

FLORIDA STATE COLLEGE AT JACKSONVILLE

COLLEGE CREDIT COURSE OUTLINE

COURSE NUMBER:	EMS 2615
COURSE TITLE:	Paramedic Module V, Medical
PREREQUISITE(S):	EMS 2611, EMS 2611L, EMS 2612L, EMS 2613L, EMS 2666 and EMS 2614
COREQUISITE(S):	EMS 2615L and EMS 2667
CREDIT HOURS:	6
CONTACT HOURS/WEEK:	6
CONTACT HOUR BREAKDOWN:	
Lecture/Discussion:	6
Laboratory:	
Other _____:	
FACULTY WORKLOAD POINTS:	6
STANDARDIZED CLASS SIZE ALLOCATION:	24

CATALOG COURSE DESCRIPTION:

This course is module V in a sequence of instruction for EMT-paramedic. Instruction includes respiratory, cardiac, renal, environmental, behavioral, and other medical emergencies management.

SUGGESTED TEXT(S):	<u>Paramedic Care: Principles and Practice Volume 3</u> , Brady Publishing
IMPLEMENTATION DATE:	January, 2001
REVIEW OR MODIFICATION DATE:	Fall Term, 2002 (20031) Fall Term, 2003 (20041) Fall Term, 2008 (20091) - Outline Review 2007

COURSE TOPICS	<u>CONTACT HOURS PER TOPIC</u>
I. Pulmonary	12
A. Assessment	
B. COPD	
C. Respiratory Infections	
D. Spontaneous Pneumothorax	
II. Cardiac	12
A. Assessment of the Cardiac Patient	
B. Specific Cardiovascular Diseases	
C. Patient Management	
III. Neurology	15
A. Neurological Pathophysiology	
B. Management of CNS Disorders	
1. Coma	
2. Seizures	
3. Stroke	
IV. Management of Other Medical Emergencies	31
A. Diabetes	
B. Myxedema	
C. Addison's Disease	
D. Cushing's Syndrome	
E. Allergies	
F. Anaphylaxis	
G. Acute Abdomen	
H. Renal Disorders	
I. Poisonings	
J. Drug Abuse	
K. Alcoholism	
L. Environmental Emergencies	
M. Infectious Diseases	
V. Obstetric and Gynecologic Emergencies	12
A. Anatomy and Physiology of the Female Reproductive System	
1. Anatomy	
2. Pregnancy	
B. Pathophysiology and Management of Gynecologic Emergencies	
1. Abdominal pain	

COURSE TOPICS (Continued)

CONTACT HOURS
PER TOPIC

2. Vaginal bleeding	
3. Rape	
C. Pathophysiology and Management of Obstetric Emergencies	
1. Antepartum Hemorrhage Complications	
2. Other Antepartum Condition	
3. Normal Delivery	
4. Complications of Delivery	
5. Abnormal Deliveries	
6. Other Childbirth Situations	
7. Apgar Scoring	
VI. Management of Emotional Crisis	8
A. Emotional Aspects of Illness and Injury (3)	
1. Responses of Patients to Illness and Injury	
2. Responses to the Family, Friends	
3. Responses of the Paramedic	
4. Response of Patients and Bystanders to Mass Casualties	
5. Death and Dying	
B. Psychiatric Assessment and General Principles (3)	
1. Patient Assessment and General principles of Management	
2. Specific Psychiatric Emergencies	
C. Techniques of Management: Patient Interviewing (2)	

PROGRAM TITLE: Emergency Medical Services - Associate's Degree

COURSE TITLE: Paramedic Module V, Medical

CIP NUMBER: 0317.020601

LIST PERFORMANCE STANDARD ADDRESSED:

NUMBER(S): TITLES(S):

20.0 DEMONSTRATE GENERAL PATIENT ASSESSMENT AND INITIAL MANAGEMENT—The student will be able to:

- 20.03 Describe the anatomy, physiology and pathophysiology of the airway and lungs and their anatomical structures.
- 20.04 Describe the use of adjuncts in airway management.
- 20.05 Describe advanced methods of airway management.
- 20.06 Explain the significance of protection of the cervical spine in airway management.
- 20.07 Explain pulmonary ventilation and gas exchange across the alveolar-capillary membrane.
- 20.08 Describe the pathophysiology of open and closed pulmonary injuries.
- 20.09 Discuss the techniques for evaluating effectiveness of ventilation.
- 20.10 Describe the anatomy and physiology of the heart and the cardiovascular system.
- 20.11 Describe the pathophysiology of cardiac arrest.
- 20.12 Describe the mechanisms of evaluating the effectiveness of perfusion.
- 20.13 Describe hemorrhage control and its benefits and complications.
- 20.14 Assess neurological status.
- 20.15 Discuss the pathophysiology of shock.
- 20.16 Define the trauma score and its usefulness.
- 20.17 Demonstrate obtaining a relevant patient medical history.
- 20.18 Describe how a patient is packaged and stabilized for transportation to the hospital.
- 20.19 Discuss procedures for hospital selection, the transportation phase, and patient monitoring enroute to the hospital.
- 20.20 Perform a rapid assessment.
- 20.21 Perform a secondary survey.
- 20.22 Demonstrate cardiopulmonary resuscitation.

26.0 ASSESS AND MANAGE RESPIRATORY EMERGENCIES--The student will be able to:

- 26.01 Describe the anatomy and physiology of the respiratory system and define appropriate medical terms.
- 26.02 Identify the normal partial pressures of oxygen and carbon dioxide in the alveoli, arterial and venous blood, and factors that affect those levels.
- 26.03 Describe the normal and COPD respiratory drives.
- 26.04 Identify the pharmacology, actions, indications, precautions, dosages, contraindications, and side effects of typical respiratory drugs for the adult and pediatric patient and demonstrate methods of administration.
- 26.05 Discuss the signs, symptoms, and pathophysiology of conditions affecting the respiratory system.
- 26.06 Demonstrate inspection, auscultation and palpation of the thorax.
- 26.07 Identify normal and abnormal lung sounds.
- 26.08 Obtain a history and assess patients with respiratory complaints.

LIST PERFORMANCE STANDARD ADDRESSED: (Continued)

NUMBER(S): TITLES(S):

26.09 Describe the management of patients with respiratory problems.

27.0 ASSESS AND MANAGE CARDIOVASCULAR EMERGENCIES--The student will be able to:

- 27.01 Describe the anatomy, physiology, and pathophysiology relevant to cardiovascular disease and emergencies.
- 27.02 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of common emergency cardiovascular drugs (AHA/ACLS).
- 27.03 Identify complications of intracardiac injections.
- 27.04 Describe innervation of the heart, sympathetic and parasympathetic stimulation, blockade, and effects on the heart rate.
- 27.05 Discuss myocardial electrical physiology.
- 27.06 Describe signs, symptoms, and common chief complaints of patients with cardiac conditions.
- 27.07 Identify and describe the historical information, specific observations, and physical findings to be evaluated in the cardiac patient.
- 27.08 Identify actions, uses, and side effects of common prescription drugs relative to cardiac problems.
- 27.09 Discuss the etiology of cardiac arrest in adults and pediatric patients.
- 27.10 Discuss concepts of ECG monitoring, types and causes of artifacts, and rhythm analysis format.
- 27.11 Identify the wave forms, intervals, and normal values relative to an electrocardiogram (ECG).
- 27.12 Describe a 12-lead ECG and compare to continuous monitoring.
- 27.13 Describe the etiology, clinical significance, and ECG characteristics of cardiac dysrhythmias.
- 27.14 Describe the indications for use of a precordial thump, vago tonic maneuvers, synchronized cardioversion, and defibrillation and discuss energy recommendations for adult and pediatric patients.
- 27.15 Identify wave forms, artifacts, and dysrhythmias on Lead or MC11 rhythm strips and oscilloscope.
- 27.16 Obtain history, assess, and manage dysrhythmias or cardiac condition.
- 27.17 Demonstrate application of ECG electrodes and obtain a sample Lead II or MC11 rhythm strip.
- 27.18 Use defibrillator paddles for Lead II monitoring.
- 27.19 Troubleshoot a poor ECG rhythm.
- 27.20 Perform a precordial thump, vago tonic maneuvers, synchronized cardioversion, defibrillation, and external cardiac pacing.
- 27.21 Use a mechanical CPR device.

29.0 ASSESS AND MANAGE NEUROLOGICAL EMERGENCIES--The student will be able to:

- 29.01 Identify and describe the anatomy, physiology, pathophysiology of the neurological system.
- 29.02 Describe the assessment and management of neurological disorders.
- 29.03 Identify the actions, uses and side effects of common prescription drugs relative to neurological problems.
- 29.04 Identify common prescription drugs that a patient with neurological problems might take and the implications of each.
- 29.05 Identify the pharmacology, actions, indications, precautions, methods of administration, dosages, contraindications, and side effects of relevant drugs.
- 29.06 Describe and use the Glasgow Coma Scale.
- 29.07 Describe and differentiate various types of seizures and their phases.
- 29.08 Obtain history and assess patients with neurological disorders.

LIST PERFORMANCE STANDARD ADDRESSED: (Continued)

NUMBER(S): TITLES(S):

29.09 Manage patients with neurological emergencies.

37.0 ASSESS AND MANAGE THE GYNECOLOGIC PATIENT--The student will be able to:

- 37.01 Describe the anatomy and physiology of the female reproductive system.
- 37.02 Identify and discuss the significance of historical information, observations, and physical findings to be evaluated in the patient's gynecologic problems.
- 37.03 Describe the pathophysiology and management of gynecological disorders.
- 37.04 Describe potential causes, assessment and management of trauma to the external genitalia.
- 37.05 Describe the assessment and management of a sexual assault victim.
- 37.06 Obtain a history and assess and manage the patient with a gynecologic problem.

38.0 ASSESS AND MANAGE THE OBSTETRIC PATIENT--The student will be able to:

- 38.01 Define obstetrical terminology.
- 38.02 Describe the process of fetal development and circulation.
- 38.03 Identify and discuss the significance of historical information, observations, and physical findings in the obstetric patient.
- 38.04 Identify and describe early signs and symptoms of pregnancy.
- 38.05 Describe potential causes, assessment, and management of trauma to the pregnant mother and the fetus.
- 38.06 Discuss the effects of pregnancy on pre-existing medical conditions.
- 38.07 Describe the anatomy, physiology, pathophysiology, causes, assessment and management of obstetric.
- 38.08 Describe Braxton-Hicks contractions.
- 38.09 Discuss the progression of labor.
- 38.10 Discuss factors that influence transport decisions for the patient in labor.
- 38.11 Describe a normal cephalic delivery.
- 38.12 Discuss the pathophysiology, assessment, and management of delivery complications.
- 38.13 Identify the pharmacology, actions, indications, methods of administration, dosages, contraindications and side effects of oxytocin.
- 38.14 Obtain a history and assess the obstetric patient.
- 38.15 Treat obstetrical patients, including assisting with childbirth.
- 38.16 Administer oxytocin.

