

ILLINOIS VALLEY COMMUNITY COLLEGE

COURSE OUTLINE

DIVISION: Workforce Development

COURSE: EMS 2220 Paramedic I

Date: Spring 2020

Credit Hours: 11.5

Prerequisite(s):

- 1. Current licensure as EMT or Intermediate
- 2. BLS for Healthcare Provider
- 3. High School Diploma or GED
- 4. Concurrent enrollment in EMS 2221

Delivery Method:	⊠ Lecture	8.5 Contact Hours (1 contact = 1 credit hour)
	□ Seminar	0 Contact Hours (1 contact = 1 credit hour)
	⊠ Lab	6 Contact Hours (2-3 contact = 1 credit hour)
	☐ Clinical	0 Contact Hours (3 contact = 1 credit hour)
	Online	
	Blended	
Offered: X Fall	☐ Spring ☐	Summer
IAI Equivalent – Or	nly for Transfer (Courses-go to http://www.itransfer.org:

CATALOG DESCRIPTION:

This course is designed to introduce and develop the knowledge and skills of the Emergency Medical Technician in the area of advanced emergency care of the sick or injured person. This course follows the National Department of Transportation Guidelines and is approved by the Illinois Department of Public Health. Areas of instruction include, but not limited to: Introduction to Paramedicine, pathophysiology, medication administration, advanced airway management, patient assessment, obstetrical and cardiac emergencies.

GENERAL EDUCATION GOALS ADDRESSED

[See last page for Course Competency/Assessment Methods Matrix.]

Upon completion of the course, the student will be able:

[Choose up to three goals that will be formally assessed in this course.]

\boxtimes	To apply analytical and problem-solving skills to personal, social, and professional
	issues and situations.
\boxtimes	To communicate successfully, both orally and in writing, to a variety of audiences.
	To construct a critical awareness of and appreciate diversity.
	To understand and use technology effectively and to understand its impact on the
	individual and society.
	To develop interpersonal capacity.
	To recognize what it means to act ethically and responsibly as an individual and as a member of society.
	To recognize what it means to develop and maintain a healthy lifestyle in terms of mind, body, and spirit.
	To connect learning to life.

EXPECTED LEARNING OUTCOMES AND RELATED COMPETENCIES:

[Outcomes related to course specific goals. See last page for more information.]

Upon completion of the course, the student will be able to:

- 1. Demonstrate an understanding of resources and abilities needed to be a successful to be a successful paramedic.
 - 1.1 Define the following terms: EMS Systems, Licensure, Certification, Registration, Profession, Professionalism, Health Care Professional, Ethics, Peer Review, Medical Direction, Protocols
 - 1.2 Explain the basic principles of research.
 - 1.3 Discuss the concept of wellness and its benefits.
 - 1.4 Identify the general principles regarding the importance of EMS documentation and ways in which documents are used.
 - 1.5 Identify the role of verbal, written, and electronic communications in the provision of EMS.
 - 1.6 Discuss interviewing considerations used by paramedics in cross-cultural communications
 - 1.7 Differentiate between legal and ethical responsibilities.
 - 1.8 Discuss the anatomy and physiology of the various body systems.
 - 1.9 Identify and use medical terminology correctly.
 - 1.10 Advocate the need to understand and apply the knowledge of pathophysiology to patient assessment and treatment.
 - 1.11 Value the uniqueness of infants, toddlers, pre-school, school aged, adolescent, early adulthood, middle aged, and late adulthood physiological and psychosocial characteristics.
 - 1.12 Discuss public health principles relevant to infectious/ communicable disease.
 - 1.13 List and differentiate routes of drug administration.
- 2. Demonstrate an understanding of airway management.
 - 2.1 Identify the anatomy of the upper and lower airway.

- 2.2 Explain the primary objective of airway maintenance.
- 2.3 List the factors that affect respiratory rate and depth
- 2.4 Describe the indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient by: mouth-to-mouth, mouth-to-nose, mouth-to-mask, one-person bag-valve-mask, two-person bag-valve-mask, three-person bag-valve-mask, flow-restricted oxygen-powered ventilation device.
- 3. Demonstrate patient assessment.
 - 3.1 Describe common hazards found at the scene of a trauma and a medical patient.
 - 3.2 Summarize the reasons for forming a general impression of the patient.
 - 3.3 Describe the techniques of history taking.
 - 3.4 Differentiate between the assessment that is performed for a patient who is unresponsive or has an altered mental status and other medical patients requiring assessment.
 - 3.5 Discuss medical identification devices/ systems.
 - 3.6 Explain the value of performing an on-going assessment
- 4. Demonstrate an understanding of selected medical emergencies.
 - 4.1 Describe the general care for any patient experiencing a gynecological emergency.
 - 4.2 Describe how to assess an obstetrical patient.
 - 4.3 Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease.
 - 4.4 Formulate an appropriate treatment plan for providing initial care to a newborn.
 - 4.5 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with cardiovascular disease.

MAPPING LEARNING OUTCOMES TO GENERAL EDUCATION GOALS

[For each of the goals selected above, indicate which outcomes align with the goal.]

Goals	Outcomes
First Goal	
To apply analytical and problem-solving skills to personal, social, and professional issues and situations.	1.1, 1.3, 1.7, 1.8, 1.10, 1.11, 1.12, 2.1, 2.2, 2.3, 2.4, 3.1, 3.2, 3.4, 3.6, 4.1, 4.2, 4.3, 4.4., 4.5
Second Goal	
To communicate successfully, both orally and in writing, to a variety of audiences	1.2, 1.4, 1.5, 1.6, 1.9, 3.3, 3.5, 4.1, 4.2, 4.3, 4.4, 4.5

COURSE TOPICS AND CONTENT REQUIREMENTS:

- I. Preparatory Module
 - a. EMS Systems
 - b. Research
 - c. Workforce safety and wellness
 - d. Documentation
 - e. EMS Systems Communications
 - i. Therapeutic Communications
 - f. Medical/Legal and Ethical
 - g. Anatomy and Physiology
 - h. Medical Terminology
 - i. Pathophysiology
 - j. Life Span Development
 - k. Public Health
 - I. Principles of Pharmacology
 - i. Medication Administration
 - ii. Emergency Medications
 - iii. IV Access

II. Airway Management Module

- a. Anatomy & Physiology
- b. Airway Management
- c. Respiration
- d. Artificial Ventilation

III. Patient Assessment

- a. Scene Size-up
- b. Primary Assessment
- c. History Taking
- d. Secondary Assessment
- e. Monitoring Devices
- f. Reassessment

IV. Medical Emergencies – Part 1

- a. Gynecological
- b. Obstetrical
- c. Pediatric
- d. Neonatal
- e. Cardiac

INSTRUCTIONAL METHODS:

- Lecture
- Demonstrations
- Skills lab hands on practice
- Scenarios
- Homework assignments and exams

INSTRUCTIONAL MATERIALS:

Text: Paramedic Care: Principles and Practice by Bledsoe, Porter, and Cherry 5th Edition, Volumes 1, 2, & 3

STUDENT REQUIREMENTS AND METHODS OF EVALUATION:

- Lecture: Reading assigned materials, preparation, and participation in classroom activities is expected.
- Written exams are used to evaluate student progress for each module. A comprehensive final exam will also be given at the end of the semester.
- Skills/Scenario Laboratory: Students will be evaluated by peers and instructors using skill sheets developed by the National Registry of EMT
- The student's final grade will be calculated: 20% Anatomy & Physiology, 20% reading assignments and homework, 20% affective grade, 20% module exams, and 20% final exam.
- The student must pass the course with a grade of "C" or better to continue and graduate from the paramedic program.

The following grading scale will be used in determining the grade for this course.

A = 90-100

B = 80 - 89

C = 76-79

D = 66-75

F = 0.65

Course Competency/Assessment Methods Matrix

(Dept/# Course Name)	Assessment Options																															
For each competency/outcome place an "X" below the method of assessment to be used.	Assessment of Student Learning	Article Review	Case Studies	Group Projects	Lab Work	Oral Presentations	Pre-Post Tests	Quizzes	Written Exams	Artifact Self Reflection of Growth	Capstone Projects	Comprehensive Written Exit Exam	Course Embedded Questions	Multi-Media Projects	Observation	Writing Samples	Portfolio Evaluation	Real World Projects	Reflective Journals	Applied Application (skills) Test	Oral Exit Interviews	Accreditation Reviews/Reports	Advisory Council Feedback	Employer Surveys	Graduate Surveys	Internship/Practicum /Site Supervisor Evaluation	Licensing Exam	In Class Feedback	Simulation	Interview	Written Report	Assignment
Assessment Measures – Are direct or indirect as indicated. List competencies/outcomes below.	Direct/ Indirect	٥	D	D	Q	D	Ω	D	D	D	D	D	D	D	D	D	D	D	Q	D	_	_	_	_	D	D						
Demonstrate an understanding of resources and abilities needed to be a successful to be a successful paramedic.					x		X	X	X			X			X					X		X	X	X	X		X	X	X			
Demonstrate an understanding of airway management.					X		X	Х	Х			X			X					X		X	Х	X	X		X	X	Х			
Demonstrate patient assessment.					Χ		Χ	Χ	Χ			Х			Х					Χ		Χ	Χ	Х	Χ		Χ	Χ	Χ			
Demonstrate an understanding of selected medical emergencies.					Х		Χ	Х	Х			Х			Х					Х		Х	Х	Х	Х		Х	Х	Х			