

## EMSP 1111 - Paramedic Fundamentals (4 Credits)

# **Course Description**

Paramedic Fundamentals prepares the student to apply principles of advanced life support. During this course, they will advance their understanding of anatomy, physiology, pathophysiology, and the essential functions of a paramedic: operations, documentation, communications, etc. Essential skills of the paramedic will be taught during classroom instruction.

## **Course Objectives**

- Identify historical, educational, and research contributions to paramedicine and how they are incorporated into the role of paramedics in EMS and healthcare.
- Demonstrate comprehensive understanding and awareness of scene and personal safety, including execution of proper PPE and safety techniques.
- Identify and incorporate stress management techniques for yourselves and others.
- Demonstrate the essential elements of written and verbal communication and documentation required for the profession.
- Exhibit understanding of legal and ethical issues in EMS and appropriate incorporation into daily practice.
- Possess comprehensive understanding of anatomy, physiology, and pathophysiology as it relates to EMS and apply it to patient care situations.
- Perform thorough assessments of a patient experiencing an emergency.
- Execute appropriate assessment, treatment, and management of airway and respiratory emergencies.
- Demonstrate a high degree of professionalism and affinity to integrate well into EMS systems.
- Begin assimilating understanding of pharmacological interventions and mechanisms of actions.
- Perform all the skills and functions of an EMT with advanced proficiency.

#### **Course Outline**

- Advanced Anatomy, Physiology, and Pathophysiology
- EMS Systems
- Medicolegal and Ethical
- Communication and Documentation
- · Advanced Airway and Respiratory Assessment and Management

### **Assignments and Assessments**

Scenario Role Cards

Student-Facilitated Scenario Handout Student-Facilitated Scenario Prep

Instructor Resources Lesson Plan: Lesson 1 Sort It Cards: Lesson 1 Lecture Outline: Chapter 7 Required Resources Lesson Guide: Lesson 1

Chapter 7 Medical Terminology Watch the following video:

Introduction to Anatomy & Physiology: A&P #1

To Be Completed:

Interactive Lecture: Chapter 7

Lesson 1 Build It

Lesson 1 Self Assessment Recommended Resources

Slides: Chapter 7

Case Studies: Chapter 7

Assessment in Action: Chapter 7

Flashcards: Chapter 7
Lesson 1 In-Class Quiz
Instructor Resou rces
Lesson Plan: Lesson 23
Lecture Outline: Chapter 11
Required Resou rces
Lesson Guide: Lesson 23
Read the following:

Patient Assessment: Why the Basics Matter Early Patient Assessment: The Cornerstone of Care

How to Conduct the Patient Interview

Read: Chapter 11 Patient Assessment, p. 581-587

Recommended Resources

To Be Completed: Lesson 23 Discussion Lesson 23 Self Assessment Lesson 23 In-Class Quiz

Matt's Lesson 23 Patient Assessment.pptx

Instructor Resources Lesson Plan: Lesson 24 Lecture Outline: Chapter 11 Required Resources Lesson Guide: Lesson 24 Lesson 24 Discussion 1

Read: Chapter 11 Patient Assessment, p. 588-593 Student-Facilitated Scenario Handout: Lesson 24

Scenario Role Cards: Lesson 24 Lesson 24 Self Assessment Lesson 24 Discussion 2 Recommended Resources Slides: Chapter 11, #7-20

Virtual Ride-Along Video: Situational Awareness

Safety Considerations for EMS Workers - CDC: "Emergency

Medical Services Workers"
Lesson 24 In-Class Quiz
Instructor Resources
Lesson Plan: Lesson 25
Sort It Cards: Lesson 25
Lecture Outline: Chapter 11
Required Resources
Lesson Guide: Lesson 25

A Doctor's Touch Discussion

Read: Chapter 11 Patient Assessment, p. 630-695

The Paramedic General Physical Exam

Interactive Lecture: Chapter 11 Skill Evaluation Sheets: Chapter 11

Skill Drills: Chapter 11

Student-Facilitated Scenario Handout: Lesson 25

Scenario Role Cards: Lesson 25 Lesson 25 Self Assessment Recommended Resources

Slides: Chapter 11, #21-42, 98-225

Lesson 25 In-Class Quiz Instructor Resources Lesson Plan: Lesson 26 Sort It Cards: Lesson 26

Are You Listening? Handout: Lesson 26

Challenge Scenario: Lesson 26 Lecture Outline: Chapter 11 Lecture Outline: Chapter 12

Required Resources Lesson Guide: Lesson 26 Read t he following:

Read: Chapter 11 Patient Assessment, p. 604-629 Read: Chapter 12 Critical Thinkin:g and Clinical Decision

Making

EMS Providers Use Differential Diagnoses in Patient Care

Yes! EMTs Diagnose Patients Interactive Lecture: Chapter 12 Lesson 26 Self Assessment

Student-Facilitated Scenario Handout: Lesson 26

Scenario Role Cards: Lesson 26 Recommended Resources Slides: Chapter 11, #43-97

Slides: Chapter 12

Case Studies: Chapter 12

Assessment in Action: Chapter 12

Flashcards: Chapter 12 Lesson 26 In-Class Quiz Instructor Resources Lesson Plan: Lesson 2

Test Your Knowledge Handout: Lesson 2

Graphic Organizer: Lesson 2 Casino Cards: Lesson 2 Lecture Outline: Chapter 8

Required Resources

Read: Chapter 8 Anatomy and Physiology, p. 271-282

Watch the following videos:

Chemical Reaction Introduction: Chemistry of Life - Biology

(Kahn Academy)
Proteins and Enzymes

Lipids: Structure of Life - Structure of Fats (Triglycerides,

Phospholipids, Prostaglandins)

Introduction to pH: Biology Foundations - High School

Biology (Kahn Academy)

Visit and Explore:

American Association of Chemistry Teachers: Chemistry

Solutions

To Be Completed:

Lesson 2 Self Assessment
Recommended Resources
Slides: Chapter 8, #5-23
Lesson 2 In-Class Quiz
Instructor Resources
Lesson Plan: Lesson 3
Move It Role Cards: Lesson 3
Casino Cards: Lesson 3
Lecture Outline: Chapter 8
Required Resources

Read: Chapter 8 Anatomy and Physiology, p. 282-306

Watch the following videos:

Lesson Guide: Lesson 3

Introduction to the Cells: The Grand Cell Tour Scale of Cells: Structure of a Cell - Biology

Inside the Cell Membrane

Inda Club: Membranes and Transport - Crash Course Biology

Homeostasis and Negative/Positive Feedback

Mitosis: The Amazing Cell Process That Uses Division to

Multiply! (Updated)

Read: "More Than Half Your Body Is Not Human" by BBC

News

Complete the following:

Interactive Lecture: Chapter 8 (Part 1) A&P Intro,

Chemical/Cellular/Tissue Organization

Lesson 3 Build It Assignment Lesson 3 Self Assessment Recommended Resources Slides: Chapter 8, #24-68 Lesson 3 In-Class Quiz Instructor Resources Lesson Plan: Lesson 4

Draw It, Act It, Tell It Cards: Lesson 4

Nervous System Trivia PowerPoint: Lesson 4

Lecture Outline: Chapter 8 Required Resources Lesson Guide: Lesson 4

Read: Chapter 8 Anatomy and Physiology, p. 340-368

Watch the following videos:

Saltatory Conduction: Conduction Through Myelinated Nerve

Fibre-Physiology Medical Animations

Nervous System and Reflex Arc Anatomy- Cranial Nerves Overview

Crania'l Nerves Music Video Complete the following:

**Build It** 

Lesson 4 Self-Assessment Recommended Resources Slides: Chapter 8, #139-167 Lesson 4 In-Class Quiz Instructor Resources Lesson Plan: Lesson 5

Sensory Changes During Aging Handout: Lesson 5

Senses Worksheet: Lesson 5 Lecture Outline: Chapter 8 Required Resources Lesson Guide: Lesson 5

Read: Chapter 8 Anatomy and Physiology, p. 368-376

Watch the following videos: Vision: Crash Course A&P #18

Hearing and Balance: Crash Course A&P #17 Visual Illusions That Show How We (Mis)think

Lesson 5 Self-Assessment Recommended Resources Slides: Chapter 8. #168-175 Lesson 5 In-Class Quiz Instructor Resources Lesson Plan: Lesson 6 Lecture Outline: Chapter 8 Required Resources Lesson Guide: Lesson 6

Read: Chapter 8 Anatomy and Physiology, p. 445-451

Read: Chapter 9 Pathophysiology, p. 495-498

Watch the following videos: Kidney Function and Anatomy The Kidney and Nephron Parts of a Nephron

Glome·rular Filt ration in the Nephron Renin-Angiotensin-Aldosterone System

Renin Angiotensin Aldosterone System (RAAS): Short and

Sweet!

Complete the following:

Review: Khan Academy's "Tubular Reabsorption Article"

Urinary System Diagram Imbalance Illustration Lesson 6 Self-Assessment Recommended Resources Slides: Chapter 8, # 309-321

Khan Academy Test Your Knowledge

Lesson 6 In-Class Quiz Instructor Resources Lesson Plan: Lesson 7 Lecture Outline: Chapter 8 Graphic Organizer: Lesson 7

Required Resources Lesson Guide: Lesson 7

Read: Chapter 8 Anatomy and Physiology, p. 376-387

Watch the following videos:

Int ro to the Endocrine System: 7Health and Medicine Hormone Concentration Metabolism and Negative Feedback

Complete the following:

Interactive Lecture: Chapter 8 (Part .3) Nervous and

Endocrine

Glandular High School Yearbook

Glandular High School Yearbook Sample Page: Lesson 7

Lesson 7 Self Assessment Recommended Resources

**Endocrine System by Amoeba Sisters** 

Slides: Chapter 8, #176-194 Lesson 7 In-Class Quiz Instructor Resources Lesson Plan: Lesson 8 Lecture Outline: Chapter 8 Sort It Cards: Lesson 8 Required Resources Lesson Guide: Lesson 8

Read: Chapter 8Anatomy and Physiology, p. 401-411

Watch the following videos:

Arteries, Arterioles, Venules, and Veins: Health and Medicine Layers of a Blood Vessel: Circulatory System Physiology

The Life and TI mes of RBCs and Platelets

Blood Types: Human and Anatomy and Physiology Coagulation Cascade: Human Anatomy and Physiology

Complete the following:

**Get Body Smart** 

Lesson 8 Self Assessment Recommended Resources

Slides: Chapter 8 Lesson 8 In-Class Quiz Instructor Resources Lesson Plan: Lesson 9

Anatomy Labeling Challenge Handout: Lesson 9

Lecture Outline: Chapter 8 Required Resources Lesson Guide: Lesson 9

Read: Chapter 8 Anatomy and Physiology, p. 393-401

Watch the following videos:

Meet the Heart! Circulatory System Physiology

Lub Dub: Circulatory System Physiology

Layers of the Heart: Circulatory System Physiology

Complete the following:

Interactive Lecture: Chapter 8 (Part 4) Circulatory &

Lymphatic

CDC Heart Disease and Stroke Map Cardiac Action Potential Video Questions

**BioDigital Website Activity** 

LVAD Assignment

Lesson 9 Self Assessment
Recommended Resources
Slides: Chapter 8, #209-226
Lesson 9 In-Class Quiz
Instructor Resources
Lesson Plan: Lesson 10
Lecture Outline: Chapter 8
Required Resources
Lesson Guide: Lesson 10

Read: Chapter 8 Anatomy and Physiology, p. 434-445

Watch the following videos:

Metabolism and Nutrition, Part 1: Crash Course A&P #36 13 Metabolism and Nutrition, Part 2: Crash Course A&P #37 13 The Digestive System, Part 1: Crash Course A&P #33 B, The Digestive System: Part 2: Crash Course A&P #34 B, The Digestive System, Part 3: Crash Course A&P #35 B,

Complete the following:

Interactive Lecture: Chapter 8 (Part ,6) Digestive, Urinary,

Reproductive

Lesson 10 Self Assessment Recommended Resources Slides: Chapter 8, #283-308

Bozeman Science Video: The Digestive System B,

Lesson 10 In-Class Quiz Instructor Resources Lesson Plan: Lesson 11 Lecture Outline: Chapter 8 Lecture Outline: Chapter 9 Required Resources Lesson Guide: Lesson 11

Read: Chapter 8 Anatomy and Physiology, p. 411-413

Read: Chapter 9 Pathophysiology, p. 510-523

Watch the following videos:

The Sci Guys: Science at Home - The Naked Egg and

Osmosis 13

Immune System Physiology videos from the Khan Academy

13

Complete the following:
Lesson 11 Self Assessment
Recommended Resources
Slides: Chapter 8, #242-251
Slides: Chapter 9 #54-88
Lesson 11 In-Class Quiz
Instructor Resources
Lesson Plan: Lesson 12
Graphic Organizer: Lesson 12
Casino Cards: Lesson 12
Lecture Outline: Chapter 8
Required Resources
Lesson Guide: Lesson 12

Read: Chapter 8 Anatomy and Physiology, p. 308-340

Watch the following videos:

Skeletal System and Bone Anatomy Physiology B, The Skeletal System: Crash Course A&P #19 B, Joints: Crash Course A&P #20 B>

Long Bones, Short Bones, Flat Bones, Irregular Bones,

Sesamoid Bones B,

Muscles, Part 1: Muscle Cells - Crash Course A&P #21 B,

Complete the following:

Interactive Lecture: Chapter 8 (Part .2) Organ Systems,

Integumentary, Musculoskeletal Build It - Lesson 12 (Optional) Lesson 12 Self Assessment Recommended Resources Slides: Chaoter 8 #70-138 Lesson 12 In-Class Quiz

Instructor Resources Lesson Plan: Lesson 13 Sort It Cards: Lesson 13 Lecture Outline: Chapter 8 Required Resources

Lesson Guide: Lesson 13

Read: Chapter 8 Anatomy and Physiology, p. 413-434

Watch the following videos:

Respiratory System Physiology - Ventilation and Perfusion

(V:Q Ratio) Physiology 13

Lung function - Lung Volumes and Capacities 13

Oxyge111: Haemoglobin Dissociation Curve - Physiology 13

Ventilator vs, ECMO 13

How Does Asthma Work? Christopher E Gaw 13

Complete the following:

Interactive Lecture: Chapter 8 (Part 5) Respiratory System

Build lit - Lesson 13

Lesson 13 Self Assessment Recommended Resources Slides: Chapter 8, #251-282 Lesson 13 In-Class Quiz

Chapter 8 Matt's Version Part 1.pptx Chapter 8 Matt's Version Part 2.pptx

Instructor Resources Lesson Plan: Lesson 14

Age Gro1.1p Matching Game Cards: Lesson 14 Terminology Guessing Game Cards: Lesson 14

Lecture Outline: Chapter 10 Required Resources Lesson Guide: Lesson 14

Read: Chapter 10 Life Span Development, p. 555-578

Watch the following video:

The Growth of Knowledge: Crash Course Psychology #18 13

Complete the following: Interactive Lecture: Chapter 10 Lesson 14 Self Assessment Recommended Resources

The Living Body - Our Extraordinary Life B,

Slides: Chapter 10

Case Studies: Chapter 10

Assessment in Action: Chapter 10

Flashcards: Chapter 10

Lesson 14 In-Class Quiz Instructor Resources Lesson Plan: Lesson 15

Paramedic Responsibilities Concept Mapping Handout:

Lessson 15

Lecture Outline: Chapter 1 Required Resources Lesson Guide: Lesson 15

Read: Chapter 1 EMS Systems, p. 4-30

Watch the following videos:

History of EMS B,

EMS and Resuscitation History Es, Websit e: "SO Years of Modern EMS" B, JEMS article: "American EMS: 2027" B,

Complete the following: Interactive Lecture: Chapter 1 Lesson 15 Self Assessment Recommended Resources EMS Systems Presentation

Slides: Chapter 1 Case Studies: Chapter 1

Assessment in Action: Chapter 1

Flashcards: Chapter 1 Lesson 15 In-Class Quiz Instructor Resources Lesson Plan: Lesson 16 Challenge Scenario: Lesson 16 Scenario Role Cards: Lesson 16

Student-Facilitated Scenario Handout: Lesson 16

Required Resources Lesson Guide: Lesson 16 Before t he Reading

John Nance Near-Miss Story B,

The Importance and Value of the Checklist 13 Towards a "Just Culture" in Healthcare 13

Following the reading

Strategy for a National EMS Culture of Safety, EMS.gov (with

special focus on pages 8-13) 13 ~~

NAEMT Position Statement: Just Culture in EMS 13

Complete the following: First-Out Bag Checklist Lesson 16 Articles Discussion

Lesson 16 Quiz Instructor Resources Lesson Plan: Lesson 17

Student-Facilitated Scenario Handout: Lesson 17

Scenario Role Cards: Lesson 17 Lecture Outline: Chapter 2 Required Resources Lesson Guide: Lesson 17

Before the Reading Lesson 17 "Make Peace" Discussi'on

Lesson 17 "Stress Management" Discussion

Lesson 17 "Never Let Your Guard Down" Discussion

Read: Chapter 2 Workforce Safety and Wellness Patient Lifting Techniques PowerlPoint: Lesson 17

Skill Evaluation Sheets: Chapter 2

Skill Drills: Chapter 2 Complete the following: Interactive Lecture: Chapter 2

Lesson 17 Brochure Prep Assignment

Lesson 17 Quiz

Recommended Resources

Khan Academy Infection Diseases Video B,

NAEMT: "EMS Safety" B,

Master Your Mindset podcasts B,

Safe Call Now website 13

Slides: Chapter 2

Case Studies: Chapter 2

Assessment in Action: Chapter 2

Flashcards: Chapter 2 Instructor Resources Lesson Plan: Lesson 18

Injury Prevention Handout: Lesson 18

Public Health Surveillance Handout: Lesson 18 Student -Facilitated Scenario Handout: Lesson 18

Scenario Role Cards: Lesson 18 Lecture Outline: Chapter 3 Required Resources Lesson Guide: Lesson 18 Before the Reading

What Is Public Health? 13 Read: Chapter 3 Public Health

Complete the following: Upstreamist s Discussion Interactive Lecture: Chapter 3 Lesson 18 Self Assessment Recommended Resources

Slides: Chapter 3

Case Studies: Chapter 3

Assessment in Action: Chapter 3

Flashcards: Chapter 3 Lesson 18 In-Class Quiz Instructor Resources Lesson Plan: Lesson 19 Sort It Cards: Lesson 19

Medical, Legal, and Et hical Issues Tri.via PowerPoint:

Lesson 19

Student -Facilitated Scenario Handout: Lesson 19

Scenario Role Cards: Lesson 19 Lecture Outline: Chapter 4 Required Resources Lesson Guide: Lesson 19

Read: Chapter 4 Medical, Legal, and Ethical Issues

Complete the following: Interactive Lecture: Chapter 4

Lesson 19 Scope of Practice Discussion

Lesson 19 Videos Discussion

Lesson 19 Self-Assessment Recommended Resources

Slides: Chapter 4

Case Studies:: Chapter 4

Assessment in Action: Chapter 4

Flashcards: Chapter 4 Lesson 19 In-Class Quiz Instructor Resources Lesson Plan: Lesson 20 Lecture Outline: Chapter 1

Journal Club Handout: Lesson 20

Required Resources Lesson Guide: Lesson 20

Complete 1st: Fisdap Research 101 Assignment

Read: Chapter 1 EMS Systems, p. 30-37

Student-Facilitated Scenario Handout: Lesson 20

Scenario Role Cards: Lesson 20 Recommended Resources

Slides: Chapter 1

Montgomery County Hospital District (MCHD) Paramedic

Podcast, Episode 44: Medical

Literatrure 101 With Dr. Tony Seupaul 13

EMS World: A Guide to Statistical Significance in EMS

Research 13 ~~

EMS World: How to Search the Scientific Literature 13  $\sim$  I EMS World: Not all Evidence is Created Equal 13  $\sim$  I

Lesson 20 In-Class Quiz Instructor Resources Lesson Plan: Lesson 21

Listen and Draw Cards: Lesson 21

Lecture Outline: Chapter 5 Required Resources Lesson Guide: Lesson 21

Read: Chapter 5 Communications

Student - Facilitated Scenario Handout: Lesson 21

Scenario Role Cards: Lesson 21 Watch the following videos:

Cultures, Subcultures, and Countercultures: Crash Course

Sociology #11 13

Health Literacy and Cultural Competency 13

Complete the following: Interactive Lecture: Chapter 5 Radio Ramblings Discussion Lesson 21 Self-Assessment Recommended Resources

Slides: Chapter 5

Case Studies:: Chapter 5

Assessment in Action: Chapter 5

Flashcards: Chapter 5 Instructor Resources Lesson Plan: Lesson 22 Sort It Cards: Lesson 22 Lecture Outline: Chapter 6 Required Resources Lesson Guide: Lesson 22

Watch before reading: NTHSA's Office of EMS: EMS Data Use

Video 13

Complete the handout: Data Search Handout: Lesson 22

Read: Chapter 6 Documentation

Complete the following:

Complete & bring to class April 7th: Narrative Exercise

Handout: Lesson 22

Interactive Lecture: Chapter 6

Lesson 22 NEMSIS Best Practices Assignment

Lesson 22 Self Assessment Recommended Resources

Slides: Chapter 6

Case Studies:: Chapter 6

Assessment in Action: Chapter 6

Flashcards: Chapter 6 Instructor Resources Lesson Plan: Lesson 27

Challenge Scenario 1: Lesson 27 Challenge Scenario 2: Lesson 27

Airway Emergencies Trivia PowerPoint: Lesson 27

Lecture Outline: Chapter 16

Required Resources Lesson Guide: Lesson 27 Chapter 16 Airway Management

Watch the following videos:
Basics of Airway Management (3.
Pre-intubation Airway Management 13

AEMT 199 Paramedic - Advanced Skills: Ventilatory

Management Adult 13

AEMT 199 Paramedic - Advanced Skills: Suprglottic Airway

Device 13

Nasal Intubation 13 Review t he following: Skill Dr ills: Chapter 16

Skill Evaluation Sheets: Chapter 16

Complete the following: Interactive Lecture: Chapter 16 Lesson 27 Self Assessment

Student-Facilitated Scenario Handout: Lesson 27

Scenario Role Cards: Lesson 27 Recommended Resources

Slides: Chapter 16

Case Studies:: Chapter 16 Assessment in Action: Chapter 16

Flashcards: Chapter 16

Basic Nasal Fiber-Optic Intubation 13

Matt's Airway Quiz #1 Instructor Resources Lesson Plan: Lesson 28 Sort It Cards: Lesson 28

Challenge Scenario 1: Lesson 28 Challenge Scenario 2: Lesson 28

**Required Resources** 

Lesson Guide: Lesson 28

Read: Chapter 17 Respiratory Emergencies

Watch the following videos:

Introduction to the Respiratory System 13

Gas Exchange and Transport 13 Respirtory System - Overview 13

Oxyge111-Haemoglobin Dissociation Curve-Physiology 13

Complete the following:

Easy Auscultation - Lung Sounds and Guided Note-Taking

Assignment

Guided Note-Taking Handout: Lesson 28 Lesson 28 Lung Sounds Organizer Assignment Lun:g Sounds Graphic Organizer: Lesson 28

Lesson 28: Teach Back Assignment

Student-Facilitated Scenario Handout: Lesson 28

Scenario Role Cards: Lesson 28 Recommended Resources

Slides: Chapter 17

Lecture Outline: Chapter 17
Case Studies:: Chapter 17
Flashcards: Chapter 17
Matt's Quiz Round 2
Instructor Resources
Lesson Plan: Lesson 29
Disease Cards: Lesson 29
Challenge Scenario: Lesson 29
Lecture Outline: Chapter 17

Required Resources Lesson Guide: Lesson 29

Review: Chapter 17 Respiratory Emergencies

Watch the following videos: Virtual Ride-Along Video: COPD

Virtual Ride-Along Video: Respiratory Distress Virtual Ride-Along Video: Difficulty Breathing

Lesson 29 - Activity 1: Flashcards Lesson 29 - Activity 2: Drug Cards Resp iratory Drug Cards: Lesson 29 Lesson 29 - Activity 3: Scenarios

Capnography Scenarios Handout: Lesson 29

Interactive Lecture: Chapter 17 Lesson 28 and 29 Self Assessment Scenario Role Cards: Lesson 29 Recommended Resources

Look up and view the Youtube videos from Ninja Nerd

Science regarding the respiratory system Slides: Chapter 17

Case Studies:: Chapter 17

Assessment in Action: Chapter 17 Lesson 28 and 29 In-Class Quiz

Instructor Resources Lesson Plan: Lesson 43

Respiratory Drug Cards: Lesson 43 Think, Find, Ask Handout: Lesson 43 Challenge Scenario: Lesson 43

Required Resources Lesson Guide: Lesson 43

Read pages 767-768 of Chapter 13 Chapter 13 Principles of Pharmacology

View the following videos:

Respiratory Drugs: Memorization Tips for Nursing Students Metered-Dose Inhaler (MDI) Demonstration Wi thout Spacer

Nursing

Metered-Dose Inhaler (MDI) Demonstration Wi th Spacer

Nursing

EMT Nebulized Albuterol Nebulized Drug Administration Respiratory Drug Sheets: Lesson 43 Graphic Organizer. Lesson 43

Filing Cabinet Instructions: Lesson 43

Respiratory Drugs Filing Cabinet !Handout: Lesson 43

Respiratory Drugs Answer Key: Lesson 43 Respiratory Drugs Flashcards: Lesson 43

Scenario Role Cards: Lesson 43 Recommended Resources

Slides: Chapter 13

Lecture Outline: Chapter 13

Student - Facilitated Scenario Handout: Lesson 43

Instructor Resources Lesson Plan: Lesson 41 Bingo Cards: Lesson 41

Draw It, Act It, Tell It Cards: Lesson 41 Think, Find, Ask Handout: Lesson 41

Required Resources Lesson Guide: Lesson 41

Int roduction to the Pharmacology Unit PowerPoint Lesson

41

Read: Chapter 13 Principles of Pharmacology, p. 725-761

View the following videos:

Pharmacology: Pharmacokinettics (Made Easy)
Pharmacology: Pharmacodynamics (Made Easy)

Recommended Resources

Slides: Chapter 13

Lecture Outline: Chapter 13 Lesson 41 Self Assessment Lesson 41 In-Class Quiz

Test Prep

1st Term Summative Exam End Of Course Survey Virtual Ride-Alongs

Virtual Ride-Along Video: Allergic Reaction Virtual Ride-Along Video: Altered Mental Status

Virtual Ride-Along Video: Assault

Virtual Ride-Along Video: Attempted Suicide Virtual Ride-Along Video: Cardiac Arrest Virtual Ride-Along Video: Fall in Apartment

Virtual Ride-Along Video: Geriatric Altered Mental Status

Virtual Ride-Along Video: GI Bleed

Virtual Ride-Along Video: Mass-Casualty Incident Drill

Virtual Ride-Along Video: Motorcycle Crash Virtual Ride-Along Video: Pediatric Trauma Virtual Ride-Along Video: Psychiatric Emergency

Virtual Ride-Along Video: Seizure Virtual Ride-Along Video: Weakness

Virtual Ride-Along Video: Situational Awareness

Skill Videos

Skill Video: Apply Cervical Collar Skill Video: Bag-Mask Ventilation Skill Video: Bandaging Techniques

Skill Video: Bronchodilator: Metered-Dose Inhaler Skill Video: Bronchodilator: Small Volume Nebulizer

Skill Video: Epinephrine Auto-Injector Skill Video: Head Tilt-Chin Maneuver Skill Video: Intraosseous Access Skill Video: Intravenous Access Skill Video: Jaw-Thrust Maneuver Skill Video: Long Bone Injury

Skill Video: Mouth-to-Mask Ventilation Skill Video: Nasopharyngeal Airway Skill Video: Nasotracheal Intubation Skill Video: Oral Medication Administration

Skill Video: Oral Suctioning Skill Video: Oropharyngeal Airway

Skill Video: Orotracheal Intubation by Direct Laryngoscopy Skill Video: Oxygen Administration by Nonrebreathing Mask

Skill Video: Patient Lifting

Skill Video: Recognition of an Airway Obstruction Skill Video: Seated Spinal Motion Restriction

Skill Video: Spine Assessment

Skill Video: Supine Spinal Motion Restriction Skill Video: Tongue-Jaw Lift Maneuver Skill Video: Vital Signs Assessment

Soft-Skill Simulations

First Responder Support & Resilience, First Edition

Interactive Lectures

Interactive Lecture: Chapter 8 (Part 1) A&P Intro,

Chemical/Cellular/Tissue Organization

Interactive Lecture: Chapter 8 (Part .2) Organ Systems,

Integumentary, Musculoskeletal

Interactive Lecture: Chapter 8 (Part .3) Nervous and

Endocrine

Interactive Lecture: Chapter 8 (Part 4) Circulatory &

Lymphatic

Interactive Lecture: Chapter 8 (Part 5) Respiratory System Interactive Lecture: Chapter 8 (Part 6) Digestive, Urinary,

Reproductive Case Studies

Case Study Slides: Chapter 8 Case Study Slides: Chapter 9 Case Study Slides: Chapter 11 Case Study Slides: Chapter 13 Case Study Slides: Chapter 18

Learning Objectives: Chapter 42 Assessment in Action Learning Objectives: Chapter 43 Assessment in Action: Chapter 8 Assessment in Action: Chapter 9 Learning Objectives: Chapter 44 Assessment in Action: Chapter 11 Learning Objectives: Chapter 45 Learning Objectives: Chapter 46 Assessment in Action: Chapter 13 Assessment in Action: Chapter 18 Learning Objectives: Chapter 47 Learning Objectives: Chapter 48 Flashcard's Flashcards: Chapter 8 Learning Objectives: Chapter 49 Flashcards: Chapter 9 Learning Objectives: Chapter 50 Flashcards: Chapter 11 Learning Objectives: Chapter 51 Flashcards: Chapter 13 Learning Objectives: Chapter 52 Flashcards: Chapter 18 Learning Objectives: Chapter 53 Learning Objectives Audio Book Learning Objectives: Chapter 1 Audio Book: Chapter 1 Learning Objectives: Chapter 2 Audio Book: Chapter 2 Learning Objectives: Chapter 3 Audio Book: Chapter 3 Learning Objectives: Chapter 4 Audio Book: Chapter 4 Learning Objectives: Chapter 5 Audio Book: Chapter 5 Learning Objectives: Chapter 6 Audio Book: Chapter 6 Learning Objectives: Chapter 7 Audio Book: Chapter 7 Learning Objectives: Chapter 8 Audio Book: Chapter 8 Learning Objectives: Chapter 9 Audio Book: Chapter 9 Learning Objectives: Chapter 10 Audio Book: Chapter 10 Learning Objectives: Chapter 11 Audio Book: Chapter 11 Learning Objectives: Chapter 12 Audio Book: Chapter 12 Learning Objectives: Chapter 13 Audio Book: Chapter 13 Learning Objectives: Chapter 14 Audio Book: Chapter 14 Learning Objectives: Chapter 15 Audio Book: Chapter 15 Learning Objectives: Chapter 16 Audio Book: Chapter 16 Learning Objectives: Chapter 17 Audio Book: Chapter 17 Learning Objectives: Chapter 18 Audio Book: Chapter 18 Learning Objectives: Chapter 19 Audio Book: Chapter 19 Learning Objectives: Chapter 20 Audio Book: Chapter 20 Learning Objectives: Chapter 21 Audio Book: Chapter 21 Learning Objectives: Chapter 22 Audio Book: Chapter 22 Learning Objectives: Chapter 23 Audio Book: Chapter 23 Learning Objectives: Chapter 24 Audio Book: Chapter 24 Learning Objectives: Chapter 25 Audio Book: Chapter 25 Learning Objectives: Chapter 26 Audio Book: Chapter 26 Learning Objectives: Chapter 27 Audio Book: Chapter 27 Learning Objectives: Chapter 28 Audio Book: Chapter 28 Learning Objectives: Chapter 29 Audio Book: Chapter 29 Learning Objectives: Chapter 30 Audio Book: Chapter 30 Learning Objectives: Chapter 31 Audio Book: Chapter 31 Learning Objectives: Chapter 32 Audio Book: Chapter 32 Learning Objectives: Chapter 33 Audio Book: Chapter 33 Learning Objectives: Chapter 34 Audio Book: Chapter 34 Learning Objectives: Chapter 35 Audio Book: Chapter 35 Learning Objectives: Chapter 36 Audio Book: Chapter 36 Learning Objectives: Chapter 37 Audio Book: Chapter 37 Learning Objectives: Chapter 38 Audio Book: Chapter 38 Learning Objectives: Chapter 39 Audio Book: Chapter 39 Learning Objectives: Chapter 40 Audio Book: Chapter 40

Audio Book: Chapter 41

Learning Objectives: Chapter 41

Audio Book: Chapter 42
Audio Book: Chapter 43
Audio Book: Chapter 44
Audio Book: Chapter 45
Audio Book: Chapter 46
Audio Book: Chapter 47
Audio Book: Chapter 48
Audio Book: Chapter 49
Audio Book: Chapter 51
Audio Book: Chapter 52
Audio Book: Chapter 53

Subject to change. Please consult your Canvas course for the most current instructions and updates.

#### **Classroom Hours**

Start: 1-21-2025 End: 5-13-2025

Mo, Tu

9:00 AM - 1:00 PM

For a full list of course hours visit: Course Schedule

#### **Instructor Contact Information**

Nancy Small - nsmall@stech.edu

Office Hours: By appointment

Email is the preferred method of communication; you will receive a response within 24 hours during regular business hours.

#### **Canvas Information**

Canvas is the where course content, grades, and communication will reside for this course.

- stech.instructure.com
- For Canvas passwords or any other computer-related technical support contact Student Services.
- For regular Hours and Weekdays call (435) 586 2899.
- For after Hours & Weekends call (435) 865 3929 (Leave a message if no response).

### **Course Policies**

The preparatory nature of this course requires the student be actively involved and dedicated to learning the material and completing the coursework. Course content is foundational to the education of a paramedic. If there is difficulty with any of the information or concepts, please seek help early so that you can be assisted in attaining and assimilating the essential content. If a student has completed foundational courses in Anatomy, Physiology, English, and Math and demonstrates adequate retention and integration of content, OR passes the Fisdap Paramedic Entrance Exam with >80%, credit will be awarded and attendance of this course will be waived. This course does not contain any tests, but various assignments to assess understanding. Each writing assignment is awarded points according to how well the submission follows the requirements of the assignment and are graded according to the college writing guidelines. Math, Anatomy and Physiology assignments are graded on accuracy and correctness. Students must demonstrate a minimum competence in all areas of the course with an 80% to be able to progress in the program. The following grading scale will be utilized for this course and throughout the program: A: 95-100%, A-: 90-94%, B+: 87-89%, B: 84-86%, B-: 80-83%, Below 80%: Fail. The concepts in this course are essential to progress within the program, and the course is very brief. Therefore, 100% attendance is required. If there are extreme circumstances, contact the Program Director to discuss the situation. Be courteous to your other classmates and keep cell phone use to a minimum and take only necessary phone calls out in the hall. Classroom setting

#### **Additional Information**

InformaCast Statement: Southwest Tech uses InformaCast to ensure the safety and well-being of our students. In times of emergency, such as weather closures and delays, this app allows us to promptly deliver notifications directly to your mobile devices. To stay informed and receive real-time updates, we encourage all students to sign up for notifications. Your safety is our priority, and staying connected ensures a swift response to any unforeseen circumstances. More information and directions for signing up are available at: <a href="https://stech.edu/emergency-notifications/">https://stech.edu/emergency-notifications/</a>

Internet Acceptable Use Policy: The student is expected to review and follow the Southwest Technical College Internet Safety Policy at: <a href="https://stech.edu/students/policies/">https://stech.edu/students/policies/</a>

Student Code of Conduct Policy: The student is expected to review and follow the Southwest Technical College Student Code of Conduct Policy at: <a href="https://stech.edu/students/policies/">https://stech.edu/students/policies/</a>

Accommodations: Students with medical, psychological, learning, or other disabilities desiring accommodations or services under ADA, must contact the Student Services Office. Student Services determines eligibility for and authorizes the provision of these accommodations and services. Students must voluntarily disclose that they have a disability, request an accommodation, and provide documentation of their disability. Students with disabilities may apply for accommodations, based on an eligible disability, through the Student Services office located at 757 W. 800 S., Cedar City, UT 84720, and by phone at (435) 586-2899. No diagnostic services are currently available through Southwest Technical College.

Safety and Building Maintenance: The College has developed and follows a variety of plans to ensure the safe and effective operation of its facilities and programs. The following plans are available online:

1) Facilities Operations and Maintenance Plan; 2) Technical Infrastructure Plan; and 3) Health and Safety Plan.

Withdrawals and Refunds: Please refer to the Southwest Technical College Refund Policy at: <a href="https://stech.edu/students/policies/">https://stech.edu/students/policies/</a>

Any high school or adult student, who declares a technical training objective is eligible for admission at Southwest Technical College (Southwest Tech). Program-specific admissions requirements may exist and will be listed on the Southwest Tech website. A high school diploma or equivalent is not required for admission but is mandatory for students seeking Title IV Federal Financial Aid.

Non-Discriminatory Policy: Southwest Technical College affirms its commitment to promote the goals of fairness and equity in all aspects of the educational enterprise, and bases its policies on the idea of global human dignity.

Southwest Tech is committed to a policy of nondiscrimination. No otherwise qualified person may be excluded from participation in or be subjected to discrimination in any course, program or activity because of race, age, color, religion, sex, pregnancy, national origin or disability. Southwest Technical College does not discriminate on the basis of sex in the education programs or activities that it operates, as required by Title IX and 34 CFR part 106. The requirement not to discriminate in education programs or activities extends to admission and employment. Inquiries about Title IX and its regulations to STECH may be referred to the Title IX Coordinator, to the Department of Education, and/or to the Office for Civil rights.

If you believe you have experienced discrimination or harassment on our campus, please contact the Title IX Coordinator, Cory Estes: cestes@stech.edu, (435) 865-3938.

For special accommodations, please contact the ADA Coordinator, Cyndie Tracy: ctracy@stech.edu, (435) 865-3944. Southwest Technical College 757 West 800 South Cedar City, UT 84720 info@stech.edu (435) 586-2899