

Reviewed by: N. Lidgett  
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Semester Effective: Fall 2025

Health Education (HLED) 1601 Advanced Paramedic with Laboratory (14.5 Units) CSU

Prerequisite: Completion of HLED 1600 with grade 'C' or better.

Co-Requisite: None

Advisory: Eligibility for ENGL 1500 or 1501, completion of BIOL 2250, and transfer level math course are strongly recommended.

Hours and Units Calculations:

208 hours lecture. (416 Outside of Class hours) 72 hours lab. (696 Total Student Learning Hours) 14.5 Units

Catalog Description: This theory course is the application of theory and skills in a wide variety of sick and injured clients in the pre-hospital setting. This course covers care of medical patients, trauma patients, special populations including obstetrical, pediatric, geriatric and mental health patients. This course is part of a program of study to prepare paramedics as described in California Code of Regulations, Title 22, Division 9, Chapter 4 and lists the required hours and subjects to be covered as set forth by the Department of Transportation curriculum. The student will practice and master skills that will allow the student to meet the clinical performance objectives of the program. Practice and competency testing is the focus of this course and will include physical assessment, care of the medical patient, special populations' needs, trauma management, communication with EMS base station and medical director, implementing safety precautions for hazardous materials exposure and manage the scene of an emergency.

Type of Class/Course: Degree Credit

Text: Caroline, Nancy L., *Emergency Care in the Streets*, 12<sup>th</sup> ed., Volume 1 & 2, American Academy of Orthopaedic Surgeons (AAOS), 2021

Course Objectives:

Upon successful completion of this course the student will be able to:

1. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with a gastroenterological problem.
2. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with a gastroenterological problem.
3. Integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with a renal or urologic problem.
4. Integrate the pathophysiological principles of the hematopoietic system to formulate a field impression and implement a treatment plan

5. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with an environmentally induced or exacerbated medical or traumatic condition.
6. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a management plan for the patient with infectious and communicable diseases.
7. Describe and demonstrate safe, empathetic competence in caring for patients with behavioral emergencies.
8. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the trauma patient with hemorrhage, shock, head injury, spinal cord injuries, and musculoskeletal injuries.
9. Understand the anatomy and physiology of the female reproductive system to the assessment and management of a patient experiencing normal or abnormal labor.
10. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for neonatal, pediatric, and geriatric patients, diverse patients, and chronically ill patients.
11. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for patients with common complaints.
12. Safely manage the scene of an emergency.
13. Understand standards and guidelines that help ensure safe and effective ground and air medical transport.
14. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the medical patient.
15. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for neonatal, pediatric, and geriatric patients, diverse patients, and chronically ill patients.
16. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for patients with common complaints.
17. Safely manage the scene of an emergency.
18. Safely manage a hazardous materials scene.
19. Understand standards and guidelines that help ensure safe and effective ground and air medical transport.
20. Integrate the principles of general incident management and multiple casualty incident (MCI) management.

#### Student Learning Outcomes:

- Differentiate pathophysiological principles and assessment findings in order to implement the treatment plan for neonatal, pediatric, and geriatric patients, diverse patients, and chronically ill patients.
- Relate pathophysiological principles and assessment findings in order to implement the treatment plan for the trauma patient with hemorrhage, shock, head injury, spinal cord injuries, and musculoskeletal injuries.
- Define the components of safely managing the scene of an emergency.
- Compare the principles of general incident management and multiple casualty incident (MCI) management.
- Integrate pathophysiological principles and assessment findings to formulate a field impression in order to implement the treatment plan for the medical patient.
- Describe the standards and guidelines that help ensure safe and effective ground and air medical transport.
- Demonstrate the proper application of patient care skills relative to patient assessment findings.

- Demonstrate the requisite skills necessary for patient care within the paramedic scope of practice.

#### Course Scope and Content: (Lecture)

##### Unit I Gastroenterology Disorders

- Gastrointestinal (GI) Diseases
- GI Infections
- Common GI Complaints
- Symptoms
- Causes
- Treatment

##### Unit II Urology Disorders

- Urologic Diseases
- Urologic Infections
- Symptoms
- Causes
- Treatment

##### Unit III Toxicology Disorders

- What is Toxicology?
- Opioid Toxidrome
- Cholinergic Toxidrome
- Anti-cholinergic Toxidrome
- Sedative-Hypnotic Toxidrome
- Hallucinogenic Toxidrome
- Symptoms
- Causes
- Treatment

##### Unit IV Environmental Conditions

- Hypothermia
- Hyperthermia
- Symptoms
- Causes
- Treatment

##### Unit V Infectious and Communicable Diseases

- Infectious versus Communicable
- Methods of Transmission
- Symptoms
- Causes
- Treatment

##### Unit VI Behavioral/Psychiatric Disorders

- What is Mental Illness?
- Anxiety Disorders
- Mood Disorders
- Substance-Related Disorders
- Schizophrenia and Related Disorders

- F. Obsessive-Compulsive Disorder and Related Disorders
- G. Feeding and Eating Disorders
- H. Stress-Related Disorders
- I. Other mental health disorders and symptoms
- J. Symptoms
- K. Causes
- L. Treatment

#### Unit VII Hematology Disorders

- A. What are Blood Disorders?
- B. Blood Clotting Disorders
- C. Bleeding Disorders
- D. Most Common Types of Blood Disorders
- E. Symptoms
- F. Causes
- G. Treatment

#### Unit VIII Gynecology Disorders

- A. Dysmenorrhea
- B. Amenorrhea
- C. Polycystic Ovaries Syndrome (PCOS)
- D. Uterine Fibroids
- E. Endometriosis
- F. Pelvic Inflammatory Disease
- G. Vaginitis
- H. Menopause
- I. Symptoms
- J. Causes
- K. Treatment

#### Unit IV Obstetrics, Normal and Abnormal Deliveries

- A. Female Reproductive System, Pregnancy, and Fetal Development
- B. Patient Assessment
- C. Baby and Mother Care
- D. Symptoms
- E. Causes
- F. Treatment

#### Unit X Special Considerations

- A. Neonatology
- B. Pediatrics
- C. Geriatrics Abuse & Assault
- D. Patients with special challenges
- E. Acute intervention for the chronic care patient

#### Unit XI Assessment Based Management for Common Complaints

- A. Primary Assessment
- B. History taking
- C. Secondary Assessment
- D. Reassessment
- E. Critical Criteria

## Unit XII Operations

- A. Medical Incident Command
- B. Ground and Air Rescue
- C. Hazardous Materials Incidents
- D. Crime Scene Awareness

## Course Scope and Content: (Laboratory)

### Unit I Treatment Plan

- A. Formulate a field impression and implement the treatment plan for the patient with a gastroenterological problem.
- B. Formulate a field impression and implement a treatment plan for the patient with a renal or urologic problem.
- C. Formulate a field impression and implement a treatment plan for the patient with a toxic exposure.
- D. Formulate a field impression and implement a treatment plan for a patient with a hematopoietic condition.

### Unit II Pathophysiology Principles and Assessment

- A. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with an environmentally induced or exacerbated medical or traumatic condition.
- B. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement a management plan for the patient with infectious and communicable diseases.
- C. Describe and demonstrate safe, empathetic competence in caring for patients with behavioral emergencies.
- D. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the trauma patient with hemorrhage, shock, head injury, spinal cord injuries, and musculoskeletal injuries.
- E. Utilize gynecological principles and assessment findings to formulate a field impression and implement the management plan for the patient experiencing a gynecological emergency.
- F. Understand the anatomy and physiology of the female reproductive system to the assessment and management of a patient experiencing normal or abnormal labor.
- G. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for neonatal, pediatric, and geriatric patients, diverse patients, and chronically ill patients.
- H. Integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for patients with common complaints.

### Unit III Scene Management

- A. Safely manage the scene of an emergency.
- B. Understand standards and guidelines that help ensure safe and effective ground and air medical transport.
- C. Integrate the principles of general incident management and multiple casualty incident (MCI) management.

All laboratory components are hands-on activities that support the learning goals of this course. Utilizing principles presented in lecture, students will perform several techniques utilized by Paramedics.

Learning Activities Required Outside of Class:

The students in this class will spend a minimum of 26 hours per week outside of regular class time doing the following:

1. Skills Syllabus - Review of procedures as assigned
2. Create and complete an E-PCR report with all state standard elements including but not limited to a full body assessment, vital sign recording, medication and intervention recording, and full patient interaction narrative for any mock patient scenarios assigned by the instructor.

Methods of Instruction:

1. Lecture and discussion periods
2. Demonstrations
3. Hands on Skills

Methods of Evaluation:

1. The course primarily involves skill demonstrations and problem solving
  - a. Computational or non-computational problem-solving demonstrations including exams, quizzes and field work
  - b. Skill demonstrations, including class performance(s), field work, and skills performance exam(s)
  - c. Objective examinations, including multiple choice, and true/false

Laboratory Category: Extensive Laboratory

Pre delivery criteria: All of the following criteria are met by this lab.

1. Curriculum development for each lab.
2. Published schedule of individual laboratory activities.
3. Published laboratory activity objectives.
4. Published methods of evaluation.
5. Supervision of equipment maintenance, laboratory setup, and acquisition of lab materials and supplies.

During laboratory activity of the laboratory: All of the following criteria are met by this lab.

1. Instructor is physically present in lab when students are performing lab activities.
2. Instructor is responsible for active facilitation of laboratory learning.
3. Instructor is responsible for active delivery of curriculum.
4. Instructor is required for safety and mentoring of lab activities.
5. Instructor is responsible for presentation of significant evaluation.

Post laboratory activity of the laboratory: All of the following criteria are met by this lab.

1. Instructor is responsible for personal evaluation of significant student outcomes (lab exercises, exams, practicals, notebooks, portfolios, etc.) that become a component of the student grade that cover the majority of lab exercises performed during the course.
2. Instructor is responsible for supervision of laboratory clean up of equipment and materials

Supplemental Data:

TOP Code:	125100: Paramedic
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SAM Priority Code:	C: Clearly Occupational
Distance Education:	Not Applicable
Funding Agency:	Y: Not Applicable(funds not used)
Program Status:	1: Program Applicable
Noncredit Category:	Y: Not Applicable, Credit Course
Special Class Status:	N: Course is not a special class
Basic Skills Status:	N: Course is not a basic skills course
Prior to College Level:	Y: Not applicable
Cooperative Work Experience:	N: Is not part of a cooperative work experience education program
Eligible for Credit by Exam:	No
Eligible for Pass/No Pass:	Yes
Taft College General Education:	NONE

Discipline:	Emergency Medical Technologies
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