Paramedic Concepts SYLLABUS

DATE OF LAST REVIEW: 02/2013

CIP CODE: 51.0904

SEMESTER: Departmental Syllabus

COURSE TITLE: Paramedic Concepts I

COURSE NUMBER: EMTC0227

CREDIT HOURS: 8

INSTRUCTOR: Departmental Syllabus

OFFICE LOCATION: Departmental Syllabus

OFFICE HOURS: Departmental Syllabus

TELEPHONE: Departmental Syllabus

EMAIL: Departmental Syllabus

KCKCC-issued email accounts are the official means for electronically communicating with out students

PREREQUISITES: College course in Human Anatomy and/or Human Physiology
Kansas certification as an EMT – Basic
Acceptance into the Kansas City Kansas Community College Paramedic Program

REQUIRED TEXT AND MATERIALS: See KCKCC Bookstore for current textbooks

COURSE DESCRIPTION:
The didactic content of this course is designed to serve as a general framework for the implementation of the objectives of the paramedic curriculum. The roles and responsibilities of the Mobile Intensive Care Technician will be discussed from a legal, practical, and philosophical point of view. The paramedic should be well versed in the legalities of emergency medical care. Practical considerations will be addressed. This section will also provide the paramedic student with an overview of the EMS system and its components/relationships. Rescue techniques and extrication, as well as emergency vehicle operations will be addressed. A section is devoted to the practical and mental response to a major incident including planning phases and triage. Additionally, sections on stress response and management, anatomy and physiology for the paramedic, basic pharmacology for the paramedic, and trauma and burns are also included. These sections familiarize the paramedic with such items as the causes and manifestations of stress in others and themselves, a working knowledge of normal body anatomy and physiologic processes, an introduction to the basic principles of pharmacology, and the medications used in the pre-hospital setting and how to handle trauma and burn cases.
METHOD OF INSTRUCTION:
A variety of instructional methods may be used depending on content area. These include but are not limited to: lecture, multimedia, cooperative/collaborative learning, labs and demonstrations, projects and presentations, speeches, debates, and panels, conferencing, performances, and learning experiences outside the classroom. Methodology will be selected to best meet student needs.

COURSE OUTLINE:
Per DOT National Standard Curriculum and Kansas Board of EMS requirements the following topics will be explored:

I. Introduction to Advanced Pre-hospital Care
   A. Description of profession
   B. Paramedic characteristics

II. Well Being of the Paramedic

III. EMS Systems
   A. History of EMS
   B. Today’s EMS systems

IV. Roles and Responsibilities
   A. Primary responsibilities
   B. Professionalism
   C. Basic physical fitness
   D. Death and dying

V. Injury and Illness Prevention
   A. Epidemiology
   B. Prevention within EMS
   C. Prevention in the community

VI. Medical/Legal Issues
   A. Legal Duties
   B. Legal accountability
   C. Resuscitation issues

VII. Ethics
   A. Overview
   B. Ethical issues in contemporary practice

VIII. Pathophysiology
   A. General principles
   B. Fluids and fluid imbalance
   C. Acid-base derangements
   D. Genetic causes of disease
   E. Hypoperfusion

IX. Pharmacology
   A. Basic pharmacology
   B. Drug classifications

X. Medication Administration
   A. Principles and routes of administration
   B. IV access, blood sampling and IO infusions
   C. Medical math

XI. Therapeutic Communications
   A. Basic elements of communication
B. Communication techniques

XII. Life Span Development
A. Introduction
B. Stages and characteristics of development

XIII. Airway Management and Ventilation
A. Respiratory problems
B. Respiratory system assessment
C. Basic airway management
D. Advanced airway management
E. Oxygenation and ventilation

XIV. History Taking
A. Establishing rapport
B. Comprehensive patient history
C. Special challenges

XV. Physical Examination Techniques
A. Approach and overview
B. Overview of a comprehensive examination
C. Anatomical regions
D. Physical exam of infants and children
E. Recording exam findings

XVI. Clinical Decision-Making
A. Clinical judgment
B. Paramedic practice
C. Critical Thinking Skills
D. Critical decision process

XVII. Communications
A. Verbal communication
B. Written communication
C. EMS response
D. Communication technology
E. Reporting procedures

XVIII. Documentation
A. Uses for documentation
B. General considerations
C. Elements of good documentation
D. Narrative writing

EXPECTED LEARNER OUTCOMES:
1. The student will be able to demonstrate an understanding of the components of the Emergency Medical Services System.
2. The student will be able to demonstrate an understanding of the Medical/Legal issues that affect the paramedic in the performance of his/her job.
3. The student will be able to demonstrate an understanding of considerations as they relate to the personal safety of the paramedic.
4. The student will be able to demonstrate the ability to obtain a pertinent medical history on a variety of patients.
5. The student will be able to demonstrate the ability to perform a complete physical assessment on patients.
6. The student will be able to demonstrate the ability to institute appropriate airway management techniques including oxygen therapy and endotracheal intubation.
7. The student will be able to demonstrate an understanding of emergency pharmacology.
8. The student will be able to demonstrate an understanding of proper documentation techniques.
9. The student will be able convey the importance of therapeutic communication.

COURSE COMPETENCIES:
The student will be able to demonstrate an understanding of the components of the Emergency Medical Services System.

1. The student will be able to describe key historical events that influenced the development of national Emergency Medical Services (EMS) systems.
2. The student will be able to describe how professionalism applies to the paramedic while on and off duty.
3. The student will be able to list the primary and additional responsibilities of paramedics.

The student will be able to demonstrate an understanding of the Medical/Legal issues that affect the paramedic in performance of his/her job.

4. The student will be able to describe the benefits of medical direction, both on-line and off-line.
5. The student will be able to differentiate among legal, ethical, and moral responsibilities.
6. The student will be able to discuss the four components needed to prove negligence.
7. The student will differentiate expressed, informed, implied, and voluntary consent and describe the process used to obtain informed or implied consent.
8. The student will be able to discuss appropriate patient interaction and documentation techniques regarding refusal of care.
9. The student will differentiate assault and battery.
10. The student will describe what is required to make a patient care report an effective legal document.

The student will be able to demonstrate an understanding of considerations as they relate to the personal safety of the paramedic.

11. The student will define the role of the paramedic relative to the safety of the crew, the patient, and bystanders.
12. The student will discuss the concept of wellness and its benefits, components of wellness, and role of the paramedic in promoting wellness.
13. The student will describe the impact of shift work on circadian rhythms.
14. The student will differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations.
15. The student will describe the three phases of the stress response.
16. The student will describe the stages of the grieving process (Kubler-Ross).
17. The student will, given a scenario involving a stressful situation, formulate a strategy to help adapt to the stress.
18. The student will demonstrate the proper procedures to take for personal protection from disease.

The student will be able to demonstrate the ability to obtain a pertinent medical history on a variety of patients.
19. The student will list the specific problems or conditions encountered while providing care that a paramedic is required to report, and identify in each instance to whom the report is to be made.
20. The student will list the components of a pertinent medical history.
21. The student will determine history of present illness or injury.
22. The student will relate pertinence of past medical history to present situation.
23. The student will discuss the importance of obtaining a family history.
24. The student will relate the importance of pertinent negatives in a history.
25. The student will differentiate signs from symptoms from information gathered in obtaining a history.

The student will be able to demonstrate the ability to perform a complete physical assessment on patients.

26. The student will define and scribe the techniques of inspection, palpation, percussion and auscultation.
27. The student will describe the evaluation of mental status.
28. The student will evaluate the importance of a general survey.
29. The student will describe the examination of the anterior and posterior thorax and differentiate between normal and abnormal findings.
30. The student will describe the survey of respiration.
31. The student will describe the general guidelines of recording examination information.
32. The student will discuss the examination considerations for an infant or child.

The student will be able to demonstrate the ability of institute appropriate airway management techniques including oxygen therapy and endotracheal intubation.

33. The student will explain the primary objective of airway maintenance.
34. The student will explain the relationship between pulmonary circulation and respiration.
35. The student will define and differentiate between hypoxia and hypoxemia.
36. The student will define causes of respiratory distress.
37. The student will explain the advantage of the two-person method when ventilating with the bag-valve-mask.
38. The student will explain safety considerations of oxygen storage and delivery.
39. The student will describe the special consideration in airway management and ventilation for patients with facial injuries.
40. The student will defend the need to oxygenate and ventilate a patient.
41. The student will demonstrate suctioning the upper airway by selecting a suction device, catheter, and technique.
42. The student will intubate the trachea using the following methods: orotracheal intubation, nasotracheal, and digital intubation.

The student will be able to demonstrate an understanding of emergency pharmacology.

43. The student will, given a scenario, defend a paramedic's actions in a situation where a physician orders therapy the paramedic feels to be detrimental to the patient's best interests.
44. The student will describe how drugs are classified.
45. The student will discuss special consideration in drug treatment with regard to
pregnant, pediatric and geriatric patients.

46. The student will integrate pathophysiological principles of pharmacology with patient assessment.

47. The student will describe the indications, equipment needed, technique used, precautions, and general principles of peripheral venous or external jugular cannulation.

48. The student will discuss the "six rights" of drug administration and correlate these with the principles of medication.

49. The student will discuss medical asepsis and the differences between clean and sterile techniques.

50. The student will comply with paramedic standards of medication administration.

51. The student will perfect disposal of contaminated items and sharps.

The student will be able to demonstrate an understanding of proper documentation techniques.

52. The student will identify the general principles regarding the importance of EMS documentation.

53. The student will identify and properly use medical terminology, abbreviations, and acronyms.

54. The student will identify and eliminate extraneous and nonprofessional information.

55. The student will demonstrate proper document revision and correction.

The student will be able to convey the importance of therapeutic communication.

56. The student will discuss common errors made by paramedics when interviewing patients.

57. The student will discuss interviewing considerations used by paramedics in cross-cultural communications.

58. The student will exhibit professional behaviors in communicating with patients in special situations.

59. The student will summarize the physiological and psychosocial characteristics of an early adult.

60. The student will summarize the six R’s of putting it all together: Read the patient, Read the scene, React, Reevaluate, Revise, the management plan, Review performance.

ASSESSMENT OF LEARNER OUTCOMES:
Student progress is evaluated by means that include, but are not limited to, exams, written assignments, and class participation.

SPECIAL NOTES:
This syllabus is subject to change at the discretion of the instructor. Material included is intended to provide an outline of the course and rules that the instructor will adhere to in evaluating the student’s progress. However, this syllabus is not intended to be a legal contract. Questions regarding the syllabus are welcome any time.

Kansas City Kansas Community College is committed to an appreciation of diversity with respect for the differences among the diverse groups comprising our students, faculty, and staff that is free of bigotry and discrimination. Kansas City Kansas Community College is committed to providing a multicultural education and environment that reflects and respects diversity and that seeks to increase understanding.
Kansas City Kansas Community College offers equal educational opportunity to all students as well as serving as an equal opportunity employer for all personnel. Various laws, including Title IX of the Educational Amendments of 1972, require the college’s policy on non-discrimination be administered without regard to race, color, age, sex, religion, national origin, physical handicap, or veteran status and that such policy be made known.

Kansas City Kansas Community College complies with the Americans with Disabilities Act. If you need accommodations due to a documented disability, please contact the Director of the Academic Resource Center, in Rm. 3354 or call at: 288-7670.