



Paramedic Program

Student Handbook

Version 8/16

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Camsen Career Institute

Policies and Procedures

The paramedic course policies and procedures for Camsen Career Institute are to be referred to as guidelines governing the Paramedic program. It is your responsibility as a student to be familiar with these policies and procedures and to adhere to them throughout the program duration.

Program Hours

See particular class schedules for class dates, topics and exam dates. Classes are generally 4 1/2 to 9 hours in length. 1 day per week classes meet Tuesday or Wednesday 9-6 pm. Night classes meet various evenings from 6pm to 10:30pm. Shift based classes are offered every third day excluding weekends and are from 9-6 pm. Clinical and field externship hours will be scheduled by the student. Externship hours must be completed prior to sitting for the Mid-term and Final Exam. See Externship requirements.

Office Hours

Office hours are from 9 a.m.-5 p.m., Monday through Friday. Phone numbers for staff will be provided at orientation for emergencies.

Appointments

Should you require a meeting with any administrative staff, an appointment is necessary.

Mission statements

At Camsen Career Institute our mission is to successfully prepare our graduates for new career opportunities. Our goals are:

- Offer our graduates career opportunities by providing a quality education based upon the requirements of perspective employers.
- Create a positive learning environment that recognizes an individual's learning style and one that will meet their unique learning goals.
- Use diverse instructional methods to foster a desire to learn.
- Maintain a qualified staff dedicated to the professional development of the individual student.
- Use the latest methods of instruction by constantly training our faculty and staff through continuing education.
- To invoke a personal desire for each student to want to be a life-long learner and constantly meet expectations.
- We believe that training and education is the foundation that a successful career will be built upon.
- We will help develop this philosophy by:
 - Believing that all students should be treated as individuals and will always be encouraged to develop to their potential.

- Acknowledge that education must be responsive to the needs of the industry that the student intends to enter or advance. Acknowledge that each student shares the responsibility for his or her own achievements and successes.
- Providing each individual with the tools needed to achieve their career goals.
- Including all faculty members in the decision process regarding development and changes in curriculums.

Required Hours

Didactic/Online/Testing/Skills	690 hours
Externships: Rescue/Ambulance	350 hours
Emergency Room	60 hours

Faculty

The Camsen Career Institute faculty is made up individuals who are experts in their field. The instructors in each discipline specialize in their knowledge of the subject matter. Instructors and guest speakers will include doctors, nurses, paramedic and subject matter experts.

Injury / Exposure Protocol

Students must be covered by Workman’s compensation or personal health coverage while enrolled in the Course and during field or hospital externships.

The procedure to follow for an injury or exposure is as described below:

1. The student is to immediately inform the Instructor or Preceptor, who will then inform administrative staff.
2. Complete a Written Report (Obtain from Camsen Career Institute Staff).
3. Report to the Emergency Department if deemed necessary.
4. If student is covered by their agency, they must follow agency policy.
5. Return completed paperwork to administrative staff to determine course of direction.

Required Pre-course Paperwork

All required student paperwork is to be turned in no later than 14 (fourteen) days after the start of class. Failure to comply will result in immediate suspension. The student may return to class, once paperwork is received. Attendance policy will apply to any missed class hours due to suspension.

Property Damage

Any damage to equipment that involves a student must be reported to the Lead Instructor. The student, who damages any equipment or property may be responsible for its replacement or repair cost.

Infection Control

Universal Standards:

- Students **MUST** wear gloves any time they are in contact with patients during externships.
- If the patient is coughing, or vomiting, goggles and masks must be used.
- In case of exposure consult “procedures to follow in case of injury” above
- Gloves will be worn at the discretion of the Lead Instructor during class or lab times
- All students **must complete all required immunization requirements prior to attending any externship**. All potential exposures/needle sticks must be reported to the campus director immediately and follow the policies outlined in the Camsen Career Institute’s Exposure Control Plan.

Attendance

Students are responsible for the material covered in ALL scheduled classes. Students will be responsible for all content of the textbook(s).

If the student misses class hours, he/she will be responsible for all material covered during the absence. The instructor is not responsible for providing the student with any handouts or notes that are covered during the absence. It is up to the student to make arrangements to obtain the material missed.

Students are only permitted to miss a maximum of 18 lecture/lab hours. Make up time must be completed outside of scheduled classroom hours, at the discretion of the Lead Instructor.

****ANY STUDENT WITH MORE THAN 18 HOURS OF ABSENCES WILL AUTOMATICALLY BE PLACED ON ACADEMIC PROBATION****

Absences will be considered per hour missed, this includes time when the student arrives late or leaves early. Excessive tardies will be addressed by the lead instructor and MAY result in disciplinary action by the Director. Students may not be responsible for responding to calls, while in class.

Hurricane Procedures

Camsen Career Institute will determine the activities of the school on a daily, or sometimes, hourly basis when a Hurricane is involving the North Florida region. If there are any questions, please contact the school for direction.

Conduct

Students are expected to arrive for class prepared and ready to begin class at the time posted. Late arrivals are disruptive to the class. After each classroom session, the area shall be free of trash and other unnecessary materials. After lab sessions, the student is expected to assist in the Instructors in returning the area back to an orderly fashion. Each class will elect a class leader. The class leader will be responsible for making sure the area is restored to a presentable state. The class leader will also work

with the lead instructor to address class problems and work as a liaison between the class and the instructors.

Class lectures are allowed to be recorded with approval of the instructor.

This is a **NO SMOKING** building. Smoking is allowed only in designated areas outside of the building. No tobacco products are allowed in the building at any time.

Any conduct that reflects negatively on the program or Camsen Career Institute will result in dismissal from the Paramedic Program. Any violation of the medical ethics for patient care and patient confidentiality will result in a meeting with the Program Director. The meeting will determine the proper course of discipline or dismissal. Examples of infractions that may result in disciplinary action or dismissal from class are:

- Cheating or any type of dishonesty
- Unprofessional behavior during class or any field externships
- Harassment of any kind toward students or staff
- Falsification of any documents pertaining to the campus or program
- Breach of patient confidentiality

Failure to comply with the campus rules and regulations will be considered reason for the students' dismissal from the program. The student may appeal a suspension or dismissal within 72 hours to the President, CEO. The decision of this meeting will be final. If the student is reinstated, the time missed will be made up at the discretion of the instructor. The student will be under a probationary period, not to exceed 3 weeks, after reinstatement.

Camsen Career Institute does not allow the possession of any object deemed a weapon of any kind on campus. This includes any object capable of inflicting serious harm.

Conditions for Reinstatement

Once a student has been dismissed for any of the reasons listed, they may seek reinstatement through a personal interview with the Course Coordinator and/or Program Director. If the Course Coordinator and/or Program Director feel the student will return and comply with the schools rule and regulations, a probationary period, not to exceed three (3) weeks, will be arranged.

Counseling / Grievance

Students who violate Course Policies shall be counseled by the Program Director. A counseling form, which includes the problem, corrective action and student's comments, will be completed and signed by the Program Director and the student. A copy will be given to the student and the original will be placed in the student's personal file.

Any grievance deemed necessary by the student shall be in writing to the Campus Director. If the meeting between the Campus Director and the student remains unsatisfactory a meeting between the student and the Campus President/CEO will be

scheduled. Any dispute that remains unresolved can be taken to the Commission for Independent Education through a grievance procedure

Electronic Devices

Electronic devices will be allowed for use in class as long as they are used for class activities. A device that is used for disruption of the class will be terminated from use.

Camsen Career Institute Dress Code

Dress code for Classroom and Lab:

- School issued Polo shirt; school issued T-shirt may be worn for Lab days. If a jacket is necessary, it shall have no writing or design that is considered an advertisement or offensive in any way.
- Black or khaki pants, NO JEANS.
- Shoes must be sturdy and form fitting to the foot and be black in color. Black athletic shoes are acceptable. No open toe shoes, sandals or flip-flops are allowed.
- Watches and wedding rings are allowed. Earrings must not hang from the ear. No visible piercing is allowed.
- Good personal hygiene and appearance must be maintained at all times. Hair that exceeds collar length must be tied up and be above the collar.
- Name tags, student ID's, are worn in class at the discretion of the lead instructor
- A watch with second hand must be brought to all classes; stethoscopes are at the discretion of the lead instructor for classes.

Any student found not wearing the appropriate "uniform" will be sent home and will not receive hours the class time missed. NO DEVIATIONS from the dress code will be allowed.

Dress Code for Externships

- School issued Polo. If a jacket is necessary, it shall have no writing or design that is considered an advertisement or offence in any way.
- Pants shall be black or khaki in color. NO JEANS
- Shoes must be sturdy and form fitting to the foot. Black athletic shoes are acceptable. No open toe shoes, sandals or flip-flops are allowed.
- Watches and wedding rings are allowed. Use caution when riding units with wedding rings. Earrings must not hang from the ear. No visible piercing is allowed.
- Good personal hygiene and appearance must be maintained at all times. Hair that exceeds collar length must be tied up and be above the collar.
- Nametags, student ID's, must be worn and visible at all times. Student must be readily identified as a student by the public at all times. ID's must be worn above the waist.
- A watch with a second hand **AND** Stethoscope must be with the students at all times during the externship.

Any student found not wearing the appropriate "uniform" will be sent home and will not receive externship hours for time missed. NO DEVIATIONS from the dress code will be allowed.

During externships, the facilities dress code may supersede Camsen Career Institute's policies. If this is the case, the student must conform to that facilities dress code. Agencies allowing externships at their facilities have the right to dismiss the student for not adhering to the dress code.

Externship Requirements

Hospital Externship Time:

Students are required to complete 60 hours of hospital externship time. Externship time will be scheduled by the student. A minimum of 12 patient contacts is necessary for each ER externship, and objectives must be completed. All reports, evaluation sheets and FISDAP requirements must be completed and turned in to your instructor within 7 days of externship or they will not be counted. A minimum hourly requirement of hospital externships to be completed **PRIOR** to Mid-term is **12 hours**.

Any student who is late for a hospital externship will be counseled by the preceptor. It will then be determined by the preceptor whether or not the student is allowed to attend the externship. A student that fails to show up for a scheduled hospital externship, without prior cancellation notice **will be assessed a rescheduling fee of \$50.00** and/or disciplinary action, subject to the discretion of the lead instructor and externship coordinator. The externship cancellation form must be filled out at least one week prior to the date of cancellation. If the form is received less than one week in advance of externship date the student will be assessed the rescheduling fee of **\$50.00**.

If a faculty member is late without prior notification, students must make all efforts to contact the instructor or externship coordinator. If no contact is made within 30 minutes, the students may leave the facility.

Students will not received credit for the externship, so it is in the best interest of the student to make contact with the externship coordinator, so that he may schedule someone to appear for the externship to continue. All handbook tasks must be completed in each area as described. Successful completions of clinical and field externships are necessary for course completion.

Field Externship Time:

Students are required to complete 350 hours total on ALS permitted vehicles. It is required the student complete a minimum of 280 hours on an ALS transport unit. The additional 70 hours of field training may be on an ALS transport or ALS Non-Transport permitted unit. The student **MUST** be accompanied by a Paramedic at all times when provided patient care in the unit. Times for riding of units will be specific to the agreement by contract with each agency. Contact you instructor or externship coordinator for questions. A minimum hour requirement for Field externships to be completed **PRIOR** to Mid-term is **75 hours**.

Externships may be scheduled after all required paper work has been completed and is in the student's file. These are:

- Proof High School Diploma or equivalent
- Be at least 18 years of age upon graduating from the program
- Completion of registration form and enrollment agreements
- Documentation of U.S. citizenship
- Proof of good physical condition Proof of good physical condition by a licensed Physician.
- Proof of MMR Vaccination, current TB Test, Hepatitis B Vaccine.
- ***Student must complete the EMT course prior to enrollment and obtain State of Florida EMT certification prior to completion of Phase I.***
- Fulfillment of all admission requirements
- Must maintain certification in CPR by the American Heart Association Health Care Provider or equivalent
- ALL required externship paperwork must on file before the student will be allowed to take the Final Written Examination.

Testing

Each student will take modular exams and quizzes as outlined in the schedule. Each exam may consist of multiple choice, fill in the blank, or short essay questions. Students must maintain an 75% average on these exams throughout Paramedic I and Paramedic II. If a students average falls below an 75%, he or she will be placed on academic probation until their average is increased to 75%, not to exceed 3 weeks. The student will be notified in writing of probation status, along with suggestions for improvement. If, after the probation period, the student's average is less than 75%, the student may be dismissed from the program. Dismissal will be at the discretion of an administrator, after consultation with the lead instructor and student.

Quizzes will be graded in the same manner as exams. The average of all quizzes will be considered one additional exam grade prior to midterm and final written exams. Make-up quizzes are at the discretion of the Lead Instructor.

Midterm and Final Written Exams

Students must have an average of 75% on all exams to be eligible to sit for the midterm and final written and practical exams.

Students ***must pass*** the midterm and final written exams with a ***70% or greater***. If a student does not pass the midterm or final written exam he or she will be dismissed from the program at that time. After the midterm exams, the grading system restarts. There will be no make up for midterm and final exam.

Midterm and Final Practical Exams

Midterm and final practical exam criteria is as follows:

- All skill sheets used for practical testing will be averaged together and be considered **one** exam score.
- The practical score will be averaged with the written score and ***must be a minimum of 75%***.
- If the student fails to achieve an overall average of 75% on the written and practical exams he or she will be dismissed from the program.

Graduation Requirements

These requirements must be completed prior to taking the Final Exam:

- Class/online/lab 690 hours
- Hospital/Emergency Department 60 hours
- ALS Field Externship 350 hours
- Pass modular exams with an overall average of 75%
- Pass Mid-term written and practical exams
- ACLS completion
- PALS completion
- PHTLS completion
- AMLS completion
- GEMS completion

In addition to the above the student must complete the following to be considered for graduation:

- Successfully pass comprehensive final written and practical exam with an average of 75% or greater.
- Complete required competency evaluations from externships.
- Demonstrate competencies in required critical tasks, as outlined in skills lab, clinical area and field externships.
- Completion of goals and objectives as outlined in FISDAP.
- Must be financially cleared with the Institution prior to receiving Diploma.

Issuance of a Certificate of Completion

Diplomas will be issued within 14 days of meeting all graduation requirements listed above. The final decision as to whether a student passes or fails the course shall be determined at the discretion of lead instructor, Program Director and ultimately the Medical Director. Each candidate for a diploma will be reviewed by the Program Director on an individual basis. The decision for successful completion shall not be determined by grade point average alone.

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Clinical Skills Objectives

Skills with asterisk (*) MUST have total amount to graduate**

Assessments

Minimum Age

20 0-17 yrs.

50 18-64 yrs.

30 >=65 yrs.

Mandatory LIVE Skills

Minimum Category

50 ***IV Success

15 ***Med Administration

10 ***Bag - Valve - Mask

5 ***Intubations

*** ET (If unable to obtain, you may substitute 5 simulated intubations for every one live intubation. Each of these simulations must be in the presence of an instructor and be documented as a simulation.)

55 ***Team Lead

Complaints & Pathologies

Minimum Encounter

- 30 Chest Pain
- 5 Cardiac Arrest
- 10 Stroke
- 25 Medical
- 20 Respiratory - Adult
- 5 Respiratory - Pediatric
- 20 Abdominal
- 10 Syncope
- 15 AMS / Neuro
- 7 Obstetrics
- 40 Trauma
- 15 Psychiatric

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OBJECTIVES FOR THE PARAMEDIC STUDENT

Upon completion of the Paramedic Program the student will be able to:

1. Identify the role of the paramedic.
2. Use interpersonal skills.
3. Recognize a medical emergency; assess the situation.
4. Manage emergency care.
5. Demonstrate ability to treat shock.
6. Demonstrate general knowledge of pharmacology.
7. Assess airway function and treat airway obstruction.
8. Assess cardiac function and treat basic arrhythmias.
9. Assess central nervous system function and treat patient with nervous system disorder.
10. Assess and manage soft tissue injuries.
11. Assess and manage musculo/skeletal injuries.
12. Identify and manage medical emergencies.
13. Identify and manage obstetric/gynecologic emergencies.
14. Assess pediatric/neonatal patients and transport as needed.
15. Identify and manage the geriatric patient.
16. Identify and manage the emotionally disturbed patient.
17. Apply techniques of extrication and rescue.
18. Use telemetry and other communications equipment.
19. Demonstrate employability skills.

Specific Objective for Each Clinical Site

EMERGENCY DEPARTMENT OBJECTIVES

During clinical rotations in this area, the paramedic student should have the opportunity to gain experience and develop proficiency in the following skills:

1. Triage
2. Physical assessment, patient history, documentation in compliance with hospital policy for all age groups.
3. Vital and diagnostic signs: recognition and significance.
4. Aseptic techniques and universal precautions.
5. Peripheral IV insertion and drip rate calculations.
6. Drug therapy: IV, IM, SQ, PO, SL, and ET - dosage calculations
7. Drug therapy: IV, IM, SQ, PO, SL, and ET - drug administration
8. Cardiac arrest procedures.
9. Management of trauma, medical, peds, OB/gyn emergencies.
10. Airway management including insertion of airways, suctioning, oxygen therapy, intubation (under direct physician supervision)

11. Use of cardiac monitors and interpretation of rhythms.
12. Venipuncture for blood specimens
13. Proper needle disposal following hospital/OSHA guidelines
14. Emotional support of patient and family.
15. Use of IV pumps.
16. Recognition of safety hazards, and implementation of safety procedures. (i.e.: using bedside rails)
17. Interpretation of ABG's.
18. Wound care and bandaging.

In addition to the above, the paramedic student should observe and assist with the following procedures as the opportunity arises:

1. Pacemaker insertion
2. Spinal tap
3. Traction, splinting, pin insertions
4. Central and jugular line insertions
5. Twelve lead EKGs
6. Ventilator and respiratory treatments
7. CT and Nuclear scans

Students must be under DIRECT supervision at all times.

- No student or Paramedic Instructor is to accept total responsibility for patient care.
- All patients will remain under control of the Emergency Department staff. Paramedic student is not allowed to discharge a patient from the Emergency Department.
- Students may go to in-house codes with the approval of the EMS Externship Instructor.
- Student may not attend a code without direct supervision of the ER physician or EMS Externship Instructor/Preceptor.
- Students will stay in the Emergency Department unless otherwise assigned by the EMS Externship Instructor/Preceptor.
- Students should assist Emergency Department staff in all aspects of patient care including changing beds, transferring patient to floor or X-ray, giving urinals or bedpans, etc.
- A paramedic student may sign off when administering injections, starting IV, giving medications and administering a breathing treatment.
- The preceptor **MUST** sign with them. But at **NO** time will the paramedic student be allowed to document on the patient's chart.
- A clinical experience in the Emergency Department requires the cooperative effort of the students, staff, physicians, and the clinical instructor.
- Any problems should be brought to the attention of the EMS Externship Instructor immediately.

Field Internship Requirements

Conduct

Student conduct and attitude should convey a message of serious interest in the care of the patient and the procedure performed.

Professional conduct shall reflect respect and consideration. Patient confidentiality shall be respected. Any discussion of the physical or social life of patients, EMS personnel, or personnel from other assisting agencies is strictly unethical.

Constructive criticism and suggestions are welcome. If the student notices things that the student does not understand or that is questionable, please talk to the person involved first. Additional clarification or information may be obtained from supervisors, training staff, or the EMS Coordinator. Use good judgment for the appropriate time to ask a question.

Student Responsibilities

1. The student should be on time and dressed in Paramedic Uniform.

LATE POLICY - A student who reports for an assigned shift who is late on three (3) separate occasions will be disciplined, up to removal from the program.

- a. The student may complete a maximum of 24 hours within a 36-hour time frame.
2. Report to the assigned station/preceptor.
 3. If the uniform becomes soiled with blood or body fluids, it is to be removed and the student is responsible for decontamination per OSHA guidelines. If further information is needed regarding decontamination, contact should be made with any EMS Faculty.
 4. A second uniform is recommended. If the student does not have an additional uniform to change into once the initial uniform has become soiled, the student will be sent home immediately.
 5. The student is to perform only those duties as identified on the List of objectives, under **DIRECT** supervision of paramedic preceptor.
 6. Hand washing is to be completed between each response and as indicated.
 7. Use of personal protective equipment (ppe), (i.e. gloves, face shield, gowns) as needed when exposure to blood and body fluids exists.
NOTE: FAILURE TO USE PPE WILL RESULT IN STUDENT BEING SENT HOME FOR REMAINDER OF SHIFT. Preceptor will document incident and the EMS Coordinator is to be notified.
 8. Valid CPR (Provider Course C or Basic Rescuer) card, Florida EMT-B license, and proper identification (DL) must be carried at all times.

Preceptor Responsibilities

1. Direct supervision of paramedic students at all times.
2. Review of operational procedures and policies, standing orders, and medical protocol.
3. Review of ALS/BLS equipment as determined in daily goals.
4. Confirm patient consent for permission of student to administer patient care.
5. Critique calls as soon as possible after completion of run.
include: evaluation and scene control, patient assessment, and hx taking
communication/documentation skills, teamwork, judgments/treatment skills
use of equipment, establishment of priorities
6. Problems of concerns should be brought to the attention of the EMS Coordinator. Problems of a serious nature should be brought to the attention of the on-duty supervisor and the EMS Coordinator **IMMEDIATELY**. (i.e.: Unprofessional conduct/manner, improper uniform, student continually late, noncompliance with PPE, student/patient injury).
7. Complete daily student evaluation and review with student.

List of Objectives

During the field internship, the paramedic student should have the opportunity to gain experience and develop proficiency in the following skills:

1. Physical assessment, patient history, and documentation in compliance with policy for all age groups.
2. Recognize and react appropriately to scene/safety hazards.
3. Vital and diagnostic signs: recognition and significance.
4. Aseptic techniques and universal precautions.
5. Peripheral IV insertion and drip rate calculations.
6. Drug therapy: IV, IM, SQ, SL, ET, Updraft - dosage calculations.
7. Drug therapy: IV, IM, SQ, SL, ET, Updraft - drug administration.

Student will

confirm all medications prior to administration.

8. Cardiac arrest procedures.
 - a. CPR
 - b. Airway management
 - c. Defibrillate/Cardioversion/External Pacing
 - d. Pharmacology management
9. Management of trauma, medical, peds, psychiatric, geriatric, OB/GYN emergencies.
10. Airway management including: insertion of oral airways, suctioning, oxygen therapy and oral/nasal endotracheal intubation.
11. Use of cardiac monitors and interpretation of rhythms.
12. Use of PPE recognition and application.
13. Proper needle disposal and infectious waste

disposal/decontamination

following MCEMS/OSHA guidelines.

14. Emotional support of patient and family.
15. Use of IV Pump.
16. Wound care and bandaging.
17. Splinting of extremity fractures.
18. Cervical immobilization and proper extrication. (Students are **not**

allowed to

use heavy rescue extrication equipment such as jaws, etc.)

equipment

carried on EMS units.

equipment

20. Didactical understanding and practical application of all ALS

carried on EMS units.

STUDENTS MUST BE UNDER DIRECT SUPERVISION AT ALL TIMES.

Station Responsibilities

1. Students are expected to actively participate in daily station cleaning duties (i.e.: mopping floors, dusting, etc) with EMS crew members.
2. Assist with cleaning, stocking, and inventory of ambulance.
3. Study and work with preceptor daily.
4. Utilize self-motivation and initiative for ultimate learning experiences.

Notification Procedures

LATE/SICK - notify preceptor, and EMS Coordinator; if not in office, leave message on phone mail, do not page for late/sick notification.

INJURY - this includes any injury to self or patient, notify on-duty supervisor, on-duty supervisor will page ECC EMS Clinical Coordinator

INFECTIOUS DISEASE EXPOSURE - complete Exposure Form and turn into EMS Coordinator

EMS PRECEPTORS - notify on-duty supervisor of any operational problems, and the EMS Coordinator of any internship concerns.

Student Restrictions

1. Students will not be allowed to drive any vehicles.
2. Students will not be allowed to participate in any fire-related activities.
3. Students may perform radio communications.
4. Any employees who are paramedic students may count their “on duty time” towards the Paramedic Internship only if they are assigned to a 3 person crew. They may not be a part of “minimum daily staffing”.
5. The EMS uniform shirt will need to be worn while performing paramedic

skills.

6. Employees externing on any shift other than their regular assigned shift must wear the Paramedic Student Uniform.
7. Fire service employees riding on units performing as a Paramedic student may wear the Paramedic work uniform. **The Paramedic Student must be easily identified as a “student” at all times during their externship, this can be done by wearing student identification badge being worn or school polo.**
8. Fire service employees who must return to fire-related duties (brush fires, house fires, etc.) must remove Paramedic uniform and cease hour time log towards required paramedic internship hours.
9. Students are not allowed to smoke or use tobacco products on EMS Clinical Duty time
10. The student must notify the EMS coordinator for tardiness or absence.
11. All shifts must be scheduled.
12. If a student must leave prior to the end of the scheduled shift, (due to illness or personal reasons), the EMS Coordinator and Agency supervisor must be notified.
13. The student must complete all hours assigned on an ALS units. Ride time may be extended based on below average documented performance evaluations and failure to meet listed objectives.
14. The Paramedic preceptor is ultimately responsible for patient care. Students are reminded not to take a procedural denial personally. (i.e.: critical patient, student may be allowed one (1) IV attempt to prevent on-scene delay)

EMS Clinical Evaluation Scoring Criteria

The scoring system on the reverse side of this page was developed to provide clinical preceptors with a comprehensive evaluation tool to measure a trainee’s performance. When properly used, this tool will help to pinpoint the person’s strengths and weaknesses. Please familiarize yourself with the individual parameters for each level of the scoring system.

4 Excellent Independent

This rating is used to identify a trainee whose knowledge/skill level is highly refined, who is extremely competent, is very accurate when diagnosing problems and is able to function safely and efficiently on their own with virtually no prompting or assistance from the preceptor. Trainees who are given this rating are ready to function on their own without a preceptor.

3 Competent Supervised

This rating is used to denote a trainee who has above average knowledge/skills, accurate most of the time, knows when to ask for assistance, and requires minimal prompting for the preceptor. Trainees who are given this rating are nearly ready to function on their own but require occasional guidance an/or assistance from the

preceptor.

2 Tentative Assisted

This rating is used to identify a trainee who, with frequent prompting or assistance from the preceptor, is able to perform tasks safely and accurately. Trainees who are given this rating require considerable assistance and/or guidance from the preceptor and are not ready to function on their own.

1 Needs more training Provisional

This rating is used to identify a trainee who possesses both a fundamental knowledge and/or skill level but requires constant prompting and assistance from the preceptor to perform tasks safely and accurately. Trainees who are given this rating are capable of initiating patient care but are unable to function on their own without constant assistance and guidance from the preceptor.

0 Unpredictable Dependent

This rating is used to identify a trainee who lacks basic knowledge, is unskilled, and is unable to perform in a safe or accurate manner. Trainees who are given this rating are considered unable to initiate or assume any portion of patient care on their own, necessitating constant intervention on the part of the preceptor.

Observed

This rating is used when the trainee remained in an observer role only and did not actually participate or perform a particular skill.

Not Applicable

This rating is used when the trainee was not able to observe, participate or perform a particular skill.

4 Excellent Independent

- _____ Performs safely and accurately every time
- _____ Does not require supportive or directional cues from the preceptor/instructor
- _____ Consistently demonstrates a high level of skill, dexterity and proficiency
- _____ Manages time effectively (spends minimal amount of time on each task)
- _____ Appears relaxed and confident
- _____ Consistently applies theoretical knowledge accurately
- _____ Focuses on patient while providing care

3 Competent Supervised

- _____ Performs safely and accurately most of the time, requires minimal assistance

- _____ Requires minimal supportive or directive cues from the preceptors/instructor
- _____ Demonstrates an above average skill level, is coordinated and proficient most of the time
- _____ Spends reasonable amount of time on each task, occasionally expends energy unnecessarily
- _____ Appears relaxed and confident most of the time, outward anxiety noted occasionally
- _____ Appears theoretical knowledge accurately most of the time, requires minimal cues
- _____ Initially focuses on patient, as complexity of case increases – attention is diverted to task

2 Tentative Assisted

- _____ Performs safely and accurately with frequent assistance
- _____ Requires frequent supportive or directive cues from the preceptors/instructor
- _____ Skill level is average, appears awkward and requires assistance to ensure proficiency
- _____ Requires frequent prompting to utilize time efficiently, consistently wastes time
- _____ Appears nervous but able to maintain composure with reassurance, occasionally turns over care to preceptor/instructor
- _____ Identifies theoretical principles but requires direction for application
- _____ Focuses primarily on task, must be prompted to focus on patient

1 Needs more training Provisional

- _____ Requires continuous assistance to perform safely, not always accurate
- _____ Requires continuous supportive and directional cues from the preceptor/instructor
- _____ Consistently demonstrates a lack of skill, is uncoordinated and requires considerable assistance
- _____ Does not complete tasks in a timely manner; activities are disrupted or omitted
- _____ Questions ability, requires on-going reassurance, frequently turns care over to preceptor/instructor
- _____ Identifies fragments of theoretical principles, applies them inappropriately
- _____ Focuses entirely on task, must be repeatedly prompted to focus on patient

0 Unpredictable Dependent

- _____ Performs in an unsafe or inaccurate manner, situation requires intervention by the preceptor/instructor
- _____ Unable to perform without directional cues from the preceptor/instructor
- _____ Performs in an unskilled manner and is not proficient
- _____ Is non-productive, is unable to manage time effectively or does not complete tasks
- _____ Demonstrates overall lack of confidence, does not respond to reassurance,

preceptor/instructor must assume care
_____ Unable to identify theoretical principles or the ability to apply them
_____ Unable to focus on patient or task despite cues

Camsen Career Institute

OBJECTIVES

UNIT TERMINAL OBJECTIVE

1-1 At the completion of this unit, the paramedic student will understand his or her roles and responsibilities within an EMS system, and how these roles and responsibilities differ from other levels of providers.

COGNITIVE OBJECTIVES

AT THE COMPLETION OF THIS UNIT, THE PARAMEDIC STUDENT WILL BE ABLE TO:

1-1.1 Define the following terms:

- a) EMS Systems.
- b) Licensure.
- c) Certification.
- d) Registration.
- e) Profession.
- f) Professionalism.
- g) Health care professional.
- h) Ethics.
- i) Peer review.
- j) Medical Direction.
- k) Protocols.

1-1.2 Describe key historical events that influenced the development of national Emergency Medical Services (EMS) systems. (C-1)

1-1.3 Identify national groups important to the development, education, and implementation of EMS. (C-1)

1-1.4 Differentiate among the four nationally recognized levels of EMS training/education, leading to licensure/certification/registration. (C-1)

1-1.5 Describe the attributes of a paramedic as a health care professional. (C-1)

1-1.6 Describe the recognized levels of EMS training/education, leading to licensure/certification in his or her state. (C-1)

1-1.7 Explain paramedic licensure/certification, recertification and reciprocity requirements in his or her state. (C-1)

1-1.8 Evaluate the importance of maintaining one's paramedic license/certification. (C-3)

1-1.9 Describe the benefits of paramedic continuing education. (C-1)

1-1.10 List current state requirements for paramedic certification in his/her state. (C-1)

- 1-1.11 Discuss the role of national associations and of a national registry agency. (C-1)
- 1-1.12 Discuss current issues in his / her state impacting EMS. (C-1)
- 1-1.13 Discuss the roles of various EMS standard setting agencies. (C-1)
- 1-1.14 Identify the standards (components) of an EMS System as defined by the National Highway Traffic Safety Administration. (C-1)
- 1-1.15 Describe how professionalism applies to the paramedic while on and off duty. (C-1)
- 1-1.16 Describe examples of professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service. (C-1)
- 1-1.17 Provide examples of activities that constitute appropriate professional behavior for a paramedic. (C-2)\
- 1-1.18 Describe the importance of quality EMS research in the future of EMS. (C-3)
- 1-1.19 Identify the benefits of paramedics teaching in their community. (C-1)
- 1-1.20 Describe what is meant by “citizen involvement in the EMS system.” (C-1)
- 1-1.21 Analyze how the paramedic can benefit the health care system by supporting primary care to patients in the out-of-hospital setting.
- 1-1.22 List the primary and additional responsibilities of paramedics.
- 1-1.23 Describe the role of the EMS physician in providing medical direction.
- 1-1.24 Describe the benefits of medical direction, both on-line and off-line.
- 1-1.25 Describe the process for the development of local policies and protocols. (C-2)
- 1-1.26 Provide examples of local protocols. (C-1)
- 1-1.27 Discuss pre-hospital and out-of-hospital care as an extension of the physician. (C-1)
- 1-1.28 Describe the relationship between a physician on the scene and the paramedic on the scene, and the WMS physician providing on-line medical direction. (C-1)
- 1-1.29 Describe the components of continuous quality improvements. (C-1)
- 1-1.30 Analyze the role of continuous quality improvement with respect to continuing medical education and research. (C-3)
- 1-1.31 Define the role of the paramedic relative to the safety of the crew, the patient, and bystanders. (C-1)
- 1-1.32 Identify local health care agencies and transportation resources for patients with special needs. (C-1)
- 1-1.33 Describe the role of the paramedic in health education activities related to illness and injury prevention. (C-1)
- 1-1.34 Describe the importance and benefits of research. (C-2)
- 1-1.35 Explain the EMS provider’s role in data collection. (C-1)
- 1-1.36 Explain the basic principles of research. (C-1)
- 1-1.37 Describe a process of evaluating and interpreting research. (C-3)

AFFECTIVE OBJECTIVES

AT THE COMPLETION OF THIS UNIT, THE PARAMEDIC STUDENT WILL BE ABLE TO:

- 1-1.38 Assess personal practices relative to the responsibility for personal safety, the safety of the crew, the patient, and bystanders. (A-3)

- 1-1.39 Serve as a role model for others relative to professionalism in EMS. (A-3)
- 1-1.40 Value the need to serve as the patient advocate inclusive of those with special needs, alternate life styles and cultural diversity. (A-3)
- 1-1.41 Defend the importance of continuing medical education and skills retention. (A-3)
- 1-1.42 Advocate the need for supporting and participating in research efforts aimed at improving EMS systems. (A-3)
- 1-1.43 Assess personal attitudes and demeanor that may distract from professionalism. (A-3)
- 1-1.44 Value the role that family dynamics plays in the total care of patients. (A-3)
- 1-1.45 Advocate the need for injury prevention, including abusive situations. (A-1)
- 1-1.46 Exhibits professional behaviors in the following areas: integrity, empathy, self-motivation, appearance and personal hygiene, self-confidence, communications, time management, teamwork and diplomacy, respect, patient advocacy, and careful delivery of service. (A-2)

UNIT TERMINAL OBJECTIVE

1-2 At the completion of this unit, the paramedic student will understand and value the importance of personal wellness in EMS and serve as a healthy role model for peers.

COGNITIVE OBJECTIVES

AT THE COMPLETION OF THIS UNIT, THE PARAMEDIC STUDENT WILL BE ABLE TO:

- 1-2.1 Discuss the concept of wellness and its benefits. (C-1)
- 1-2.2 Define the components of wellness. (C-1)
- 1-2.3 Describe the role of the paramedic in promoting wellness. (C-1)
- 1-2.4 Discuss the components of wellness associated with proper nutrition. (C-1)
- 1-2.5 List principles of weight control. (C-1)
- 1-2.6 Discuss how cardiovascular endurance, muscle strength, and flexibility contribute to physical fitness. (C-2)
- 1-2.7 Describe the impact of shift work on circadian rhythms. (C-1)
- 1-2.8 Discuss how periodic risks assessments and knowledge of warning signs contribute to cancer and cardiovascular disease prevention. (C-1)
- 1-2.9 Differentiate proper from improper body mechanics for lifting and moving patients in emergency and non-emergency situations. (C-3)
- 1-2.10 Describe the problems that a paramedic might encounter in a hostile situation and the techniques used to manage the situation. (C-1)
- 1-2.11 Given a scenario involving arrival at the scene of a motor vehicle collision, assess the safety of the scene and propose ways to make the scene safer. (C-3) 93
- 1-2.12 List factors that contribute to safe vehicle operations. (C-1)
- 1-2.13 Describe the considerations that should be given to: (C-1)
 - a) Using escorts.
 - b) Adverse environmental conditions.
 - c) Using lights and siren.
 - d) Proceeding through intersections.

e) Parking at an emergency scene.

1-2.14 Discuss the concept of “due regard for the safety of all others” while operating an emergency vehicle. (C-1)

1-2.15 Describe the equipment available for self-protection when confronted with a variety of adverse situations. (C-1)

1-2.16 Describe the benefits and methods of smoking cessation. (C-1)

1-2.17 Describe the three phrases of the stress response. (C-1)

1-2.18 List factors that trigger the stress response. (C-1)

1-2.19 Differentiate between normal/ healthy and detrimental reactions to anxiety and stress. (C-3)

1-2.20 Describe the common physiological and psychological effects of stress. (C-1)

1-2.21 Identify causes of stress in EMS. (C-1)

1-2.22 Describe behavior that is a manifestation of stress on patients and those close to them and how these relate to paramedic stress. (C-1)

1-2.23 Identify and describe the defense mechanisms and management techniques commonly used to deal with stress. (C-1)

1-2.24 Describe the components of critical incident stress management (CISM). (C-1)

1-2.25 Provide examples of situations in which CISM would likely be beneficial to paramedics. (C-1)

1-2.26 Given a scenario involving a stressful situation, formulate a strategy to help cope with the stress. (C-3)

1-2.27 Describe the stages of the grieving process (Kubler-Ross). (C-1)

1-2.28 Describe the needs of the paramedic when dealing with death and dying. (C-1)

1-2.29 Describe the challenges for paramedics in dealing with the needs of children and other special populations related to their understanding or experience of death and dying. (C-1)

1-2.30 Discuss the importance of universal precautions and body substance isolation practices. (C-1)

1-2.31 Describe the steps to take for personal protection from airborne and blood borne pathogens. (C-1)

1-2.32 Given a scenario in which equipment and supplies have been exposed to body substances, plan for the proper cleaning, disinfection, and disposal of the items. (C-3)

1-2.33 Explain what is meant by an exposure and describe principles for management. (C-1)

1-2.34 Advocate the benefits of working toward the goal of a total personal wellness. (A-2)

1-2.35 Serve as a role model for other EMS providers in regard to a total wellness lifestyle. (A-3)

1-2.36 Value the need to assess his/her own lifestyle. (A-2)

1-2.37 Challenge his/herself to each wellness concept in his/ her role as a paramedic. (A-3)

1-2.38 Defend the need to treat each patient as an individual, with respect and dignity. (A-2)

1-2.39 Assess his/ her own prejudices related to the various aspects of cultural diversity. (A-3)

- 1-2.40 Improve personal physical well being through achieving and maintaining proper body weight, regular exercise and proper nutrition. (A-3)
- 1-2.41 Promote and practice stress management techniques. (A-3)
- 1-2.42 Defend the need to respect the emotional needs of dying patients and their families. (A-3)
- 1-2.43 Advocate and practice the use of personal safety precautions in all scene situations. (A-3)
- 1-2.44 Advocate and serve as a role model for other EMS providers relative to body substance isolation practices. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-2.45 Demonstrate safe methods for lifting and moving patients in emergency and non-emergency situations. (P-2)
- 1-2.46 Demonstrate the proper procedures to take for personal protection from disease. (P-2)

UNIT TERMINAL OBJECTIVE

1-3 At the completion of this unit, the paramedic student will be able to integrate the implementation of primary injury prevention activities as an effective way to reduce death, disabilities and health care costs.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1.3-1 Describe the incidence, morbidity and mortality of unintentional and alleged unintentional events. (C-1)
- 1.3-2 Identify the human, environmental, and socioeconomic impact of unintentional and alleged unintentional events. (C-1)
- 1.3-3 Identify health hazards and potential crime areas within the community. (C-1)
- 1.3-4 Identify local municipal and community resources available for physical, socioeconomic crises. (C-1)
- 1.3-5 List the general and specific environmental parameters that should be inspected to assess a patient's need for preventative information and direction. (C-1)
- 1.3-6 Identify the role of EMS in local municipal and community prevention programs. (C-1)
- 1.3-7 Identify the local prevention programs that promote safety for all age populations. (C-2)
- 1.3-8 Identify patient situations where the paramedic can intervene in a preventative manner. (C-1)
- 1.3-9 Document primary and secondary injury prevention data. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1.3-10 Value and defend tenets of prevention in terms of personal safety and wellness. (A-3)
- 1.3-11 Value and defend tenets of prevention for patients and communities being served. (A-3)

1.3-12 Value the contribution of effective documentation as one justification for funding of prevention programs. (A-3)

1.3-13 Value personal commitment to success of prevention programs. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

1.3-14 **Demonstrate the use of protective equipment appropriate to the environment and scene. (P-3)**

UNIT TERMINAL OBJECTIVE

1-4 **At the completion of this unit, the paramedic student will understand the legal issues that impact decisions made in the out-of-hospital environment.**

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

1-4.1 Differentiate between legal and ethical responsibilities. (C-2)

1-4.2 Describe the basic structure of the legal system in the United States. (C-1)

1-4.3 Differentiate between civil and criminal law as it pertains to the paramedic. (C-1)

1-4.4 Identify and explain the importance of laws pertinent to the paramedic. (C-1)

1-4.5 Differentiate between licensure and certification as they apply to the paramedic. (C-1)

1-4.6 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. (C-1)

1-4.7 Define the following terms: (C-1)

a. Abandonment

b. Advance directives

c. Assault

d. Battery

e. Breach of duty

f. Confidentiality

g. Consent (expressed, implied, informed, involuntary)

h. Do not resuscitate (DNR) orders 95

i. Duty to act

j. Emancipated minor

k. False imprisonment

l. Immunity

m. Liability

n. Libel

o. Minor

p. Negligence

q. Proximate cause

r. Scope of practice

s. Slander

- t. Standard of care
- u. Tort

- 1-4.8 Differentiate between the scope of practice and the standard of care for paramedic practice. (C-3)
- 1-4.9 Discuss the concept of medical direction, including off-line medical direction and on-line medical direction, and its relationship to the standard of care of a paramedic. (C-1)
- 1-4.10 Describe the four elements that must be present in order to prove negligence. (C-1)
- 1-4.11 Given a scenario in which a patient is injured while a paramedic is providing care, determine whether the four components of negligence are present. (C-2)
- 1-4.12 Given a scenario, demonstrate patient care behaviors that would protect the paramedic from claims of negligence. (C-3)
- 1-4.13 Explain the concept of liability as it might apply to paramedic practice, including physicians providing medical direction and paramedic supervision of other care providers. (C-2)
- 1-4.14 Discuss the legal concept of immunity, including Good Samaritan statutes and governmental immunity, as it applies to the paramedic. (C-1)
- 1-4.15 Explain the importance and necessity of patient confidentiality and the standards for maintaining patient confidentiality that apply to the paramedic. (C-1)
- 1-4.16 Differentiate among expressed, informed, implied, and involuntary consent. (C-2)
- 1-4.17 Given a scenario in which a paramedic is presented with a conscious patient in need of care, describe the process used to obtain consent. (C-2)
- 1-4.18 Identify the steps to take if a patient refuses care. (C-1)
- 1-4.19 Given a scenario, demonstrate appropriate patient management and care techniques in a refusal of care situation. (C-3)
- 1-4.20 Describe what constitutes abandonment. (C-1)
- 1-4.21 Identify the legal issues involved in the decision not to transport a patient, or to reduce the level of care being provided during transportation. (C-1)
- 1-4.22 Describe how hospitals are selected to receive patients based on patient need and hospital capability and the role of the paramedic in such selection. (C-1)
- 1-4.23 Differentiate between assault and battery and describe how to avoid each. (C-2)
- 1-4.24 Describe the conditions under which the use of force, including restraint, is acceptable. (C-1)
- 1-4.25 Explain the purpose of advance directives relative to patient care and how the paramedic should care for a patient who is covered by an advance directive. (C-1)
- 1-4.26 Discuss the responsibilities of the paramedic relative to resuscitation efforts for patients who are potential organ donors. (C-1)
- 1-4.27 Describe the actions that the paramedic should take to preserve evidence at a crime or accident scene. (C-1)
- 1-4.28 Describe the importance of providing accurate documentation (oral and written) in substantiating an incident. (C-1)
- 1-4.29 Describe the characteristics of a patient care report required to make it an effective legal document. (C-1)

1-4.30 Given a scenario, prepare a patient care report, including an appropriately detailed narrative. (C-2) 96

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-4.31 Advocate the need to show respect for the rights and feelings of patients. (A-3)
- 1-4.32 Assess his/ her personal commitment to protecting patient confidentiality. (A-3)
- 1-4.33 Given a scenario involving a new employee, explain the importance of obtaining consent for adults and minors. (A-2)
- 1-4.34 Defend personal beliefs about withholding or stopping patient care. (A-3)
- 1-4.35 Defend the value of advance medical directives. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

1-5 At the completion of this unit, the paramedic student will understand the role that ethics plays in decision-making in the out-of-hospital environment.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-5.1 Define ethics. (C-1)
- 1-5.2 Distinguish between ethical and moral decisions. (C-3)
- 1-5.3 Identify the premise that should underlie the paramedic's ethical decisions in out-of-hospital care. (C-1)
- 1-5.4 Analyze the relationship between the law and ethics in EMS. (C-3)
- 1-5.5 Compare and contrast the criteria that may be used in allocating scarce EMS resources. (C-3)
- 1-5.6 Identify the issues surrounding the use of advance directives, in making a prehospital resuscitation decision. (C-1)
- 1-5.7 Describe the criteria necessary to honor an advance directive in your state. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-5.8 Value the patient's autonomy in the decision-making process. (A-2)
- 1-5.9 Defend the following ethical positions: (A-3)
 - a. The paramedic is accountable to the patient.
 - b. The paramedic is accountable to the medical director.
 - c. The paramedic is accountable to the EMS system.
 - d. The paramedic is accountable for fulfilling the standard of care.
- 1-5.10 Given a scenario, defend or challenge a paramedic's actions concerning a patient who is treated against his/ her wishes. (A-3)
- 1-5.11 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. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

1-6 At the completion of this unit, the paramedic student will be able to apply the general concepts of pathophysiology for the assessment and management of emergency patients.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-6.1 Discuss cellular adaptation. (C-1)
- 1-6.2 Describe cellular injury and cellular death. (C-1) 97
- 1-6.3 Describe the factors that precipitate disease in the human body. (C-1)
- 1-6.4 Describe the cellular environment. (C-1)
- 1-6.5 Discuss analyzing disease risk. (C-1)
- 1-6.6 Describe environmental risk factors. (C-1)
- 1-6.7 Discuss combined effects and interaction among risk factors. (C-1)
- 1-6.8 Describe aging as a risk factor for disease. (C-1)
- 1-6.9 Discuss familial diseases and associated risk factors. (C-1)
- 1-6.10 Discuss hypoperfusion. (C-1)
- 1-6.11 Define cardiogenic, hypovolemic, neurogenic, anaphylactic and septic shock. (C-1)
- 1-6.12 Describe multiple organ dysfunction syndrome. (C-1)
- 1-6.13 Define the characteristics of the immune response. (C-1)
- 1-6.14 Discuss induction of the immune system. (C-1)
- 1-6.15 Discuss fetal and neonatal immune function. (C-1)
- 1-6.16 Discuss aging and the immune function in the elderly. (C-1)
- 1-6.17 Describe the inflammation response. (C-1)
- 1-6.18 Discuss the role of mast cells as part of the inflammation response. (C-1)
- 1-6.19 Describe the plasma protein system. (C-1)
- 1-6.20 Discuss the cellular components of inflammation. (C-1)
- 1-6.21 Describe the systemic manifestations of the inflammation response. (C-1)
- 1-6.22 Describe the resolution and repair from inflammation. (C-1)
- 1-6.23 Discuss the effect of aging on the mechanisms of self-defense. (C-1)
- 1-6.24 Discuss hypersensitivity. (C-1)
- 1-6.25 Describe deficiencies in immunity and inflammation. (C-1)
- 1-6.26 Describe homeostasis as a dynamic steady state. (C-1)
- 1-6.27 List types of tissue. (C-1)
- 1-6.28 Describe the systemic manifestations that result from cellular injury. (C-1)
- 1-6.29 Describe neuroendocrine regulation. (C-1)
- 1-6.30 Discuss the inter-relationships between stress, coping, and illness. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

1-6.31 Advocate the need to understand and apply the knowledge of pathophysiology to patient assessment and treatment. (A-2)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

1-7 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles of pharmacology and the assessment findings to formulate a field impression and implement a pharmacologic management plan.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-7.1 Describe historical trends in pharmacology. (C-1)
- 1-7.2 Differentiate among the chemical, generic (nonproprietary), and trade (proprietary) names of a drug. (C-3)
- 1-7.3 List the four main sources of drug products. (C-1)
- 1-7.4 Describe how drugs are classified. (C-1)
- 1-7.5 List the authoritative sources for drug information. (C-1)
- 1-7.6 List legislative acts controlling drug use and abuse in the United States. (C-1)
- 1-7.7 Differentiate among Schedule I, II, III, IV, and V substances. (C-3)
- 1-7.8 List examples of substances in each schedule. (C-1)
- 1-7.9 Discuss standardization of drugs. (C-1)
- 1-7.10 Discuss investigational drugs, including the Food and Drug Administration (FDA) approval process and the FDA classifications for newly approved drugs. (C-1)
- 1-7.11 Discuss special consideration in drug treatment with regard to pregnant, pediatric and geriatric patients. (C-1)
- 1-7.12 Discuss the paramedic's responsibilities and scope of management pertinent to the administration of medications. (C-1)
- 1-7.13 Review the specific anatomy and physiology pertinent to pharmacology with additional attention to autonomic pharmacology. (C-1)
- 1-7.14 List and describe general properties of drugs. (C-1)
- 1-7.15 List and describe liquid and solid drug forms. (C-1)
- 1-7.16 List and differentiate routes of drug administration. (C-3)
- 1-7.17 Differentiate between enteral and parenteral routes of drug administration. (C-3)
- 1-7.18 Describe mechanisms of drug action. (C-1)
- 1-7.19 List and differentiate the phases of drug activity, including the pharmaceutical, pharmacokinetic, and pharmacodynamic phases. (C-3)
- 1-7.20 Describe the process called pharmacokinetics, pharmacodynamics, including theories of drug action, drug-response relationship, factors altering drug responses, predictable drug responses, iatrogenic drug responses, and unpredictable adverse drug responses. (C-1)

- 1-7.21 Differentiate among drug interactions. (C-3)
- 1-7.22 Discuss considerations for storing and securing medications. (C-1)
- 1-7.23 List the component of a drug profile by classification. (C-1)
- 1-7.24 List and describe drugs that the paramedic may administer according to local protocol. (C-1)
- 1-7.25 Integrate pathophysiological principles of pharmacology with patient assessment. (C-3)
- 1-7.26 Synthesize patient history information and assessment findings to form a field impression. (C-3)
- 1-7.27 Synthesize a field impression to implement a pharmacologic management plan. (C-3)
- 1-7.28 Assess the pathophysiology of a patient's condition by identifying classifications of drugs. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-7.29 Serve as a model for obtaining a history by identifying classifications of drugs. (A-3)
- 1-7.30 Defend the administration of drugs by a paramedic to affect positive therapeutic affect. (A-3)
- 1-7.31 Advocate drug education through identification of drug classifications. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

1-8 At the completion of this unit, the paramedic student will be able to safely and precisely access the venous circulation and administer medications.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-8.1 Review the specific anatomy and physiology pertinent to medication administration. (C-1)
- 1-8.2 Review mathematical principles. (C-1)
- 1-8.3 Review mathematical equivalents. (C-1)
- 1-8.4 Differentiate temperature readings between the Centigrade and Fahrenheit scales. (C-3)
- 1-8.5 Discuss formulas as a basis for performing drug calculations. (C-1)
- 1-8.6 Discuss applying basic principles of mathematics to the calculation of problems associated with medication dosages. (C-1)
- 1-8.7 Describe how to perform mathematical conversions from the household system to the metric system. (C-1)
- 1-8.8 Describe the indications, equipment needed, technique used, precautions, and general principles of peripheral venous or external jugular cannulation. (C-1)
- 1-8.9 Describe the indications, equipment needed, technique used, precautions, and general principles of

- intraosseous needle placement and infusion. (C-1)
- 1-8.10 Discuss legal aspects affecting medication administration. (C-1)
- 1-8.11 Discuss the "six rights" of drug administration and correlate these with the principles of medication administration. (C-1)
- 1-8.12 Discuss medical asepsis and the differences between clean and sterile techniques. (C-1)
- 1-8.13 Describe use of antiseptics and disinfectants. (C-1)
- 1-8.14 Describe the use of universal precautions and body substance isolation (BSI) procedures when administering a medication. (C-1)
- 1-8.15 Differentiate among the different dosage forms of oral medications. (C-3)
- 1-8.16 Describe the equipment needed and general principles of administering oral medications. (C-3)
- 1-8.17 Describe the indications, equipment needed, techniques used, precautions, and general principles of administering medications by the inhalation route. (C-3)
- 1-8.18 Describe the indications, equipment needed, techniques used, precautions, and general principles of administering medications by the gastric tube. (C-3)
- 1-8.19 Describe the indications, equipment needed, techniques used, precautions, and general principles of rectal medication administration. (C-3)
- 1-8.20 Differentiate among the different parenteral routes of medication administration. (C-3)
- 1-8.21 Describe the equipment needed, techniques used, complications, and general principles for the preparation and administration of parenteral medications. (C-1)
- 1-8.22 Differentiate among the different percutaneous routes of medication administration. (C-3)
- 1-8.23 Describe the purpose, equipment needed, techniques used, complications, and general principles for obtaining a blood sample. (C-1)
- 1-8.24 Describe disposal of contaminated items and sharps. (C-1)
- 1-8.25 Synthesize a pharmacologic management plan including medication administration. (C-3)
- 1-8.26 Integrate pathophysiological principles of medication administration with patient management. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-8.27 Comply with paramedic standards of medication administration. (A-1)
- 1-8.28 Comply with universal precautions and body substance isolation (BSI). (A-1)
- 1-8.29 Defend a pharmacologic management plan for medication administration. (A-3)
- 1-8.30 Serve as a model for medical asepsis. (A-3)
- 1-8.31 Serve as a model for advocacy while performing medication administration. (A-3)
- 1-8.32 Serve as a model for disposing contaminated items and sharps. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-8.33 Use universal precautions and body substance isolation (BSI) procedures during medication administration. (P-2)
- 1-8.34 Demonstrate cannulation of peripheral or external jugular veins. (P-2)

- 1-8.35 Demonstrate intraosseous needle placement and infusion. (P-2)
- 1-8.36 Demonstrate clean technique during medication administration. (P-3)
- 1-8.37 Demonstrate administration of oral medications. (P-2)
- 1-8.38 Demonstrate administration of medications by the inhalation route. (P-2)
- 1-8.39 Demonstrate administration of medications by the gastric tube. (P-2)
- 1-8.40 Demonstrate rectal administration of medications. (P-2)
- 1-8.41 Demonstrate preparation and administration of parenteral medications. (P-2)
- 1-8.42 Demonstrate preparation and techniques for obtaining a blood sample. (P-2)
- 1-8.43 Perfect disposal of contaminated items and sharps. (P-3)

UNIT TERMINAL OBJECTIVE

1-9 At the completion of this unit, the paramedic student will be able to integrate the principles of therapeutic communication to effectively communicate with any patient while providing care.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 1-9.1 Define communication. (C-1)
- 1-9.2 Identify internal and external factors that affect a patient/ bystander interview conducted by a paramedic. (C-1)
- 1-9.3 Restate the strategies for developing patient rapport. (C-1)
- 1-9.4 Provide examples of open-ended and closed or direct questions. (C-1)
- 1-9.5 Discuss common errors made by paramedics when interviewing patients. (C-1)
- 1-9.6 Identify the nonverbal skills that are used in patient interviewing. (C-1)
- 1-9.7 Restate the strategies to obtain information from the patient. (C-1)
- 1-9.8 Summarize the methods to assess mental status based on interview techniques. (C-1)
- 1-9.9 Discuss the strategies for interviewing a patient who is unmotivated to talk. (C-1)
- 1-9.10 Differentiate the strategies a paramedic uses when interviewing a patient who is hostile compared to one who is cooperative. (C-3)
- 1-9.11 Summarize developmental considerations of various age groups that influence patient interviewing. (C-1)
- 1-9.12 Restate unique interviewing techniques necessary to employ with patients who have special needs. (C-1)
- 1-9.13 Discuss interviewing considerations used by paramedics in cross-cultural communications. (C-1)

AFFECTIVE OBJECTIVES

- 1-9.14 Serve as a model for an effective communication process. (A-3)
- 1-9.15 Advocate the importance of external factors of communication. (A-2)
- 1-9.16 Promote proper responses to patient communication. (A-2)
- 1-9.17 Exhibit professional non-verbal behaviors. (A-2)
- 1-9.18 Advocate development of proper patient rapport. (A-2)
- 1-9.19 Value strategies to obtain patient information. (A-2)
- 1-9.20 Exhibit professional behaviors in communicating with patients in special situations. (A-3)

1-9.21 Exhibit professional behaviors in communication with patient from different cultures. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE:

1-10 At the completion of this unit the paramedic student will be able to integrate the physiological, psychological, and sociological changes throughout human development with assessment and communication strategies for patients of all ages.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

1-10.1 Compare the physiological and psychosocial characteristics of an infant with those of an early adult. (C-3)

1-10.2 Compare the physiological and psychosocial characteristics of a toddler with those of an early adult. (C-3)

1-10.3 Compare the physiological and psychosocial characteristics of a pre-school child with those of an early adult. (C-3)

1-10.4 Compare the physiological and psychosocial characteristics of a school-aged child with those of an early adult. (C-3)

1-10.5 Compare the physiological and psychosocial characteristics of an adolescent with those of an early adult. (C-3)

1-10.6 Summarize the physiological and psychosocial characteristics of an early adult. (C-3)

1-10.7 Compare the physiological and psychosocial characteristics of a middle-aged adult with those of an early adult. (C-3)

1-10.8 Compare the physiological and psychosocial characteristics of a person in late adulthood with those of an early adult. (C-3)

AFFECTIVE OBJECTIVES

1-10.9 Value the uniqueness of infants, toddlers, pre-school, school aged, adolescents, early adulthood, middle-aged, and late adulthood physiological and psychosocial characteristics. (A-3)

PSYCHOMOTOR OBJECTIVES:

None identified for this unit

UNIT TERMINAL OBJECTIVE

2-1 At the completion of this unit, the paramedic student will be able to establish and/ or maintain a patent airway, oxygenate, and ventilate a patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

2-1.1 Explain the primary objective of airway maintenance. (C-1)

2-1.2 Identify commonly neglected prehospital skills related to airway. (C-1)

2-1.3 Identify the anatomy of the upper and lower airway. (C-1)

- 2-1.4 Describe the functions of the upper and lower airway. (C-1)
- 2-1.5 Explain the differences between adult and pediatric airway anatomy. (C-1)
- 2-1.6 Define gag reflex. (C-1)
- 2-1.7 Explain the relationship between pulmonary circulation and respiration. (C-3)
- 2-1.8 List the concentration of gases that comprise atmospheric air. (C-1)
- 2-1.9 Describe the measurement of oxygen in the blood. (C-1)
- 2-1.10 Describe the measurement of carbon dioxide in the blood. (C-1)
- 2-1.11 Describe peak expiratory flow. (C-1)
- 2-1.12 List factors that cause decreased oxygen concentrations in the blood. (C-1)
- 2-1.13 List the factors that increase and decrease carbon dioxide production in the body. (C-1)
- 2-1.14 Define atelectasis. (C-1)
- 2-1.15 Define FiO₂. (C-1)
- 2-1.16 Define and differentiate between hypoxia and hypoxemia. (C-1)
- 2-1.17 Describe the voluntary and involuntary regulation of respiration. (C-1)
- 2-1.18 Describe the modified forms of respiration. (C-1)
- 2-1.19 Define normal respiratory rates and tidal volumes for the adult, child, and infant. (C-1)
- 2-1.20 List the factors that affect respiratory rate and depth. (C-1)
- 2-1.21 Explain the risk of infection to EMS providers associated with ventilation. (C-3)
- 2-1.22 Define pulsus paradoxus. (C-1)
- 2-1.23 Define and explain the implications of partial airway obstruction with good and poor air exchange. (C-1)
- 2-1.24 Define complete airway obstruction. (C-1)
- 2-1.25 Describe causes of upper airway obstruction. (C-1)
- 2-1.26 Describe causes of respiratory distress. (C-1)
- 2-1.27 Describe manual airway maneuvers. (C-1)
- 2-1.28 Describe the Sellick (cricoid pressure) maneuver. (C-1)
- 2-1.29 Describe complete airway obstruction maneuvers. (C-1)
- 2-1.30 Explain the purpose for suctioning the upper airway. (C-1)
- 2-1.31 Identify types of suction equipment. (C-1)
- 2-1.32 Describe the indications for suctioning the upper airway. (C-3)
- 2-1.33 Identify types of suction catheters, including hard or rigid catheters and soft catheters. (C-1)
- 2-1.34 Identify techniques of suctioning the upper airway. (C-1)
- 2-1.35 Identify special considerations of suctioning the upper airway. (C-1)
- 2-1.36 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and 102 technique of tracheobronchial suctioning in the intubated patient. (C-3)
- 2-1.37 Describe the use of an oral and nasal airway. (C-1)
- 2-1.38 Identify special considerations of tracheobronchial suctioning in the intubated patient. (C-1)
- 2-1.39 Define gastric distention. (C-1)
- 2-1.40 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for inserting a nasogastric tube and orogastric tube. (C-1)
- 2-1.41 Identify special considerations of gastric decompression. (C-1)

- 2-1.42 Describe the indications, contraindications, advantages, disadvantages, complications, and technique for inserting an oropharyngeal and nasopharyngeal airway (C-1)
- 2-1.43 Describe the indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient by: (C-1)
- a. Mouth-to-mouth
 - b. Mouth-to-nose
 - c. Mouth-to-mask
 - d. One person bag-valve-mask
 - e. Two person bag-valve-mask
 - f. Three person bag-valve-mask
 - g. Flow-restricted, oxygen-powered ventilation device
- 2-1.44 Explain the advantage of the two-person method when ventilating with the bag-valve-mask. (C-1)
- 2-1.45 Compare the ventilation techniques used for an adult patient to those used for pediatric patients. (C-3)
- 2-1.46 Describe indications, contraindications, advantages, disadvantages, complications, and technique for ventilating a patient with an automatic transport ventilator (ATV). (C-1)
- 2-1.47 Explain safety considerations of oxygen storage and delivery. (C-1)
- 2-1.48 Identify types of oxygen cylinders and pressure regulators (including a high-pressure regulator and a therapy regulator). (C-1)
- 2-1.49 List the steps for delivering oxygen from a cylinder and regulator. (C-1)
- 2-1.50 Describe the use, advantages and disadvantages of an oxygen humidifier. (C-1)
- 2-1.51 Describe the indications, contraindications, advantages, disadvantages, complications, liter flow range, and concentration of delivered oxygen for supplemental oxygen delivery devices. (C-3)
- 2-1.52 Define, identify and describe a tracheostomy, stoma, and tracheostomy tube. (C-1)
- 2-1.53 Define, identify, and describe a laryngectomy. (C-1)
- 2-1.54 Define how to ventilate with a patient with a stoma, including mouth-to-stoma and bag-valve-mask-to-stoma ventilation. (C-1)
- 2-1.55 Describe the special considerations in airway management and ventilation for patients with facial injuries. (C-1)
- 2-1.56 Describe the special considerations in airway management and ventilation for the pediatric patient. (C-1)
- 2-1.57 Differentiate endotracheal intubation from other methods of advanced airway management. (C-3)
- 2-1.58 Describe the indications, contraindications, advantages, disadvantages and complications of endotracheal intubation. (C-1)
- 2-1.59 Describe laryngoscopy for the removal of a foreign body airway obstruction. (C-1)
- 2-1.60 Describe the indications, contraindications, advantages, disadvantages, complications, equipment, and technique for direct laryngoscopy. (C-1)
- 2-1.61 Describe visual landmarks for direct laryngoscopy. (C-1)
- 2-1.62 Describe use of cricoid pressure during intubation. (C-1)
- 2-1.63 Describe indications, contraindications, advantages, disadvantages,

- complications, equipment and technique for digital endotracheal intubation. (C-1)
- 2-1.64 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for using a dual lumen airway. (C-3)
- 2-1.65 Describe the indications, contraindications, advantages, disadvantages, complications and equipment for rapid sequence intubation with neuromuscular blockade. (C-1)
- 2-1.66 Identify neuromuscular blocking drugs and other agents used in rapid sequence intubation. (C-1)
- 2-1.67 Describe the indications, contraindications, advantages, disadvantages, complications and equipment for sedation during intubation. (C-1)
- 2-1.68 Identify sedative agents used in airway management. (C-1)
- 2-1.69 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for nasotracheal intubation. (C-1) 103
- 2-1.70 Describe the indications, contraindications, advantages, disadvantages and complications for performing an open cricothyrotomy. (C-3)
- 2-1.71 Describe the equipment and technique for performing an open cricothyrotomy. (C-1)
- 2-1.72 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for transtlaryngeal catheter ventilation (needle cricothyrotomy). (C-3)
- 2-1.73 Describe methods of assessment for confirming correct placement of an endotracheal tube. (C-1)
- 2-1.74 Describe methods for securing an endotracheal tube. (C-1)
- 2-1.75 Describe the indications, contraindications, advantages, disadvantages, complications, equipment and technique for extubation. (C-1)
- 2-1.76 Describe methods of endotracheal intubation in the pediatric patient. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 2-1.77 Defend the need to oxygenate and ventilate a patient. (A-1)
- 2-1.78 Defend the necessity of establishing and/ or maintaining patency of a patient's airway. (A-1)
- 2-1.79 Comply with standard precautions to defend against infectious and communicable diseases. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 2-1.80 Perform body substance isolation (BSI) procedures during basic airway management, advanced airway management, and ventilation. (P-2)
- 2-1.81 Perform pulse oximetry. (P-2)
- 2-1.82 Perform end-tidal CO₂ detection. (P-2)
- 2-1.83 Perform peak expiratory flow testing. (P-2)
- 2-1.84 Perform manual airway maneuvers, including: (P-2)
- Opening the mouth
 - Head-tilt/ chin-lift maneuver
 - Jaw-thrust without head-tilt maneuver
 - Modified jaw-thrust maneuver

- 2-1.85 Perform manual airway maneuvers for pediatric patients, including: (P-2)
 - a. Opening the mouth
 - b. Head-tilt/ chin-lift maneuver
 - c. Jaw-thrust without head-tilt maneuver
 - d. Modified jaw-thrust maneuver
- 2-1.86 Perform the Sellick maneuver (cricoid pressure). (P-2)
- 2-1.87 Perform complete airway obstruction maneuvers, including: (P-2)
 - a. Heimlich maneuver
 - b. Finger sweep
 - c. Chest thrusts
 - d. Removal with Magill forceps
- 2-1.88 Demonstrate suctioning the upper airway by selecting a suction device, catheter and technique. (P-2)
- 2-1.89 Perform tracheobronchial suctioning in the intubated patient by selecting a suction device, catheter and technique. (P-2)
- 2-1.90 Demonstrate insertion of a nasogastric tube. (P-2)
- 2-1.91 Demonstrate insertion of an orogastric tube. (P-2)
- 2-1.92 Perform gastric decompression by selecting a suction device, catheter and technique. (P-2)
- 2-1.93 Demonstrate insertion of an oropharyngeal airway. (P-2)
- 2-1.94 Demonstrate insertion of a nasopharyngeal airway. (P-2)
- 2-1.95 Demonstrate ventilating a patient by the following techniques: (P-2)
 - a. Mouth-to-mask ventilation
 - b. One person bag-valve-mask
 - c. Two person bag-valve-mask
 - d. Three person bag-valve-mask
 - e. Flow-restricted, oxygen-powered ventilation device 104
 - f. Automatic transport ventilator
 - g. Mouth-to-stoma
 - h. Bag-valve-mask-to-stoma ventilation
- 2-1.96 Ventilate a pediatric patient using the one and two person techniques. (P-2)
- 2-1.97 Perform ventilation with a bag-valve-mask with an in-line small-volume nebulizer. (P-2)
- 2-1.98 Perform oxygen delivery from a cylinder and regulator with an oxygen delivery device. (P-2)
- 2-1.99 Perform oxygen delivery with an oxygen humidifier. (P-2)
- 2-1.100 Deliver supplemental oxygen to a breathing patient using the following devices: nasal cannula, simple facemask, partial rebreather mask, non-rebreather mask, and venturi mask (P-2)
- 2-1.101 Perform stoma suctioning. (P-2)
- 2-1.102 Perform retrieval of foreign bodies from the upper airway. (P-2)
- 2-1.103 Perform assessment to confirm correct placement of the endotracheal tube. (P-2)
- 2-1.104 Intubate the trachea by the following methods: (P-2)
 - a. Orotracheal intubation
 - b. Nasotracheal intubation
 - c. Multi-lumen airways

- d. Digital intubation
- e. Transillumination
- f. Open cricothyrotomy
- 2-1.105 Adequately secure an endotracheal tube. (P-1)
- 2-1.106 Perform endotracheal intubation in the pediatric patient. (P-2)
- 2-1.107 Perform transtracheal catheter ventilation (needle cricothyrotomy). (P-2)
- 2-1.108 Perform extubation. (P-2)
- 2-1.109 Perform replacement of a tracheostomy tube through a stoma. (P-2)

UNIT TERMINAL OBJECTIVE

3-1 At the completion of this unit, the paramedic student will be able to use the appropriate techniques to obtain a medical history from a patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-1.1 Describe the techniques of history taking. (C-1)
- 3-1.2 Discuss the importance of using open ended questions. (C-1)
- 3-1.3 Describe the use of facilitation, reflection, clarification, empathetic responses, confrontation, and interpretation. (C-1)
- 3-1.4 Differentiate between facilitation, reflection, clarification, sympathetic responses, confrontation, and interpretation. (C-3)
- 3-1.5 Describe the structure and purpose of a health history. (C-1)
- 3-1.6 Describe how to obtain a comprehensive health history. (C-1)
- 3-1.7 List the components of a comprehensive history of an adult patient. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-1.8 Demonstrate the importance of empathy when obtaining a health history. (A-1)
- 3-1.9 Demonstrate the importance of confidentiality when obtaining a health history. (A-1)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

3-2 At the completion end of this unit, the paramedic student will be able to explain the pathophysiological significance of physical exam findings.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-2.1 Define the terms inspection, palpation, percussion, auscultation. (C-1)
- 3-2.2 Describe the techniques of inspection, palpation, percussion, and auscultation. (C-1)
- 3-2.3 Describe the evaluation of mental status. (C-1)
- 3-2.4 Evaluate the importance of a general survey. (C-3)
- 3-2.5 Describe the examination of skin, hair and nails. (C-1)
- 3-2.6 Differentiate normal and abnormal findings of the assessment of the skin. (C-3)

- 3-2.7 Distinguish the importance of abnormal findings of the assessment of the skin. (C-3)
- 3-2.8 Describe the examination of the head and neck. (C-1)
- 3-2.9 Differentiate normal and abnormal findings of the scalp examination. (C-3)
- 3-2.10 Describe the normal and abnormal assessment findings of the skull. (C-1)
- 3-2.11 Describe the assessment of visual acuity. (C-1)
- 3-2.12 Explain the rationale for the use of an ophthalmoscope. (C-1)
- 3-2.13 Describe the examination of the eyes. (C-1)
- 3-2.14 Distinguish between normal and abnormal assessment findings of the eyes. (C-3)
- 3-2.15 Explain the rationale for the use of an otoscope. (C-1)
- 3-2.16 Describe the examination of the ears. (C-1)
- 3-2.17 Differentiate normal and abnormal assessment findings of the ears. (C-3)
- 3-2.18 Describe the examination of the nose. (C-1)
- 3-2.19 Differentiate normal and abnormal assessment findings of the nose. (C-3)
- 3-2.20 Describe the examination of the mouth and pharynx. (C-1)
- 3-2.21 Differentiate normal and abnormal assessment findings of the mouth and pharynx. (C-3)
- 3-2.22 Describe the examination of the neck. (C-1)
- 3-2.23 Differentiate normal and abnormal assessment findings the neck. (C-3)
- 3-2.24 Describe the survey of the thorax and respiration. (C-1)
- 3-2.25 Describe the examination of the posterior chest. (C-1)
- 3-2.26 Describe percussion of the chest. (C-1)
- 3-2.27 Differentiate the percussion notes and their characteristics. (C-3)
- 3-2.28 Differentiate the characteristics of breath sounds. (C-3)
- 3-2.29 Describe the examination of the anterior chest. (C-1)
- 3-2.30 Differentiate normal and abnormal assessment findings of the chest examination. (C-3)
- 3-2.31 Describe special examination techniques related to the assessment of the chest. (C-1)
- 3-2.32 Describe the examination of the arterial pulse including rate, rhythm, and amplitude. (C-1)
- 3-2.33 Distinguish normal and abnormal findings of arterial pulse. (C-3)
- 3-2.34 Describe the assessment of jugular venous pressure and pulsations. (C-1)
- 3-2.35 Distinguish normal and abnormal examination findings of jugular venous pressure and pulsations. (C-3)
- 3-2.36 Describe the examination of the heart and blood vessels. (C-1)
- 3-2.37 Differentiate normal and abnormal assessment findings of the heart and blood vessels. (C-3)
- 3-2.38 Describe the auscultation of the heart. (C-1)
- 3-2.39 Differentiate the characteristics of normal and abnormal findings associated with the auscultation of the heart. (C-3)
- 3-2.40 Describe special examination techniques of the cardiovascular examination. (C-1)
- 3-2.41 Describe the examination of the abdomen. (C-1)
- 3-2.42 Differentiate normal and abnormal assessment findings of the abdomen. (C-3)
- 3-2.43 Describe auscultation of the abdomen. (C-1)

- 3-2.44 Distinguish normal and abnormal findings of the auscultation of the abdomen. (C-3)
- 3-2.45 Describe the examination of the female genitalia. (C-1)
- 3-2.46 Differentiate normal and abnormal assessment findings of the female genitalia. (C-3)
- 3-2.47 Describe the examination of the male genitalia. (C-1)
- 3-2.48 Differentiate normal and abnormal findings of the male genitalia. (C-3)
- 3-2.49 Describe the examination of the anus and rectum. (C-3)
- 3-2.50 Distinguish between normal and abnormal findings of the anus and rectum. (C-3)
- 3-2.51 Describe the examination of the peripheral vascular system. (C-1)
- 3-2.52 Differentiate normal and abnormal findings of the peripheral vascular system. (C-3)
- 3-2.53 Describe the examination of the musculoskeletal system. (C-1)
- 3-2.54 Differentiate normal and abnormal findings of the musculoskeletal system. (C-3) 106
- 3-2.55 Describe the examination of the nervous system. (C-1)
- 3-2.56 Differentiate normal and abnormal findings of the nervous system. (C-3)
- 3-2.57 Describe the assessment of the cranial nerves. (C-1)
- 3-2.58 Differentiate normal and abnormal findings of the cranial nerves. (C-3)
- 3-2.59 Describe the general guidelines of recording examination information. (C-1)
- 3-2.60 Discuss the considerations of examination of an infant or child. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-2.61 Demonstrate a caring attitude when performing physical examination skills. (A-3)
- 3-2.62 Discuss the importance of a professional appearance and demeanor when performing physical examination skills. (A-1)
- 3-2.63 Appreciate the limitations of conducting a physical exam in the out-of-hospital environment. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-2.64 Demonstrate the examination of skin, hair and nails. (P-2)
- 3-2.65 Demonstrate the examination of the head and neck. (P-2)
- 3-2.66 Demonstrate the examination of the eyes. (P-2)
- 3-2.67 Demonstrate the examination of the ears. (P-2)
- 3-2.68 Demonstrate the assessment of visual acuity. (P-2)
- 3-2.69 Demonstrate the examination of the nose. (P-2)
- 3-2.70 Demonstrate the examination of the mouth and pharynx. (P-2)
- 3-2.71 Demonstrate the examination of the neck. (P-2)
- 3-2.72 Demonstrate the examination of the thorax and ventilation. (P-2)
- 3-2.73 Demonstrate the examination of the posterior chest. (P-2)
- 3-2.74 Demonstrate auscultation of the chest. (P-2)
- 3-2.75 Demonstrate percussion of the chest. (P-2)
- 3-2.76 Demonstrate the examination of the anterior chest. (P-2)

- 3-2.77 Demonstrate special examination techniques related to the assessment of the chest. (P-2)
- 3-2.78 Demonstrate the examination of the arterial pulse including location, rate, rhythm, and amplitude. (P-2)
- 3-2.79 Demonstrate the assessment of jugular venous pressure and pulsations. (P-2)
- 3-2.80 Demonstrate the examination of the heart and blood vessels. (P-2)
- 3-2.81 Demonstrate special examination techniques of the cardiovascular examination. (P-2)
- 3-2.82 Demonstrate the examination of the abdomen. (P-2)
- 3-2.83 Demonstrate auscultation of the abdomen. (P-2)
- 3-2.84 Demonstrate the external visual examination of the female genitalia. (P-2)
- 3-2.85 Demonstrate the examination of the male genitalia. (P-2)
- 3-2.86 Demonstrate the examination of the peripheral vascular system. (P-2)
- 3-2.87 Demonstrate the examination of the musculoskeletal system. (P-2)
- 3-2.88 Demonstrate the examination of the nervous system. (P-2)**

UNIT TERMINAL OBJECTIVE

3-3 At the end of this unit, the paramedic student will be able to integrate the principles of history taking and techniques of physical exam to perform a patient assessment.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.1 Recognize hazards/ potential hazards. (C-1)
- 3-3.2 Describe common hazards found at the scene of a trauma and a medical patient. (C-1)
- 3-3.3 Determine hazards found at the scene of a medical or trauma patient. (C-2)
- 3-3.4 Differentiate safe from unsafe scenes. (C-3)
- 3-3.5 Describe methods to making an unsafe scene safe. (C-1) 107
- 3-3.6 Discuss common mechanisms of injury/ nature of illness. (C-1)
- 3-3.7 Predict patterns of injury based on mechanism of injury. (C-2)
- 3-3.8 Discuss the reason for identifying the total number of patients at the scene. (C-1)
- 3-3.9 Organize the management of a scene following size-up. (C-3)
- 3-3.10 Explain the reasons for identifying the need for additional help or assistance. (C-1)
- 3-3.11 Summarize the reasons for forming a general impression of the patient. (C-1)
- 3-3.12 Discuss methods of assessing mental status. (C-1)
- 3-3.13 Categorize levels of consciousness in the adult, infant and child. (C-3)
- 3-3.14 Differentiate between assessing the altered mental status in the adult, child and infant patient. (C-3)
- 3-3.15 Discuss methods of assessing the airway in the adult, child and infant patient. (C-1)
- 3-3.16 State reasons for management of the cervical spine once the patient has been determined to be a trauma patient. (C-1)
- 3-3.17 Analyze a scene to determine if spinal precautions are required. (C-3)
- 3-3.18 Describe methods used for assessing if a patient is breathing. (C-1)

- 3-3.19 Differentiate between a patient with adequate and inadequate minute ventilation. (C-3)
- 3-3.20 Distinguish between methods of assessing breathing in the adult, child and infant patient. (C-3)
- 3-3.21 Compare the methods of providing airway care to the adult, child and infant patient. (C-3)
- 3-3.22 Describe the methods used to locate and assess a pulse. (C-1)
- 3-3.23 Differentiate between locating and assessing a pulse in an adult, child and infant patient. (C-3)
- 3-3.24 Discuss the need for assessing the patient for external bleeding. (C-1)
- 3-3.25 Describe normal and abnormal findings when assessing skin color. (C-1)
- 3-3.26 Describe normal and abnormal findings when assessing skin temperature. (C-1)
- 3-3.27 Describe normal and abnormal findings when assessing skin condition. (C-1)
- 3-3.28 Explain the reason for prioritizing a patient for care and transport. (C-1)
- 3-3.29 Identify patients who require expeditious transport. (C-3)
- 3-3.30 Describe the evaluation of patient's perfusion status based on findings in the initial assessment. (C-1)
- 3-3.31 Describe orthostatic vital signs and evaluate their usefulness in assessing a patient in shock. (C-1)
- 3-3.32 Apply the techniques of physical examination to the medical patient. (C-1)
- 3-3.33 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. (C-3)
- 3-3.34 Discuss the reasons for reconsidering the mechanism of injury. (C-1)
- 3-3.35 State the reasons for performing a rapid trauma assessment. (C-1)
- 3-3.36 Recite examples and explain why patients should receive a rapid trauma assessment. (C-1)
- 3-3.37 Apply the techniques of physical examination to the trauma patient. (C-1)
- 3-3.38 Describe the areas included in the rapid trauma assessment and discuss what should be evaluated. (C-1)
- 3-3.39 Differentiate cases when the rapid assessment may be altered in order to provide patient care. (C-3)
- 3-3.40 Discuss the reason for performing a focused history and physical exam. (C-1)
- 3-3.41 Describe when and why a detailed physical examination is necessary. (C-1)
- 3-3.42 Discuss the components of the detailed physical exam in relation to the techniques of examination. (C-1)
- 3-3.43 State the areas of the body that are evaluated during the detailed physical exam. (C-1)
- 3-3.44 Explain what additional care should be provided while performing the detailed physical exam. (C-1)
- 3-3.45 Distinguish between the detailed physical exam that is performed on a trauma patient and that of the medical patient. (C-3)
- 3-3.46 Differentiate patients requiring a detailed physical exam from those who do not. (C-3)
- 3-3.47 Discuss the reasons for repeating the initial assessment as part of the on-going assessment. (C-1)

- 3-3.48 Describe the components of the on-going assessment. (C-1)
- 3-3.49 Describe trending of assessment components. (C-1)
- 3-3.50 Discuss medical identification devices/ systems. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.51 Explain the rationale for crewmembers to evaluate scene safety prior to entering. (A-2)
- 3-3.52 Serve as a model for others explaining how patient situations affect your evaluation of mechanism of injury or illness. (A-3)
- 3-3.53 Explain the importance of forming a general impression of the patient. (A-1)
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- 3-3.54 Explain the value of performing an initial assessment. (A-2)
- 3-3.55 Demonstrate a caring attitude when performing an initial assessment. (A-3)
- 3-3.56 Attend to the feelings that patients with medical conditions might be experiencing. (A-1)
- 3-3.57 Value the need for maintaining a professional caring attitude when performing a focused history and physical examination. (A-3)
- 3-3.58 Explain the rationale for the feelings that these patients might be experiencing. (A-3)
- 3-3.59 Demonstrate a caring attitude when performing a detailed physical examination. (A-3)
- 3-3.60 Explain the value of performing an on-going assessment. (A-2)
- 3-3.61 Recognize and respect the feelings that patients might experience during assessment. (A-1)
- 3-3.62 Explain the value of trending assessment components to other health professionals who assume care of the patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-3.63 Observe various scenarios and identify potential hazards. (P-1)
- 3-3.64 Demonstrate the scene-size-up. (P-2)
- 3-3.65 Demonstrate the techniques for assessing mental status. (P-2)
- 3-3.66 Demonstrate the techniques for assessing the airway. (P-2)
- 3-3.67 Demonstrate the techniques for assessing if the patient is breathing. (P-2)
- 3-3.68 Demonstrate the techniques for assessing if the patient has a pulse. (P-2)
- 3-3.69 Demonstrate the techniques for assessing the patient for external bleeding. (P-2)
- 3-3.70 Demonstrate the techniques for assessing the patient's skin color, temperature, and condition. (P-2)
- 3-3.71 Demonstrate the ability to prioritize patients. (P-2)
- 3-3.72 Using the techniques of examination, demonstrate the assessment of a medical patient. (P-2)
- 3-3.73 Demonstrate the patient care skills that should be used to assist with a patient who is responsive with no known history. (P-2)
- 3-3.74 Demonstrate the patient care skills that should be used to assist with a patient who is unresponsive or has an altered mental status. (P-2)

- 3-3.75 Perform a rapid medical assessment. (P-2)
- 3-3.76 Perform a focused history and physical exam of the medical patient. (P-2)
- 3-3.77 Using the techniques of physical examination, demonstrate the assessment of a trauma patient. (P-2)
- 3-3.78 Demonstrate the rapid trauma assessment used to assess a patient based on mechanism of injury. (P-2)
- 3-3.79 Perform a focused history and physical exam on a non-critically injured patient. (P-2)
- 3-3.80 Perform a focused history and physical exam on a patient with life-threatening injuries. (P-2)
- 3-3.81 Perform a detailed physical examination. (P-2)
- 3-3.82 Demonstrate the skills involved in performing the on-going assessment. (P-2)**

UNIT TERMINAL OBJECTIVE

3-4 At the end of this unit, the paramedic student will be able to apply a process of clinical decision making to use the assessment findings to help form a field impression.

COGNITIVE OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-4.1 Compare the factors influencing medical care in the out-of-hospital environment to other medical settings. (C-2)
- 3-4.2 Differentiate between critical life threatening, potentially life-threatening, and non life-threatening patient presentations. (C-3)
- 3-4.3 Evaluate the benefits and shortfalls of protocols, standing orders and patient care algorithms. (C-3)
- 3-4.4 Define the components, stages and sequences of the critical thinking process for paramedics. (C-1)
- 3-4.5 Apply the fundamental elements of critical thinking for paramedics. (C-2)
- 3-4.6 Describe the effects of the “fight or flight” response and the positive and negative effects on a paramedic’s decision making. (C-1)
- 3-4.7 Summarize the “six Rs” of putting it all together: Read the patient, Read the scene, React, Reevaluate, Revise the management plan, Review performance. (C-1)

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AFFECTIVE OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-4.8 Defend the position that clinical decision-making is the cornerstone of effective paramedic practice. (A-3)
- 3-4.9 Practice facilitating behaviors when thinking under pressure. (A-1)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

3-5 At the completion of this unit, the paramedic student will be able to follow an accepted format for dissemination of patient information in verbal form,

either in person or over the radio.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-5.1 Identify the importance of communications when providing EMS. (C-1)
- 3-5.2 Identify the role of verbal, written, and electronic communications in the provision of EMS. (C-1)
- 3-5.3 Describe the phases of communications necessary to complete a typical EMS event. (C-1)
- 3-5.4 Identify the importance of proper terminology when communicating during an EMS event. (C-1)
- 3-5.5 Identify the importance of proper verbal communications during an EMS event. (C-1)
- 3-5.6 List factors that impede effective verbal communications. (C-1)
- 3-5.7 List factors, which enhance verbal communications. (C-1)
- 3-5.8 Identify the importance of proper written communications during an EMS event. (C-1)
- 3-5.9 List factors, which impede effective written communications. (C-1)
- 3-5.10 List factors, which enhance written communications. (C-1)
- 3-5.11 Recognize the legal status of written communications related to an EMS event. (C-1)
- 3-5.12 State the importance of data collection during an EMS event. (C-1)
- 3-5.13 Identify technology used to collect and exchange patient and/ or scene information electronically. (C-1)
- 3-5.14 Recognize the legal status of patient medical information exchanged electronically. (C-1)
- 3-5.15 Identify the components of the local EMS communications system and describe their function and use. (C-1)
- 3-5.16 Identify and differentiate among the following communications systems: (C-3)
 - a. Simplex
 - b. Multiplex
 - c. Duplex
 - d. Trunked
 - e. Digital communications
 - f. Cellular telephone
 - g. Facsimile
 - h. Computer
- 3-5.17 Identify the components of the local dispatch communications system and describe their function and use. (C-1)
- 3-5.18 Describe the functions and responsibilities of the Federal Communications Commission. (C-1)
- 3-5.19 Describe how an EMS dispatcher functions as an integral part of the EMS team. (C-1)
- 3-5.20 List appropriate information to be gathered by the Emergency Medical Dispatcher. (C-1)
- 3-5.21 Identify the role of Emergency Medical Dispatch in a typical EMS event. (C-1)
- 3-5.22 Identify the importance of pre-arrival instructions in a typical EMS event. (C-1)

- 3-5.23 Describe the purpose of verbal communication of patient information to the hospital. (C-1)
- 3-5.24 Describe information that should be included in patient assessment information verbally reported to medical direction. (C-1)
- 3-5.25 Diagram a basic model of communications. (C-3)
- 3-5.26 Organize a list of patient assessment information in the correct order for electronic transmission to medical direction according to the format used locally. (C-3)

AFFECTIVE OBJECTIVES 110

At the end of this unit, the paramedic student will be able to:

- 3-5.27 Show appreciation for proper terminology when describing a patient or patient condition. (A-2)

PSYCHOMOTOR OBJECTIVES

At the end of this unit, the paramedic student will be able to:

- 3-5.28 Demonstrate the ability to use the local dispatch communications system. (P-1)
- 3-5.29 Demonstrate the ability to use a radio. (P-1)
- 3-5.30 Demonstrate the ability to use the biotelemetry equipment used locally. (P-1)**

UNIT TERMINAL OBJECTIVE

3-6 At the completion of this unit, the paramedic student will be able to effectively document the essential elements of patient assessment, care and transport.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-6.1 Identify the general principles regarding the importance of EMS documentation and ways in which documents are used. (C-1)
- 3-6.2 Identify and use medical terminology correctly. (C-1)
- 3-6.3 Recite appropriate and accurate medical abbreviations and acronyms. (C-1)
- 3-6.4 Record all pertinent administrative information. (C-1)
- 3-6.5 Explain the role of documentation in agency reimbursement. (C-1)
- 3-6.6 Analyze the documentation for accuracy and completeness, including spelling. (C-3)
- 3-6.7 Identify and eliminate extraneous or nonprofessional information. (C-1)
- 3-6.8 Describe the differences between subjective and objective elements of documentation. (C-1)
- 3-6.9 Evaluate a finished document for errors and omissions. (C-3)
- 3-6.10 Evaluate a finished document for proper use and spelling of abbreviations and acronyms. (C-3)
- 3-6.11 Evaluate the confidential nature of an EMS report. (C-3)
- 3-6.12 Describe the potential consequences of illegible, incomplete, or inaccurate documentation. (C-1)
- 3-6.13 Describe the special considerations concerning patient refusal of transport. (C-3)

- 3-6.14 Record pertinent information using a consistent narrative format. (C-3)
- 3-6.15 Explain how to properly record direct patient or bystander comments. (C-1)
- 3-6.16 Describe the special considerations concerning mass casualty incident documentation. (C-1)
- 3-6.17 Apply the principles of documentation to computer charting, as access to this technology becomes available. (C-2)
- 3-6.18 Identify and record the pertinent, reportable clinical data of each patient interaction. (C-1)
- 3-6.19 Note and record “pertinent negative” clinical findings. (C-1)
- 3-6.20 Correct errors and omissions, using proper procedures as defined under local protocol. (C-1)
- 3-6.21 Revise documents, when necessary, using locally approved procedures. (C-1)
- 3-6.22 Assume responsibility for self-assessment of all documentation. (C-3)
- 3-6.23 Demonstrate proper completion of an EMS event record used locally. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 3-6.24 Advocate among peers the relevance and importance of properly completed documentation. (A-3)
- 3-6.25 Resolve the common negative attitudes toward the task of documentation. (A-3)

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

4-2 the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan 111 for the patient with shock or hemorrhage.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-2.1 Describe the epidemiology, including the morbidity/ mortality and prevention strategies, for shock and hemorrhage. (C-1)
- 4-2.2 Discuss the anatomy and physiology of the cardiovascular system. (C-1)
- 4-2.3 Predict shock and hemorrhage based on mechanism of injury. (C-1)
- 4-2.4 Discuss the various types and degrees of shock and hemorrhage. (C-1)
- 4-2.5 Discuss the pathophysiology of hemorrhage and shock. (C-1)
- 4-2.6 Discuss the assessment findings associated with hemorrhage and shock. (C-1)
- 4-2.7 Identify the need for intervention and transport of the patient with hemorrhage or shock. (C-1)
- 4-2.8 Discuss the treatment plan and management of hemorrhage and shock. (C-1)
- 4-2.9 Discuss the management of external hemorrhage. (C-1)
- 4-2.10 Differentiate between controlled and uncontrolled hemorrhage. (C-3)
- 4-2.11 Differentiate between the administration rate and amount of IV fluid in a patient with controlled versus uncontrolled hemorrhage. (C-3)

- 4-2.12 Relate internal hemorrhage to the pathophysiology of compensated and decompensated hemorrhagic shock. (C-3)
- 4-2.13 Relate internal hemorrhage to the assessment findings of compensated and decompensated hemorrhagic shock. (C-3)
- 4-2.14 Discuss the management of internal hemorrhage. (C-1)
- 4-2.15 Define shock based on aerobic and anaerobic metabolism. (C-1)
- 4-2.16 Describe the incidence, morbidity, and mortality of shock. (C-1)
- 4-2.17 Describe the body's physiologic response to changes in perfusion. (C-1)
- 4-2.18 Describe the effects of decreased perfusion at the capillary level. (C-1)
- 4-2.19 Discuss the cellular ischemic phase related to hemorrhagic shock. (C-1)
- 4-2.20 Discuss the capillary stagnation phase related to hemorrhagic shock. (C-1)
- 4-2.21 Discuss the capillary washout phase related to hemorrhagic shock. (C-1)
- 4-2.22 Discuss the assessment findings of hemorrhagic shock. (C-1)
- 4-2.23 Relate pulse pressure changes to perfusion status. (C-3)
- 4-2.24 Relate orthostatic vital sign changes to perfusion status. (C-3)
- 4-2.25 Define compensated and decompensated hemorrhagic shock. (C-1)
- 4-2.26 Discuss the pathophysiological changes associated with compensated shock. (C-1)
- 4-2.27 Discuss the assessment findings associated with compensated shock. (C-1)
- 4-2.28 Identify the need for intervention and transport of the patient with compensated shock. (C-1)
- 4-2.29 Discuss the treatment plan and management of compensated shock. (C-1)
- 4-2.30 Discuss the pathophysiological changes associated with decompensated shock. (C-1)
- 4-2.31 Discuss the assessment findings associated with decompensated shock. (C-1)
- 4-2.32 Identify the need for intervention and transport of the patient with decompensated shock. (C-1)
- 4-2.33 Discuss the treatment plan and management of the patient with decompensated shock. (C-1)
- 4-2.34 Differentiate between compensated and decompensated shock. (C-3)
- 4-2.35 Relate external hemorrhage to the pathophysiology of compensated and decompensated hemorrhagic shock. (C-3)
- 4-2.36 Relate external hemorrhage to the assessment findings of compensated and decompensated hemorrhagic shock. (C-3)
- 4-2.37 Differentiate between the normotensive, hypotensive, or profoundly hypotensive patient. (C-3)
- 4-2.38 Differentiate between the administration of fluid in the normotensive, hypotensive, or profoundly hypotensive patient. (C-3)
- 4-2.39 Discuss the physiologic changes associated with the pneumatic anti-shock garment (PASG). (C-1)
- 4-2.40 Discuss the indications and contraindications for the application and inflation of the PASG. (C-1)
- 4-2.41 Apply epidemiology to develop prevention strategies for hemorrhage and shock. (C-1)
- 4-2.42 Integrate the pathophysiological principles to the assessment of a patient with hemorrhage or shock. (C-3)
- 4-2.43 Synthesize assessment findings and patient history information to form a field

impression for the patient with hemorrhage or shock. (C-3) 112
4-2.44 Develop, execute and evaluate a treatment plan based on the field impression for the hemorrhage or shock patient. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-2.45 Demonstrate the assessment of a patient with signs and symptoms of hemorrhagic shock. (P-2)
- 4-2.46 Demonstrate the management of a patient with signs and symptoms of hemorrhagic shock. (P-2)
- 4-2.47 Demonstrate the assessment of a patient with signs and symptoms of compensated hemorrhagic shock. (P-2)
- 4-2.48 Demonstrate the management of a patient with signs and symptoms of compensated hemorrhagic shock. (P-2)
- 4-2.49 Demonstrate the assessment of a patient with signs and symptoms of decompensated hemorrhagic shock. (P-2)
- 4-2.50 Demonstrate the management of a patient with signs and symptoms of decompensated hemorrhagic shock. (P-2)
- 4-2.51 Demonstrate the assessment of a patient with signs and symptoms of external hemorrhage. (P-2)
- 4-2.52 Demonstrate the management of a patient with signs and symptoms of external hemorrhage. (P-2)
- 4-2.53 Demonstrate the assessment of a patient with signs and symptoms of internal hemorrhage. (P-2)
- 4-2.54 Demonstrate the management of a patient with signs and symptoms of internal hemorrhage. (P-2)**

UNIT TERMINAL OBJECTIVE

5-1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with respiratory problems.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-1.1 Discuss the epidemiology of pulmonary diseases and conditions. (C-1)
- 5-1.2 Identify and describe the function of the structures located in the upper and lower airway. (C-1)
- 5-1.3 Discuss the physiology of ventilation and respiration. (C-1)
- 5-1.4 Identify common pathological events that affect the pulmonary system. (C-1)
- 5-1.5 Discuss abnormal assessment findings associated with pulmonary diseases and conditions. (C-1)
- 5-1.6 Compare various airway and ventilation techniques used in the management of pulmonary diseases. (C-3)

- 5-1.7 Review the pharmacological preparations that paramedics use for management of respiratory diseases and conditions. (C-1)
- 5-1.8 Review the pharmacological preparations used in managing patients with respiratory diseases that may be prescribed by physicians. (C-1)
- 5-1.9 Review the use of equipment used during the physical examination of patients with complaints associated with respiratory diseases and conditions. (C-1)
- 5-1.10 Identify the epidemiology, anatomy, physiology, pathophysiology, assessment findings, and management for the following respiratory diseases and conditions: (C-1)
- Adult respiratory distress syndrome
 - Bronchial asthma
 - Chronic bronchitis
 - Emphysema
 - Pneumonia
 - Pulmonary edema
 - Pulmonary thromboembolism
 - Neoplasms of the lung
 - Upper respiratory infections
 - Spontaneous pneumothorax 113
 - Hyperventilation syndrome

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-1.11 Recognize and value the assessment and treatment of patients with respiratory diseases. (A-2)
- 5-1.12 Indicate appreciation for the critical nature of accurate field impressions of patients with respiratory diseases and conditions. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-1.13 Demonstrate proper use of airway and ventilation devices. (P-1)
- 5-1.14 Conduct a history and patient assessment for patients with pulmonary diseases and conditions. (P-1)
- 5-1.15 Demonstrate the application of a CPAP/ BiPAP unit. (P-1)

COGNITIVE OBJECTIVES

At the completion of this unit, the Paramedic student will be able to:

- 4-1.1 List and describe the components of a comprehensive trauma system. (C-1)
- 4-1.2 Describe the role of and differences between levels of trauma centers. (C-3)
- 4-1.3 Describe the criteria for transport to a trauma center. (C-1)
- 4-1.4 Describe the criteria and procedure for air medical transport. (C-1)
- 4-1.5 Define energy and force as they relate to trauma. (C-1)
- 4-1.6 Define laws of motion and energy and understand the role that increased speed has on injuries. (C-1)
- 4-1.7 Describe each type of impact and its effect on unrestrained victims (e.g., “down and under,” “up and over,” compression, deceleration). (C-1)
- 4-1.8 Describe the pathophysiology of the head, spine, thorax, and abdomen that result from the above forces. (C-1)

- 4-1.9 List specific injuries and their causes as related to interior and exterior vehicle damage. (C-1)
- 4-1.10 Describe the kinematics of penetrating injuries. (C-1)
- 4-1.11 List the motion and energy considerations of mechanisms other than motor vehicle crashes. (C-1)
- 4-1.12 Define the role of kinematics as an additional tool for patient assessment. (C-1)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

4-3 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with soft tissue trauma.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-3.1 Describe the incidence, morbidity, and mortality of soft tissue injuries. (C-1)
- 4-3.2 Describe the layers of the skin, specifically: (C-1)
 - a. Epidermis and dermis (cutaneous)
 - b. Superficial fascia (subcutaneous)
 - c. Deep fascia
- 4-3.3 Identify the major functions of the integumentary system. (C-1)
- 4-3.4 Identify the skin tension lines of the body. (C-1)
- 4-3.5 Predict soft tissue injuries based on mechanism of injury. (C-1)
- 4-3.6 Discuss the pathophysiology of wound healing, including: (C-1) 130
 - a. Hemostasis
 - b. Inflammation phase
 - c. Epithelialization
 - d. Neovascularization
 - e. Collagen synthesis
- 4-3.7 Discuss the pathophysiology of soft tissue injuries. (C-2)
- 4-3.8 Differentiate between the following types of closed soft tissue injuries: (C-3)
 - a. Contusion
 - b. Hematoma
 - c. Crush injuries
- 4-3.9 Discuss the assessment findings associated with closed soft tissue injuries. (C-1)
- 4-3.10 Discuss the management of a patient with closed soft tissue injuries. (C-2)
- 4-3.11 Discuss the pathophysiology of open soft tissue injuries. (C-2)
- 4-3.12 Differentiate between the following types of open soft tissue injuries: (C-3)
 - a. Abrasions
 - b. Lacerations

- c. Major arterial lacerations
- d. Avulsions
- e. Impaled objects
- f. Amputations
- g. Incisions
- h. Crush injuries
- i. Blast injuries
- j. Penetrations/ punctures
- 4-3.13 Discuss the incidence, morbidity, and mortality of blast injuries. (C-1)
- 4-3.14 Predict blast injuries based on mechanism of injury, including: (C-2)
 - a. Primary
 - b. Secondary
 - c. Tertiary
- 4-3.15 Discuss types of trauma including: (C-1)
 - a. Blunt
 - b. Penetrating
 - c. Barotrauma
 - d. Burns
- 4-3.16 Discuss the pathophysiology associated with blast injuries. (C-1)
- 4-3.17 Discuss the effects of an explosion within an enclosed space on a patient. (C-1)
- 4-3.18 Discuss the assessment findings associated with blast injuries. (C-1)
- 4-3.19 Identify the need for rapid intervention and transport of the patient with a blast injury. (C-1)
- 4-3.20 Discuss the management of a patient with a blast injury. (C-1)
- 4-3.21 Discuss the incidence, morbidity, and mortality of crush injuries. (C-1)
- 4-3.22 Define the following conditions: (C-1)
 - a. Crush injury
 - b. Crush syndrome
 - c. Compartment syndrome
- 4-3.23 Discuss the mechanisms of injury in a crush injury. (C-1)
- 4-3.24 Discuss the effects of reperfusion and rhabdomyolysis on the body. (C-1)
- 4-3.25 Discuss the assessment findings associated with crush injuries. (C-1)
- 4-3.26 Identify the need for rapid intervention and transport of the patient with a crush injury. (C-1)
- 4-3.27 Discuss the management of a patient with a crush injury. (C-1)
- 4-3.28 Discuss the pathophysiology of hemorrhage associated with soft tissue injuries, including: (C-2)
 - a. Capillary
 - b. Venous
 - c. Arterial
- 4-3.29 Discuss the assessment findings associated with open soft tissue injuries. (C-1)
- 4-3.30 Discuss the assessment of hemorrhage associated with open soft tissue injuries. (C-1)
- 4-3.31 Differentiate between the various management techniques for hemorrhage control of open soft tissue injuries, including: (C-3)

- a. Direct pressure
 - b. Elevation
 - c. Pressure dressing
 - d. Pressure point
 - e. Tourniquet application
- 4-3.32 Differentiate between the types of injuries requiring the use of an occlusive versus non-occlusive dressing. (C-3)
- 4-3.33 Identify the need for rapid assessment, intervention and appropriate transport for the patient with a soft tissue injury. (C-2)
- 4-3.34 Discuss the management of the soft tissue injury patient. (C-2)
- 4-3.35 Define and discuss the following: (C-1)
- a. Dressings
 - 1. Sterile
 - 2. Non-sterile
 - 3. Occlusive
 - 4. Non-occlusive
 - 5. Adherent
 - 6. Non-adherent
 - 7. Absorbent
 - 8. Non-absorbent
 - 9. Wet
 - 10. Dry
 - b. Bandages
 - 1. Absorbent
 - 2. Non-absorbent
 - 3. Adherent
 - 4. Non-adherent
 - c. Tourniquet
- 4-3.36 Predict the possible complications of an improperly applied dressing, bandage, or tourniquet. (C-2)
- 4-3.37 Discuss the assessment of wound healing. (C-1)
- 4-3.38 Discuss the management of wound healing. (C-1)
- 4-3.39 Discuss the pathophysiology of wound infection. (C-1)
- 4-3.40 Discuss the assessment of wound infection. (C-1)
- 4-3.41 Discuss the management of wound infection. (C-1)
- 4-3.42 Integrate pathophysiological principles to the assessment of a patient with a soft tissue injury. (C-3)
- 4-3.43 Formulate treatment priorities for patients with soft tissue injuries in conjunction with: (C-3)
- a. Airway/ face/ neck trauma
 - b. Thoracic trauma (open/ closed)
 - c. Abdominal trauma
- 4-3.44 Synthesize assessment findings and patient history information to form a field impression for the patient with soft tissue trauma. (C-3)
- 4-3.45 Develop, execute, and evaluate a treatment plan based on the field impression for the patient with soft tissue trauma. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-3.46 Defend the rationale explaining why immediate life-threats must take priority over wound closure. (A-3)
- 4-3.47 Defend the management regimens for various soft tissue injuries. (A-3)
- 4-3.48 Defend why immediate life-threatening conditions take priority over soft tissue management. (A-3)
- 4-3.49 Value the importance of a thorough assessment for patients with soft tissue injuries. (A-3)
- 4-3.50 Attend to the feelings that the patient with a soft tissue injury may experience. (A-2)
- 4-3.51 Appreciate the importance of good follow-up care for patients receiving sutures. (A-2)
- 4-3.52 Understand the value of the written report for soft tissue injuries, in the continuum of patient care. (A-2) 132

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-3.53 Demonstrate the assessment and management of a patient with signs and symptoms of soft tissue injury, including: (P-2)
 - a. Contusion
 - b. Hematoma
 - c. Crushing
 - d. Abrasion
 - e. Laceration
 - f. Avulsion
 - g. Amputation
 - h. Impaled object
 - i. Penetration/ puncture
 - j. Blast

UNIT TERMINAL OBJECTIVE

4-4 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the management plan for the patient with a burn injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-4.1 Describe the anatomy and physiology pertinent to burn injuries. (C-1)
- 4-4.2 Describe the epidemiology, including incidence, mortality/ morbidity, risk factors, and prevention strategies for the patient with a burn injury. (C-1)
- 4-4.3 Describe the pathophysiologic complications and systemic complications of a burn injury. (C-1)
- 4-4.4 Identify and describe types of burn injuries, including a thermal burn, an inhalation burn, a chemical burn, an electrical burn, and a radiation exposure. (C-1)
- 4-4.5 Identify and describe the depth classifications of burn injuries, including a

superficial burn, a partial-thickness burn, a full-thickness burn, and other depth classifications described by local protocol. (C-1)

4-4.6 Identify and describe methods for determining body surface area percentage of a burn injury including the "rules of nines," the "rules of palms," and other methods described by local protocol. (C-1)

4-4.7 Identify and describe the severity of a burn including a minor burn, a moderate burn, a severe burn, and other severity classifications described by local protocol. (C-1)

4-4.8 Differentiate criteria for determining the severity of a burn injury between a pediatric patient and an adult patient. (C-3)

4-4.9 Describe special considerations for a pediatric patient with a burn injury. (C-1)

4-4.10 Discuss considerations which impact management and prognosis of the burn injured patient. (C-1)

4-4.11 Discuss mechanisms of burn injuries. (C-1)

4-4.12 Discuss conditions associated with burn injuries, including trauma, blast injuries, airway compromise, respiratory compromise, and child abuse. (C-1)

4-4.13 Describe the management of a burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (C-1)

4-4.14 Describe the epidemiology of a thermal burn injury. (C-1)

4-4.15 Describe the specific anatomy and physiology pertinent to a thermal burn injury. (C-1)

4-4.16 Describe the pathophysiology of a thermal burn injury. (C-1)

4-4.17 Identify and describe the depth classifications of a thermal burn injury. (C-1)

4-4.18 Identify and describe the severity of a thermal burn injury. (C-1)

4-4.19 Describe considerations which impact management and prognosis of the patient with a thermal burn injury. (C-1)

4-4.20 Discuss mechanisms of burn injury and conditions associated with a thermal burn injury. (C-1)

4-4.21 Describe the management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ 133 communication strategies. (C-1)

4-4.22 Describe the epidemiology of an inhalation burn injury. (C-1)

4-4.23 Describe the specific anatomy and physiology pertinent to an inhalation burn injury. (C-1)

4-4.24 Describe the pathophysiology of an inhalation burn injury. (C-1)

4-4.25 Differentiate between supraglottic and infraglottic inhalation injuries. (C-3)

4-4.26 Identify and describe the depth classifications of an inhalation burn injury. (C-1)

4-4.27 Identify and describe the severity of an inhalation burn injury. (C-1)

4-4.28 Describe considerations which impact management and prognosis of the patient with an inhalation burn injury. (C-1)

4-4.29 Discuss mechanisms of burn injury and conditions associated with an inhalation burn injury. (C-1)

4-4.30 Describe the management of an inhalation burn injury, including airway and

ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)

4-4.31 Describe the epidemiology of a chemical burn injury and a chemical burn injury to the eye. (C-1)

4-4.32 Describe the specific anatomy and physiology pertinent to a chemical burn injury and a chemical burn injury to the eye. (C-1)

4-4.33 Describe the pathophysiology of a chemical burn injury, including types of chemicals and their burning processes and a chemical burn injury to the eye. (C-1)

4-4.34 Identify and describe the depth classifications of a chemical burn injury. (C-1)

4-4.35 Identify and describe the severity of a chemical burn injury. (C-1)

4-4.36 Describe considerations which impact management and prognosis of the patient with a chemical burn injury and a chemical burn injury to the eye. (C-1)

4-4.37 Discuss mechanisms of burn injury and conditions associated with a chemical burn injury. (C-1)

4-4.38 Describe the management of a chemical burn injury and a chemical burn injury to the eye, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)

4-4.39 Describe the epidemiology of an electrical burn injury. (C-1)

4-4.40 Describe the specific anatomy and physiology pertinent to an electrical burn injury. (C-1)

4-4.41 Describe the pathophysiology of an electrical burn injury. (C-1)

4-4.42 Identify and describe the depth classifications of an electrical burn injury. (C-1)

4-4.43 Identify and describe the severity of an electrical burn injury. (C-1)

4-4.44 Describe considerations which impact management and prognosis of the patient with an electrical burn injury. (C-1)

4-4.45 Discuss mechanisms of burn injury and conditions associated with an electrical burn injury. (C-1)

4-4.46 Describe the management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)

4-4.47 Describe the epidemiology of a radiation exposure. (C-1)

4-4.48 Describe the specific anatomy and physiology pertinent to a radiation exposure. (C-1)

4-4.49 Describe the pathophysiology of a radiation exposure, including the types and characteristics of ionizing radiation. (C-1)

4-4.50 Identify and describe the depth classifications of a radiation exposure. (C-1)

4-4.51 Identify and describe the severity of a radiation exposure. (C-1)

4-4.52 Describe considerations which impact management and prognosis of the patient with a radiation exposure. (C-1)

4-4.53 Discuss mechanisms of burn injury associated with a radiation exposure. (C-1)

4-4.54 Discuss conditions associated with a radiation exposure. (C-1)

4-4.55 Describe the management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, and psychological support/ communication strategies. (C-1)

4-4.56 Integrate pathophysiological principles to the assessment of a patient with a

thermal burn injury. (C-3)

4-4.57 Integrate pathophysiological principles to the assessment of a patient with an inhalation burn injury. (C-3)

4-4.58 Integrate pathophysiological principles to the assessment of a patient with a chemical burn injury. (C-3)

4-4.59 Integrate pathophysiological principles to the assessment of a patient with an electrical burn injury. (C-3)

4-4.60 Integrate pathophysiological principles to the assessment of a patient with a radiation exposure. (C-3)

4-4.61 Synthesize patient history information and assessment findings to form a field impression for the patient 134 with a thermal burn injury. (C-3)

4-4.62 Synthesize patient history information and assessment findings to form a field impression for the patient with an inhalation burn injury. (C-3)

4-4.63 Synthesize patient history information and assessment findings to form a field impression for the patient with a chemical burn injury. (C-3)

4-4.64 Synthesize patient history information and assessment findings to form a field impression for the patient with an electrical burn injury. (C-3)

4-4.65 Synthesize patient history information and assessment findings to form a field impression for the patient with a radiation exposure. (C-3)

4-4.66 Develop, execute and evaluate a management plan based on the field impression for the patient with a thermal burn injury. (C-3)

4-4.67 Develop, execute and evaluate a management plan based on the field impression for the patient with an inhalation burn injury. (C-3)

4-4.68 Develop, execute and evaluate a management plan based on the field impression for the patient with a chemical burn injury. (C-3)

4-4.69 Develop, execute and evaluate a management plan based on the field impression for the patient with an electrical burn injury. (C-3)

4-4.70 Develop, execute and evaluate a management plan based on the field impression for the patient with a radiation exposure. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

4-4.71 Value the changes of a patient's self-image associated with a burn injury. (A-2)

4-4.72 Value the impact of managing a burn injured patient. (A-2)

4-4.73 Advocate empathy for a burn injured patient. (A-2)

4-4.74 Assess safety at a burn injury incident. (A-3)

4-4.75 Characterize mortality and morbidity based on the pathophysiology and assessment findings of a patient with a burn injury. (A-3)

4-4.76 Value and defend the sense of urgency in burn injuries. (A-3)

4-4.77 Serve as a model for universal precautions and body substance isolation (BSI). (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

4-4.78 Take body substance isolation procedures during assessment and management of patients with a burn injury. (P-2)

- 4-4.79 Perform assessment of a patient with a burn injury. (P-2)
- 4-4.80 Perform management of a thermal burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.81 Perform management of an inhalation burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.82 Perform management of a chemical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.83 Perform management of an electrical burn injury, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)
- 4-4.84 Perform management of a radiation exposure, including airway and ventilation, circulation, pharmacological, non-pharmacological, transport considerations, psychological support/ communication strategies, and other management described by local protocol. (P-2)

UNIT TERMINAL OBJECTIVE

4-5 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the trauma patient with a suspected head injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-5.1 Describe the incidence, morbidity, and mortality of facial injuries. (C-1)
- 4-5.2 Explain facial anatomy and relate physiology to facial injuries. (C-1)
- 4-5.3 Predict facial injuries based on mechanism of injury. (C-1)
- 4-5.4 Predict other injuries commonly associated with facial injuries based on mechanism of injury. (C-2)
- 4-5.5 Differentiate between the following types of facial injuries, highlighting the defining characteristics of each: (C-3)
- Eye
 - Ear
 - Nose
 - Throat
 - Mouth
- 4-5.6 Integrate pathophysiological principles to the assessment of a patient with a facial injury. (C-3)
- 4-5.7 Differentiate between facial injuries based on the assessment and history. (C-3)
- 4-5.8 Formulate a field impression for a patient with a facial injury based on the

assessment findings. (C-3)

4-5.9 Develop a patient management plan for a patient with a facial injury based on the field impression. (C-3)

4-5.10 Explain the pathophysiology of eye injuries. (C-1)

4-5.11 Relate assessment findings associated with eye injuries to pathophysiology. (C-3)

4-5.12 Integrate pathophysiological principles to the assessment of a patient with an eye injury. (C-3)

4-5.13 Formulate a field impression for a patient with an eye injury based on the assessment findings. (C-3)

4-5.14 Develop a patient management plan for a patient with an eye injury based on the field impression. (C-3)

4-5.15 Explain the pathophysiology of ear injuries. (C-1)

4-5.16 Relate assessment findings associated with ear injuries to pathophysiology. (C-3)

4-5.17 Integrate pathophysiological principles to the assessment of a patient with an ear injury. (C-3)

4-5.18 Formulate a field impression for a patient with an ear injury based on the assessment findings. (C-3)

4-5.19 Develop a patient management plan for a patient with an ear injury based on the field impression. (C-3)

4-5.20 Explain the pathophysiology of nose injuries. (C-1)

4-5.21 Relate assessment findings associated with nose injuries to pathophysiology. (C-3)

4-5.22 Integrate pathophysiological principles to the assessment of a patient with a nose injury. (C-3)

4-5.23 Formulate a field impression for a patient with a nose injury based on the assessment findings. (C-3)

4-5.24 Develop a patient management plan for a patient with a nose injury based on the field impression. (C-3)

4-5.25 Explain the pathophysiology of throat injuries. (C-1)

4-5.26 Relate assessment findings associated with throat injuries to pathophysiology. (C-3)

4-5.27 Integrate pathophysiological principles to the assessment of a patient with a throat injury. (C-3)

4-5.28 Formulate a field impression for a patient with a throat injury based on the assessment findings. (C-3)

4-5.29 Develop a patient management plan for a patient with a throat injury based on the field impression. (C-3)

4-5.30 Explain the pathophysiology of mouth injuries. (C-1)

4-5.31 Relate assessment findings associated with mouth injuries to pathophysiology. (C-3)

4-5.32 Integrate pathophysiological principles to the assessment of a patient with a mouth injury. (C-3)

4-5.33 Formulate a field impression for a patient with a mouth injury based on the assessment findings. (C-3)

4-5.34 Develop a patient management plan for a patient with a mouth injury based on

- the field impression. (C-3)
- 4-5.35 Describe the incidence, morbidity, and mortality of head injuries. (C-1)
- 4-5.36 Explain anatomy and relate physiology of the CNS to head injuries. (C-1)
- 4-5.37 Predict head injuries based on mechanism of injury. (C-2)
- 4-5.38 Distinguish between head injury and brain injury. (C-3)
- 4-5.39 Explain the pathophysiology of head/ brain injuries. (C-1)
- 4-5.40 Explain the concept of increasing intracranial pressure (ICP). (C-1)
- 4-5.41 Explain the effect of increased and decreased carbon dioxide on ICP. (C-1)
- 4-5.42 Define and explain the process involved with each of the levels of increasing ICP. (C-1)
- 4-5.43 Relate assessment findings associated with head/ brain injuries to the pathophysiologic process. (C-3)
- 4-5.44 Classify head injuries (mild, moderate, severe) according to assessment findings. (C-2) 136
- 4-5.45 Identify the need for rapid intervention and transport of the patient with a head/ brain injury. (C-1)
- 4-5.46 Describe and explain the general management of the head/ brain injury patient, including pharmacological and non-pharmacological treatment. (C-1)
- 4-5.47 Analyze the relationship between carbon dioxide concentration in the blood and management of the airway in the head/ brain injured patient. (C-3)
- 4-5.48 Explain the pathophysiology of diffuse axonal injury. (C-1)
- 4-5.49 Relate assessment findings associated with concussion, moderate and severe diffuse axonal injury to pathophysiology. (C-3)
- 4-5.50 Develop a management plan for a patient with a moderate and severe diffuse axonal injury. (C-3)
- 4-5.51 Explain the pathophysiology of skull fracture. (C-1)
- 4-5.52 Relate assessment findings associated with skull fracture to pathophysiology. (C-3)
- 4-5.53 Develop a management plan for a patient with a skull fracture. (C-3)
- 4-5.54 Explain the pathophysiology of cerebral contusion. (C-1)
- 4-5.55 Relate assessment findings associated with cerebral contusion to pathophysiology. (C-3)
- 4-5.56 Develop a management plan for a patient with a cerebral contusion. (C-3)
- 4-5.57 Explain the pathophysiology of intracranial hemorrhage, including: (C-1)
- a. Epidural
 - b. Subdural
 - c. Intracerebral
 - d. Subarachnoid
- 4-5.58 Relate assessment findings associated with intracranial hemorrhage to pathophysiology, including: (C-3)
- a. Epidural
 - b. Subdural
 - c. Intracerebral
 - d. Subarachnoid
- 4-5.59 Develop a management plan for a patient with a intracranial hemorrhage, including: (C-1)
- a. Epidural

- b. Subdural
- c. Intracerebral
- d. Subarachnoid
- 4-5.60 Describe the various types of helmets and their purposes. (C-1)
- 4-5.61 Relate priorities of care to factors determining the need for helmet removal in various field situations including sports related incidents. (C-3)
- 4-5.62 Develop a management plan for the removal of a helmet for a head injured patient. (C-3)
- 4-5.63 Integrate the pathophysiological principles to the assessment of a patient with head/ brain injury. (C-3)
- 4-5.64 Differentiate between the types of head/ brain injuries based on the assessment and history. (C-3)
- 4-5.65 Formulate a field impression for a patient with a head/ brain injury based on the assessment findings. (C-3)
- 4-5.66 Develop a patient management plan for a patient with a head/ brain injury based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE

4-6 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the patient with a suspected spinal injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to: 137

- 4-6.1 Describe the incidence, morbidity, and mortality of spinal injuries in the trauma patient. (C-1)
- 4-6.2 Describe the anatomy and physiology of structures related to spinal injuries. (C-1)
 - a. Cervical
 - b. Thoracic
 - c. Lumbar
 - d. Sacrum
 - e. Coccyx
 - f. Head
 - g. Brain
 - h. Spinal cord
 - i. Nerve tract(s)
 - j. Dermatomes
- 4-6.3 Predict spinal injuries based on mechanism of injury. (C-2)
- 4-6.4 Describe the pathophysiology of spinal injuries. (C-1)

- 4-6.5 Explain traumatic and non-traumatic spinal injuries. (C-1)
- 4-6.6 Describe the assessment findings associated with spinal injuries. (C-1)
- 4-6.7 Describe the management of spinal injuries. (C-1)
- 4-6.8 Identify the need for rapid intervention and transport of the patient with spinal injuries. (C-1)
- 4-6.9 Integrate the pathophysiological principles to the assessment of a patient with a spinal injury. (C-3)
- 4-6.10 Differentiate between spinal injuries based on the assessment and history. (C-3)
- 4-6.11 Formulate a field impression based on the assessment findings. (C-3)
- 4-6.12 Develop a patient management plan based on the field impression. (C-3)
- 4-6.13 Describe the pathophysiology of traumatic spinal injury related to: (C-1)
 - a. Spinal shock
 - b. Spinal neurogenic shock
 - c. Quadriplegia/ paraplegia
 - d. Incomplete cord injury/ cord syndromes:
 - 1. Central cord syndrome
 - 2. Anterior cord syndrome
 - 3. Brown-Sequard syndrome
- 4-6.14 Describe the assessment findings associated with traumatic spinal injuries. (C-1)
- 4-6.15 Describe the management of traumatic spinal injuries. (C-1)
- 4-6.16 Integrate pathophysiological principles to the assessment of a patient with a traumatic spinal injury. (C-3)
- 4-6.17 Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history. (C-3)
- 4-6.18 Formulate a field impression for traumatic spinal injury based on the assessment findings. (C-3)
- 4-6.19 Develop a patient management plan for traumatic spinal injury based on the field impression. (C-3)
- 4-6.20 Describe the pathophysiology of non-traumatic spinal injury, including: (C-1)
 - a. Low back pain
 - b. Herniated intervertebral disk
 - c. Spinal cord tumors
- 4-6.21 Describe the assessment findings associated with non-traumatic spinal injuries. (C-1)
- 4-6.22 Describe the management of non-traumatic spinal injuries. (C-1)
- 4-6.23 Integrate pathophysiological principles to the assessment of a patient with non-traumatic spinal injury. (C-3)
- 4-6.24 Differentiate between traumatic and non-traumatic spinal injuries based on the assessment and history. (C-3)
- 4-6.25 Formulate a field impression for non-traumatic spinal injury based on the assessment findings. (C-3)
- 4-6.26 Develop a patient management plan for non-traumatic spinal injury based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

4-6.27 Advocate the use of a thorough assessment when determining the proper management modality for spine injuries. (A-3) 138

4-6.28 Value the implications of failing to properly immobilize a spine-injured patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

4-6.29 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected traumatic spinal injury. (P-1)

4-6.30 Demonstrate a clinical assessment to determine the proper management modality for a patient with a suspected non-traumatic spinal injury. (P-1)

4-6.31 Demonstrate immobilization of the urgent and non-urgent patient with assessment findings of spinal injury from the following presentations: (P-1)

- a. Supine
- b. Prone
- c. Semi-prone
- d. Sitting
- e. Standing

4-6.32 Demonstrate documentation of suspected spinal cord injury to include: (P-1)

- a. General area of spinal cord involved
- b. Sensation
- c. Dermatomes
- d. Motor function
- e. Area(s) of weakness

4-6.33 Demonstrate preferred methods for stabilization of a helmet from a potentially spine injured patient. (P-1)

4-6.34 Demonstrate helmet removal techniques. (P-1)

4-6.35 Demonstrate alternative methods for stabilization of a helmet from a potentially spine injured patient. (P-1)

4-6.36 Demonstrate documentation of assessment before spinal immobilization. (P-1)

4-6.37 Demonstrate documentation of assessment during spinal immobilization. (P-1)

4-6.38 Demonstrate documentation of assessment after spinal immobilization. (P-1)

UNIT TERMINAL OBJECTIVE

4-7 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for a patient with a thoracic injury.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

4-7.1 Describe the incidence, morbidity, and mortality of thoracic injuries in the trauma patient. (C-1)

4-7.2 Discuss the anatomy and physiology of the organs and structures related to thoracic injuries. (C-1)

4-7.3 Predict thoracic injuries based on mechanism of injury. (C-2)

- 4-7.4 Discuss the types of thoracic injuries. (C-1)
- 4-7.5 Discuss the pathophysiology of thoracic injuries. (C-1)
- 4-7.6 Discuss the assessment findings associated with thoracic injuries. (C-1)
- 4-7.7 Discuss the management of thoracic injuries. (C-1)
- 4-7.8 Identify the need for rapid intervention and transport of the patient with thoracic injuries. (C-1)
- 4-7.9 Discuss the pathophysiology of specific chest wall injuries, including: (C-1)
 - a. Rib fracture
 - b. Flail segment
 - c. Sternal fracture
- 4-7.10 Discuss the assessment findings associated with chest wall injuries. (C-1)
- 4-7.11 Identify the need for rapid intervention and transport of the patient with chest wall injuries. (C-1)
- 4-7.12 Discuss the management of chest wall injuries. (C-1)
- 4-7.13 Discuss the pathophysiology of injury to the lung, including: (C-1)
 - a. Simple pneumothorax
 - b. Open pneumothorax
 - c. Tension pneumothorax 139
 - d. Hemothorax
 - e. Hemopneumothorax
 - f. Pulmonary contusion
- 4-7.14 Discuss the assessment findings associated with lung injuries. (C-1)
- 4-7.15 Discuss the management of lung injuries. (C-1)
- 4-7.16 Identify the need for rapid intervention and transport of the patient with lung injuries. (C-1)
- 4-7.17 Discuss the pathophysiology of myocardial injuries, including: (C-1)
 - a. Pericardial tamponade
 - b. Myocardial contusion
 - c. Myocardial rupture
- 4-7.18 Discuss the assessment findings associated with myocardial injuries. (C-1)
- 4-7.19 Discuss the management of myocardial injuries. (C-1)
- 4-7.20 Identify the need for rapid intervention and transport of the patient with myocardial injuries. (C-1)
- 4-7.21 Discuss the pathophysiology of vascular injuries, including injuries to: (C-1)
 - a. Aorta
 - b. Vena cava
 - c. Pulmonary arteries/ veins
- 4-7.22 Discuss the assessment findings associated with vascular injuries. (C-1)
- 4-7.23 Discuss the management of vascular injuries. (C-1)
- 4-7.24 Identify the need for rapid intervention and transport of the patient with vascular injuries. (C-1)
- 4-7.25 Discuss the pathophysiology of diaphragmatic injuries. (C-1)
- 4-7.26 Discuss the assessment findings associated with diaphragmatic injuries. (C-1)
- 4-7.27 Discuss the management of diaphragmatic injuries. (C-1)
- 4-7.28 Identify the need for rapid intervention and transport of the patient with diaphragmatic injuries. (C-1)
- 4-7.29 Discuss the pathophysiology of esophageal injuries. (C-1)

- 4-7.30 Discuss the assessment findings associated with esophageal injuries. (C-1)
- 4-7.31 Discuss the management of esophageal injuries. (C-1)
- 4-7.32 Identify the need for rapid intervention and transport of the patient with esophageal injuries. (C-1)
- 4-7.33 Discuss the pathophysiology of tracheo-bronchial injuries. (C-1)
- 4-7.34 Discuss the assessment findings associated with tracheo-bronchial injuries. (C-1)
- 4-7.35 Discuss the management of tracheo-bronchial injuries. (C-1)
- 4-7.36 Identify the need for rapid intervention and transport of the patient with tracheo-bronchial injuries. (C-1)
- 4-7.37 Discuss the pathophysiology of traumatic asphyxia. (C-1)
- 4-7.38 Discuss the assessment findings associated with traumatic asphyxia. (C-1)
- 4-7.39 Discuss the management of traumatic asphyxia. (C-1)
- 4-7.40 Identify the need for rapid intervention and transport of the patient with traumatic asphyxia. (C-1)
- 4-7.41 Integrate the pathophysiological principles to the assessment of a patient with thoracic injury. (C-1)
- 4-7.42 Differentiate between thoracic injuries based on the assessment and history. (C-3)
- 4-7.43 Formulate a field impression based on the assessment findings. (C-3)
- 4-7.44 Develop a patient management plan based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-7.45 Advocate the use of a thorough assessment to determine a differential diagnosis and treatment plan for thoracic trauma. (A-3)
- 4-7.46 Advocate the use of a thorough scene survey to determine the forces involved in thoracic trauma. (A-3)
- 4-7.47 Value the implications of failing to properly diagnose thoracic trauma. (A-2)
- 4-7.48 Value the implications of failing to initiate timely interventions to patients with thoracic trauma. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-7.49 Demonstrate a clinical assessment for a patient with suspected thoracic trauma. (P-1)
- 4-7.50 Demonstrate the following techniques of management for thoracic injuries: (P-1)
- Needle decompression 140
 - Fracture stabilization
 - Elective intubation
 - ECG monitoring
 - Oxygenation and ventilation

UNIT TERMINAL OBJECTIVE

4-8 At the completion of this unit, the paramedic student will be able to integrate pathophysiologic principles and the assessment findings to formulate

a field impression and implement the treatment plan for the patient with suspected abdominal trauma.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-8.1 Describe the epidemiology, including the morbidity/mortality and prevention strategies for a patient with abdominal trauma. (C-1)
- 4-8.2 Describe the anatomy and physiology of organs and structures related to abdominal injuries. (C-1)
- 4-8.3 Predict abdominal injuries based on blunt and penetrating mechanisms of injury. (C-2)
- 4-8.4 Describe open and closed abdominal injuries. (C-1)
- 4-8.5 Explain the pathophysiology of abdominal injuries. (C-1)
- 4-8.6 Describe the assessment findings associated with abdominal injuries. (C-1)
- 4-8.7 Identify the need for rapid intervention and transport of the patient with abdominal injuries based on assessment findings. (C-1)
- 4-8.8 Describe the management of abdominal injuries. (C-1)
- 4-8.9 Integrate the pathophysiological principles to the assessment of a patient with abdominal injury. (C-3)
- 4-8.10 Differentiate between abdominal injuries based on the assessment and history. (C-3)
- 4-8.11 Formulate a field impression for patients with abdominal trauma based on the assessment findings. (C-3)
- 4-8.12 Develop a patient management plan for patients with abdominal trauma based on the field impression. (C-3)
- 4-8.13 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for solid organ injuries. (C-1)
- 4-8.14 Explain the pathophysiology of solid organ injuries. (C-1)
- 4-8.15 Describe the assessment findings associated with solid organ injuries. (C-1)
- 4-8.16 Describe the treatment plan and management of solid organ injuries. (C-1)
- 4-8.17 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for hollow organ injuries. (C-1)
- 4-8.18 Explain the pathophysiology of hollow organ injuries. (C-1)
- 4-8.19 Describe the assessment findings associated with hollow organ injuries. (C-1)
- 4-8.20 Describe the treatment plan and management of hollow organ injuries. (C-1)
- 4-8.21 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for abdominal vascular injuries. (C-1)
- 4-8.22 Explain the pathophysiology of abdominal vascular injuries. (C-1)
- 4-8.23 Describe the assessment findings associated with abdominal vascular injuries. (C-1)
- 4-8.24 Describe the treatment plan and management of abdominal vascular injuries. (C-1)
- 4-8.25 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for pelvic fractures. (C-1)
- 4-8.26 Explain the pathophysiology of pelvic fractures. (C-1)
- 4-8.27 Describe the assessment findings associated with pelvic fractures. (C-1)
- 4-8.28 Describe the treatment plan and management of pelvic fractures. (C-1)

- 4-8.29 Describe the epidemiology, including the morbidity/ mortality and prevention strategies for other related abdominal injuries. (C-1)
- 4-8.30 Explain the pathophysiology of other related abdominal injuries. (C-1)
- 4-8.31 Describe the assessment findings associated with other related abdominal injuries. (C-1)
- 4-8.32 Describe the treatment plan and management of other related abdominal injuries. (C-1)
- 4-8.33 Apply the epidemiologic principles to develop prevention strategies for abdominal injuries. (C-2)
- 4-8.34 Integrate the pathophysiological principles to the assessment of a patient with abdominal injuries. (C-3)
- 4-8.35 Differentiate between abdominal injuries based on the assessment and history. (C-3) 141
- 4-8.36 Formulate a field impression based upon the assessment findings for a patient with abdominal injuries. (C-3)
- 4-8.37 Develop a patient management plan for a patient with abdominal injuries, based upon field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-8.38 Advocate the use of a thorough assessment to determine a differential diagnosis and treatment plan for abdominal trauma. (A-3)
- 4-8.39 Advocate the use of a thorough scene survey to determine the forces involved in abdominal trauma. (A-3)
- 4-8.40 Value the implications of failing to properly diagnose abdominal trauma and initiate timely interventions to patients with abdominal trauma. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-8.41 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with suspected abdominal trauma. (P-1)
- 4-8.42 Demonstrate the proper use of PASG in a patient with suspected abdominal trauma. (P-1)
- 4-8.43 Demonstrate the proper use of PASG in a patient with suspected pelvic fracture. (P-1)

UNIT TERMINAL OBJECTIVE

4-9 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and the assessment findings to formulate a field impression and implement the treatment plan for the patient with a musculoskeletal injury.

COGNITIVE OBJECTIVE

At the completion of this unit, the paramedic student will be able to:

- 4-9.1 Describe the incidence, morbidity, and mortality of musculoskeletal injuries. (C-1)
- 4-9.2 Discuss the anatomy and physiology of the musculoskeletal system. (C-1)

- 4-9.3 Predict injuries based on the mechanism of injury, including: (C-3)
- Direct
 - Indirect
 - Pathologic
- 4-9.4 Discuss the types of musculoskeletal injuries: (C-1)
- Fracture (open and closed)
 - Dislocation/ fracture
 - Sprain
 - Strain
- 4-9.5 Discuss the pathophysiology of musculoskeletal injuries. (C-1)
- 4-9.6 Discuss the assessment findings associated with musculoskeletal injuries. (C-1)
- 4-9.7 List the six "P"s of musculoskeletal injury assessment. (C-1)
- 4-9.8 List the primary signs and symptoms of extremity trauma. (C-1)
- 4-9.9 List other signs and symptoms that can indicate less obvious extremity injury. (C-1)
- 4-9.10 Discuss the need for assessment of pulses, motor and sensation before and after splinting. (C-1)
- 4-9.11 Identify the need for rapid intervention and transport when dealing with musculoskeletal injuries. (C-1)
- 4-9.12 Discuss the management of musculoskeletal injuries. (C-1)
- 4-9.13 Discuss the general guidelines for splinting. (C-1)
- 4-9.14 Explain the benefits of cold application for musculoskeletal injury. (C-1)
- 4-9.15 Explain the benefits of heat application for musculoskeletal injury. (C-1)
- 4-9.16 Describe age associated changes in the bones. (C-1)
- 4-9.17 Discuss the pathophysiology of open and closed fractures. (C-1)
- 4-9.18 Discuss the relationship between volume of hemorrhage and open or closed fractures. (C-3)
- 4-9.19 Discuss the assessment findings associated with fractures. (C-1) 142
- 4-9.20 Discuss the management of fractures. (C-1)
- 4-9.21 Discuss the usefulness of the pneumatic anti-shock garment (PASG) in the management of fractures. (C-1)
- 4-9.22 Describe the special considerations involved in femur fracture management. (C-1)
- 4-9.23 Discuss the pathophysiology of dislocations. (C-1)
- 4-9.24 Discuss the assessment findings of dislocations. (C-1)
- 4-9.25 Discuss the out-of-hospital management of dislocation/ fractures, including splinting and realignment. (C-1)
- 4-9.26 Explain the importance of manipulating a knee dislocation/ fracture with an absent distal pulse. (C-1)
- 4-9.27 Describe the procedure for reduction of a shoulder, finger or ankle dislocation/ fracture. (C-1)
- 4-9.28 Discuss the pathophysiology of sprains. (C-1)
- 4-9.29 Discuss the assessment findings of sprains. (C-1)
- 4-9.30 Discuss the management of sprains. (C-1)
- 4-9.31 Discuss the pathophysiology of strains. (C-1)
- 4-9.32 Discuss the assessment findings of strains. (C-1)
- 4-9.33 Discuss the management of strains. (C-1)

- 4-9.34 Discuss the pathophysiology of a tendon injury. (C-1)
- 4-9.35 Discuss the assessment findings of tendon injury. (C-1)
- 4-9.36 Discuss the management of a tendon injury. (C-1)
- 4-9.37 Integrate the pathophysiological principles to the assessment of a patient with a musculoskeletal injury. (C-3)
- 4-9.38 Differentiate between musculoskeletal injuries based on the assessment findings and history. (C-3)
- 4-9.39 Formulate a field impression of a musculoskeletal injury based on the assessment findings. (C-3)
- 4-9.40 Develop a patient management plan for the musculoskeletal injury based on the field impression. (C-3)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-9.41 Advocate the use of a thorough assessment to determine a working diagnosis and treatment plan for musculoskeletal injuries. (A-3)
- 4-9.42 Advocate for the use of pain management in the treatment of musculoskeletal injuries. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 4-9.43 Demonstrate a clinical assessment to determine the proper treatment plan for a patient with a suspected musculoskeletal injury. (P-1)
- 4-9.44 Demonstrate the proper use of fixation, soft and traction splints for a patient with a suspected fracture. (P-1)

UNIT TERMINAL OBJECTIVE

5-2 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement the treatment plan for the patient with cardiovascular disease.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-2.1 Describe the incidence, morbidity and mortality of cardiovascular disease. (C-1)
- 5-2.2 Discuss prevention strategies that may reduce the morbidity and mortality of cardiovascular disease. (C-1)
- 5-2.3 Identify the risk factors most predisposing to coronary artery disease. (C-1)
- 5-2.4 Describe the anatomy of the heart, including the position in the thoracic cavity, layers of the heart, chambers of the heart, and location and function of cardiac valves. (C-1)
- 5-2.5 Identify the major structures of the vascular system. (C-1)
- 5-2.6 Identify the factors affecting venous return. (C-1)
- 5-2.7 Identify and define the components of cardiac output. (C-1)
- 5-2.8 Identify phases of the cardiac cycle. (C-1)
- 5-2.9 Identify the arterial blood supply to any given area of the myocardium. (C-1) 143
- 5-2.10 Compare and contrast the coronary arterial distribution to the major portions

of the cardiac conduction system. (C-3)

5-2.11 Identify the structure and course of all divisions and subdivisions of the cardiac conduction system. (C-1)

5-2.12 Identify and describe how the heart's pacemaking control, rate, and rhythm are determined. (C-2)

5-2.13 Explain the physiological basis of conduction delay in the AV node. (C-3)

5-2.14 Define the functional properties of cardiac muscle. (C-1)

5-2.15 Define the events comprising electrical potential. (C-1)

5-2.16 List the most important ions involved in myocardial action potential and their primary function in this process. (C-2)

5-2.17 Describe the events involved in the steps from excitation to contraction of cardiac muscle fibers. (C-1)

5-2.18 Describe the clinical significance of Starling's law. (C-3)

5-2.19 Identify the structures of the autonomic nervous system (ANS). (C-1)

5-2.20 Identify the effect of the ANS on heart rate, rhythm and contractility. (C-1)

5-2.21 Define and give examples of positive and negative inotropism, chronotropism and dromotropism. (C-2)

5-2.22 Discuss the pathophysiology of cardiac disease and injury. (C-1)

5-2.23 Identify and describe the details of inspection, auscultation and palpation specific to the cardiovascular system. (C-1)

5-2.24 Define pulse deficit, pulsus paradoxus and pulsus alternans. (C-1)

5-2.25 Identify the normal characteristics of the point of maximal impulse (PMI). (C-1)

5-2.26 Identify and define the heart sounds. (C-1)

5-2.27 Relate heart sounds to hemodynamic events in the cardiac cycle. (C-2)

5-2.28 Describe the differences between normal and abnormal heart sounds. (C-2)

5-2.29 Identify and describe the components of the focused history as it relates to the patient with cardiovascular compromise. (C-1)

5-2.30 Explain the purpose of ECG monitoring. (C-1)

5-2.31 Describe how ECG waveforms are produced. (C-2)

5-2.32 Correlate the electrophysiological and hemodynamic events occurring throughout the entire cardiac cycle with the various ECG waveforms, segments and intervals. (C-2)

5-2.33 Identify how heart rates, durations, and amplitudes may be determined from ECG recordings. (C-3)

5-2.34 Relate the cardiac surfaces or areas represented by the ECG leads. (C-2)

5-2.35 Given an ECG, identify the arrhythmia. (C-3)

5-2.36 Identify the limitations to the ECG. (C-1)

5-2.37 Differentiate among the primary mechanisms responsible for producing cardiac arrhythmias. (C-1)

5-2.38 Describe a systematic approach to the analysis and interpretation of cardiac arrhythmias. (C-2)

5-2.39 Describe the arrhythmias originating in the sinus node, the AV junction, the atria, and the ventricles. (C-3)

5-2.40 Describe the arrhythmias originating or sustained in the AV junction. (C-3)

5-2.41 Describe the abnormalities originating within the bundle branch system. (C-3)

5-2.42 Describe the process of differentiating wide QRS complex tachycardias. (C-3)

5-2.43 Recognize the pitfalls in the differentiation of wide QRS complex tachycardias.

(C-1)

5-2.44 Describe the conditions of pulseless electrical activity. (C-3)

5-2.45 Describe the phenomena of reentry, aberration and accessory pathways. (C-1)

5-2.46 Identify the ECG changes characteristically produced by electrolyte imbalances and specify the clinical implications. (C-2)

5-2.47 Identify patient situations where ECG rhythm analysis is indicated. (C-1)

5-2.48 Recognize the changes on the ECG that may reflect evidence of myocardial ischemia and injury. (C-1)

5-2.49 Recognize the limitations of the ECG in reflecting evidence of myocardial ischemia and injury. (C-1)

5-2.50 Correlate abnormal ECG findings with clinical interpretation. (C-2)

5-2.51 Identify the major therapeutic objectives in the treatment of the patient with any arrhythmia. (C-1)

5-2.52 Identify the major mechanical, pharmacological and electrical therapeutic interventions. (C-3)

5-2.53 Based on field impressions, identify the need for rapid intervention for the patient in cardiovascular compromise. (C-3)

5-2.54 Describe the incidence, morbidity and mortality associated with myocardial conduction defects. (C-1)

5-2.55 Identify the clinical indications for transcutaneous and permanent artificial cardiac pacing. (C-1)

5-2.56 Describe the components and the functions of a transcutaneous pacing system. (C-1)

5-2.57 Explain what each setting and indicator on a transcutaneous pacing system represents and how the settings may be adjusted. (C-2) 144

5-2.58 Describe the techniques of applying a transcutaneous pacing system. (C-1)

5-2.59 Describe the characteristics of an implanted pacemaking system. (C-1)

5-2.60 Describe artifacts that may cause confusion when evaluating the ECG of a patient with a pacemaker. (C- 2)

5-2.61 List the possible complications of pacing. (C-3)

5-2.62 List the causes and implications of pacemaker failure. (C-2)

5-2.63 Identify additional hazards that interfere with artificial pacemaker function. (C-1)

5-2.64 Recognize the complications of artificial pacemakers as evidenced on ECG. (C-2)

5-2.65 Describe the epidemiology, morbidity and mortality, and pathophysiology of angina pectoris. (C-1)

5-2.66 List and describe the assessment parameters to be evaluated in a patient with angina pectoris. (C-1)

5-2.67 Identify what is meant by the OPQRST of chest pain assessment. (C-3)

5-2.68 List other clinical conditions that may mimic signs and symptoms of coronary artery disease and angina pectoris. (C-1)

5-2.69 Identify the ECG findings in patients with angina pectoris. (C-3)

5-2.70 Identify the paramedic responsibilities associated with management of the patient with angina pectoris. (C-2)

5-2.71 Based on the pathophysiology and clinical evaluation of the patient with chest pain, list the anticipated clinical problems according to their life-threatening potential.

(C-3)

5-2.72 Describe the epidemiology, morbidity and mortality of myocardial infarction.

(C-1)

5-2.73 List the mechanisms by which an MI may be produced by traumatic and non-traumatic events. (C-2)

5-2.74 Identify the primary hemodynamic changes produced in myocardial infarction.

(C-1)

5-2.75 List and describe the assessment parameters to be evaluated in a patient with a suspected myocardial infarction. (C-1)

5-2.76 Identify the anticipated clinical presentation of a patient with a suspected acute myocardial infarction. (C-3)

5-2.77 Differentiate the characteristics of the pain/ discomfort occurring in angina pectoris and acute myocardial infarction. (C-2)

5-2.78 Identify the ECG changes characteristically seen during evolution of an acute myocardial infarction. (C-2)

5-2.79 Identify the most common complications of an acute myocardial infarction. (C-3)

5-2.80 List the characteristics of a patient eligible for thrombolytic therapy. (C-2)

5-2.81 Describe the "window of opportunity" as it pertains to reperfusion of a myocardial injury or infarction. (C-3)

5-2.82 Based on the pathophysiology and clinical evaluation of the patient with a suspected acute myocardial infarction, list the anticipated clinical problems according to their life-threatening potential. (C-3)

5-2.83 Specify the measures that may be taken to prevent or minimize complications in the patient suspected of myocardial infarction. (C-3)

5-2.84 Describe the most commonly used cardiac drugs in terms of therapeutic effect and dosages, routes of administration, side effects and toxic effects. (C-3)

5-2.85 Describe the epidemiology, morbidity and mortality of heart failure. (C-1)

5-2.86 Define the principle causes and terminology associated with heart failure. (C-1)

5-2.87 Identify the factors that may precipitate or aggravate heart failure. (C-3)

5-2.88 Describe the physiological effects of heart failure. (C-2)

5-2.89 Define the term "acute pulmonary edema" and describe its relationship to left ventricular failure. (C-3)

5-2.90 Define preload, after load and left ventricular end-diastolic pressure and relate each to the pathophysiology of heart failure. (C-3)

5-2.91 Differentiate between early and late signs and symptoms of left ventricular failure and those of right ventricular failure. (C-3)

5-2.92 Explain the clinical significance of paroxysmal nocturnal dyspnea. (C-1)

5-2.93 Explain the clinical significance of edema of the extremities and sacrum. (C-1)

5-2.94 List the interventions prescribed for the patient in acute congestive heart failure. (C-2)

5-2.95 Describe the most commonly used pharmacological agents in the management of congestive heart failure in terms of therapeutic effect, dosages, routes of administration, side effects and toxic effects. (C-1)

5-2.96 Define the term "cardiac tamponade". (C-1)

5-2.97 List the mechanisms by which cardiac tamponade may be produced by traumatic and non-traumatic events. (C-2)

- 5-2.98 Identify the limiting factor of pericardial anatomy that determines intrapericardiac pressure. (C-1)
- 5-2.99 Identify the clinical criteria specific to cardiac tamponade. (C-2)
- 5-2.100 Describe how to determine if pulsus paradoxus, pulsus alternans or electrical alternans is present. (C-2) 145
- 5-2.101 Identify the paramedic responsibilities associated with management of a patient with cardiac tamponade. (C-2)
- 5-2.102 Describe the incidence, morbidity and mortality of hypertensive emergencies. (C-1)
- 5-2.103 Define the term "hypertensive emergency". (C-1)
- 5-2.104 Identify the characteristics of the patient population at risk for developing a hypertensive emergency. (C-1)
- 5-2.105 Explain the essential pathophysiological defect of hypertension in terms of Starling's law of the heart. (C-3)
- 5-2.106 Identify the progressive vascular changes associate with sustained hypertension. (C-1)
- 5-2.107 Describe the clinical features of the patient in a hypertensive emergency. (C-3)
- 5-2.108 Rank the clinical problems of patients in hypertensive emergencies according to their sense of urgency. (C-3)
- 5-2.109 From the priority of clinical problems identified, state the management responsibilities for the patient with a hypertensive emergency. (C-2)
- 5-2.110 Identify the drugs of choice for hypertensive emergencies, rationale for use, clinical precautions and disadvantages of selected antihypertensive agents. (C-3)
- 5-2.111 Correlate abnormal findings with clinical interpretation of the patient with a hypertensive emergency. (C-3)
- 5-2.112 Define the term "cardiogenic shock". (C-1)
- 5-2.113 Describe the major systemic effects of reduced tissue perfusion caused by cardiogenic shock. (C-3)
- 5-2.114 Explain the primary mechanisms by which the heart may compensate for a diminished cardiac output and describe their efficiency in cardiogenic shock. (C-3)
- 5-2.115 Differentiate progressive stages of cardiogenic shock. (C-3)
- 5-2.116 Identify the clinical criteria for cardiogenic shock. (C-1)
- 5-2.117 Describe the characteristics of patients most likely to develop cardiogenic shock. (C-3)
- 5-2.118 Describe the most commonly used pharmacological agents in the management of cardiogenic shock in terms of therapeutic effects, dosages, routes of administration, side effects and toxic effects. (C-2)
- 5-2.119 Correlate abnormal findings with clinical assessment of the patient in cardiogenic shock. (C-3)
- 5-2.120 Identify the paramedic responsibilities associated with management of a patient in cardiogenic shock. (C-2)
- 5-2.121 Define the term "cardiac arrest". (C-1)
- 5-2.122 Identify the characteristics of patient population at risk for developing cardiac arrest from cardiac causes. (C-1)
- 5-2.123 Identify non-cardiac causes of cardiac arrest. (C-1)
- 5-2.124 Describe the arrhythmias seen in cardiac arrest. (C-3)

- 5-2.125 Identify the critical actions necessary in caring for the patient with cardiac arrest. (C-3)
- 5-2.126 Explain how to confirm asystole using the 3-lead ECG. (C-1)
- 5-2.127 Define the terms defibrillation and synchronized cardioversion. (C-1)
- 5-2.128 Specify the methods of supporting the patient with a suspected ineffective implanted defibrillation device. (C-2)
- 5-2.129 Describe the most commonly used pharmacological agents in the managements of cardiac arrest in terms of therapeutic effects. (C-3)
- 5-2.130 Identify resuscitation. (C-1)
- 5-2.131 Identify circumstances and situations where resuscitation efforts would not be initiated. (C-1)
- 5-2.132 Identify and list the inclusion and exclusion criteria for termination of resuscitation efforts. (C-1)
- 5-2.133 Identify communication and documentation protocols with medical direction and law enforcement used for termination of resuscitation efforts. (C-1)
- 5-2.134 Describe the incidence, morbidity and mortality of vascular disorders. (C-1)
- 5-2.135 Describe the pathophysiology of vascular disorders. (C-1)
- 5-2.136 List the traumatic and non-traumatic causes of vascular disorders. (C-1)
- 5-2.137 Define the terms "aneurysm", "claudication" and "phlebitis". (C-1)
- 5-2.138 Identify the peripheral arteries most commonly affected by occlusive disease. (C-1)
- 5-2.139 Identify the major factors involved in the pathophysiology of aortic aneurysm. (C-1)
- 5-2.140 Recognize the usual order of signs and symptoms that develop following peripheral artery occlusion. (C-3)
- 5-2.141 Identify the clinical significance of claudication and presence of arterial bruits in a patient with peripheral vascular disorders. (C-3)
- 5-2.142 Describe the clinical significance of unequal arterial blood pressure readings in the arms. (C-3)
- 5-2.143 Recognize and describe the signs and symptoms of dissecting thoracic or abdominal aneurysm. (C-3)
- 5-2.144 Describe the significant elements of the patient history in a patient with vascular disease. (C-2)
- 5-2.145 Identify the hemodynamic effects of vascular disorders. (C-1) 146
- 5-2.146 Identify the complications of vascular disorders. (C-1)
- 5-2.147 Identify the Paramedic's responsibilities associated with management of patients with vascular disorders. (C-2)
- 5-2.148 Develop, execute and evaluate a treatment plan based on the field impression for the patient with vascular disorders. (C-3)
- 5-2.149 Differentiate between signs and symptoms of cardiac tamponade, hypertensive emergencies, cardiogenic shock, and cardiac arrest. (C-3)
- 5-2.150 Based on the pathophysiology and clinical evaluation of the patient with chest pain, characterize the clinical problems according to their life-threatening potential. (C-3)
- 5-2.151 Apply knowledge of the epidemiology of cardiovascular disease to develop prevention strategies. (C-3)
- 5-2.152 Integrate pathophysiological principles into the assessment of a patient with

cardiovascular disease. (C-3)

5-2.153 Apply knowledge of the epidemiology of cardiovascular disease to develop prevention strategies. (C-3)

5-2.154 Integrate pathophysiological principles into the assessment of a patient with cardiovascular disease. (C-3)

5-2.155 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with cardiovascular disease. (C-3)

5-2.156 Integrate pathophysiological principles to the assessment of a patient in need of a pacemaker. (C-1)

5-2.157 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient in need of a pacemaker. (C-3)

5-2.158 Develop, execute, and evaluate a treatment plan based on field impression for the patient in need of a pacemaker. (C-3)

5-2.159 Based on the pathophysiology and clinical evaluation of the patient with chest pain, characterize the clinical problems according to their life-threatening potential. (C-3)

5-2.160 Integrate pathophysiological principles to the assessment of a patient with chest pain. (C-3)

5-2.161 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with angina pectoris. (C-3)

5-2.162 Develop, execute and evaluate a treatment plan based on the field impression for the patient with chest pain. (C-3)

5-2.163 Integrate pathophysiological principles to the assessment of a patient with a suspected myocardial infarction. (C-3)

5-2.164 Synthesize patient history, assessment findings and ECG analysis to form a field impression for the patient with a suspected myocardial infarction. (C-3)

5-2.165 Develop, execute and evaluate a treatment plan based on the field impression for the suspected myocardial infarction patient. (C-3)

5-2.166 Integrate pathophysiological principles to the assessment of the patient with heart failure. (C-3)

5-2.167 Synthesize assessment findings and patient history information to form a field impression of the patient with heart failure. (C-3)

5-2.168 Develop, execute, and evaluate a treatment plan based on the field impression for the heart failure patient. (C-3)

5-2.169 Integrate pathophysiological principles to the assessment of a patient with cardiac tamponade. (C-3)

5-2.170 Synthesize assessment findings and patient history information to form a field impression of the patient with cardiac tamponade. (C-3)

5-2.171 Develop, execute and evaluate a treatment plan based on the field impression for the patient with cardiac tamponade. (C-3)

5-2.172 Integrate pathophysiological principles to the assessment of the patient with a hypertensive emergency. (C-3)

5-2.173 Synthesize assessment findings and patient history information to form a field impression of the patient with a hypertensive emergency. (C-3)

5-2.174 Develop, execute and evaluate a treatment plan based on the field impression for the patient with a hypertensive emergency. (C-3)

5-2.175 Integrate pathophysiological principles to the assessment of the patient with

cardiogenic shock. (C-3)

5-2.176 Synthesize assessment findings and patient history information to form a field impression of the patient with cardiogenic shock. (C-3)

5-2.177 Develop, execute, and evaluate a treatment plan based on the field impression for the patient with cardiogenic shock. (C-3)

5-2.178 Integrate the pathophysiological

UNIT TERMINAL OBJECTIVE

5-13 At the end of this unit, the paramedic student will be able to utilize gynecological principles and assessment findings to formulate a field impression and implement the management plan for the patient experiencing a gynecological emergency.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

5-13.1 Review the anatomic structures and physiology of the female reproductive system. (C-1) 163

5-13.2 Identify the normal events of the menstrual cycle. (C-1)

5-13.3 Describe how to assess a patient with a gynecological complaint. (C-1)

5-13.4 Explain how to recognize a gynecological emergency. (C-1)

5-13.5 Describe the general care for any patient experiencing a gynecological emergency. (C-1)

5-13.6 Describe the pathophysiology, assessment, and management of specific gynecological emergencies. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

5-13.7 Value the importance of maintaining a patient's modesty and privacy while still being able to obtain necessary information. (A-2)

5-13.8 Defend the need to provide care for a patient of sexual assault, while still preventing destruction of crime scene information. (A-3)

5-13.9 Serve as a role model for other EMS providers when discussing or caring for patients with gynecological emergencies. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

5-13.10 Demonstrate how to assess a patient with a gynecological complaint. (P-2)

5-13.11 Demonstrate how to provide care for a patient with: (P-2)

a. Excessive vaginal bleeding

b. Abdominal pain

c. Sexual assault

UNIT TERMINAL OBJECTIVE

5-14 At the completion of this unit, the paramedic student will be able to apply an understanding of the anatomy and physiology of the female reproductive system to the assessment and management of a patient experiencing normal or abnormal labor.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-14.1 Review the anatomic structures and physiology of the reproductive system. (C-1)
- 5-14.2 Identify the normal events of pregnancy. (C-1)
- 5-14.3 Describe how to assess an obstetrical patient. (C-1)
- 5-14.4 Identify the stages of labor and the paramedic's role in each stage. (C-1)
- 5-14.5 Differentiate between normal and abnormal delivery. (C-3)
- 5-14.6 Identify and describe complications associated with pregnancy and delivery. (C-1)
- 5-14.7 Identify predelivery emergencies. (C-1)
- 5-14.8 State indications of an imminent delivery. (C-1)
- 5-14.9 Explain the use of the contents of an obstetrics kit. (C-2)
- 5-14.10 Differentiate the management of a patient with predelivery emergencies from a normal delivery. (C-3)
- 5-14.11 State the steps in the predelivery preparation of the mother. (C-1)
- 5-14.12 Establish the relationship between body substance isolation and childbirth. (C-3)
- 5-14.13 State the steps to assist in the delivery of a newborn. (C-1)
- 5-14.14 Describe how to care for the newborn. (C-1)
- 5-14.15 Describe how and when to cut the umbilical cord. (C-1)
- 5-14.16 Discuss the steps in the delivery of the placenta. (C-1)
- 5-14.17 Describe the management of the mother post-delivery. (C-1)
- 5-14.18 Summarize neonatal resuscitation procedures. (C-1)
- 5-14.19 Describe the procedures for handling abnormal deliveries. (C-1)
- 5-14.20 Describe the procedures for handling complications of pregnancy. (C-1)
- 5-14.21 Describe the procedures for handling maternal complications of labor. (C-1)
- 5-14.22 Describe special considerations when meconium is present in amniotic fluid or during delivery. (C-1) 164
- 5-14.23 Describe special considerations of a premature baby. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-14.24 Advocate the need for treating two patients (mother and baby). (A-2)
- 5-14.25 Value the importance of maintaining a patient's modesty and privacy during assessment and management. (A-2)
- 5-14.26 Serve as a role model for other EMS providers when discussing or performing the steps of childbirth. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 5-14.27 Demonstrate how to assess an obstetric patient. (P-2)
- 5-14.28 Demonstrate how to provide care for a patient with: (P-2)
 - a. Excessive vaginal bleeding
 - b. Abdominal pain
 - c. Hypertensive crisis

UNIT TERMINAL OBJECTIVE

6-1.1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for a neonatal patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-1.2 Define the term newborn. (C-1)
- 6-1.3 Define the term neonate. (C-1)
- 6-1.4 Identify important Antepartum factors that can affect childbirth. (C-1)
- 6-1.5 Identify important intrapartum factors that can term the newborn high risk. (C-1)
- 6-1.6 Identify the factors that lead to premature birth and low birth weight newborns. (C-1)
- 6-1.7 Distinguish between primary and secondary apnea. (C-3)
- 6-1.8 Discuss pulmonary perfusion and asphyxia. (C-1)
- 6-1.9 Identify the primary signs utilized for evaluating a newborn during resuscitation. (C-1)
- 6-1.10 Formulate an appropriate treatment plan for providing initial care to a newborn. (C-3)
- 6-1.11 Identify the appropriate use of the Apgar score in caring for a newborn. (C-1)
- 6-1.12 Calculate the APGAR score given various newborn situations. (C-3)
- 6-1.13 Determine when ventilatory assistance is appropriate for a newborn. (C-1)
- 6-1.14 Prepare appropriate ventilation equipment, adjuncts and technique for a newborn. (C-1)
- 6-1.15 Determine when chest compressions are appropriate for a newborn. (C-1)
- 6-1.16 Discuss appropriate chest compression techniques for a newborn. (C-1)
- 6-1.17 Assess patient improvement due to chest compressions and ventilations. (C-1)
- 6-1.18 Determine when endotracheal intubation is appropriate for a newborn. (C-1)
- 6-1.19 Discuss appropriate endotracheal intubation techniques for a newborn. (C-1)
- 6-1.20 Assess patient improvement due to endotracheal intubation. (C-1)
- 6-1.21 Identify complications related to endotracheal intubation for a newborn. (C-1)
- 6-1.22 Determine when vascular access is indicated for a newborn. (C-1)
- 6-1.23 Discuss the routes of medication administration for a newborn. (C-1)
- 6-1.24 Determine when blow-by oxygen delivery is appropriate for a newborn. (C-1)
- 6-1.25 Discuss appropriate blow-by oxygen delivery devices and technique for a newborn. (C-1)
- 6-1.26 Assess patient improvement due to assisted ventilations. (C-1)
- 6-1.27 Determine when an orogastric tube should be inserted during positive-pressure ventilation. (C-1)
- 6-1.28 Discuss the signs of hypovolemia in a newborn. (C-1)
- 6-1.29 Discuss the initial steps in resuscitation of a newborn. (C-1)
- 6-1.30 Assess patient improvement due to blow-by oxygen delivery. (C-1) 165
- 6-1.31 Discuss the effects maternal narcotic usage has on the newborn. (C-1)
- 6-1.32 Determine the appropriate treatment for the newborn with narcotic depression. (C-1)

- 6-1.33 Discuss appropriate transport guidelines for a newborn. (C-1)
- 6-1.34 Determine appropriate receiving facilities for low and high-risk newborns. (C-1)
- 6-1.35 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for meconium aspiration. (C-1)
- 6-1.36 Discuss the pathophysiology of meconium aspiration. (C-1)
- 6-1.37 Discuss the assessment findings associated with meconium aspiration. (C-1)
- 6-1.38 Discuss the management/ treatment plan for meconium aspiration. (C-1)
- 6-1.39 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for apnea in the neonate. (C-1)
- 6-1.40 Discuss the pathophysiology of apnea in the neonate. (C-1)
- 6-1.41 Discuss the assessment findings associated with apnea in the neonate. (C-1)
- 6-1.42 Discuss the management/ treatment plan for apnea in the neonate. (C-1)
- 6-1.43 Describe the epidemiology, pathophysiology, assessment findings, management/ treatment plan for diaphragmatic hernia. (C-1)
- 6-1.44 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for bradycardia in the neonate. (C-1)
- 6-1.45 Discuss the pathophysiology of bradycardia in the neonate. (C-1)
- 6-1.46 Discuss the assessment findings associated with bradycardia in the neonate. (C-1)
- 6-1.47 Discuss the management/ treatment plan for bradycardia in the neonate. (C-1)
- 6-1.48 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for premature infants
- 6-1.49 Discuss the pathophysiology of premature infants. (C-1)
- 6-1.50 Discuss the assessment findings associated with premature infants. (C-1)
- 6-1.51 Discuss the management/ treatment plan for premature infants. (C-1)
- 6-1.52 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.53 Discuss the pathophysiology of respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.54 Discuss the assessment findings associated with respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.55 Discuss the management/ treatment plan for respiratory distress/ cyanosis in the neonate. (C-1)
- 6-1.56 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for seizures in the neonate. (C-1)
- 6-1.57 Discuss the pathophysiology of seizures in the neonate. (C-1)
- 6-1.58 Discuss the assessment findings associated with seizures in the neonate. (C-1)
- 6-1.59 Discuss the management/ treatment plan for seizures in the neonate. (C-1)
- 6-1.60 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for fever in the neonate. (C-1)
- 6-1.61 Discuss the pathophysiology of fever in the neonate. (C-1)
- 6-1.62 Discuss the assessment findings associated with fever in the neonate. (C-1)
- 6-1.63 Discuss the management/ treatment plan for fever in the neonate. (C-1)
- 6-1.64 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for hypothermia in the neonate. (C-1)
- 6-1.65 Discuss the pathophysiology of hypothermia in the neonate. (C-1)
- 6-1.66 Discuss the assessment findings associated with hypothermia in the neonate.

(C-1)

6-1.67 Discuss the management/ treatment plan for hypothermia in the neonate. (C-1)

6-1.68 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for hypoglycemia in the neonate. (C-1)

6-1.69 Discuss the pathophysiology of hypoglycemia in the neonate. (C-1)

6-1.70 Discuss the assessment findings associated with hypoglycemia in the neonate. (C-1)

6-1.71 Discuss the management/ treatment plan for hypoglycemia in the neonate. (C-1)

6-1.72 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for vomiting in the neonate (C-1)

6-1.73 Discuss the pathophysiology of vomiting in the neonate. (C-1)

6-1.74 Discuss the assessment findings associated with vomiting in the neonate. (C-1)

6-1.75 Discuss the management/ treatment plan for vomiting in the neonate. (C-1)

6-1.76 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for diarrhea in the neonate. (C-1)

6-1.77 Discuss the pathophysiology of in diarrhea the neonate. (C-1)

6-1.78 Discuss the assessment findings associated with diarrhea in the neonate. (C-1)

6-1.79 Discuss the management/ treatment plan for diarrhea in the neonate. (C-1)

6-1.80 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for common birth injuries in the neonate. (C-1)

6-1.81 Discuss the pathophysiology of common birth injuries in the neonate. (C-1)

6-1.82 Discuss the assessment findings associated with common birth injuries in the neonate. (C-1)

6-1.83 Discuss the management/ treatment plan for common birth injuries in the neonate. (C-1)

6-1.84 Describe the epidemiology, including the incidence, morbidity/ mortality and risk factors for cardiac arrest in the neonate. (C-1)

6-1.85 Discuss the pathophysiology of cardiac arrest in the neonate. (C-1)

6-1.86 Discuss the assessment findings associated with cardiac arrest in the neonate. (C-1)

6-1.87 Discuss the management/ treatment plan for cardiac arrest in the neonate. (C-1)

6-1.88 Discuss the pathophysiology of post arrest management of the neonate. (C-1)

6-1.89 Discuss the assessment findings associated with post arrest situations in the neonate. (C-1)

6-1.90 Discuss the management/ treatment plan to stabilize the post arrest neonate. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

6-1.91 Demonstrate and advocate appropriate interaction with a newborn/ neonate that conveys respect for their position in life. (A-3)

6-1.92 Recognize the emotional impact of newborn/ neonate injuries/ illnesses on parents/ guardians. (A-1)

- 6-1.93 Recognize and appreciate the physical and emotional difficulties associated with separation of the parent/ guardian and a newborn/ neonate. (A-3)
- 6-1.94 Listen to the concerns expressed by parents/ guardians. (A-1)
- 6-1.95 Attend to the need for reassurance, empathy and compassion for the parent/ guardian. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-1.96 Demonstrate preparation of a newborn resuscitation area. (P-2)
- 6-1.97 Demonstrate appropriate assessment technique for examining a newborn. (P-2)
- 6-1.98 Demonstrate appropriate assisted ventilations for a newborn. (P-2)
- 6-1.99 Demonstrate appropriate endotracheal intubation technique for a newborn. (P-2) 167
- 6-1.100 Demonstrate appropriate meconium aspiration suctioning technique for a newborn. (P-2)
- 6-1.101 Demonstrate appropriate insertion of an orogastric tube. (P-2)
- 6-1.102 Demonstrate needle chest decompression for a newborn or neonate. (P-2)
- 6-1.103 Demonstrate appropriate chest compression and ventilation technique for a newborn. (P-2)
- 6-1.104 Demonstrate appropriate techniques to improve or eliminate endotracheal intubation complications. (P-2)
- 6-1.105 Demonstrate vascular access cannulation techniques for a newborn. (P-2)
- 6-1.106 Demonstrate the initial steps in resuscitation of a newborn. (P-2)
- 6-1.107 Demonstrate blow-by oxygen delivery for a newborn. (P-2)

UNIT TERMINAL OBJECTIVE

6-2.1 At the completion of this unit, the paramedic student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the pediatric patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-2.2 Discuss the paramedic's role in the reduction of infant and childhood morbidity and mortality from acute illness and injury. (C-1)
- 6-2.3 Identify methods/ mechanisms that prevent injuries to infants and children. (C-1)
- 6-2.4 Describe Emergency Medical Services for Children (EMSC). (C-1)
- 6-2.5 Discuss how an integrated EMSC system can affect patient outcome. (C-2)
- 6-2.6 Identify key growth and developmental characteristics of infants and children and their implications. (C-2)
- 6-2.7 Identify key anatomical and physiological characteristics of infants and children and their implications. (C-2)
- 6-2.8 Describe techniques for successful assessment of infants and children. (C-1)
- 6-2.9 Describe techniques for successful treatment of infants and children. (C-1)
- 6-2.10 Identify the common responses of families to acute illness and injury of an infant or child. (C-1)

- 6-2.11 Describe techniques for successful interaction with families of acutely ill or injured infants and children. (C-1)
- 6-2.12 Outline differences in adult and childhood anatomy and physiology. (C-3)
- 6-2.13 Identify "normal" age group related vital signs. (C-1)
- 6-2.14 Discuss the appropriate equipment utilized to obtain pediatric vital signs. (C-1)
- 6-2.15 Determine appropriate airway adjuncts for infants and children. (C-1)
- 6-2.16 Discuss complications of improper utilization of airway adjuncts with infants and children. (C-1)
- 6-2.17 Discuss appropriate ventilation devices for infants and children. (C-1)
- 6-2.18 Discuss complications of improper utilization of ventilation devices with infants and children. (C-1)
- 6-2.19 Discuss appropriate endotracheal intubation equipment for infants and children. (C-1)
- 6-2.20 Identify complications of improper endotracheal intubation procedure in infants and children. (C-1)
- 6-2.21 List the indications and methods for gastric decompression for infants and children. (C-1)
- 6-2.22 Define respiratory distress. (C-1)
- 6-2.23 Define respiratory failure. (C-1)
- 6-2.24 Define respiratory arrest. (C-1)
- 6-2.25 Differentiate between upper airway obstruction and lower airway disease. (C-3)
- 6-2.26 Describe the general approach to the treatment of children with respiratory distress, failure, or arrest from upper airway obstruction or lower airway disease. (C-3)
- 6-2.27 Discuss the common causes of hypoperfusion in infants and children. (C-1)
- 6-2.28 Evaluate the severity of hypoperfusion in infants and children. (C-3)
- 6-2.29 Identify the major classifications of pediatric cardiac rhythms. (C-1)
- 6-2.30 Discuss the primary etiologies of cardiopulmonary arrest in infants and children. (C-1)
- 6-2.31 Discuss age appropriate vascular access sites for infants and children. (C-1)
- 6-2.32 Discuss the appropriate equipment for vascular access in infants and children. (C-1) 168
- 6-2.33 Identify complications of vascular access for infants and children. (C-1)
- 6-2.34 Describe the primary etiologies of altered level of consciousness in infants and children. (C-1)
- 6-2.35 Identify common lethal mechanisms of injury in infants and children. (C-1)
- 6-2.36 Discuss anatomical features of children that predispose or protect them from certain injuries. (C-1)
- 6-2.37 Describe aspects of infant and children airway management that are affected by potential cervical spine injury. (C-1)
- 6-2.38 Identify infant and child trauma patients who require spinal immobilization. (C-1)
- 6-2.39 Discuss fluid management and shock treatment for infant and child trauma patient. (C-1)
- 6-2.40 Determine when pain management and sedation are appropriate for infants and children. (C-1)
- 6-2.41 Define child abuse. (C-1)

- 6-2.42 Define child neglect. (C-1)
- 6-2.43 Define sudden infant death syndrome (SIDS). (C-1)
- 6-2.44 Discuss the parent/ caregiver responses to the death of an infant or child. (C-1)
- 6-2.45 Define children with special health care needs. (C-1)
- 6-2.46 Define technology assisted children. (C-1)
- 6-2.47 Discuss basic cardiac life support (CPR) guidelines for infants and children. (C-1)
- 6-2.48 Identify appropriate parameters for performing infant and child CPR. (C-1)
- 6-2.49 Integrate advanced life support skills with basic cardiac life support for infants and children. (C-3)
- 6-2.50 Discuss the indications, dosage, route of administration and special considerations for medication administration in infants and children. (C-1)
- 6-2.51 Discuss appropriate transport guidelines for infants and children. (C-1)
- 6-2.52 Discuss appropriate receiving facilities for low and high-risk infants and children. (C-1)
- 6-2.53 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for respiratory distress/ failure in infants and children. (C-1)
- 6-2.54 Discuss the pathophysiology of respiratory distress/ failure in infants and children. (C-1)
- 6-2.55 Discuss the assessment findings associated with respiratory distress/ failure in infants and children. (C-1)
- 6-2.56 Discuss the management/ treatment plan for respiratory distress/ failure in infants and children. (C-1)
- 6-2.57 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for hypoperfusion in infants and children. (C-1)
- 6-2.58 Discuss the pathophysiology of hypoperfusion in infants and children. (C-1)
- 6-2.59 Discuss the assessment findings associated with hypoperfusion in infants and children. (C-1)
- 6-2.60 Discuss the management/ treatment plan for hypoperfusion in infants and children. (C-1)
- 6-2.61 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for cardiac dysrhythmias in infants and children. (C-1)
- 6-2.62 Discuss the pathophysiology of cardiac dysrhythmias in infants and children. (C-1)
- 6-2.63 Discuss the assessment findings associated with cardiac dysrhythmias in infants and children. (C-1)
- 6-2.64 Discuss the management/ treatment plan for cardiac dysrhythmias in infants and children. (C-1)
- 6-2.65 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for neurological emergencies in infants and children. (C-1)
- 6-2.66 Discuss the pathophysiology of neurological emergencies in infants and children. (C-1)
- 6-2.67 Discuss the assessment findings associated with neurological emergencies in

- infants and children. (C-1)
- 6-2.68 Discuss the management/ treatment plan for neurological emergencies in infants and children. (C-1)
- 6-2.69 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for trauma in infants and children. (C-1)
- 6-2.70 Discuss the pathophysiology of trauma in infants and children. (C-1)
- 6-2.71 Discuss the assessment findings associated with trauma in infants and children. (C-1)
- 6-2.72 Discuss the management/ treatment plan for trauma in infants and children. (C-1)
- 6-2.73 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for abuse and neglect in infants and children. (C-1)
- 6-2.74 Discuss the pathophysiology of abuse and neglect in infants and children. (C-1)
- 6-2.75 Discuss the assessment findings associated with abuse and neglect in infants and children. (C-1)
- 6-2.76 Discuss the management/ treatment plan for abuse and neglect in infants and children, including documentation and reporting. (C-1)
- 6-2.77 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for SIDS infants. (C-1)
- 6-2.78 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention 169 strategies for children with special health care needs including technology-assisted children. (C-1)
- 6-2.79 Discuss the pathophysiology of children with special health care needs including technology-assisted children. (C-1)
- 6-2.80 Discuss the assessment findings associated for children with special health care needs including technology-assisted children. (C-1)
- 6-2.81 Discuss the management/ treatment plan for children with special health care needs including technology-assisted children. (C-1)
- 6-2.82 Describe the epidemiology, including the incidence, morbidity/ mortality, risk factors and prevention strategies for SIDS infants. (C-1)
- 6-2.83 Discuss the pathophysiology of SIDS in infants. (C-1)
- 6-2.84 Discuss the assessment findings associated with SIDS infants. (C-1)
- 6-2.85 Discuss the management/ treatment plan for SIDS in infants. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-2.86 Demonstrate and advocate appropriate interactions with the infant/ child that conveys an understanding of their developmental stage. (A-3)
- 6-2.87 Recognize the emotional dependence of the infant/ child to their parent/ guardian. (A-1)
- 6-2.88 Recognize the emotional impact of the infant/ child injuries and illnesses on the parent/ guardian. (A-1)
- 6-2.89 Recognize and appreciate the physical and emotional difficulties associated with separation of the parent/ guardian of a special needs child (A-3)
- 6-2.90 Demonstrate the ability to provide reassurance, empathy and compassion for

the parent/ guardian. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-2.91 Demonstrate the appropriate approach for treating infants and children. (P-2)
- 6-2.92 Demonstrate appropriate intervention techniques with families of acutely ill or injured infants and children. (P-2)
- 6-2.93 Demonstrate an appropriate assessment for different developmental age groups. (P-2)
- 6-2.94 Demonstrate an appropriate technique for measuring pediatric vital signs. (P-2)
- 6-2.95 Demonstrate the use of a length-based resuscitation device for determining equipment sizes, drug doses and other pertinent information for a pediatric patient. (P-2)
- 6-2.96 Demonstrate the appropriate approach for treating infants and children with respiratory distress, failure, and arrest. (P-2)
- 6-2.97 Demonstrate proper technique for administering blow-by oxygen to infants and children. (P-2)
- 6-2.98 Demonstrate the proper utilization of a pediatric non-rebreather oxygen mask. (P-2)
- 6-2.99 Demonstrate proper technique for suctioning of infants and children. (P-2)
- 6-2.100 Demonstrate appropriate use of airway adjuncts with infants and children. (P-2)
- 6-2.101 Demonstrate appropriate use of ventilation devices for infants and children. (P-2)
- 6-2.102 Demonstrate endotracheal intubation procedures in infants and children. (P-2)
- 6-2.103 Demonstrate appropriate treatment/ management of intubation complications for infants and children. (P-2)
- 6-2.104 Demonstrate appropriate needle cricothyroidotomy in infants and children. (P-2)
- 6-2.105 Demonstrate proper placement of a gastric tube in infants and children. (P-2)
- 6-2.106 Demonstrate an appropriate technique for insertion of peripheral intravenous catheters for infants and children. (P-2)
- 6-2.107 Demonstrate an appropriate technique for administration of intramuscular, inhalation, subcutaneous, rectal, endotracheal and oral medication for infants and children. (P-2)
- 6-2.108 Demonstrate an appropriate technique for insertion of an intraosseous line for infants and children. (P-2)
- 6-2.109 Demonstrate appropriate interventions for infants and children with a partially obstructed airway. (P-2)
- 6-2.110 Demonstrate age appropriate basic airway clearing maneuvers for infants and children with a completely obstructed airway. (P-2)
- 6-2.111 Demonstrate proper technique for direct laryngoscopy and foreign body retrieval in infants and children with a completely obstructed airway. (P-2)
- 6-2.112 Demonstrate appropriate airway and breathing control maneuvers for infant

and child trauma patients. (P- 2)

6-2.113 Demonstrate appropriate treatment of infants and children requiring advanced airway and breathing control. (P-2)

6-2.114 Demonstrate appropriate immobilization techniques for infant and child trauma patients. (P-2)

6-2.115 Demonstrate treatment of infants and children with head injuries. (P-2)

6-2.116 Demonstrate appropriate treatment of infants and children with chest injuries. (P-2)

6-2.117 Demonstrate appropriate treatment of infants and children with abdominal injuries. (P-2)

6-2.118 Demonstrate appropriate treatment of infants and children with extremity injuries. (P-2)

6-2.119 Demonstrate appropriate treatment of infants and children with burns. (P-2)

6-2.120 Demonstrate appropriate parent/ caregiver interviewing techniques for infant and child death situations. (P- 2)

6-2.121 Demonstrate proper infant CPR. (P-2)

6-2.122 Demonstrate proper child CPR. (P-2)

6-2.123 Demonstrate proper techniques for performing infant and child defibrillation and synchronized cardioversion. (P-2)

UNIT TERMINAL OBJECTIVE

6-3 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles and the assessment findings to formulate and implement a treatment plan for the geriatric patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

6-3.1 Discuss population demographics demonstrating the rise in elderly population in the U.S. (C-1)

6-3.2 Discuss society's view of aging and the social, financial, and ethical issues facing the elderly. (C-1)

6-3.3 Assess the various living environments of elderly patients. (C-3)

6-3.4 Describe the local resources available to assist the elderly and create strategies to refer at risk patients to appropriate community services. (C-3)

6-3.5 Discuss issues facing society concerning the elderly. (C-1)

6-3.6 Discuss common emotional and psychological reactions to aging to include causes and manifestations. (C-1)

6-3.7 Apply the pathophysiology of multi-system failure to the assessment and management of medical conditions in the elderly patient. (C-2)

6-3.8 Discuss the problems with mobility in the elderly and develop strategies to prevent falls. (C-1)

6-3.9 Discuss the implications of problems with sensation to communication and patient assessment. (C-2)

6-3.10 Discuss the problems with continence and elimination and develop communication strategies to provide psychological support. (C-3)

6-3.11 Discuss factors that may complicate the assessment of the elderly patient. (C-1)

- 6-3.12 Describe principles that should be employed when assessing and communicating with the elderly. (C-1)
- 6-3.13 Compare the assessment of a young patient with that of an elderly patient. (C-3)
- 6-3.14 Discuss common complaints of elderly patients. (C-1)
- 6-3.15 Compare the pharmacokinetics of an elderly patient to that of a young adult. (C-2) 6-3.
- 6-3.16 Discuss the impact of polypharmacy and medication non-compliance on patient assessment and management. (C-1)
- 6-3.17 Discuss drug distribution, metabolism, and excretion in the elderly patient. (C-1)
- 6-3.18 Discuss medication issues of the elderly including polypharmacy, dosing errors and increased drug sensitivity. (C-1)
- 6-3.19 Discuss the use and effects of commonly prescribed drugs for the elderly patient. (C-1)
- 6-3.20 Discuss the normal and abnormal changes with age of the pulmonary system. (C-1)
- 6-3.21 Describe the epidemiology of pulmonary diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with pneumonia, chronic obstructive pulmonary diseases and pulmonary embolism. (C-1)
- 6-3.22 Compare and contrast the pathophysiology of pulmonary diseases in the elderly with that of a younger adult, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism. (C-3) 171
- 6-3.23 Discuss the assessment of the elderly patient with pulmonary complaints, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism. (C-1)
- 6-3.24 Identify the need for intervention and transport of the elderly patient with pulmonary complaints. (C-1)
- 6-3.25 Develop a treatment and management plan of the elderly patient with pulmonary complaints, including pneumonia, chronic obstructive pulmonary diseases, and pulmonary embolism. (C-3)
- 6-3.26 Discuss the normal and abnormal cardiovascular system changes with age. (C-1)
- 6-3.27 Describe the epidemiology for cardiovascular diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with myocardial infarction, heart failure, dysrhythmias, aneurysm, and hypertension. (C-1)
- 6-3.28 Compare and contrast the pathophysiology of cardiovascular diseases in the elderly with that of a younger adult, including myocardial infarction, heart failure, dysrhythmias, aneurysms, and hypertension. (C-3)
- 6-3.29 Discuss the assessment of the elderly patient with complaints related to the cardiovascular system, including myocardial infarction, heart failure, dysrhythmias, aneurysms, and hypertension. (C-1)
- 6-3.30 Identify the need for intervention and transportation of the elderly patient with cardiovascular complaints. (C-1)
- 6-3.31 Develop a treatment and management plan of the elderly patient with

cardiovascular complaints, including myocardial infarction, heart failure, dysrhythmias, aneurisms and hypertension. (C-3)

6-3.32 Discuss the normal and abnormal changes with age of the nervous system. (C-1)

6-3.33 Describe the epidemiology for nervous system diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-1)

6-3.34 Compare and contrast the pathophysiology of nervous system diseases in the elderly with that of a younger adult, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-3)

6-3.35 Discuss the assessment of the elderly patient with complaints related to the nervous system, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-1)

6-3.36 Identify the need for intervention and transportation of the patient with complaints related to the nervous system. (C-1)

6-3.37 Develop a treatment and management plan of the elderly patient with complaints related to the nervous system, including cerebral vascular disease, delirium, dementia, Alzheimer's disease and Parkinson's disease. (C-3)

6-3.38 Discuss the normal and abnormal changes of the endocrine system with age. (C-1)

6-3.39 Describe the epidemiology for endocrine diseases in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with diabetes and thyroid diseases. (C-1)

6-3.40 Compare and contrast the pathophysiology of diabetes and thyroid diseases in the elderly with that of a younger adult. (C-3)

6-3.41 Discuss the assessment of the elderly patient with complaints related to the endocrine system, including diabetes and thyroid diseases. (C-1)

6-3.42 Identify the need for intervention and transportation of the patient with endocrine problems. (C-1)

6-3.43 Develop a treatment and management plan of the elderly patient with endocrine problems, including diabetes and thyroid diseases. (C-3)

6-3.44 Discuss the normal and abnormal changes of the gastrointestinal system with age. (C-1)

6-3.45 Discuss the assessment of the elderly patient with complaints related to the gastrointestinal system. (C-1)

6-3.46 Identify the need for intervention and transportation of the patient with gastrointestinal complaints. (C-1)

6-3.47 Develop and execute a treatment and management plan of the elderly patient with gastrointestinal problems. (C-3)

6-3.48 Discuss the assessment and management of an elderly patient with GI hemorrhage and bowel obstruction. (C-1)

6-3.49 Compare and contrast the pathophysiology of GI hemorrhage and bowel obstruction in the elderly with that of a young adult. (C-3)

6-3.50 Discuss the normal and abnormal changes with age related to toxicology. (C-1)

6-3.51 Discuss the assessment of the elderly patient with complaints related to toxicology. (C-1)

6-3.52 Identify the need for intervention and transportation of the patient with toxicological problems. (C-1)

6-3.53 Develop and execute a treatment and management plan of the elderly patient with toxicological problems. (C-3)

6-3.54 Describe the epidemiology in the elderly, including the incidence, morbidity/ mortality, risk factors, and 172 prevention strategies, for patients with drug toxicity. (C-1)

6-3.55 Compare and contrast the pathophysiology of drug toxicity in the elderly with that of a younger adult. (C-3)

6-3.56 Discuss the assessment findings common in elderly patients with drug toxicity. (C-1)

6-3.57 Discuss the management/ considerations when treating an elderly patient with drug toxicity. (C-1)

6-3.58 Describe the epidemiology for drug and alcohol abuse in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)

6-3.59 Compare and contrast the pathophysiology of drug and alcohol abuse in the elderly with that of a younger adult. (C-3)

6-3.60 Discuss the assessment findings common in elderly patients with drug and alcohol abuse. (C-1)

6-3.61 Discuss the management/ considerations when treating an elderly patient with drug and alcohol abuse. (C-1)

6-3.62 Discuss the normal and abnormal changes of thermoregulation with age. (C-1)

6-3.63 Discuss the assessment of the elderly patient with complaints related to thermoregulation. (C-1)

6-3.64 Identify the need for intervention and transportation of the patient with environmental considerations. (C-1)

6-3.65 Develop and execute a treatment and management plan of the elderly patient with environmental considerations. (C-3)

6-3.66 Compare and contrast the pathophysiology of hypothermia and Hyperthermia in the elderly with that of a younger adult. (C-3)

6-3.67 Discuss the assessment findings and management plan for elderly patients with hypothermia and Hyperthermia. (C-1)

6-3.68 Discuss the normal and abnormal psychiatric changes of age. (C-1)

6-3.69 Describe the epidemiology of depression and suicide in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)

6-3.70 Compare and contrast the psychiatry of depression and suicide in the elderly with that of a younger adult. (C-3)

6-3.71 Discuss the assessment of the elderly patient with psychiatric complaints, including depression and suicide. (C-1)

6-3.72 Identify the need for intervention and transport of the elderly psychiatric patient. (C-1)

6-3.73 Develop a treatment and management plan of the elderly psychiatric patient, including depression and suicide. (C-3)

6-3.74 Discuss the normal and abnormal changes of the integumentary system with age. (C-1)

6-3.75 Describe the epidemiology for pressure ulcers in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)

- 6-3.76 Compare and contrast the pathophysiology of pressure ulcers in the elderly with that of a younger adult. (C-3)
- 6-3.77 Discuss the assessment of the elderly patient with complaints related to the integumentary system, including pressure ulcers. (C-1)
- 6-3.78 Identify the need for intervention and transportation of the patient with complaints related to the integumentary system. (C-1)
- 6-3.79 Develop a treatment and management plan of the elderly patient with complaints related to the integumentary system, including pressure ulcers. (C-3)
- 6-3.80 Discuss the normal and abnormal changes of the musculoskeletal system with age. (C-1)
- 6-3.81 Describe the epidemiology for osteoarthritis and osteoporosis, including incidence, morbidity/ mortality, risk factors, and prevention strategies. (C-1)
- 6-3.82 Compare and contrast the pathophysiology of osteoarthritis and osteoporosis with that of a younger adult. (C-3)
- 6-3.83 Discuss the assessment of the elderly patient with complaints related to the musculoskeletal system, including osteoarthritis and osteoporosis. (C-1)
- 6-3.84 Identify the need for intervention and transportation of the patient with musculoskeletal complaints. (C-1)
- 6-3.85 Develop a treatment and management plan of the elderly patient with musculoskeletal complaints, including osteoarthritis and osteoporosis. (C-3)
- 6-3.86 Describe the epidemiology for trauma in the elderly, including incidence, morbidity/ mortality, risk factors, and prevention strategies for patients with orthopedic injuries, burns and head injuries. (C-1)
- 6-3.87 Compare and contrast the pathophysiology of trauma in the elderly with that of a younger adult, including orthopedic injuries, burns and head injuries. (C-3)
- 6-3.88 Discuss the assessment findings common in elderly patients with traumatic injuries, including orthopedic 173 injuries, burns and head injuries. (C-1)
- 6-3.89 Discuss the management/ considerations when treating an elderly patient with traumatic injuries, including orthopedic injuries, burns and head injuries. (C-1)
- 6-3.90 Identify the need for intervention and transport of the elderly patient with trauma. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-3.91 Demonstrate and advocate appropriate interactions with the elderly that conveys respect for their position in life. (A-3)
- 6-3.92 Recognize the emotional need for independence in the elderly while simultaneously attending to their apparent acute dependence. (A-1)
- 6-3.93 Recognize and appreciate the many impediments to physical and emotional well being in the elderly. (A-2)
- 6-3.94 Recognize and appreciate the physical and emotional difficulties associated with being a caretaker of an impaired elderly person, particularly the patient with Alzheimer's disease. (A-3)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-3.95 Demonstrate the ability to assess a geriatric patient. (P-2)
6-3.96 Demonstrate the ability to adjust their assessment to a geriatric patient. (P-3)

UNIT TERMINAL OBJECTIVE

6-4 At the completion of this unit, the paramedic student will be able to integrate the assessment findings to formulate a field impression and implement a treatment plan for the patient who has sustained abuse or assault.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-4.1 Discuss the incidence of abuse and assault. (C-1)
6-4.2 Describe the categories of abuse. (C-1)
6-4.3 Discuss examples of spouse abuse. (C-1)
6-4.4 Discuss examples of elder abuse. (C-1)
6-4.5 Discuss examples of child abuse. (C-1)
6-4.6 Discuss examples of sexual assault. (C-1)
6-4.7 Describe the characteristics associated with the profile of the typical abuser of a spouse. (C-1)
6-4.8 Describe the characteristics associated with the profile of the typical abuser of the elder. (C-1)
6-4.9 Describe the characteristics associated with the profile of the typical abuser of children. (C-1)
6-4.10 Describe the characteristics associated with the profile of the typical assailant of sexual assault. (C-1)
6-4.11 Identify the profile of the "at-risk" spouse. (C-1)
6-4.12 Identify the profile of the "at-risk" elder. (C-1)
6-4.13 Identify the profile of the "at-risk" child. (C-1)
6-4.14 Discuss the assessment and management of the abused patient. (C-1)
6-4.15 Discuss the legal aspects associated with abuse situations. (C-1)
6-4.16 Identify community resources that are able to assist victims of abuse and assault. (C-1)
6-4.17 Discuss the documentation associated with abused and assaulted patient. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-4.18 Demonstrate sensitivity to the abused patient. (A-1)
6-4.19 Value the behavior of the abused patient. (A-2) 174
6-4.20 Attend to the emotional state of the abused patient. (A-1)
6-4.21 Recognize the value of non-verbal communication with the abused patient. (A-1)
6-4.22 Attend to the needs for reassurance, empathy and compassion with the abused patient. (A-1)
6-4.23 Listen to the concerns expressed by the abused patient. (A-1)
6-4.24 Listen and value the concerns expressed by the sexually assaulted patient. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-4.25 Demonstrate the ability to assess a spouse, elder or child-abused patient. (P-1)
- 6-4.26 Demonstrate the ability to assess a sexually assaulted patient. (P-1)

UNIT TERMINAL OBJECTIVE

6-5 At the completion of this unit the paramedic student will be able to integrate pathophysiological and psychosocial principles to adapt the assessment and treatment plan for diverse patients and those who face physical, mental, social and financial challenges.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-5.1 Describe the various etiologies and types of hearing impairments. (C-1)
- 6-5.2 Recognize the patient with a hearing impairment. (C-1)
- 6-5.3 Anticipate accommodations that may be needed in order to properly manage the patient with a hearing impairment. (C-3)
- 6-5.4 Describe the various etiologies of visual impairments. (C-1)
- 6-5.5 Recognize the patient with a visual impairment. (C-1)
- 6-5.6 Anticipate accommodations that may be needed in order to properly manage the patient with a visual impairment. (C-3)
- 6-5.7 Describe the various etiologies and types of speech impairments. (C-1)
- 6-5.8 Recognize the patient with speech impairment. (C-1)
- 6-5.9 Anticipate accommodations that may be needed in order to properly manage the patient with speech impairment. (C-3)
- 6-5.10 Describe the various etiologies of obesity. (C-1)
- 6-5.11 Anticipate accommodations that may be needed in order to properly manage the patient with obesity. (C-3)
- 6-5.12 Describe paraplegia/ quadriplegia. (C-1)
- 6-5.13 Anticipate accommodations that may be needed in order to properly manage the patient with paraplegia/ quadriplegia. (C-3)
- 6-5.14 Define mental illness. (C-1)
- 6-5.15 Describe the various etiologies of mental illness. (C-1)
- 6-5.16 Recognize the presenting signs of the various mental illnesses. (C-1)
- 6-5.17 Anticipate accommodations that may be needed in order to properly manage the patient with a mental illness. (C-3)
- 6-5.18 Define the term developmentally disabled. (C-1)
- 6-5.19 Recognize the patient with a developmental disability. (C-1)
- 6-5.20 Anticipate accommodations that may be needed in order to properly manage the patient with a developmental disability. (C-3)
- 6-5.21 Describe Down's syndrome. (C-1)
- 6-5.22 Recognize the patient with Down's syndrome. (C-1)
- 6-5.23 Anticipate accommodations that may be needed in order to properly manage the patient with Down's syndrome. (C-3)
- 6-5.24 Describe the various etiologies of emotional impairment. (C-1)
- 6-5.25 Recognize the patient with an emotional impairment. (C-1)
- 6-5.26 Anticipate accommodations that may be needed in order to properly manage

- the patient with an emotional impairment. (C-3)
- 6-5.27 Define emotional/ mental impairment (EMI). (C-1)
- 6-5.28 Recognize the patient with an emotional or mental impairment. (C-1)
- 6-5.29 Anticipate accommodations that may be needed in order to properly manage patients with an emotional or mental impairment. (C-3)
- 6-5.30 Describe the following diseases/ illnesses: (C-1)
- a. Arthritis
 - b. Cancer
 - c. Cerebral palsy
 - d. Cystic fibrosis
 - e. Multiple sclerosis
 - f. Muscular dystrophy
 - g. Myasthenia gravis
 - h. Poliomyelitis
 - i. Spina bifida
 - j. Patients with a previous head injury
- 6-5.31 Identify the possible presenting sign(s) for the following diseases/ illnesses: (C-1)
- a. Arthritis
 - b. Cancer
 - c. Cerebral palsy
 - d. Cystic fibrosis
 - e. Multiple sclerosis
 - f. Muscular dystrophy
 - g. Myasthenia gravis
 - h. Poliomyelitis
 - i. Spina bifida
 - j. Patients with a previous head injury
- 6-5.32 Anticipate accommodations that may be needed in order to properly manage the following patients: (C-3)
- a. Arthritis
 - b. Cancer
 - c. Cerebral palsy
 - d. Cystic fibrosis
 - e. Multiple sclerosis
 - f. Muscular dystrophy
 - g. Myasthenia gravis
 - h. Poliomyelitis
 - i. Spina bifida
 - j. Patients with a previous head injury
- 6-5.33 Define cultural diversity. (C-1)
- 6-5.34 Recognize a patient who is culturally diverse. (C-1)
- 6-5.35 Anticipate accommodations that may be needed in order to properly manage a patient who is culturally diverse. (C-3)
- 6-5.36 Identify a patient that is terminally ill. (C-1)
- 6-5.37 Anticipate accommodations that may be needed in order to properly manage a patient who is terminally ill. (C-3)

- 6-5.38 Identify a patient with a communicable disease. (C-1)
- 6-5.39 Recognize the presenting signs of a patient with a communicable disease. (C-1)
- 6-5.40 Anticipate accommodations that may be needed in order to properly manage a patient with a communicable disease. (C-3)
- 6-5.41 Recognize sign(s) of financial impairments. (C-1)
- 6-5.42 Anticipate accommodations that may be needed in order to properly manage the patient with a financial impairment. (C-3)

AFFECTIVE OBJECTIVES

None identified for this unit.

PSYCHOMOTOR OBJECTIVES

None identified for this unit.

UNIT TERMINAL OBJECTIVE 176

6-6 At the completion of this unit, the paramedic student will be able to integrate the pathophysiological principles and the assessment findings to formulate a field impression and implement a treatment plan for the acute deterioration of a chronic care patient.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-6.1 Compare and contrast the primary objectives of the ALS professional and the home care professional. (C-3)
- 6-6.2 Identify the importance of home health care medicine as related to the ALS level of care. (C-1)
- 6-6.3 Differentiate between the role of EMS provider and the role of the home care provider. (C-3)
- 6-6.4 Compare and contrast the primary objectives of acute care, home care and hospice care. (C-3)
- 6-6.5 Summarize the types of home health care available in your area and the services provided. (C-3)
- 6-6.6 Discuss the aspects of home care that result in enhanced quality of care for a given patient. (C-1)
- 6-6.7 Discuss the aspects of home care that have a potential to become a detriment to the quality of care for a given patient. (C-1)
- 6-6.8 List complications commonly seen in the home care patients, which result in their hospitalization. (C-1)
- 6-6.9 Compare the cost; mortality and quality of care for a given patient in the hospital versus the home care setting. (C-3)
- 6-6.10 Discuss the significance of palliative care programs as related to a patient in a home health care setting. (C-1)
- 6-6.11 Define hospice care, comfort care and DNR/ DNAR as they relate to local practice, law and policy. (C-1)
- 6-6.12 List the stages of the grief process and relate them to an individual in hospice care. (C-1)
- 6-6.13 List pathologies and complications typical to home care patients. (C-1)

- 6-6.14 Given a home care scenario, predict complications requiring ALS intervention. (C-3)
- 6-6.15 Given a series of home care scenarios, determine which patients should receive follow-up home care and which should be transported to an emergency care facility. (C-3)
- 6-6.16 Describe airway maintenance devices typically found in the home care environment. (C-1)
- 6-6.17 Describe devices that provide or enhance alveolar ventilation in the home care setting. (C-1)
- 6-6.18 List modes of artificial ventilation and an out-of-hospital situation where each might be employed. (C-1)
- 6-6.19 List vascular access devices found in the home care setting. (C-1)
- 6-6.20 Recognize standard central venous access devices utilized in home health care. (C-1)
- 6-6.21 Describe the basic universal characteristics of central venous catheters. (C-1)
- 6-6.22 Describe the basic universal characteristics of Implantable injection devices. (C-1)
- 6-6.23 List devices found in the home care setting that are used to empty, irrigate or deliver nutrition or medication to the GI/ GU tract. (C-1)
- 6-6.24 Describe complications of assessing each of the airway, vascular access, and GI/ GU devices described above. (C-1)
- 6-6.25 Given a series of scenarios, demonstrate the appropriate ALS interventions. (C-3)
- 6-6.26 Given a series of scenarios, demonstrate interaction and support with the family members/ support persons for a patient who has died. (C-3)
- 6-6.27 Describe common complications with central venous access and implantable drug administration ports in the out-of-hospital setting. (C-1)
- 6-6.28 Describe the indications and contraindications for urinary catheter insertion in an out-of-hospital setting. (C-1)
- 6-6.29 Identify the proper anatomy for placement of urinary catheters in males or females. (C-2)
- 6-6.30 Identify failure of GI/ GU devices found in the home care setting. (C-2)
- 6-6.31 Identify failure of ventilatory devices found in the home care setting. (C-2)
- 6-6.32 Identify failure of vascular access devices found in the home care setting. (C-2)
- 6-6.33 Identify failure of drains. (C-2)
- 6-6.34 Differentiate between home care and acute care as preferable situations for a given patient scenario. (C-3)
- 6-6.35 Discuss the relationship between local home care treatment protocols/ SOPs and local EMS Protocols/ SOPs. (C-3)
- 6-6.36 Discuss differences in individuals' ability to accept and cope with their own impending death. (C-3)
- 6-6.37 Discuss the rights of the terminally ill. (C-1) 177

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-6.38 Value the role of the home-care professional and understand their role in patient care along the life-span continuum. (A-2)

- 6-6.39 Value the patient's desire to remain in the home setting. (A-2)
- 6-6.40 Value the patient's desire to accept or deny hospice care. (A-2)
- 6-6.41 Value the uses of long term venous access in the home health setting, including but not limited to: (A-2)
- Chemotherapy
 - Home pain management
 - Nutrition therapy
 - Congestive heart therapy
 - Antibiotic therapy

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 6-6.42 Observe for an infected or otherwise complicated venous access point. (P-1)
- 6-6.43 Demonstrate proper tracheotomy care. (P-1)
- 6-6.44 Demonstrate the insertion of a new inner cannula and/ or the use of an endotracheal tube to temporarily maintain an airway in a tracheostomy patient. (P-1)
- 6-6.45 Demonstrate proper technique for drawing blood from a central venous line. (P-1)
- 6-6.46 Demonstrate the method of accessing vascular access devices found in the home health care setting. (P-1)

UNIT TERMINAL OBJECTIVE

7-1 At the completion of this unit, the paramedic student will be able to integrate the principles of assessment-based management to perform an appropriate assessment and implement the management plan for patients with common complaints.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 7-1.1 Explain how effective assessment is critical to clinical decision-making. (C-1)
- 7-1.2 Explain how the paramedic's attitude affects assessment and decision-making. (C-1)
- 7-1.3 Explain how uncooperative patients affect assessment and decision-making. (C-1)
- 7-1.4 Explain strategies to prevent labeling and tunnel vision. (C-1)
- 7-1.5 Develop strategies to decrease environmental distractions. (C-1)
- 7-1.6 Describe how manpower considerations and staffing configurations affect assessment and decision-making. (C-1)
- 7-1.7 Synthesize concepts of scene management and choreography to simulated emergency calls. (C-3)
- 7-1.8 Explain the roles of the team leader and the patient care person. (C-1)
- 7-1.9 List and explain the rationale for carrying the essential patient care items. (C-3)
- 7-1.10 When given a simulated call, list the appropriate equipment to be taken to the patient. (C-2)
- 7-1.11 Explain the general approach to the emergency patient. (C-1)
- 7-1.12 Explain the general approach, patient assessment, differentials, and management priorities for patients with the following problems: (C-3)

- a. Chest pain
- b. Medical and traumatic cardiac arrest
- c. Acute abdominal pain
- d. GI bleed
- e. Altered mental status 178
- f. Dyspnea
- g. Syncope
- h. Seizures
- I. Environmental or thermal problem
- j. Hazardous material or toxic exposure
- k. Trauma or multi trauma patients
- l. Allergic reactions
- m. Behavioral problems
- n. Obstetric or gynecological problems
- o. Pediatric patients

7-1.13 Describe how to effectively communicate patient information face to face, over the telephone, by radio, and in writing. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

7-1.14 Appreciate the use of scenarios to develop high-level clinical decision-making skills. (A-2)

7-1.15 Defend the importance of considering differentials in patient care. (A-3)

7-1.16 Advocate and practice the process of complete patient assessment on all patients. (A-3)

7-1.17 Value the importance of presenting the patient accurately and clearly. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

7-1.18 While serving as team leader, choreograph the EMS response team, perform a patient assessment, provide local/ regionally appropriate treatment, present cases verbally and in writing given a moulaged and programmed simulated patient. (P-3)

7-1.19 While serving as team leader, assess a programmed patient or mannequin, consider differentials, make decisions relative to interventions and transportation, provide the interventions, patient packaging and transportation, work as a team and practice various roles for the following common emergencies: (P-3)

- a. Chest pain
- b. Cardiac Arrest
 - 1. Traumatic arrest
 - 2. Medical arrest
- c. Acute abdominal pain
- d. GI bleed
- e. Altered mental status
- f. Dyspnea
- g. Syncope
- h. Seizure
- I. Thermal/ environmental problem

- j. Hazardous materials/ toxicology
- k. Trauma
 - 1. Isolated extremity fracture (tibia/ fibula or radius/ ulna)
 - 2. Femur fracture
 - 3. Shoulder dislocation
 - 4. Clavicular fracture or A-C separation
 - 5. Minor wound (no sutures required, sutures required, high risk wounds, with tendon and/ or nerve injury)
 - 6. Spine injury (no neurologic deficit, with neurologic deficit)
 - 7. Multiple trauma-blunt
 - 8. Penetrating trauma
 - 9. Impaled object
 - 10. Elderly fall
 - 11. Athletic injury
 - 12. Head injury (concussion, subdural/ epidural)
- 1. Allergic reactions/ bites/ envenomation 179
 - 1. Local allergic reaction
 - 2. Systemic allergic reaction
 - 3. Envenomation
- m. Behavioral
 - 1. Mood disorders
 - 2. Schizophrenic and delusional disorders
 - 3. Suicidal
- n. Obstetrics/ gynecology
 - 1. Vaginal bleeding
 - 2. Childbirth (normal and abnormal)
- o. Pediatric
 - 1. Respiratory distress
 - 2. Fever
 - 3. Seizures

UNIT TERMINAL OBJECTIVE

8-1 At the completion of this unit, the paramedic will understand standards and guidelines that help ensure safe and effective ground and air medical transport.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

- 8-1.1 Identify current local and state standards, which influence ambulance design, equipment requirements and staffing of ambulances. (C-1)
- 8-1.2 Discuss the importance of completing an ambulance equipment/ supply checklist. (C-1)
- 8-1.3 Discuss the factors to be considered when determining ambulance stationing within a community. (C-1)
- 8-1.4 Describe the advantages and disadvantages of air medical transport. (C-1)
- 8-1.5 Identify the conditions/ situations in which air medical transport should be considered. (C-1)

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

8-1.6 Assess personal practices relative to ambulance operations, which may affect the safety of the crew, the patient and bystanders. (A-3)

8-1.7 Serve as a role model for others relative to the operation of ambulances. (A-3)

8-1.8 Value the need to serve as the patient advocate to ensure appropriate patient transportation via ground or air. (A-2)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

8-1.9 Demonstrate how to place a patient in, and remove a patient from, an ambulance. (P-1)

UNIT TERMINAL OBJECTIVE

8-2 At the completion of this unit, the paramedic student will be able to integrate the principles of general incident management and multiple casualty incident (MCI) management techniques in order to function effectively at major incidents.

COGNITIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

8-2.1 Explain the need for the incident management system (IMS)/ incident command system (ICS) in managing emergency medical services incidents. (C-1)

8-2.2 Define the term multiple casualty incident (MCI). (C-1)

8-2.3 Define the term disaster management. (C-1)

8-2.4 Describe essential elements of scene size-up when arriving at a potential MCI. (C-1) 180

8-2.5 Describe the role of the paramedics and EMS systems in planning for MCIs and disasters. (C-1)

8-2.6 Define the following types of incidents and how they affect medical management: (C-1)

a. Open or uncontained incident

b. Closed or contained incident

8-2.7 Describe the functional components of the incident management system in terms of the following: (C-1)

a. Command

b. Finance

c. Logistics

d. Operations

e. Planning

8-2.8 Differentiate between singular and unified command and when each is most applicable. (C-3)

8-2.9 Describe the role of command. (C-1)

8-2.10 Describe the need for transfer of command and procedures for transferring it. (C-1)

8-2.11 Differentiate between command procedures used at small, medium and large-scale medical incidents. (C-1)

- 8-2.12 Explain the local/ regional threshold for establishing command and implementation of the incident management system including threshold MCI declaration. (C-1)
- 8-2.13 List and describe the functions of the following groups and leaders in ICS as it pertains to EMS incidents: (C-1)
- Safety
 - Logistics
 - Rehabilitation (rehab)
 - Staging
 - Treatment
 - Triage
 - Transportation
 - Extrication/ rescue
 - Disposition of deceased (morgue)
 - Communications
- 8-2.14 Describe the methods and rationale for identifying specific functions and leaders for these functions in ICS. (C-1)
- 8-2.15 Describe the role of both command posts and emergency operations centers in MCI and disaster management. (C-1)
- 8-2.16 Describe the role of the physician at multiple casualty incidents. (C-1)
- 8-2.17 Define triage and describe the principles of triage. (C-1)
- 8-2.18 Describe the START (simple triage and rapid treatment) method of initial triage. (C-1)
- 8-2.19 Given a list of 20 patients with various multiple injuries, determine the appropriate triage priority with 90% accuracy. (C-3)
- 8-2.20 Given color coded tags and numerical priorities, assign the following terms to each: (C-1)
- Immediate
 - Delayed
 - Hold
 - Deceased
- 8-2.21 Define primary and secondary triage. (C-1)
- 8-2.22 Describe when primary and secondary triage techniques should be implemented. (C-1)
- 8-2.23 Describe the need for and techniques used in tracking patients during multiple casualty incidents. (C-1)
- 8-2.24 Describe techniques used to allocate patients to hospitals and track them. (C-1)
- 8-2.25 Describe modifications of telecommunications procedures during multiple casualty incidents. (C-1)
- 8-2.26 List and describe the essential equipment to provide logistical support to MCI operations to include: (C-1)
- Airway, respiratory and hemorrhage control
 - Burn management
 - Patient packaging/ immobilization
- 8-2.27 List the physical and psychological signs of critical incident stress. (C-1)
- 8-2.28 Describe the role of critical incident stress management sessions in MCIs. (C-1)

8-2.29 Describe the role of the following exercises in preparation for MCIs: (C-1)

- a. Table top exercises
- b. Small and large MCI drills 181

AFFECTIVE OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

8-2.30 Understand the rationale for initiating incident command even at a small MCI event. (A-1)

8-2.31 Explain the rationale for having efficient and effective communications as part of an incident command/ management system. (A-1)

8-2.32 Explain why common problems of an MCI can have an adverse effect on an entire incident. (A-1)

8-2.33 Explain the organizational benefits for having standard operating procedures (SOPs) for using the incident management system or incident command system. (A-1)

PSYCHOMOTOR OBJECTIVES

At the completion of this unit, the paramedic student will be able to:

8-2.34 Demonstrate the use of local/ regional triage tagging system used for primary and secondary triage. (P-1)

8-2.35 Given a simulated tabletop multiple casualty incidents, with 5-10 patients: (P-1)

- a. Establish unified or singular command
- b. Conduct a scene assessment
- c. Determine scene objectives
- d. Formulate an incident plan
- e. Request appropriate resources
- f. Determine need for ICS expansion and groups
- g. Coordinate communications and groups leaders
- h. Coordinate outside agencies

8-2.36 Demonstrate effective initial scene assessment and update (progress) reports. (P-1)

8-2.37 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of triage group leader. (P-3)

8-2.38 Given a classroom simulation of a MCI with 5-10 patients, fulfill the role of treatment group leader