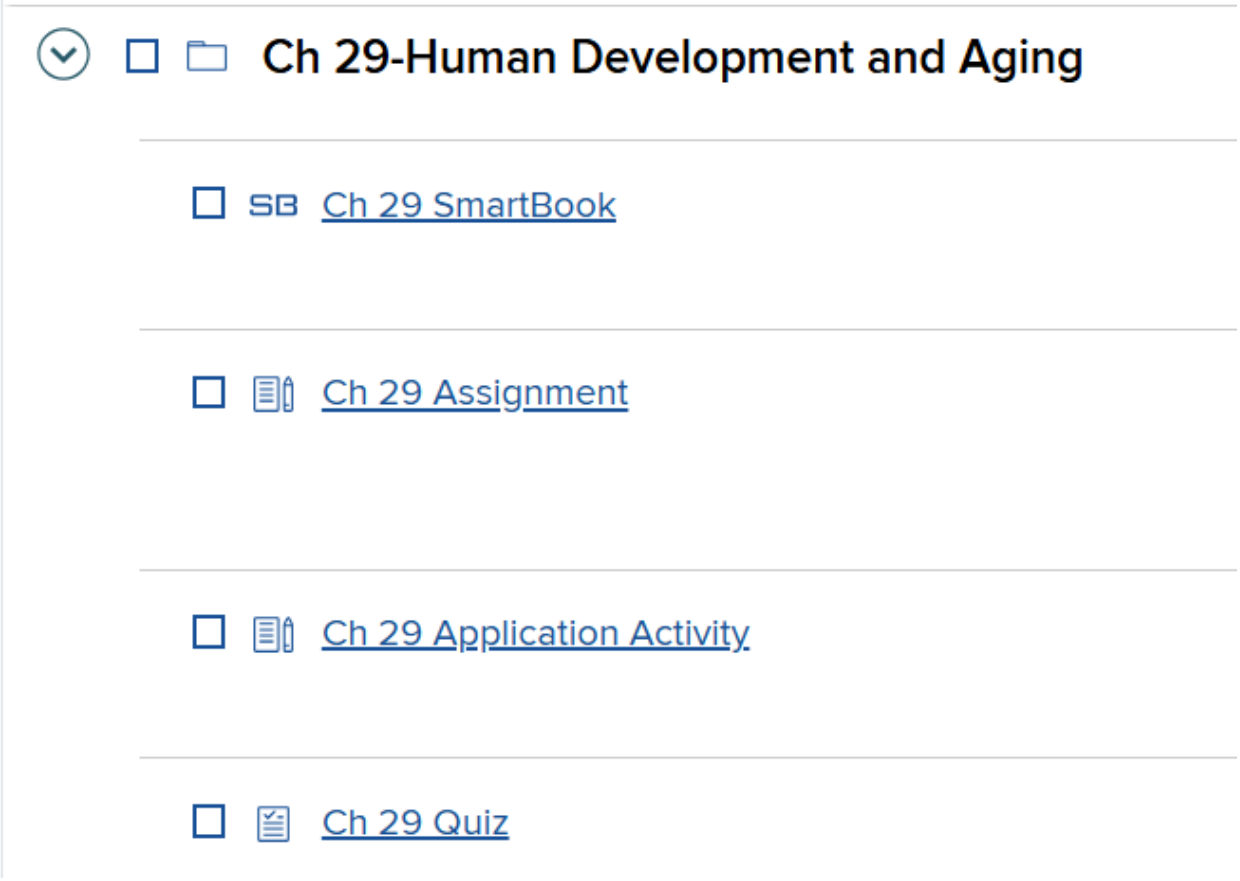
- Reproductive System AP Prep
- SB Ch 27 SmartBook
- Ch 27 Assignment
- Ch 27 Application Activity
- APR Ch 27- The Male Reproductive System- An APR Assessment
- Ch 27 Quiz

16) May 5 Read 28

Ch 28-The Female Reproductive System

- SB Ch 28 SmartBook
- Ch 28 Assignment
- Ch 28 Application Activity
- APR Ch 28- The Female Reproductive Assessment- An APR Assessment
- Ch 28 Quiz

17) May 7 Read 29



Animations that you can watch in addition to the class

Date for pre readings.	Lecture's topics and homework	Video Links
Ch1	**Chapter 1: Major Themes of Anatomy and Physiology** **1-4 APR** **5 transition**	• Organism Hierarchy: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17000 • Cells and Organelles: https://anatomy.mheducation.com/html/apr.html?animal=human&id=16996 • Homeostasis: http://anatomy.mheducation.com/html/apr.html?animal=human&id=16993 • Prokaryotic vs Eukaryotic Cells: https://www.youtube.com/watch?v=Pxujitlv8wc • Negative and Positive Feedback: https://www.youtube.com/watch?v=Iz0Q9nTZCw4 • Medical Terminology: https://www.youtube.com/watch?v=04Wh2E9oNug
	Chapter 5: The Human Tissues • Introduction to Human Tissue: https://www.youtube.com/watch?v=15k5fajCN_w • Primary Tissues: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17001 **Chapter 6: The Integumentary System** Systems and skin https://www.youtube.com/watch?v=GSY2g6ZIMoU https://www.youtube.com/watch?v=TuDYjv84jrw Désordres https://www.youtube.com/watch?v=ZxZAlSQlbLc	• Mitosis: https://anatomy.mheducation.com/html/apr.html?animal=human&id=16998 • Introduction to Human Tissue: https://www.youtube.com/watch?v=15k5fajCN_w • Primary Tissues: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17001 • Protein Synthesis: https://anatomy.mheducation.com/html/apr.html?animal=human&id=16997 Systems and skin https://www.youtube.com/watch?v=GSY2g6ZIMoU skin layers https://www.youtube.com/watch?v=Orumw-PyNjw&t=90s skin cell https://www.youtube.com/watch?v=Oru

	https://www.youtube.com/watch?v=OxPlCkTKhzY https://www.youtube.com/watch?v=Orumw-PyNjw&t=90s skin cell https://www.youtube.com/watch?v=Orumw-PyNjw&t=135s	mw-PyNjw&t=135s désordres https://www.youtube.com/watch?v=ZxZAlSQlbLc
	Chapter 7: Bone Tissue **Intro** **https://www.youtube.com/watch?v=inqWoakkiTc** Bones Overview 2: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17004 https://anatomy.mheducation.com/html/apr.html?animal=human&id=15 https://www.viddler.com/embed/e1553f60 **https://www.youtube.com/watch?v=78RBpWSOl08** **https://www.youtube.com/watch?v=GpMV197xZXc** **https://www.youtube.com/watch?v=c5tc01WFYks** https://www.youtube.com/watch?v=0dV1Bwe2v6c https://www.youtube.com/watch?v=P5HwYWShBhw Bones Overview 1: https://www.youtube.com/watch?v=4AmOnF0V4Vw **Chapter 8: The Skeletal System** **To start with music**	• https://www.youtube.com/watch?v=f-FF7Qigd3U • Bones Structure and Types: https://www.youtube.com/watch?v=2vESqp8mL5I • Osteogenesis 1: https://www.youtube.com/watch?v=FyUHVEylSms • Osteogenesis 2: https://www.youtube.com/watch?v=xXgZap0AvL0

	https://www.youtube.com/watch?v=n3QbHNOxzcY **https://www.youtube.com/watch?v=38MsEkhdECM** **https://anatomy.mheducation.com/html/apr.html?animal=human&id=14** **https://www.youtube.com/watch?v=zyl6eoU-3Rg** **https://www.youtube.com/watch?v=0qR-Yfw9fOI** **To start with music** **https://www.youtube.com/watch?v=orL-w2QBiN8** **https://www.youtube.com/watch?v=QHl6wYCwlcQ**	
	Chapter 9: Joints Joints Overview: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17005 APR Module 5 Skeletal: Animations: Synovial Joint APR Module 5 Skeletal: Animations: Temporomandiublar Joint APR Module 5 Skeletal: Animations: Glenohumeral Joint APR Module 5 Skeletal: Animations: Elbow Joint APR Module 5 Skeletal: Animations: Hip Joint APR Module 5 Skeletal: Animations: Knee Joint APR Module 5 Skeletal: Animations: Tibiofibulotalar joint **https://www.youtube.com/watch?v=D3GVKjeY1FM** **https://www.youtube.com/watch?v=3l3-5lj3JZ8** **https://www.youtube.com/watch?v=_q-**	• Joints Overview: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17005 • Joints Range of Motion: https://www.youtube.com/watch?v=8hqyQIyenxA • Joint Structures: https://www.youtube.com/watch?v=bfiUnhAHt8Q

	Jxj5sT0g APR Module 5: Skeletal: Animations: Skull **Chapter 10: The Muscular System** **https://www.youtube.com/watch?v=8ycndx5lv8A** https://www.youtube.com/watch?v=rMcg9YzNSEs https://www.youtube.com/watch?v=VVL-8zr2hk4 https://anatomy.mheducation.com/html/apr.html?animal=human&id=1 https://anatomy.mheducation.com/html/apr.html?animal=human&id=8684 https://www.youtube.com/watch?v=SCznFaTwTPE https://www.google.com/search?q=muscles+of+the+digestive+truct+animation+&rlz=1C1GCEA_enUS902US902&sxsrf=APq-WBug4mGCmtaUO6Pq_yoCs0Mel9CYHg%3A1645131680748&ei=oLcOYsCMLdqvqtsPuPiViA4&ved=0ahUKEwjA3MGL0Yf2AhXal2oFHTh8BeEQ4dUDCA8&uact=5&oq=muscles+of+the+digestive+truct+animation+&gs_lcp=Cgdnd3Mtd2l6EAMyCgghEBYQChAdEB46BwgAEEcQsAM6BQgAEIAEOgYIABAWEB46CAgAEBYQChAeOggIIRAWEB0QHjoFCAAQogQ6BAgAEA06CAgAEA0QBRAeOgYIABANEB5KBAhBGABKBAhGGABQvRBYmDBg7TFoA3ABeACAAXCIAdgLkgEEMTAuNpgBAKABAcgBCMABAQ&sclient=gws-wiz#kpvalbx=_4LcOYqG5N4WpqtsPts-siA818 https://www.youtube.com/watch?v=qmpd82mpVO4 https://www.youtube.com/watch?v=0qksc4kqSjM	
	Chapter 11: Muscular Tissue	• Introduction to the Muscular System: https://www.youtube.com/watch?v=vNnMsEcUnUE

	For class on Thursday 02/24 https://youtu.be/SvnWNtaTIOQ https://www.youtube.com/watch?v=rRRFXR16kYA https://www.youtube.com/watch?v=sZuy356qkPM https://www.youtube.com/watch?v=IMkHo11reWg https://www.youtube.com/watch?v=v7Q9BrNfIpQ **THEN GO with APR** **Chapter 12 Neuros Tissue** https://elpasolive.com/events/russian-ballet-theatre-presents-swan-lake https://www.youtube.com/watch?v=WmqvOUBh2cc https://www.youtube.com/watch?v=ZWACm6BkDVo https://www.kenhub.com/en/library/anatomy/histology-of-neurons **https://www.youtube.com/watch?v=03GUyBNKBPc&t=4s** https://www.youtube.com/watch?v=64MgiEDWyRg Continue with a APR	• Muscular System Terminology: https://www.youtube.com/watch?v=VUzhweM2YDQ • Introduction to Muscle Histology: https://www.youtube.com/watch?v=mT3mtJ77B5U • Cardiac Action Potential: https://www.youtube.com/watch?v=v7Q9BrNfIpQ • Introduction to Nervous System 1: https://www.youtube.com/watch?v=qPix_X-9t7E • Introduction to Neuronal Tissue: https://www.youtube.com/watch?v=4RS-3Ex04NU • Glial Cells: https://www.youtube.com/watch?v=64MgiEDWyRg • Action Potential: https://www.youtube.com/watch?v=OZG8M_IdA1M
	Chapter 13: The Spinal Cord, Spinal Nerves, and Somatic Reflexes	• Spinal Cord Introduction: https://www.youtube.com/watch?v=K-P_BKOUFXs • Introduction to Nervous System 2: https://www.youtube.com/watch?

	• Spinal Cord Introduction: https://www.youtube.com/watch?v=K-P_BKOUFXs • Spinal Cord REAL Dissection : https://www.youtube.com/watch?v=IAwk0pshcDE APR	v=q8NtmDrb_qo • CNS REAL Dissection: https://www.youtube.com/watch?v=xB7rXw_3gVY • Basics of Cranial Nerves: https://www.youtube.com/watch?v=GJBnwZQ60Ss • 3D Cranial Nerves Map: https://www.youtube.com/watch?v=vFp_gNifHzw
	Chapter 14: The Brain and Cranial Nerves • Nervous System Basics Re-fresher: https://www.youtube.com/watch?v=6O-0CVAgaEM • https://teens.drugabuse.gov/videos/human-brain-major-structures-and-functions-1 **https://www.youtube.com/watch?v=DMcmrP-BWGk** **Go with APR** • • Basics of Cranial Nerves: https://www.youtube.com/watch?v=GJBnwZQ60Ss 3D Cranial Nerves Map: https://www.youtube.com/watch?v=vFp_gNifHzw	• CNS, PNS, ANS: https://www.youtube.com/watch?v=zZ80T1BtumQ • Spinal Cord REAL Dissection : https://www.youtube.com/watch?v=IAwk0pshcDE • Nervous System Basics Re-fresher: https://www.youtube.com/watch?v=6O-0CVAgaEM • PNS and Senses: https://www.youtube.com/watch?v=pDr6DDRHvUY
	Chapter 15: The Autonomic Nervous System and Visceral Reflexes Synapse https://www.youtube.com/watch?v=mItV4rC57kM ANS https://www.youtube.com/watch?v=D96mSg2_h0c https://www.youtube.com/watch?v=5a1gYoJaNvU https://www.youtube.com/watch?v=EQFaTwFkhSU VR https://www.youtube.com/watch?v=SS_qMHPI0XM&t=42s	• ANS Introduction: https://www.youtube.com/watch?v=71pCilo8k4M • Homunculus : https://www.youtube.com/watch?v=fxZWtc0mYpQ • Sensation and Perception : https://www.youtube.com/watch?v=unWnZvXJH2o

	Reflex mesurmeny https://stanfordmedicine25.stanford.edu/the25/tendon.html Stroke https://www.youtube.com/watch?v=EY98RInP-A4	
	Chapter 16: Sense Organs PTSD https://www.youtube.com/watch?v=b_n9qeqR7C4 Trauma and brain https://www.youtube.com/watch?v=4-tcKYx24aA CH 15 animations in a folder Ch 16 animations online PPT	• Vision : https://www.youtube.com/watch?v=o0DYP-u1rNM • Balance and Hearing : https://www.youtube.com/watch?v=Ie2j7GpC4JU • Taste and Smell: https://www.youtube.com/watch?v=mFm3yA1nslE
	Chapter 17: The Endocrine System Chapter 18: The Circulatory System: Blood	• Endocrine System Introduction: https://www.youtube.com/watch?v=8TveCTps_Xw • Hormonal Cascade: https://www.youtube.com/watch?v=SCV_m91mN-Q • Endocrine System Introduction 2: https://www.youtube.com/watch?v=ER49EweKwW8
	Chapter 19: The Circulatory System: Heart Chapter 20: The Circulatory System: Blood Vessels and Circulation	• Circulatory System Introduction: https://www.youtube.com/watch?v=_vZ0IefPg_0 • The Heart: https://www.youtube.com/watch?v=X9ZZ6tcxArI • Cardiovascular Medical Terminology: https://www.youtube.com/watch?v=COQ1WOKQnGg • Cardiac Conductance: https://www.youtube.com/watch?v=RYZ4daFwMa8 • Cardiac Muscle Physiology: https://www.youtube.com/watch?

		v=IMkHo11reWg
	Chapter 21: The Lymphatic and Immune Systems **Chapter 22: The Respiratory System**	• Lymphatic System Introduction: https://www.youtube.com/watch?v=o_TVdvaMCWA • Histology of Lymph Nodes: https://www.youtube.com/watch?v=8nqnKIyBA20 • Lymphatic System Introduction 2: https://www.youtube.com/watch?v=I7orwMqTQ5I
	Chapter 23: The Urinary System Chapter 24: Fluid, Electrolyte, and Acid–base Balance	• Immune System Introduction: https://www.youtube.com/watch?v=GIJK3dwCWCw • Innate vs Adaptive Immune System : https://www.youtube.com/watch?v=9_uTdCHp7vI • Respiratory System Introduction : https://www.youtube.com/watch?v=0fVoz4V75_E • Urinary System Intro 1: https://www.youtube.com/watch?v=l128tW1H5a8 • Urinary System Intro 2: https://www.youtube.com/watch?v=DlqyyyvTI3k • Acid-Base Balance: https://www.youtube.com/watch?v=VzEEs00v-JU
	Chapter 25: The Digestive System Chapter 26: Nutrition and Metabolism	• Digestive System Part 1: https://www.youtube.com/watch?v=yIoTRGfcMqM • Digestive System Part 2: https://www.youtube.com/watch?v=yIoTRGfcMqM • How the digestive System Works: https://www.youtube.com/watch?v=X3TAROotFfM • Digestive System Histology: https://www.youtube.com/watch?v=Qp7_vF-eUKE • Digestion & Metabolism: https://www.youtube.com/watch?v=fR3NxCR9z2U
	Chapter 27: The Male Reproductive System	• Male Reproductive System: https://www.youtube.com/watch?v=-XQcnO4iX_U • Histology of Male Reproductive

	Chapter 28: The Female Reproductive System	System: https://www.youtube.com/watch?v=BdQPfFTzMQY • Prostate and Cancer: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17046 • Female Reproductive System: https://www.youtube.com/watch?v=RFDatCchpus • Histology of Female Reproductive System: https://www.youtube.com/watch?v=6EC4DFP78k0 • Breast Cancer: https://anatomy.mheducation.com/html/apr.html?animal=human&id=17047
	Chapter 29: Human Development and Aging *Summary*	• ***Human development: Sex and Fertilization: https://www.youtube.com/watch?v=SUdAEGXLO-8*** • ***Stages of Human Development: https://www.youtube.com/watch?v=zBrLaVGLrcg*** • ***Biology of Aging: https://www.youtube.com/watch?v=xHlNXzfCv0o***

These animations are accessible, closed-captioned, browser-based files.

Chapter 1

APR Module 1: Body Orientation: Organ Systems: Nervous System
APR Module 1: Body Orientation: Organ Systems: Digestive System
APR Module 1: Body Orientation: Planes of Section: Coronal Plane
APR Module 1: Body Orientation: Directional Terms: Anterior
APR Module 1: Body Orientation: Body Regions: Frontal region
APR Module 1: Body Orientation: Body Cavities: Abdominal Cavity
APR Module 1: Body Orientation: Pleura and Pericardium
APR Module 1: Body Orientation: Abdominal Quadrants and Regions: Umbillical region
Homeostasis: Introduction
Homeostasis: Digestion and Blood Glucose
Homeostasis: Hypoglycemic Condition
Homeostasis: Homeostasis of Blood Glucose
Positive and Negative Feedback

Chapter 2

APR Module 2: Cells and Chemistry: Animations: Atomic Structure
Atom Structure
APR Module 2: Cells and Chemistry: Animations: Bonds
Formation of an Ionic Compound

Formation of a Covalent Compound
Polarity of Molecules
Dissolution of an Ionic and a Covalent Compound
Water Properties
Buffers
Acid Dissociation
Prepping a Solution
Dilution
Enzyme Action and the Hydrolysis of Sucrose
Overview of Lipids
Carbohydrate Structure and Function
DNA structure
Protein Structure and Function
Protein Denaturation

Chapter 3
APR Module 2: Cells and Chemistry: Animations: NADH Oxyative-Reduction Reactions
APR Module 2: Cells and Chemistry: Animations: Enzymes
What are Enzymes?
Enzyme Action and the Hydrolysis of Sucrose
Biochemical pathway
APR Module 2: Cells and Chemistry: Animations: Electron Transport and ATP Synthesis
APR Module 2: Cells and Chemistry: Animations: Glycolysis
Cellular Respiration: Glycolysis
APR Module 2: Cells and Chemistry: Animations: Kreb's Cycle
Cellular Respiration: Citric Acid
APR Module 2: Cells and Chemistry: Animations: Electron Transport and ATP Synthesis
Cellular Respiration: Electron Transport Chain
Cellular Respiration: Summary
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Nucleus
APR Module 2: Cells and Chemistry: Dissection: Plasma Membrane
APR Module 2: Cells and Chemistry: Animations: Diffusion
APR Module 2: Cells and Chemistry: Animations: Facilitated Diffusion
APR Module 2: Cells and Chemistry: Animations: Osmosis
Membrane Transport: Osmosis
APR Module 2: Cells and Chemistry: Animations: Osmosis and Tonicity
Hemolysis and Crenation
APR Module 2: Cells and Chemistry: Animations: Sodium-Potassium pump
Primary Active Transport
APR Module 2: Cells and Chemistry: Animations: Cotransport
APR Module 2: Cells and Chemistry: Animations: Endocytosis and Exocytosis
Membrane Transport: Diffusion
Neurotransmission: Resting Membrane Potential and Depolarization
Membrane Bound Receptors
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Smooth Endoplasmic Reticulum
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Golgi Appartatus
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Lysosome
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Mitochondrian
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Rough Endoplasmic Reticulum
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Intermediate Filament

APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Microvillus
APR Module 2: Cells and Chemistry: Dissection: Generalized Cell: Overview: Nucleus

Chapter 4
APR Module 2: Cells and Chemistry: Animation: Transcription
Molecular Biology: Gene Transcription
APR Module 2: Cells and Chemistry: Animation: Translation (Protein Synthesis)
Molecular Biology: Gene Translation
APR Module 2: Cells and Chemistry: Animations: Cell Cycle and Mitosis
Cell Cycle: Introduction
APR Module 2: Cells and Chemistry: Animations: DNA Replication
DNA Replication: Leading, Lagging strands
Cell Cycle: Mitosis

Chapter 5
APR Module 3: Tissues: Animations: Epithelia overview
Cells, Tissues, etc…
APR Module 3: Tissues: Histology: Simple Squamous epithelium
APR Module 3: Tissues: Histology: Simple Cuboidal epithelium
APR Module 3: Tissues: Histology: Simple Columnar epithelium (nonciliated)
APR Module 3: Tissues: Histology: Simple Columnar epithelium (ciliated)
APR Module 3: Tissues: Histology: Pseudostratified Columnar Epithelia
APR Module 3: Tissues: Histology: Keritanized Stratified Squamous Epithelium
APR Module 3: Tissues: Histology: Nonkeritanized Stratified Squamous Epithelium
APR Module 3: Tissues: Stratified Cuboidal Epithelium
APR Module 3: Tissues: Stratified Columnar Epthelium
APR Module 3: Tissues: Transitional Epithelium
APR Module 3: Tissues: Animations: Connective Tissue overview
APR Module 3: Tissues: Histology: Areolar Connective Tissue
APR Module 3: Tissues: Histology: Adipose Connective Tissue
APR Module 3: Tissues: Histology: Reticular Connective Tissue
APR Module 3: Tissues: Histology: Dense Regular Connective Tissue
APR Module 3: Tissues: Histology: Dense Irregular Connective Tissue
APR Module 3: Tissues: Histology: Elastic Connective Tissue
APR Module 3: Tissues: Histology: Hyaline Cartilage
APR Module 3: Tissues: Histology: Fibrocartilage
APR Module 3: Tissues: Histology: Elastic Cartilage
APR Module 3: Tissues: Histology: Compact Bone
APR Module 3: Tissues: Histology: Blood
APR Module 3: Tissues: Histology: Skeletal Muscle
APR Module 3: Tissues: Histology: Cardiac Muscle
APR Module 3: Tissues: Histology: Smooth Muscle
APR Module 3: Tissues: Histology: Nervous Tissue

Chapter 6
APR Module 4: Integumentary System: Dissection: Thin Skin and Subcutaneous Tissue: Epidermis
APR Module 4: Integumentary System: Histology: Thick Skin: LM Low Magnification: Epidermis
APR Module 4: Integumentary System: Histology: Thin Skin: LM Low Magnification
APR Module 4: Integumentary System: Dissection: Thin Skin and Subcutaneous Tissue: View layers: Dermis

APR Module 4: Integumentary System: Histology: Thin Skin: LM High Magnification:Epidermis
APR Module 4: Integumentary System: Dissection: Fingernail
APR Module 4: Integumentary System: Histology: Hair Follice: LM medium magnification
APR Module 4: Integumentary System: Histology: Sebaceous Gland: LM Low Magnification

Chapter 7
APR Module 5: Skeletal: Dissection: Femur: Anterior and Coronal View
APR Module 5: Skeletal: Histology: Compact Bone - High Magnification: Osteocyte
APR Module 5: Skeletal: Histology: Compact Bone - Low Magnification
APR Module 5: Skeletal: Histology: Compact Bone - High Magnification: Canaliculus
APR Module 5: Skeletal: Histology: Compact Bone - SEM - Central Canal of Osteon
APR Module 5: Skeletal: Histology: Spongy Bone - Med Mag - Trabeculae of spongy bone
APR Module 5: Skeletal: Histology: Hyaline Cartilage: High Magnification: Chondrocyte (in lacuna)
APR Module 5: Skeletal: Imaging: Hand: Teen Aged: Epiphyseal plate
APR Module 5: Skeletal: Animations: Appositional Bone Growth
Bone Growth in Width
Osteoporosis
APR Module 5: Skeletal: Imaging: Bone Scan: Tibia

Chapter 8
APR Module 5: Skeletal: Animations: Skull
APR Module 5: Skeletal: Dissection: Skull: Superior: Sagittal Suture
APR Module 5: Skeletal: Dissection: Skull: Lateral: Temporal bone
APR Module 5: Skeletal: Dissection: Skull: Sagittal: Sphenoid Sinus
APR Module 5: Skeletal: Dissection: Skull: Inferior: Palatine Bone
APR Module 5: Skeletal: Dissection: Skull- Cranial Cavity: Superior: Sella Turcica
APR Module 5: Skeletal: Dissection: Frontal Bone
APR Module 5: Skeletal: Dissection: Parietal Bone
APR Module 5: Skeletal: Dissection: Temporal Bone
APR Module 5: Skeletal: Dissection: Occipital Bone
APR Module 5: Skeletal: Dissection: Shpenoid Bone
APR Module 5: Skeletal: Dissection: Ethmoid Bone
APR Module 5: Skeletal: Dissection: Maxilla Bone
APR Module 5: Skeletal: Dissection: Mandible
APR Module 5: Skeletal: Dissection: Orbit: Lacrimal Bone
APR Module 5: Skeletal: Dissection: Verterbral Column: Atlas
APR Module 5: Skeletal: Dissection: Thoracic Vertebrae
APR Module 5: Skeletal: Dissection: Cervical Vertebrae
APR Module 5: Skeletal: Dissection: Thoracic Vertebrae
APR Module 5: Skeletal: Dissection: Lumbar Vertebrae
APR Module 5: Skeletal: Dissection: Atlas (C1) vertebrae
APR Module 5: Skeletal: Dissection: Sacrum
APR Module 5: Skeletal: Dissection: Thoracic cage
APR Module 5: Skeletal: Dissection: Clavicle
APR Module 5: Skeletal: Dissection: Scapula: Spine of Scapula
APR Module 5: Skeletal: Dissection: Humerus
APR Module 5: Skeletal: Dissection: Radius and Ulna: Radius
APR Module 5: Skeletal: Dissection: Wrist and Hand: Carpal bones
APR Module 5: Skeletal: Dissection: Pelvis: Pelvic inlet
APR Module 5: Skeletal: Dissection: Hip Bone: Acetabulum
APR Module 5: Skeletal: Dissection: Femur

APR Module 5: Skeletal: Dissection: Patella
APR Module 5: Skeletal: Dissection: Tibia and Fibula: Tibia
APR Module 5: Skeletal: Dissection: Ankle and Foot: Tarsal Bones

Chapter 9
APR Module 5: Skeletal: Imaging: Hand (teen-aged)
APR Module 5 Skeletal: Animations: Synovial Joint
APR Module 5 Skeletal: Animations: Temporomandiublar Joint
APR Module 5 Skeletal: Animations: Glenohumeral Joint
APR Module 5 Skeletal: Animations: Elbow Joint
APR Module 5 Skeletal: Animations: Hip Joint
APR Module 5 Skeletal: Animations: Knee Joint
APR Module 5 Skeletal: Animations: Tibiofibulotalar joint

https://www.arthritis-health.com/video/shoulder-osteoarthritis-video
and add joint replacement

Chapter 10
APR Module 6: Muscular: Dissection: Head and Neck: Anterior View: Frontalis
APR Module 6: Muscular: Dissection: Orbit
APR Module 6: Muscular: Dissection: Head and Neck: Lateral View: masseter
APR Module 6: Muscular: Dissection: Head and Neck: Lateral View: Muscles: Muscles of Chewing and S?walloweing: Pharyngeal constrictors
APR Module 6: Muscular: Dissection: Head and Neck: Anterior View: Muscles: Sternocleidomastoid
APR Module 6: Muscular: Dissection: Head and Neck: Lateral view: Muscles: Sternocleidomastoid
APR Module 6: Muscular: Dissection: Head and Neck: Posterior view: Muscles: Splenius capitis
APR Module 6: Muscular: Dissection: Back: Posterior: Erector spinae
APR Module 6: Muscular: Dissection: Thorax: Anterior: Muscles: Diaphragm
APR Module 6: Muscular: Dissection: Abdomen: Anterior View: Rectus Abdominis
APR Module 6: Muscular: Dissection: Shoulder and Arm: Anterior View: Deltoid
APR Module 6: Muscular: Animation: Muscle Actions: Pectoralis Major
APR Module 6: Muscular: Animation: Muscle Actions: Latissimus Dorsi
APR Module 6: Muscular: Dissection: Shoulder and Arm: Posterior View: Infraspinatus
APR Module 6: Muscular: Dissection: Shoulder and Arm: Anterior View: Biceps Brachii
APR Module 6: Muscular: Dissection: Forearm and Hand: Anterior View: Supinator
APR Module 6: Muscular: Animation: Muscle Actions: Flexor Digitorum Superficialis
APR Module 6: Muscular: Dissection: Wrist and Hand: Anterior View: Flexor Pollicis Brevis
APR Module 6: Muscular: Dissection: Hip and Thigh: Anterior View: Iliopsoasm.
APR Module 6: Muscular: Dissection: Hip and Thigh: Anterior View: Rectus Femoris
APR Module 6: Muscular: Dissection: Hip and Thigh: Posterior View: Gluteus Maximus
APR Module 6: Muscular: Animation: Muscle Actions: Gastrocnemius
APR Module 6: Muscular: Dissection: Leg & Foot: Posterior: Gastrocnemius m.
APR Module 6: Muscular: Dissection: Foot: Plantar: Flexor digitorum brevism.

Chapter 11
APR Module 6: Muscular: Animations: Skeletal Muscle
APR Module 6: Muscular: Histology: Skeletal Muscle Striations: LM High Magnification: Skeletal Muscle Fibers
APR Module 6: Muscular: Animations: Sliding Filament
APR Module 6: Muscular: Histology: Sarcomere
Muscle Contraction: Muscle Anatomy
APR Module 6: Muscular: Histology: Neuromuscular Junction: End Plate

APR Module 6: Muscular: Animations: Excitation-Contraction Coupling
Function of the Neuromuscular Junction
Action Potentials and Muscle Contraction
APR Module 6: Muscular: Animations: Cross Bridge Cycle
Breakdown of ATP and Crossbridge Movement during muscle Contraction
Muscle Contraction: Sliding Filament Model
Sarcomere Contraction
Muscle Contraction: Regulation by Calcium
Muscle Contraction: Summary
APR Module 6: Muscular: Histiology: Cardiac Muscle
APR Module 6: Muscular: Histiology: Smooth Muscle: LM: High Magnification

Chapter 12
APR Module 7: Nervous: Dissection: Brain: coronal
APR Module 7: Nervous: Histology: Multipolar Neuron
APR Module 7: Nervous: Animation: Reflex Arc
Neurotransmission: Introduction
Neurotransmission: Synapse
APR Module 7: Nervous: Histology: Schwann Cell
APR Module 7: Nervous: Histology: Unmyelinated Axon: LM Low magnification: myelin sheath:
APR Module 7: Nervous: Animation: Chemical Synapse
Neurotransmission: Resting Membrane Potential and Depolarization
Voltage Gated Channels
Nerve Impulse
Action Potential Propagation: Unmyelinated
Neurotransmission: Action Potential Propogation

Chapter 13
APR Module 7: Nervous: Dissection: Spinal Cord: Overview: Spinal cord
APR Module 7: Nervous: Dissection: Spinal Cord: Overview: Cervical Region of Spinal Cord
APR Module 7: Nervous: Dissection: Spinal Cord: Overview: Thoracic Region of Spinal Cord
APR Module 7: Nervous: Dissection: spinal Cord: Lumbar Region of Spinal Cord
APR Module 7: Nervous: Dissection:Spinal Cord: Overview: Sacral Region of Spinal Cord
APR Module 7: Nervous: Animation: Typical spinal Nerve: Grey matter of the spinal cord
APR Module 7: Nervous: Dissection: Spinal Cord: Typical Spinal Nerve: White matter of the spinal cord
APR Module 7: Nervous: Animation: Typical spinal Nerve
APR Module 7: Nervous: Dissection:Spinal Cord: Overview: C2 Dermatome
APR Module 7: Nervous: Dissection: Peripheral Nerves: Cervical Plexus: Roots
APR Module 7: Nervous: Dissection: Peripheral Nerves: Brachial Plexus and Branches
APR Module 7: Nervous: Dissection: Peripheral Nerves: Lumbosacral Plexus: Lumbar Plexus
APR Module 7: Nervous: Animation: Reflex Arc

Chapter 14
APR Module 7: Nervous: Animation: Divisions of the Brain
APR Module 7: Nervous: Dissection: Brain: Inferior: Optic chiasm
APR Module 7: Nervous: Dissection: Brain: Lateral:Corpus callosum
APR Module 7: Nervous: Dissection: Brain: Coronal: Corpus callosum
APR Module 7: Nervous: Animation: Meninges
APR Module 7: Nervous: Animation: Brain Ventricles Fly Through

APR Module 7: Nervous: Animation: CSF flow
APR Module 7: Nervous: Animation: Divisions of the Brain
APR Module 7: Nervous: Imaging: Brain (superior view): Precentral Gyrus
APR Module 7: Nervous: Dissection: Brain MRI: Anterior Commissure
APR Module 7: Nervous: Dissection: Brain: Lateral: Thalamus
APR Module 7: Nervous: Dissection: Brain: Lateral: Thalamus
APR Module 7: Nervous: Dissection: Brain: Lateral: HypoThalamus
APR Module 7: Nervous: Dissection: Brain: Coronal: Brainstem
APR Module 7: Nervous: Dissection: Brain: Coronal: Cerebral Peduncle
APR Module 7: Nervous: Dissection: Brain: Coronal: Brainstem
APR Module 7: Nervous: Dissection: Brain: Coronal: Cerebellum
APR Module 7: Nervous: Dissection: Brain: Coronal: Hippocampus
APR Module 7: Nervous: Dissection: Cranial Nerves: Inferior Brain: Olfactory Bulbs

Chapter 15
APR Module 7: Nervous: Dissection: sympathetic (ANS) Overview: Sympathetic Trunk
APR Module 7: Nervous: Dissection: Parasympathetic (ANS) Overview: Pelvic Splanchnic nn.
APR Module 7: Nervous: Dissection: Parasympathetic (ANS) Overview: Parasympathetic innervation of all effectors
APR Module 7: Nervous: Dissection: sympathetic (ANS) Overview: Sympathetic innervation of all effectors
APR Module 7: Nervous: Dissection: sympathetic (ANS) Thoracic Region: Sympathetic trunk
APR Module 7: Nervous: Dissection: sympathetic (ANS) Overview: Celiac ganglion

Chapter 16
APR Module 7: Nervous: Dissection: Smell: Nasal Cavity: lateral: Olfactory mucosa
Taste
APR Module 7: Nervous: Dissection: Taste: tongue: Superior: Dorsum of tongue
APR Module 7: Nervous: Dissection: Vision: Eye Lateral: cornea
APR Module 7: Nervous: Dissection: Vision: Eye Lateral: choroid
APR Module 7: Nervous: Histology: Vision: Retina: Neural retina
Vision
APR Module7: Nervous: Animation: Vision
APR Module7: Nervous: Dissection: Hearing/Balance: Ear Anterior: Tympanic membrane
APR Module7: Nervous: Dissection: Hearing/Balance: Ear Anterior: Cochlea
Hearing
Effect of Sound Waves on Cochlear Structures
Sense and Balance

Chapter 17
Hormonal Communication
Intracellular Receptor Model
Mechanism of Steroid Hormone Action
Membrane Bound Receptors (That…)
APR Module 8: Endocrine: Animations: Second messengers
Signal Amplification
APR Module 8: Endocrine: Dissection: Hypothalamus
APR Module 8: Endocrine: Animations: Hypothalamus and Pituitary Glands
APR Module 8: Endocrine: Dissection: Thyroid gland
APR Module 8: Endocrine: Animations: Thyroid Gland

Mechanism of Thyroxine Action
APR Module 8: Endocrine: Animations: Suprarenal (adrenal) glands
APR Module 8: Endocrine: Dissection: Pancreas Gland
APR Module 8: Endocrine Animations: Pancreas
Blood Sugar Regulation in Diabetics (new)
Blood Sugar Regulation
APR Module 8: Endocrine Animations: Parathyroid

Chapter 18
APR Module 3.:Tissues: Blood: Medium Mag: Platelets
APR Module 9: Cardiovascular: Animations: Hemopoiesis
APR Module 9: Cardiovascular: Histology: Blood (peripheral smear): platelet
APR Module 9: Cardiovascular: Histology: Blood (peripheral smear): erythrocyte
APR Module 9: Cardiovascular: Animations: Hemoglobin Breakdown
Hemoglobin Breakdown
APR Module 9: Cardiovascular: Histology: Neutrophil
APR Module 9: Cardiovascular: Histology: Eosinophil
APR Module 9: Cardiovascular: Histology: Basophil
APR Module 9: Cardiovascular: Histology: Lymphocyte:
APR Module 9: Cardiovascular: Histology: Monocyte

Chapter 19
APR Module 9: Cardiovascular: Animation: Cardiovascular System Overview
APR Module 9: Cardiovascular: Animations: Heart Fly Through
APR Module 9: Cardiovascular: Animation Blood Flow through the Heart
APR Module 9: Cardiovascular: Dissection: Thorax: Arteries-Anterior: Apex of heart
APR Module 9: Cardiovascular: Dissection: Thorax: Arteries Anterior: Fibrous Pericardium
APR Module 9: Cardiovascular: Dissection: Heart: Vasculature Anterior: Anterior interventricular branch
APR Module 9: Cardiovascular: Dissection: Heart: Vasculature Posterior: Posterior interventricular artery
APR Module 9: Cardiovascular: Dissection: Heart: Internal Features: Anterior: Interatrial septum
APR Module 9: Cardiovascular: Dissection: Heart: Internal Features: Right Atrioventricular valve
APR Module 9: Cardiovascular: Histology: Cardiac Muscle: Branched cardiac muscle fiber
APR Module 9: Cardiovascular: Dissection: Heart: Vasculature Anterior: Right coronary artery
Conducting System of the Heart
Cardiac cycle

Chapter 20
APR Module 9: Cardiovascular: Dissection: Muscular artery and medium sized vein: Tunica intima of muscular a.
APR Module 9: Cardiovascular: Imaging: Aortic Aneurysm: CTA Anterior
APR Module 9: Cardiovascular: Animations: Capillary Exchange
Fluid exchange across walls of capillaries
APR Module 9: Cardiovascular: Animations: Baroreceptor Reflex
Chemoreceptor Reflex Control of Blood Pressure
Baroreceptor Reflex Control of Blood Pressure
APR Module 9: Cardiovascular: Animations: Pulmonary and Systemic Circulation
APR Module 9: Cardiovascular: Animation: Cardiovascular System Overview
APR Module 9: Cardiovascular: Dissection: Brain: Arteries Inferior: Basilar artery

APR Module 9: Cardiovascular: Dissection: Brain: Veins: Lateral: Inferior sagittal sinus
APR Module 9: Cardiovascular: Dissection: Abdomen: Celiac Trunk: Anterior: Celiac artery
APR Module 9: Cardiovascular: Dissection: Abdomen: Inferior Vena Cava
APR Module 9: Cardiovascular: Dissection: Abdomen: Abdominal Aorta
APR Module 9: Cardiovascular: Animations: Hepatic Portal System
APR Module 9: Cardiovascular: Dissection: Shoulder and Arm: Vasculature Anterior: Brachial artery
APR Module 9: Cardiovascular: Dissection: Hip and Thigh: Vasculature Anterior: Femoral a.
APR Module 9: Cardiovascular: Dissection: Hip and Thigh: Vasculature Posterior: Popliteal vein

Chapter 21
Lymphatic System
APR Module 10: Lymphatic: Animations: Lymphatic System Overview
APR Module 10: Lymphatic: Dissection: Thoracic: Anterior: Thoracic Duct
APR Module 10: Lymphatic: Dissection: Thoracic: Thymus: Adult: Remnant of Thymus
APR Module 10: Lymphatic: Histology: Lymph Node: LM Low Magnification: Capsule of Lymph Node
APR Module 10: Lymphatic: Histology: Spleen: Capsule of Spleen
APR Module 10: Lymphatic: Dissection: Tonsils: Lateral: Pharyngeal Tonsil
Immune Response
Antiviral Activity of Interferon
Complement Activation
Inflammatory Response
Antigen Processing
Antigenic Determinants Epitopes
Cytotoxic T Cells Activity Against Target Cells
Interaction of Antigen Presenting Cells and T Helper Cells
Vaccination
APR Module 10: Lymphatic: Animations: IgE mediated hypersensitivity

Chapter 22
Respiratory System Overview
APR Module 11 Respiratory: Histology: Respiratory Epithelium: LM High Magnification: Goblet Cell of Respiratory Epithelium
APR Module 11: Respiratory: Dissection: Nasal Cavity: Coronal: Nasal Septum
APR Module 11: Respiratory: Dissection: Nasal Cavity: Coronal: Maxillary Sinus
APR Module 11: Respiratory: Imaging: Upper Respiratory: MRI Sagittal: Nasopharynx
APR Module 11: Respiratory: Dissection: Larynx: Anterior: Laryngeal Cartilages
APR Module 11: Respiratory: Dissection: Trachea: Anterior
APR Module 11: Respiratory: Dissection: Lower Respiratory: Anterior: Segmental Bronchus and Branches
APR Module 11 Respiratory: Histology: Alveolus: SEM Low magnification: Alveolus
APR Module 11: Respiratory: Dissection: Lower Respiratory: Anterior: Right lung
APR Module 11: Respiratory: Dissection: Lower Respiratory: Anterior: Left lung
Smoking risks
APR Module 11 Respiratory: Animations: Thoracic Cavity Dimensional Changes
Alveolar Pressure Inspiration Expiration
Diffusion Across Respiratory Membrane
Changes in the Partial Pressure of Oxygen and Carbon Dioxide
Gas Exchange During Respiration

Chapter 23
APR Module 13: Urinary: Animations: Urinary System Overview
APR Module 13: Urinary: Imaging: Kidney: CT: Axial 1: Left kidney
APR Module 13: Urinary: Animations: Kidney Gross Anatomy
APR Module 13: Urinary: Animations: Kidney Microscopic Anatomy
APR Module 13: Urinary: Histology: Renal Cortex: Renal Corpuscle
APR Module 13: Urinary: Animations: Urine Formation
Kidney Function
APR Module 13: Urinary: Histology: Podocyte: SEM High Magnification
Cotransport: Symport and Antiport
Membrane Transport: Diffusion
Membrane Transport: Active Transport
APR Module 13: Urinary: Dissection: Upper Urinary: Anterior: Ureter
APR Module 13: Urinary: Dissection: Lower Urinary: Sagittal view: Urinary Bladder
APR Module 13: Urinary: Dissection: Lower Urinary- male: Sagittal view: Spongy Urethra
Micturition Reflex

Chapter 24
How Much Water Do I Need
Calcium levels in the blood
APR Module 13: Urinary: Histology: Renal Corpuscle: LM High Magnification: Macula Densa
APR Module 13: Urinary: Animations: Urine Formation
APR Module 13: Histology: Renal Corpuscle: LM High Magnification: Distal convoluted Tubule

Chapter 25
Organs of digestion
G.I. Tract overview
APR Module 12: Digestive: Histology: Duondenum: Low Magnification: Mucosa of Duodenum
APR Module 12: Digestive: Dissection: Oral Cavity and Pharynx: Oral cavity proper
APR Module 12: Digestive: Dissection: Salivary glands: Submandibular glad [4]
APR Module 12: Digestive: Dissection: Teeth: Mandibular teeth
APR Module 12: Digestive: Animations: Stomach
APR Module 12: Digestive: Histology: Stomach: LM Medium magnification: Gastric pit
Hydrochloric acid production of the stomach
Ulcers
Three phases of gastric secretion
Hormones and gastric secretion
APR Module 12: Digestive: Histology: Small Intestine
Absorption of Nutrients in the Small Intestine
APR Module 12: Digestive: Animations: Liver
APR Module 12: Digestive: Histology: Liver: LM Low Magnification: Portal Triad
Digestion, Absorption: Emulsification with Bile
APR Module 12: Digestive: Dissection: Biliary Ducts: Anterior: Pancreas
APR Module 12: Digestive: Dissection: Abdominal Cavity: Anterior: Right colic Flexure
Reflexes in the Colon
Enzyme Action and the Hydrolysis of Sucrose
Small Intestine Digestion
APR Module 12: Digestive: Animations: Digestive System Overview

Chapter 26
Carbohydrate Structure and Function
Lipid Overview
Digestion and Metabolism Overview
Six Classes of Essential Nutrients
Fiber: Overview
Limiting Amino Acids
B Vitamins
Vitamins: Overview
Introduction to Food Labels
Blood Sugar Regulation
Lipoproteins Explained
APR Module 12: Digestive: Animations: Liver
Cellular Respiration: Digestion
Cellular Respiration: Summary

Chapter 27
APR Module 14 Reproductive: Animations: Male Reproductive System Overview
APR Module 14 Reproductive: Dissection: Penis and Scrotum: Spermatic cord
APR Module 14 Reproductive: Histology: Seminiferous tubule: SEM Low magnification
APR Module 14 Reproductive: Animations: Spermatogenesis
Spermatogenesis
APR Module 14 Reproductive: Dissection: Testes and spermatic cord: Vas deferens

Chapter 28
APR Module 14 Reproductive: Dissection: Perineum: Female: Urogenital triangle
Meiosis: Interphase and Meiosis I
How Meiosis Works
Meiosis: Meiosis II
APR Module 14 Reproductive: Female reproductive System Overview
APR Module 14 Reproductive: Dissection: Pelvis Female: Sagittal view: Uterus
APR Module 14 Reproductive: Histology: Ovary: Germinal epithelium
Maturation of the Follicle and Oocyte
APR Module 14 Reproductive: Animations: Female Reproductive Cycles
APR Module 14 Reproductive: Dissection: Pelvis Female: Superior view: Uterine Tube
APR Module 14 Reproductive: Histology: Vagina: Epithelium of Vagina
APR Module 14 Reproductive: Dissection: Breast: Female: Breast

Chapter 29
Ovulation thru Implantation
APR Module 2 Cells & Chemistry: Chromosome: Centromere

*The schedule is subject to change - check blackboard for changes or important announcements.
Course drop/withdrawal deadline: zzz yyy, 2021 (mmm)

ADDITIONAL COURSE INFORMATION and POLICIES

ACCESSIBILITY STATEMENT:

- As per Section 504 of the Vocational Rehabilitation Act of 1973 and the Americans with

Disabilities Act (ADA) of 1990, if a student needs an accommodation then the Office of Center for Accommodation and Support Services (CASS) located at UTEP needs to be contacted. Further info can be found in the following link: https://www.utep.edu/student-affairs/cass/

- If you have a condition, which may affect your ability to perform successfully in this course, you are encouraged to discuss this in confidence with the instructor and/or the director of the Center for Accommodation and Support Services (CASS). You may call 915-747-5148 for general information about the American with Disabilities Act (ADA) and the rights that you have as a UTEP student with a disability.
- Individuals with disabilities have the right to equal access and opportunity. It is the student's responsibility to contact the instructor and The Center for Accommodation and Support Services (CASS) at The University of Texas at El Paso.

ACADEMIC/SCHOLASTIC INTEGRITY:

- Academic dishonesty is an assault upon the basic integrity and meaning of a University.
- Cheating, plagiarism and collusion in dishonest activities are serious acts which erode the University's educational and research roles and cheapen the learning experience not only for the perpetrators, but also for the entire community.
- It is expected that UTEP students will understand and subscribe to the ideal of academic integrity and that they will be willing to bear individual responsibility for their work.
- Materials (written or otherwise) submitted to fulfill academic requirements must represent a student's own efforts.
- Any act of academic dishonesty attempted by a UTEP student is unacceptable and will not be tolerated. Violations will be referred to the Dean of Students Office for possible disciplinary action. Students may be suspended or expelled from UTEP for such actions.

TECHNICAL and BLACKBOARD SUPPORT:

- The University of Texas at El Paso provides free 24/7 Helpdesk support to academic students and faculty members teaching on-line through the [Tech Support Company]. The Helpdesk can provide answers to questions about using Blackboard, technology and services, as well as, technical support. Please visit the technical support page for more information.

SYLLABUS, IS SUBJECT TO CHANGE. PLEASE USE THE SYLLABUS AS A GUIDELINE FOR WHAT WILL BE DISCUSSED AND WHAT SHOULD BE LEARNED.

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EACH STUDENT IS ENCOURAGED TO FILL OUT THE COURSE EVALUATION. THIS IS A NEW COURSE THAT NEEDS TO BE SUPPORTED FOR THE BENEFIT OF CURRENT AND FUTURE STUDENTS AT UTEP.

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