



INSTRUCTIONAL PACKAGE

EMS 119

Emergency Medical Services Operations

2019-30
SUMMER 2019

INSTRUCTIONAL PACKAGE

Part I: Course Information

Effective Term: 201830

COURSE PREFIX: EMS 119

COURSE TITLE: Emergency Medical Services Operations

CONTACT HOURS: 2-0-2

CREDIT HOURS: 2

RATIONALE FOR THE COURSE:

The student will develop a working knowledge of skills and modalities of operational skills used in the pre-hospital emergency treatment of illness and injury.

COURSE DESCRIPTION:

This course is a multi-faceted approach to theory of EMS operations. Topics include expanded provider roles, EMS systems overview, medical/legal aspects and theory of ambulance operations, mass casualty incident management, rescue awareness, crime scenes, terrorism, and weapons of mass destruction.

PREREQUISITES/CO-REQUISITES:

Prerequisites: EMS 109 & EMS 212 – SC & NREMT EMT Certification

Corequisites: BIO 112, EMS 115, EMS 150. EMS 223

REQUIRED MATERIALS:

Please visit the Bookstore online site for most current textbook information. Use the direct link below to find textbooks. [Bookstore Web Link](#).

Enter the semester, course prefix, number and section when prompted and you will be linked to the correct textbook.

ADDITIONAL REQUIREMENTS:

Computer access, Background Check, Urine Drug Screen, Immunization Requirements & Health Physical.

TECHNICAL REQUIREMENTS:

Access to Desire2Learn (D2L), HGTC's student portal for course materials.

WaveNet and D2L email access.

Receives calls from dispatchers, responds verbally to emergency calls, reads maps, drives ambulances to emergency sites, uses most expeditious route, and observes traffic ordinances and regulations. Works as a member of a two-person team.

Determines nature and extent of illness or injury, takes pulse, blood pressure, visually observes changes in skin color, auscultate breath sounds, makes determination regarding patient status, establishes priority for emergency care, renders appropriate emergency care (based upon competency and certification level); may administer intravenous drugs of fluid replacement as directed by a physician and based upon competency and certification level. May use equipment (based upon competency and certification level) such as but not limited to, defibrillator, electrocardiograph, performs endotracheal intubation to open airways and to ventilate patient, inflates pneumatic counter-pressure devices to improve patient's blood circulation.

Assisting in lifting, carrying, and transporting patient to ambulance and on to a medical facility. Reassures patients and bystanders, avoids mishandling patient and undue haste, and searches for medical identification emblem to aid in care. Extricates patients from entrapment, assess extent of injury, uses prescribed techniques and appliances, radios dispatcher for additional assistance or services, provides light rescue service if required, provides additional emergency care following established protocols.

Complies with regulations in handling deceased, notifies authorities, and arranges for protection of property and evidence at scene. Determines appropriate facility to which patient will be transported, report nature and extent of injuries or illness to the facility, ask for direction from hospital physician or emergency department (based upon competency and certification level). Observes patient enroute and administers care as directed by physician or emergency department or according to published protocol based on competency and certification level. Identifies diagnostic signs that require communication with facility. Assist in removing patient from ambulance and into emergency facility. Reports verbally and in writing observations about and care of patients at the scene and enroute to facility, provides assistance to emergency staff as required.

Replaces supplies, prepares and / or sends used supplies for sterilization and / or disposal in accordance with state and OSHA regulations and published standard operating procedures. Checks all equipment for future readiness, maintains ambulance in operable condition, ensures ambulance cleanliness and orderliness of equipment and supplies, decontaminates vehicle interior determines vehicle readiness by checking oil, gas, water in battery and radiator, and tire pressure, maintains familiarity with all specialized equipment.

ALL EMT's MUST BE ABLE TO PERFORM THESE ESSENTIAL JOB FUNCTIONS:

1. Ability to communicate verbally, via telephone and radio equipment;
2. Ability to lift, carry, and balance up to 125 pounds (250 pounds with assistance);
3. Ability to read and interpret written, oral, and diagnostic form instructions;
4. Ability to use good sound judgment and remain calm in high-stress situations;
5. Ability to work effectively in an environment with loud noises and flashing lights;
6. Ability to function efficiently throughout an entire work shift;
7. Ability to calculate weight and volume ratios and read small print, both under life threatening time constraints;
8. Ability to read and understand English language manuals and road maps;
9. Accurately discern street signs and address numbers;

10. Ability to interview patient, family members, and bystanders;
11. Ability to document, in writing, all relevant information in prescribed format in light of legal ramifications of such;
12. Ability to converse in English with co-workers and hospital staff as to status of patient;
13. Good manual dexterity, with ability to perform all tasks related to highest quality patient care;
14. Ability to bend, stoop, and crawl on uneven terrain;
15. Ability to withstand varied environmental conditions such as extreme heat, cold, and moisture;
16. Ability to work in low light, confined spaces and other dangerous environments.

STUDENT IDENTIFICATION VERIFICATION

Students enrolled in online courses will be required to participate in a minimum of one (1) proctored assignment and/or one (1) virtual event to support student identification verification.

CLASSROOM ETIQUETTE:

As a matter of courtesy to other students and your professor, please turn off cell phones and other communication/entertainment devices before class begins. If you are monitoring for an emergency, please notify your professor prior to class and switch cell phone ringers to vibrate.

NETIQUETTE: is the term commonly used to refer to conventions adopted by Internet users on the web, mailing lists, public forums, and in live chat focused on online communications etiquette. For more information regarding Netiquette expectations for distance learning courses, please visit [Online Netiquette](#).

Part II: Student Learning Outcomes

To prepare competent entry-level Emergency Medical Technician – Paramedics in the cognitive (knowledge), psychomotor (skills) and affective (behavior) learning domains.

COURSE LEARNING OUTCOMES and ASSESSMENTS*:

Module #1

Material Covered:

Chapters 1-4

Assessments:

Online quizzes located in Desire2Learn

Dropbox Scenarios

Workbook

Module #1 Test

Learning Outcomes:

1. List key developments in the history of emergency medical services (EMS). (pp 4-9)
2. Discuss the processes of licensure and certification. (pp 9-10)
3. Define reciprocity, including its relevance to the practice of emergency medical care. (p 10)

4. List the five main types of services that provide emergency medical care. (pp 10-11)
5. Discuss the critical points, required components, and system elements of EMS. (pp 11-12)
6. Describe the levels of EMS education in terms of skill sets needed for each of the following: emergency medical responder, emergency medical technician, advanced emergency medical technician, and paramedic. (pp 12-13)
7. Discuss the role of the National Scope of Practice and the National EMS Education Standards as they relate to the levels of EMS education. (pp 13-14)
8. Discuss initial paramedic education and the importance of continuing education. (pp 13-14)
9. Describe various types of transports the paramedic may perform, including transports to specialty centers and interfacility transports. (pp 14-15)
10. Discuss the paramedic's role in working with other health care providers and public safety agencies. (pp 15-16)
11. Characterize the EMS system's role in prevention and public education in the community. (pp 16, 18, 20, 26)
12. Describe the attributes that a paramedic is expected to possess. (pp 17-18)
13. Describe the roles and responsibilities of the paramedic. (pp 19-21)
14. Discuss issues relating to the appropriate method of transport, as well as non-transport situations. (pp 20, 22)
15. Describe how medical direction of an EMS system works and the paramedic's role in the process. (pp 21-22)
16. Discuss the purpose of the EMS continuous quality improvement (CQI) process. (pp 22-24)
17. Discuss examples of how errors can be prevented when providing EMS care. (pp 23-24)
18. Discuss the importance of medical research and its role in refining EMS practices. (p 24)
19. List the types of research and subtypes within each category. (pp 26-27)
20. Discuss ethical considerations related to conducting medical research. (pp 27-28)
21. Define peer-reviewed literature and describe how this relates to a practicing paramedic. (p 29)
22. Discuss evidence-based medicine and how to incorporate this concept into everyday paramedic practice. (pp 29-30)
23. Describe the components of personal well-being and their importance in managing stress. (pp 39-46)
24. List the seven factors that have been found to improve heart health, according to the American Heart Association. (pp 39-40)
25. Explain how mental, emotional, and spiritual well-being pertain to your paramedic career. (pp 44-46)
26. Define infectious disease and communicable disease. (p 46)
27. Discuss the various routes of disease transmission. (p 46)
28. Describe the standard precautions that are used to prevent infection when treating patients. (pp 47-48)
29. Explain the importance of immunizations. (pp 47-48)
30. Describe the various types of personal protective equipment used to protect against airborne and bloodborne pathogens. (pp 47-50)
31. Discuss the importance of ambulance cleaning and disinfection. (p 50)
32. Explain post exposure management when exposed to patient blood or body fluids, including completing a post exposure report. (p 51)
33. Recognize the possibility of hostile situations and the steps to take to deal with them. (p 51)
34. Discuss how to determine scene safety and prevent work-related injuries at the scene of a traffic incident. (pp 51-52)
35. Describe the physiologic, physical, and psychological responses to stress. (pp 55-57)
36. Describe reactions to expect from ill and injured patients, including how you can effectively work with people exhibiting a range of stress-related behaviors. (pp 55-58)
37. Discuss techniques for working at particularly stressful situations, including mass-casualty incidents or the death of a child. (pp 58-63)

38. Describe issues concerning care of the dying patient, death, and the grieving process of family members. (pp 60-63)
39. Describe posttraumatic stress disorder (PTSD) and steps that can be taken, including critical incident stress management, to decrease the likelihood that PTSD will develop. (p 63)
40. Define public health and its role in the health care system. (p 72)
41. Define intentional injuries and unintentional injuries. (p 72)
42. Discuss the detrimental effects of injuries as related to public health. (pp 72-74)
43. Discuss pediatric injuries and risk factors for them. (pp 73-74)
44. Discuss the detrimental effects of chronic and acute illness as related to public health. (p 74)
45. Explain the concept of years of potential life lost. (pp 74-75)
46. Explain the relevance of a teachable moment in EMS. (pp 75-77)
47. Discuss the principles of injury prevention, including education, enforcement, engineering/ environment, and economic incentives. (pp 77-79)
48. List the major public health laws, regulations, and guidelines in place in the United States, including the purpose of each. (p 80)
49. Explain the paramedic's unique role in promoting public health, both in terms of illness and injury. (p 81)
50. Define primary prevention and secondary prevention; include examples of each. (pp 81-82)
51. Define morbidity and mortality. (p 83)
52. Discuss the concept of injury surveillance and how it relates to EMS. (p 83)
53. Explain the Haddon Matrix and how it can be used in the understanding and prevention of injury. (pp 83-84)
54. List ways a paramedic can promote injury prevention in his or her community. (pp 85-88)
55. Describe the steps involved in organizing a community prevention program. (pp 86-88)
56. Differentiate between laws and ethics. (pp 96-102)
57. Describe medical ethics, including the implications for paramedics. (pp 97-99)
58. Discuss the legal system in the United States and how it affects paramedics. (pp 100-102)
59. Differentiate between civil and criminal law relevant to paramedics. (pp 100-101)
60. Describe the process of a typical lawsuit against emergency medical services. (p 102)
61. Discuss the legal and ethical accountability of paramedics. (p 103)
62. Discuss legislation that affects paramedic practice. (pp 103-107)
63. Differentiate between licensure and certification as they apply to paramedic practice. (p 104)
64. Explain the importance and necessity of patient confidentiality and the standards for maintaining patient confidentiality that apply to paramedic practice. (pp 104-106)
65. Discuss the legal and ethical issues surrounding patient transport. (pp 106-107)
66. Describe the actions that you should take to preserve evidence at a crime or motor vehicle crash scene. (pp 107-108)
67. Explain the mandatory reporting requirements for special situations, including abuse or neglect, drug-related injuries, childbirth, suicide, and crime scenes. (p 108)
68. Differentiate between expressed, informed, implied, and involuntary consent. (p 109)
69. Describe the processes you should use to determine consent or valid refusal, especially relative to the patient's decision-making capacity. (pp 109-111)
70. Identify the steps to take if a patient refuses care, and when to transport a patient against his or her will. (pp 110-112)
71. Identify methods for obtaining consent for minors, including exceptions for emancipated minors. (p 112)
72. Discuss the legal ramifications of patient restraint, both physical and chemical, for patient and practitioner safety. (p 113)
73. Define the four elements that must be present to prove negligence: duty, breach of duty, proximate cause, and damage (harm). (pp 113-116)
74. Discuss abandonment as it relates to paramedic practice. (p 116)

75. Discuss patient rights, including autonomy, end-of-life decisions, and the moral and ethical implications of do not resuscitate orders and other advance directives. (pp 116-120)
76. Identify situations in which it would be appropriate for you to cease resuscitation efforts or to not initiate resuscitation efforts in the field. (pp 119-120)
77. Discuss your responsibilities relative to resuscitation efforts for patients who are potential organ donors. (pp 120-121)
78. Discuss common defenses to litigation, including contributory negligence. (p 121)
79. Describe forms of legal immunity that can apply to you as a paramedic. (pp 121-122)
80. Discuss employment legislation regarding sexual harassment, discrimination, disabilities, the Family and Medical Leave Act, Occupational Safety and Health Administration law, and other legislation that applies to paramedic practice. (pp 122-125)

Module #2

Material Covered:

Chapters 5-7

Assessments:

Online quizzes located in Desire2Learn

Dropbox Scenarios

Workbook

Module #2 Test

Learning Outcomes:

1. Discuss the importance of effective communication while providing emergency medical care. (p 134)
2. Describe the communication loop and how it is used to communicate effectively. (p 135)
3. List barriers to effective verbal communication. (p 135)
4. Explain the importance of emergency medical dispatch (EMD) and prearrival instructions in a typical emergency medical services (EMS) response. (pp 136-138)
5. Explain the role of the emergency medical dispatcher in a typical EMS response. (pp 136-138)
6. Describe the components, function, and use of the local dispatch communications system. (pp 137-138)
7. List the phases of EMD. (p 138)
8. Explain basic concepts of radio communications. (p 139)
9. List the components of communications systems. (pp 139-141)
10. Differentiate between the following types of communications technologies:
11. Simplex radio systems (p 140)
12. Duplex radio systems (p 140)
13. Multiplex radio systems (p 140)
14. Digital radio systems (p 140)
15. Repeaters (p 140)
16. Digital trunked radio systems (p 141)
17. Cellular technology (p 142)
18. Biotelemetry (pp 143-144)
19. Computer networks (pp 142-144)

20. Define interoperability, including its importance during large-scale events. (pp 141-142)
21. Recognize the protected legal status of patient health information. (pp 142, 145, 149)
22. Describe the functions and responsibilities of the Federal Communications Commission. (p 144)
23. Describe the phases of communication necessary to complete a typical EMS response. (pp 146-148)
24. Describe the format for reporting essential patient assessment information to medical control. (pp 148-149)
25. Describe the importance of effective verbal communication of patient information to the hospital. (pp 149-150)
26. List factors that may enhance verbal communication. (pp 150-152)
27. Identify internal and external factors that affect your patient/bystander interview. (pp 150-152)
28. Discuss the strategies for developing patient rapport. (pp 151-152)
29. Provide examples of open-ended and closed-ended questions. (p 152)
30. Discuss interviewing strategies to obtain useful information from a patient. (pp 152-154)
31. Discuss common errors to avoid when interviewing a patient. (p 154)
32. Identify the nonverbal skills that are used when interviewing a patient. (p 154)
33. Describe the strategies that are used when interviewing a patient who is hostile or potentially violent. (pp 154-155)
34. Summarize developmental considerations of various age groups that influence patient interviewing. (pp 155-156)
35. Discuss the techniques that are used when interviewing patients with special challenges. (pp 156-157)
36. Define cultural competence. (p 157)
37. Discuss interviewing considerations used in cross-cultural communications. (pp 157-158, 160)
38. Provide examples of traditional folk medicine, including why it is important to understand those practices. (pp 158-159)
39. Explain the legal implications of the patient care report (PCR). (pp 170-171)
40. Discuss the implications of the Health Insurance Portability and Accountability Act of 1996 as they relate to documentation. (pp 171, 182, 185)
41. Describe the purposes of documentation. (pp 171-172)
42. Compare handwritten PCRs with electronic PCRs, and discuss the pros and cons of each type. (pp 172-173)
43. Identify the information required in a PCR, including the standard items that must be documented for every emergency call. (p 173)
44. Discuss the process for documenting transfer of care and care prior to arrival. (pp 173-174)
45. Discuss the process for documenting refusal of care, including the legal implications. (pp 174-178)
46. Discuss state and/or local reporting requirements for special circumstances, including workplace injuries and illnesses, mass-casualty incidents, occupational exposures, cases of alleged abuse or neglect, and involvement of on-scene physicians or other agencies. (pp 175, 178-179)
47. Discuss various formats for the narrative portion of the PCR. (pp 179-181)
48. Discuss why it is important that documentation be accurate, legible, and professional. (pp 181-184)
49. Explain the procedure to follow should an error occur during or after creating a PCR. (pp 184-185)
50. Discuss the consequences of intentional falsification of documentation. (p 185)

51. Discuss why it is important to accurately document incident times. (pp 185-186)
52. Explain the purpose of medical terminology and the importance of being familiar with it. (pp 191-192)
53. Explain the Greek and Latin origins of medical terms. (pp 192-193)
54. Define medical eponyms, homonyms, antonyms, and synonyms; include examples for each. (pp 193-194)
55. Name the four word parts or components used to build medical terms; include examples of each. (pp 194-198)
56. Describe how compound words are created and how the plural is formed when using medical terminology; include examples of each. (p 198)
57. Describe the anatomic position and why it is used. (pp 198-199)
58. List the three planes of the human body. (p 199)
59. List medical terms associated with regional anatomy. (pp 200-201)
60. Explain the importance of using accurate medical terminology for direction, movement, and position in your documentation and other communication. (pp 201-205)
61. Describe the topography of the abdominal region, including the four abdominal quadrants and the nine abdominal regions. (pp 204-205)
62. Identify specialized prefixes used to indicate position, direction, and location. (pp 205-206)
63. Define specific terms used to indicate the patient's position on the scene or prior to transport: prone, supine, Fowler position, and recovery (left lateral recumbent) position. (pp 206-207)
64. Interpret standardly accepted medical abbreviations, acronyms, and symbols. (pp 207-208)
65. Identify error-prone medical abbreviations, acronyms, and symbols. (p 208)
66. Know appropriate terminology related to pharmacology. (pp 209-210)

Module #3

Material Covered:

Chapters 46, 47, 48 & 49

Assessments:

Online quizzes located in Desire2Learn

Dropbox Scenarios

Workbook

Module #3 Test

Learning Outcomes:

1. Summarize the medical equipment, safety equipment, and operations equipment carried on an emergency medical vehicle. (pp 2304-2306)
2. Discuss the importance of performing regular vehicle inspections, and list the specific parts of an emergency vehicle that should be inspected daily. (pp 2306-2308)
3. Provide examples of some high-risk situations and hazards that may affect the safety of the emergency vehicle and its passengers during both pretransport and transport. (pp 2309-2310)
4. Discuss specific considerations that are required for ensuring scene safety, including personal safety, patient safety, and traffic control. (pp 2310-2311)
5. Define the terms cleaning, disinfection, high-level disinfection, and sterilization, and explain how they differ. (p 2311)

6. Identify the dangers to consider when operating an emergency vehicle in the emergency mode. (pp 2312-2316)
7. Discuss the guidelines for driving an emergency vehicle safely and defensively, and identify key steps emergency medical services (EMS) personnel can take to improve safety while en route to the scene, the hospital, and the station. (pp 2313-2316)
8. Describe the elements that dictate the use of lights and siren to the scene and to the hospital and the factors required to perform a risk-benefit analysis regarding their use. (pp 2313-2314, 2318-2319)
9. Give examples of the specific, limited privileges that are provided to emergency vehicle drivers by most state laws and regulations. (p 2318)
10. Explain why using police escorts and crossing intersections pose additional risks to EMS personnel during transport, and discuss special considerations related to each. (p 2319)
11. Describe the capabilities, protocols, and methods for accessing air medical transport. (pp 2319-2322)
12. List the safety concerns when operating a landing zone for helicopter transport. (pp 2322-2326)
13. Describe key scene safety considerations when preparing for a helicopter medevac, including establishing a landing zone, securing loose objects, mitigating on-site hazards, and approaching the aircraft. (pp 2322-2326)
14. Explain the federal requirements for the minimum entry-level certifications of paramedics and other emergency personnel in incident command system (ICS) training. (p 2334)
15. Describe the National Incident Management System (NIMS) and its major components. (pp 2334-2335)
16. Describe the purpose of the ICS and its organizational structure, and the role of emergency medical services (EMS) response within it. (pp 2335-2339)
17. Describe how the ICS ensures the safety of responders, people injured or threatened by the incident, volunteers assisting at the incident, and the media and general public who are at the scene. (pp 2339-2340)
18. Describe the role of the paramedic in establishing command under the ICS. (pp 2340-2341)
19. Explain the purpose of EMS operations within incident management. (pp 2341-2344)
20. Describe the specific conditions that would define a situation as a mass-casualty incident (MCI), including some examples. (p 2344)
21. Describe what occurs during primary and secondary triage, how the four triage categories are assigned to patients on the scene, and how destination decisions regarding triaged patients are made. (pp 2345-2348, 2351)
22. Explain the need for retriaging of patients during MCIs. (p 2346)
23. Describe how the START and JumpSTART triage methods are performed. (pp 2348-2350)
24. Describe the purpose of critical incident stress management. (p 2351)
25. Explain the three levels of training in technical rescue incidents in the context of NFPA 1006, Standards for Technical Rescue Personnel Professional Qualifications. (p 2361)
26. Discuss guidelines for assisting special rescue teams in the context of NFPA 1670, Standard on Operations and Training for Technical Search and Rescue Incidents. (pp 2361-2362)
27. Discuss the steps in special rescue, including preparation, response, arrival and scene size-up, scene stabilization, access, disentanglement, removal, and transport in the context of NFPA 1670. (pp 2362-2367)
28. Discuss specific hazards that may be encountered during the arrival and scene size-up of a technical rescue incident. (pp 2363-2365)
29. Discuss how to ensure situational safety at the site of a vehicle extrication, including controlling traffic flow, performing a 360° assessment, stabilizing the vehicle, dealing with unique hazards, and evaluating the need for additional resources. (pp 2363-2365)
30. Discuss how to ensure safety at the scene of a rescue incident, including scene size-up and the selection of the proper personal protective equipment and additional necessary gear. (pp 2363-2366)
31. Explain the importance of the incident management system during technical rescue incidents. (p 2364)

32. Explain the simple methods used to access the patient during an incident that requires extrication. (pp 2366, 2372-2375)
33. Discuss disentanglement methods and considerations, including airbag safety, displacing the seat, removing the windshield, removing the roof, and displacing the dashboard. (pp 2366, 2374-2377)
34. Outline the standard terminology used to describe the anatomy of a vehicle. (pp 2368-2369)
35. Describe the specific hazards associated with alternative power vehicles. (pp 2369-2370)
36. Identify the hazards posed by specific types of hazardous materials. (p 2370)
37. Recall how hand tools for striking, prying, cutting, and lifting are used in rescue operations. (pp 2370-2371)
38. Identify various types of cribbing used for vehicle stabilization. (pp 2371-2372)
39. Outline the ways in which a patient can be accessed, from simple to complex. (pp 2372-2374)
40. Recognize the hazards to providers' and patients' safety during disentanglement, including undeployed airbags. (pp 2374-2376)
41. Give examples of situations that would require special technical rescue teams and describe the paramedic's role in these situations. (pp 2378-2387)
42. Summarize the special hazards and challenges posed by entrapment in and rescue from a confined space. (pp 2378-2379)
43. Describe why collapse is a key safety concern in trench rescue and how this threat can be managed. (pp 2379-2380)
44. Compare the variables of depth, temperature, and current in surface water rescue, cold water submersion, and rescue from floodwaters. (p 2380)
45. Differentiate the equipment and techniques used in high- and low-angle rope rescue. (pp 2382, 2384)
46. Define and contrast wilderness search and rescue with lost person search and rescue. (pp 2384-2385)
47. Describe the steps in making a safe approach to a structure fire. (p 2385)
48. Cite the similarities between agricultural and industrial rescue. (pp 2385-2386)
49. Explain the special considerations applicable to tactical response scenarios. (pp 2386-2387)
50. Sequence the metabolic cascade that occurs in a patient with crush syndrome. (p 2388)
51. Articulate the patient care considerations involved in providing prehospital pain management. (p 2388)
52. Using a basket stretcher as an example, explain the importance of proper equipment selection in patient packaging. (pp 2388-2390)
53. Define the term *hazardous material*. (p 2398)
54. Describe the OSHA HAZWOPER regulation and the entry-level training or experience requirements identified by the HAZWOPER regulation for a paramedic to respond to a hazardous materials incident. (pp 2398-2399)
55. Describe the hazard classification system used by the National Fire Protection Association (NFPA). (p 2399)
56. Explain the role of paramedics during a hazardous materials incident both before and after the hazardous materials team arrives, including precautions required to ensure the safety of civilians and public service personnel. (pp 2399-2401)
57. Discuss the specific types of information and reference resources a paramedic can use to recognize a hazardous materials incident. (pp 2401-2402)
58. Describe some of the containers and vehicles used to transport hazardous materials on the roadway. (pp 2403-2404, 2406-2410)
59. Explain how the three safety zones are established at a hazardous materials incident, and discuss the characteristics of each zone, including the personnel who work within each one. (pp 2410-2412)
60. Describe the four levels of personal protective equipment (PPE) that may be required at a hazardous materials incident to protect personnel from injury by or contamination from a particular substance. (pp 2411, 2413-2414)
61. Describe how the route of the exposure, the dose and concentration of the hazard, and the length of time the hazard is in contact with the body affect the body. (pp 2414-2415)

62. Provide examples of how understanding the chemical and physical properties of a substance may give you some valuable insight when it comes to providing care. (pp 2415-2417)
63. Describe decontamination techniques, including emergency decontamination, mass decontamination, and technical decontamination. (pp 2418-2420)
64. Describe patient care at a hazardous materials incident and explain special requirements for specific exposures. (pp 2420-2422)

Module #4

Material Covered:

Chapters 50, 51 & 52

Assessments:

Online quizzes located in Desire2Learn

Dropbox Scenarios

Workbook

Module #4 Test

Learning Outcomes:

1. List key questions to consider when responding to a terrorist event. (p 2433)
2. Define international and domestic terrorism. (pp 2434-2435)
3. Define and specify the types of terrorist groups. (p 2436)
4. List various examples of terrorist motivations. (pp 2436-2437)
5. Discuss the color-coded advisory system's replacement with the National Terrorism Advisory System. (p 2437)
6. Explain how to identify potential terrorist targets to which you may respond. (pp 2437-2438)
7. Discuss what actions paramedics should take during the course of their work to heighten their ability to respond to and survive a terrorist attack. (pp 2438-2439)
8. Discuss factors to consider when responding to a potential weapon of mass destruction incident, including preincident indicators, the type of location, the type of call, the number of patients, and victims' statements. (p 2438)
9. Discuss key response actions to take at the scene of a terrorist event. (pp 2438-2441)
10. Define secondary device and the importance of continually reassessing scene safety. (p 2441)
11. List the five main categories of weapons of mass destruction (p 2441)
12. Define the terms persistency, volatility, contact hazard, and vapor hazard. (p 2442)
13. Describe specific vesicant agents. (p 2442)
14. Explain the signs, symptoms, and emergency medical treatment of a patient with vesicant exposure. (pp 2442-2443)
15. Describe specific pulmonary agents. (p 2443)
16. Explain the signs, symptoms, and emergency medical treatment of a patient with pulmonary agent exposure. (p 2443)
17. Describe specific nerve agents. (pp 2443-2444, 2446)
18. Explain the signs, symptoms, and emergency medical treatment of a patient with nerve agent exposure. (pp 2444-2446)
19. Describe specific industrial chemicals and insecticides. (p 2446)
20. Explain the signs, symptoms, and emergency medical treatment of a patient with cyanide agent exposure. (pp 2446-2447)
21. Define the terms dissemination, disease vector, communicability, and incubation. (p 2447)

22. Explain the signs, symptoms, and emergency medical treatment of a patient with smallpox. (pp 2448-2449)
23. Explain the signs, symptoms, and emergency medical treatment of a patient with viral hemorrhagic fever. (pp 2449-2450)
24. Explain the signs, symptoms, and emergency medical treatment of a patient with inhalation and cutaneous anthrax. (pp 2450-2451)
25. Explain the signs, symptoms, and emergency medical treatment of a patient with plague. (pp 2451-2452)
26. Explain the signs, symptoms, and emergency medical treatment of a patient with botulinum toxin exposure. (p 2452)
27. Explain the signs, symptoms, and emergency medical treatment of a patient with ricin exposure. (pp 2452-2453)
28. Define syndromic surveillance and its importance during a potential terrorist event. (p 2453)
29. Define radiation and the difference between alpha, beta, gamma, and neutron radiation. (p 2455)
30. Describe what a radiologic dispersal device, or dirty bomb, is and how it is used for terrorism. (p 2455)
31. Explain the emergency medical management of a patient who was potentially exposed to radiation. (p 2456)
32. List protective measures to take when responding to a radiologic event. (p 2456)
33. Discuss specific types of explosive devices used by terrorists. (pp 2457-2458)
34. Define disaster, including the types of critical infrastructure that can be affected by a disaster. (p 2466)
35. Explain what is meant by an all-hazards approach to disaster planning. (p 2466)
36. Discuss preplanning questions to consider related to general items, such as geography, the infrastructure, and the population. (pp 2467-2469)
37. List items to consider when preplanning for a disaster of any sort. (pp 2467-2470)
38. Discuss preplanning considerations related to available emergency medical services (EMS) resources, such as mutual aid, fire, police, and hospitals. (pp 2468-2469)
39. Discuss other resources that should be considered when preplanning for a disaster event, such as nongovernmental organizations, disaster relief agencies, and local businesses. (p 2468)
40. Discuss other preplanning considerations for disaster planning, including communications, supplies, training, transportation, and media and legal concerns. (pp 2468-2469)
41. Describe early measures to take when responding to a disaster, including early preparation when a warning is received, inventory of supplies, mobilization of personnel, and command setup. (p 2470)
42. List items to consider when responding to a disaster emergency. (p 2470)
43. Discuss other general considerations for responding to a disaster, including personnel physical and mental needs, resupplying, surveillance, and media. (pp 2471-2473)
44. Discuss actions to take after responding to a disaster, including the after-action report, retraining, and reimbursement. (pp 2473-2474)
45. List items to consider after responding to a disaster. (p 2473)
46. Discuss concerns related to specific natural disasters, including natural fires, snow and ice storms, tornadoes, hurricanes, tsunamis, earthquakes, landslides, cave-ins, volcanic eruptions, flooding, sandstorms, drought, prolonged cold weather, heat waves, meteors, and pandemics. (pp 2474-2483)
47. Discuss concerns related to specific man-made disasters, including structural fires, construction failures, power failures, riots and stampedes, strikes, snipers and hostage situations, explosions, and technology disruptions. (pp 2483-2487)
48. Understand the significance of potential violence that can occur on an emergency medical services call, including the settings in which violence is more likely to occur. (pp 2493-2494)
49. Discuss practical measures paramedics should take to reduce the likelihood of becoming a victim on the scene, including uniform style and body armor. (pp 2494-2495)
50. Describe factors to assess during scene size-up that can help determine whether the scene is safe, including specific indicators of violence. (pp 2495-2496)
51. Discuss the role of standard operating procedures at a potentially violent incident. (p 2496)

52. Describe how to park and position your emergency vehicle when responding to a call involving another motor vehicle. (pp 2496-2497)
53. Describe the safest way to approach a passenger-style motor vehicle. (pp 2497-2498)
54. Describe the safest way to approach a van. (pp 2498-2499)
55. Describe how to retreat from danger. (p 2499)
56. Describe how to approach a residence safely. (p 2499)
57. Discuss primary and secondary types of exits. (pp 2499-2500)
58. List items that can potentially be used as a weapon. (p 2500)
59. Discuss techniques to use when responding to a call involving potential domestic violence. (p 2500)
60. Discuss concerns related to clandestine drug laboratories. (pp 2500-2501)
61. Discuss concerns related to gang territories and the measures paramedics can take to work safely in these areas. (pp 2501-2503)
62. Discuss the procedures paramedics should follow at mass shootings and at scenes involving active shooters or snipers. (pp 2503-2504)
63. Define cover and concealment; include an example of each. (pp 2504-2508)
64. Describe the measures paramedics should take to increase safety in a hostage situation. (pp 2505-2506)
65. Discuss the role self-defense can play in the practice of paramedicine. (pp 2508-2509)
66. Discuss the measures paramedics should take to preserve evidence at a crime scene, while still providing optimal patient care. (pp 2509-2511)

****Students – please refer to the Instructor’s Course Information sheet for specific information on assessments and due dates.***

Part III: Grading and Assessment

EVALUATION OF REQUIRED COURSE MEASURES/ARTIFACTS

Students’ performance will be assessed and the weight associated with the various measures/artifacts are listed below.

EVALUATION

Tests (4)	60%
Quizzes	15%
Final Exam	25%
Total	100%

Making up of a missed assignment is not allowed. Missed tests, quizzes, dropbox submissions and miscellaneous assignments will result in a zero grade for that assignment.

GRADING SYSTEM:

HGTC has a standardized, recommended grading scale for academic courses. The grading scale requires that grades within the indicated range be defined as:

A: 90-100 B: 80-89 C: 70-79 D: 60-69 F: Below 60

Grades earned in courses impact academic progression and financial aid status. Before withdrawing from a course, be sure to talk with your instructor and financial aid counselor about the implications of

that course of action. Ds, Fs, Ws, WFs and Is also negatively impact academic progression and financial aid status.

The Add/Drop Period is the first 5 days of the semester for **full term** classes. Add/Drop periods are shorter for accelerated format courses. Please refer to the academic calendar for deadlines for add/drop ([ACADEMIC CALENDAR](#)). You must attend at least one meeting of all of your classes during that period. If you do not, you will be dropped from the course(s) and your Financial Aid will be reduced accordingly.

Students will be required to pass an exit exam during the terminal semester with a minimum score to gain endorsement to take the NREMT written and practical examinations.

Part IV: Attendance

Horry-Georgetown Technical College maintains a general attendance policy requiring students to be present for a minimum of 80 percent (80%) of their classes in order to receive credit for any course. Due to the varied nature of courses taught at the college, some faculty may require up to 90 percent (90%) attendance. Pursuant to 34 Code of Federal Regulations 228.22 - Return to Title IV Funds, once a student has missed over 20% of the course or has missed two (2) consecutive weeks, the faculty is obligated to withdraw the student and a student may not be permitted to reenroll. **Instructors define absentee limits for their class at the beginning of each term.**

In Accordance with SC DHEC – Bureau of EMS a student may miss 10% of the total classroom hours for any reason. Under extenuating circumstances, the program coordinator may allow the student to miss **up to a total** of 20% of the total classroom hours. The student is responsible for documenting in writing to the program coordinator's satisfaction, the extenuating circumstances. The program coordinator is under NO obligation to accept the student's documentation or extend the student the additional 10% in allotted absences. The student should also understand that arriving to class late or leaving class early counts towards the allotted hours of time missed. Once the student exceeds the hours of absences, the student will be terminated from the course and will not be eligible to attempt the National Registry examination.

Part V: Student Resources

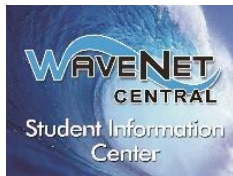


The Student Success and Tutoring Center (SSTC)

The SSTC offers to all students the following **free** resources:

- 1. Academic coaches** for most subject areas, **Writing Center Support**, and **college success skills**.
- 2. On-line student success and academic support resources.**

Visit the SSTC website: [Student Success & Tutoring Center](#) and visit the student services tab in your WaveNet account to schedule appointments using TutorTrac. For more information, call: SSTC Conway, 349-7872; SSTC Grand Strand, 477-2113; and SSTC Georgetown, 520-1455 or go to the [Online Resource Center](#) to access on-demand resources any time.



Student Information Center: WaveNet Central (WNC)

WNC offers to all students the following **free** resources:

1. **Getting around HGTC:** General information and guidance for enrollment!
2. Use the [Online Resource Center \(ORC\)](#) for COMPASS support, technology education, and online tools.
3. **Drop-in technology support or scheduled training** in the Center or in class.
4. **In-person workshops, online tutorials and more services** are available.

Visit the WNC website: [Wavenet Central](#). Live Chat and Center locations are posted on the website. Or please call one of the following locations: WNC Conway, 349-5182; WNC Grand Strand, 477-2076; and WNC Georgetown, 520-1473.

Disability Services:

HGTC is committed to providing an accessible environment for students with disabilities. Inquiries may be directed to Beth Havens, Director of Student Development on the Conway Campus Jaime Davis, Counselor/Advisor on the Georgetown Campus or Kristin Griffin, Counselor on the Grand Strand Campus. These individuals will review documentation of the student's disability and, in a confidential setting with the student, develop an educational accommodation plan.

Note: It is the student's responsibility to self-identify as needing accommodations and to provide acceptable documentation. After a student has self-identified and submitted documentation of a disability, accommodations may be determined, accepted, and provided.

Statement of Equal Opportunity/Non-Discrimination Statement

Horry-Georgetown Technical College prohibits discrimination and harassment, including sexual harassment and abuse, on the basis of race, color, sex, national or ethnic origin, age, religion, disability, marital or family status, veteran status, political ideas, sexual orientation, gender identity, or pregnancy, childbirth, or related medical conditions, including, but not limited to, lactation in educational programs and/or activities.

Inquiries regarding the non-discrimination policies: Students and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs, Dr. Melissa Batten, VP Student Affairs, Title IX

Coordinator, Building 1100, Room 107A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5228, Melissa.Batten@hgtc.edu. Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources, Jacquelyne Snyder, VP Human Resources, Section 504, Title II, and Title IX Coordinator, Building 200, Room 212A, Conway Campus, PO Box 261966, Conway, SC 29528-6066, 843-349-5212, Jacquelyne.Snyder@hgtc.edu.

Title IX Requirements

All students (as well as other persons) at Horry-Georgetown Technical College are protected by Title IX—regardless of their sex, sexual orientation, gender identity, part- or full-time status, disability, race, or national origin—in all aspects of educational programs and activities. Any student, or other member of the college community, who believes that he/she is or has been a victim of sexual harassment or sexual violence may file a report with the college’s Chief Student Services Officer, campus law enforcement, or with the college’s Title IX Coordinator, or designee.

*Faculty and Staff are required to report incidents to the Title IX Coordinators when involving students. The only HGTC employees exempt from mandatory reporting are licensed mental health professionals (only as part of their job description such as counseling services).

Inquiries regarding the non-discrimination policies:	
Student and prospective student inquiries concerning Section 504, Title II, and Title IX and their application to the College or any student decision may be directed to the Vice President for Student Affairs.	Employee and applicant inquiries concerning Section 504, Title II, and Title IX and their application to the College may be directed to the Vice President for Human Resources.
Dr. Melissa Batten, VP Student Affairs <i>Title IX Coordinator</i> Building 1100, Room 107A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5228 Melissa.Batten@hgtc.edu	Jacquelyne Snyder, VP Human Resources <i>Section 504, Title II, and Title IX Coordinator</i> Building 200, Room 212A, Conway Campus PO Box 261966, Conway, SC 29528-6066 843-349-5212 Jacquelyne.Snyder@hgtc.edu

Accident Occurring on or off Campus

Accidents involving Faculty, Staff and Student Workers (work-study, clinical student or students on a required internship):

An accident/illness involving faculty, staff or student worker must be reported immediately to the Human Resources Department (843.349.7134) before seeking medical treatment, if possible, so an accident/incident report can be completed and Worker’s Compensation can be notified. In the event

someone in Human Resources cannot be notified, the injured party may contact the College's Worker's Compensation insurance carrier, CompEndium Services, to complete an accident/incident report and to receive clearance for treatment at 877.709.2667. If the incident is an emergency, please notify Human Resources as soon as the proper medical attention has been rendered for verification of workers' compensation coverage.

In any event, if an accident occurs, proper documentation needs to be completed. An accident report needs to be filled out stating the name of the injured party, the location of the accident, his/her identification number (social or H number), his/her address & phone number, the date & time of the accident, whether there were witnesses, and a brief description of what occurred. Attached is a copy of the Accident/Incident Report form. A copy of the report needs to be distributed to the following departments: Human Resources, the respective Supervisor, and the Dean/Provost of the specific campus.