



Western Technical College

30531303 Advanced EMT

Course Outcome Summary

Course Information

Description	This course expands on the EMT - Basic curriculum. Advanced patient assessment knowledge and skills will be integrated throughout course as well as critical decision making. Skills include IV access and fluid therapy as well as administration of aspirin, 50% dextrose, narcan, atrovent, epinephrine, glucagon and nitroglycerine.
Career Cluster	Law, Public Safety, Corrections and Security
Instructional Level	Technical Diploma Courses
Total Credits	4
Total Hours	180

Textbooks

Advanced EMT, EMS Testing, and My Brady Lab (MBL). 2nd Edition. Copyright 2017. Alexander, Melissa R. and Richard Belle. Publisher: Pearson. **ISBN-13:** 978-0-13-466458-3. Required.

Learner Supplies

Program Clothing. **Vendor:** To be discussed in class. Required.

Watch with second hand - \$10.00-20.00. **Vendor:** To be discussed in class. Required.

Stethoscope \$25-200. **Vendor:** To be discussed in class. Optional.

Eye Protection. **Vendor:** To be discussed in class. Required.

Success Abilities

1. Live Responsibly: Develop Resilience
2. Refine Professionalism: Act Ethically
3. Refine Professionalism: Improve Critical Thinking
4. Refine Professionalism: Participate Collaboratively
5. Refine Professionalism: Practice Effective Communication

High Impact Practices

1. Community-Based Learning Service Hours: a key learning experience of this course is connecting course work while helping a community partner. Learn more about civic responsibility and enhance your community.
2. Work-Based Learning: this course applies your learning to your desired profession by working in industry placements such as internships, practicums, clinicals, or co-ops.

Program Outcomes

1. Prepare for incident response and EMS operations
2. Integrate pathophysiological principles and assessment findings to provide appropriate patient care
3. Demonstrate AEMT skills associated with established standards and procedures for a variety of patient encounters
4. Communicate effectively with others
5. Demonstrate professional behavior
6. Meet state competencies for AEMT certification

Course Competencies

1. **M1-1. Demonstrate proper wellness/safety procedures, patient transfer and medical legal considerations as an AEMT.**

Assessment Strategies

- 1.1. Oral, Written or Graphic Assessment
- 1.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 1.1. you explain EMS Systems.
- 1.2. you classify the levels of EMS training and licensure.

Learning Objectives

- 1.a. M1.1.1. Explore emergency care
- 1.b. M1.1.2. Demonstrate proper workforce safety and wellness
- 1.c. M1.1.3. Examine Medical/Legal and Ethical Issues in EMS
- 1.d. M1.1.4. Demonstrate Lifting and Moving Patients

2. **M1-2. Relate anatomy-physiology and patho-physiology to the profession of an AEMT.**

Assessment Strategies

- 2.1. Oral, Written, or Graphic Assessment
- 2.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 2.1. you explain the practice of data collection.
- 2.2. you demonstrate evidence based decision-making.
- 2.3. you demonstrate proper workforce safety and wellness.
- 2.4. you use principles of medical documentation, report writing and communication.
- 2.5. you discuss Medical/Legal and Ethical Issues in EMS.
- 2.6. you explain the role of EMS during public health emergencies.

Learning Objectives

- 2.a. M1.2.1. Summarize the human body and human physiology
- 2.b. M1.2.2. Examine patho-physiology as related to the practice of AEMT

3. M2-1. Demonstrate the concepts related to the principles of pharmacology.

Assessment Strategies

- 3.1. Oral, Written, or Graphic Assessment
- 3.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 3.1. you relate anatomy-physiology and patho-physiology to the profession of an Advanced EMT.
- 3.2. you explain patho-physiology as related to the practice of an Advanced EMS.
- 3.3. you can distinguish between body organ systems.
- 3.4. you relate the fundamental elements of the life support chain.

Learning Objectives

- 3.a. M2.1.1. Describe considerations related to medication safety, legislation, naming, classification, storage, security and terminology
- 3.b. M2.1.2. Explain basic pharmacological concepts

4. M2-2. Demonstrate safe administration of AEMT medications.

Assessment Strategies

- 4.1. Oral, Written or Graphic Assessment
- 4.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 4.1. you practice the administration of emergency medications used by AEMT's.

Learning Objectives

- 4.a. M2.2.1. Practice the administration of emergency medications used by AEMT's
- 4.b. Summarize specific anatomy and physiology pertinent to administration of a medication.
- 4.c. Explain the role medical direction plays involving medication administration.
- 4.d. Interpret legal aspects that influence medication administration.
- 4.e. Interpret the "six rights" of drug administration.
- 4.f. Demonstrate aseptic technique during the administration of a medication.
- 4.g. Summarize the general principles involved in administering a medication by the inhalation route.
- 4.h. Determine the necessary equipment involved in administering a medication by the inhalation route.
- 4.i. Demonstrate the procedure involved in administering a medication by the inhalation route.
- 4.j. Distinguish between different parental routes.
- 4.k. Summarize the general principles involved in administration of a parental medication.
- 4.l. Determine the necessary equipment utilized in administering a medication by a subcutaneous route.
- 4.m. Summarize the procedure involved in the administration of a medication by a subcutaneous route.
- 4.n. Demonstrate the procedure involved in the administration of a subcutaneous medication.
- 4.o. Determine the necessary equipment utilized in administering a medication by an intramuscular route.
- 4.p. Summarize the procedure involved in the administration of a medication by an intramuscular route.
- 4.q. Summarize the procedure involved in the administration of a medication by the intravenous route.
- 4.r. Demonstrate the procedure involved in the administration of a medication by the intravenous route.
- 4.s. Distinguish between various percutaneous routes of medication administration.
- 4.t. Summarize the steps involved in the administration of an oral medications.

- 4.u. Demonstrate the procedure involved in the administration of oral medications.
- 4.v. Incorporate pathophysiological principles of medication administration with proper patient management.
- 4.w. Outline a pharmacologic management plan for a medical patient, including the administration of an appropriate medication.

5. M2-3. Apply the principles of emergency medicine pharmacology as related to the AEMT.

Assessment Strategies

- 5.1. Oral, Written, or Graphic Assessment
- 5.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 5.1. you explain the medications used by an AEMT.
- 5.2. you identify indications, contraindications, dosage and route of administration of medications administered by AEMT's.
- 5.3. you describe the management of a variety of medical emergencies using AEMT pharmacology.

Learning Objectives

- 5.a. M2.3.1. Explain the medications used by an AEMT
- 5.b. M2.3.2. Identify indications, contraindications, dosage and route of administration of medications administered by AEMT's.
- 5.c. M2.3.3. Describe the management of a variety of medical emergencies using AEMT pharmacology.
- 5.d. Differentiate between a generic and trade name for a medication.
- 5.e. Summarize the special considerations regarding medication administration to special patient populations.
- 5.f. Interpret the high level of responsibility placed upon the IV Tech regarding drug administration and management.
- 5.g. Compare the different routes of drug administration.
- 5.h. Analyze the possibility of drug interactions.
- 5.i. Assess the need for proper medication storage.
- 5.j. Explain the components of a drug profile.
- 5.k. Interpret pathophysiological principles of pharmacology as they pertain to assessment findings.
- 5.l. Interpret assessment findings and patient history to formulate a field impression.
- 5.m. Evaluate a field impression to implement an appropriate pharmacologic management plan for patient.

6. M3-1. Demonstrate thorough primary and secondary patient assessments.

Assessment Strategies

- 6.1. Oral, Written, or Graphic Assessment
- 6.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 6.1. you demonstrate thorough primary and secondary patient assessments.
- 6.2. you demonstrate history taking as a part of a thorough patient assessment.
- 6.3. you explore the anatomical differences of pediatric and adult patients.
- 6.4. you explore the physical differences of pediatric and adult patients.
- 6.5. you explore the cognitive differences of pediatric and adult patients.
- 6.6. you explore the emotional differences of pediatric and adult patients.
- 6.7. you examine the physiological and psycho-social characteristics associated with various stages of life.

Learning Objectives

- 6.a. M3.1.1. Demonstrate thorough primary and secondary patient assessments.
- 6.b. M3.1.2. Demonstrate history taking as a part of a thorough patient assessment
- 6.c. M3.1.3. Explore the anatomical, physical, cognitive and emotional differences of pediatric and adult patients
- 6.d. M3.1.4. Examine the physiological and psychosocial characteristics associated with various stages of life.

7. M3-2. Demonstrate history-taking as a part of a thorough patient assessment.

Assessment Strategies

- 7.1. Oral, Written, or Graphic Assessment
- 7.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 7.1. you demonstrate thorough primary and secondary patient assessments.
- 7.2. you take thorough patient history during patient assessment.
- 7.3. you explain the anatomical, physical, cognitive and emotional differences of pediatric and adult patients.
- 7.4. you examine the physiological and psycho-social characteristics associated with various stages of life.

Learning Objectives

- 7.a. M3.2.1. Demonstrate thorough primary and secondary patient assessments
- 7.b. M3.2.2. Take thorough patient history during patient assessment
- 7.c. M3.2.3. Explain the anatomical, physical, cognitive and emotional differences of pediatric and adult patients
- 7.d. M3.2.4. Examine the physiological and psychosocial characteristics associated with various stages of life

8. **M3-3. Distinguish among the anatomical, physical, cognitive and emotional differences of pediatric and adult patients.**

Assessment Strategies

- 8.1. Oral, Written, or Graphic Assessment
- 8.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 8.1. you identify potential care needs based on patient age.
- 8.2. you demonstrate a complete physical assessment on a variety of patients.

Learning Objectives

- 8.a. M3.3.1. Identify potential care needs based on patient age
- 8.b. M3.3.2. Demonstrate a complete physical assessment on a variety of patients

9. **M3-4. Examine the physiological and psychosocial characteristics associated with various stages of life.**

Assessment Strategies

- 9.1. Oral, Written, or Graphic Assessment
- 9.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 9.1. you explain lifespan development.
- 9.2. you explain the differences between adult and pediatric patients.

Learning Objectives

- 9.a. M3.4.1. Review lifespan development
- 9.b. M3.4.2. Discuss differences between adult and pediatric patients

10. **M4-1. Investigate the respiratory process and anatomy of the airway.**

Assessment Strategies

- 10.1. Oral, Written, or Graphic Assessment
- 10.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 10.1. you explain the anatomy and physiology of the airway.
- 10.2. you explain the processes of ventilation and respiration.
- 10.3. you describe potential complications related to the ventilation of a patient of a variety of ages.

Learning Objectives

- 10.a. M4.1.1. Review the anatomy and physiology of the airway and processes of ventilation and respiration
- 10.b. M4.1.2. Describe potential complications related to the ventilation of a patient of a variety of ages

11. M4-2. Demonstrate the proper basic and advanced airway management.

Assessment Strategies

- 11.1. Oral, Written, or Graphic Assessment
- 11.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 11.1. you distinguish between airway management, respiration and artificial ventilation.
- 11.2. you demonstrate the use of advanced airways used by AEMT's.

Learning Objectives

- 11.a. M4.2.1. Distinguish airway management, respiration and artificial ventilation
- 11.b. M4.2.2. Demonstrate the use of advanced airways used by AEMT's

12. M5-1. Demonstrate a correct medical assessment.

Assessment Strategies

- 12.1. Oral, Written, or Graphic Assessment
- 12.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 12.1. you complete a history on a patient with a respiratory condition.
- 12.2. you complete a history on a patient with a cardiac condition.
- 12.3. you complete a history on a patient with a hematological condition.
- 12.4. you complete a history on a patient with a abdominal condition.
- 12.5. you complete a history on a patient with a genitourinary condition.
- 12.6. you complete a history on a patient with a endocrine immunological condition.
- 12.7. you complete a history on a patient with a toxicological condition.
- 12.8. you complete a history on a patient with psychiatric disorder(s).
- 12.9. you complete a physical examination on a patient with a respiratory condition.
- 12.10. you complete a physical examination on a patient with a cardiac condition.
- 12.11. you complete a physical examination on a patient with a hematological condition.
- 12.12. you complete a physical examination on a patient with an abdominal condition.
- 12.13. you complete a physical examination on a patient with a genitourinary condition.
- 12.14. you complete a physical examination on a patient with a endocrine immunological condition.
- 12.15. you complete a physical examination on a patient with a toxicological condition you complete an examination on a patient with psychiatric disorder(s).

Learning Objectives

- 12.a. M5.1.1. Complete a history on a patient with a medical condition
- 12.b. M5.1.2. Demonstrate a physical examination on a patient with a medical condition

13. M5-2. Examine the assessment findings, pathophysiology and treatment for patients with variety of medical emergencies.

Assessment Strategies

- 13.1. Oral, Written, or Graphic Assessment
- 13.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 13.1. you explain assessment findings on patients with a variety of medical emergencies.
- 13.2. you explain treatment of patients with a variety of medical emergencies.

Learning Objectives

- 13.a. M.5.2.1. Review assessment findings on patients with a variety of medical emergencies

13.b. M.5.2.2. Determine treatments of patients with a variety of medical emergencies

14. M6-1. Classify the different types of shock.

Assessment Strategies

- 14.1. Oral, Written, or Graphic Assessment
- 14.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 14.1. you explain the different stages of shock.
- 14.2. you explain the different types of shock.
- 14.3. you determine the management of a patient with a variety of shock states.

Learning Objectives

- 14.a. M6.1.1. Review the different stages of shock
- 14.b. M6.1.2. Explain the different types of shock
- 14.c. M6.1.3. Determine the management of a patient with a variety of shock states

15. M6-2. Demonstrate the management of a patient in a state of shock.

Assessment Strategies

- 15.1. Oral, Written, or Graphic Assessment
- 15.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 15.1. you identify the patient's type and stage of shock.
- 15.2. you choose the correct management of a patient in shock.

Learning Objectives

- 15.a. M6.2.1. Identify the patient's type and stage of shock
- 15.b. M6.2.2. Choose the correct management of a patient in shock

16. M7-1. Demonstrate a correct trauma assessment.

Assessment Strategies

- 16.1. Oral, Written, or Graphic Assessment
- 16.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 16.1. you complete a history on a patient with traumatic injury.
- 16.2. you demonstrate physical examination on a patient with traumatic injury.

Learning Objectives

- 16.a. M7.1.1. Complete a history on a patient with traumatic injury
- 16.b. M7.1.2. Demonstrate physical examination on a patient with traumatic injury

17. M7-2. Apply treatment principles for patients with soft tissue, orthopedic, nervous system, and head and spine trauma injury

Assessment Strategies

- 17.1. Oral, Written, or Graphic Assessment
- 17.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 17.1. you review assessment principles and findings for a trauma patient.
- 17.2. you demonstrate appropriate treatment for a patient with a traumatic injury.
- 17.3. you identify the need for rapid transport in the trauma patient.

Learning Objectives

- 17.a. M7.2.1. Review assessment principles and findings for a trauma patient
- 17.b. M7.2.2. Demonstrate appropriate treatment for a patient with a traumatic injury
- 17.c. M7.2.3. Identify the need for rapid transport in the trauma patient

18. M7-3. Manage a patient with environmental emergencies.

Assessment Strategies

- 18.1. Oral, Written, or Graphic Assessment
- 18.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 18.1. you explain specific assessment findings for a patient with a heat emergency.
- 18.2. you explain specific assessment findings for a patient with a cold emergency.

Learning Objectives

- 18.a. M7.3.1. Explain specific assessment findings for a patient with a heat emergency
- 18.b. M7.3.2. Explain specific assessment findings for a patient with a cold emergency

19. M8-1. Demonstrate the management of a patient with an obstetrical emergency including child birth.

Assessment Strategies

- 19.1. Oral, Written, or Graphic Assessment
- 19.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 19.1. you explain the assessment findings of a patient with an obstetrical emergency.
- 19.2. you demonstrate appropriate management of a patient with an obstetrical emergency.

Learning Objectives

- 19.a. M8.1.1. Review assessment findings of a patient with an obstetrical emergency
- 19.b. M8.1.2. Demonstrate appropriate management of a patient with an obstetrical emergency

20. M8-2. Apply assessment and treatment principles for a variety of emergencies for pediatric and geriatric patients.

Assessment Strategies

- 20.1. Oral, Written, or Graphic Assessment
- 20.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 20.1. you explain the assessment considerations for geriatric and pediatric patients.
- 20.2. you explain development for a variety of age ranges.
- 20.3. you demonstrate a history and physical on a variety of patients.

Learning Objectives

- 20.a. M8.2.1. Review assessment considerations for geriatric and pediatric patients
- 20.b. M8.2.2. Differentiate the development for a variety of age ranges
- 20.c. M8.2.3. Demonstrate a history and physical on a variety of patients

21. M8-3. Simulate assessment and treatment considerations for a patient with special challenges.

Assessment Strategies

- 21.1. Oral, Written, or Graphic Assessment
- 21.2. Practical Skill Demonstration/Simulation

Criteria

You will be a successful Advanced EMT when:

- 21.1. you describe various physical limitations that would affect assessments in a patient with special challenges.

- 21.2. you describe various cognitive limitations that would affect assessment in a patient with special challenges.

Learning Objectives

- 21.a. M8.3.1. Describe various physical limitations that would affect assessments in a patient with special challenges
- 21.b. M8.3.2. Describe various cognitive limitations that would affect assessment in a patient with special challenges

22. M9-1. Outline principles of safe ground and air ambulance operations.

Assessment Strategies

- 22.1. Oral, Written, or Graphic Assessment
- 22.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 22.1. you explain safe ground ambulance operations.
- 22.2. you explain the safety considerations for air ambulance operations.

Learning Objectives

- 22.a. M9.1.1. Examine items of safe ground ambulance operations
- 22.b. M9.1.2. Examine safety considerations for air ambulance operations

23. M9-2. Apply principles of incident management.

Assessment Strategies

- 23.1. FEMA IS-100 Requirements
- 23.2. FEMA ICS 700 Requirements

Criteria

You will be a successful Advanced EMT when:

- 23.1. you meet FEMA IS-100 training requirements.
- 23.2. you meet FEMA ICS 700 training requirements.

Learning Objectives

- 23.a. M9.2.1. Meet FEMA IS-100 training requirements
- 23.b. M9.2.2. Meet FEMA ICS 700 training requirements

24. M9-3. Determine appropriate procedures related to motor vehicle extrication.

Assessment Strategies

- 24.1. Oral, Written, or Graphic Assessment
- 24.2. Practical Skill Demonstration

Criteria

You will be a successful Advanced EMT when:

- 24.1. you identify safety considerations during a vehicle extrication.
- 24.2. you demonstrate the safe removal of a patient from a vehicle involved in an accident.

Learning Objectives

- 24.a. M9.3.1. Identify safety considerations when participating in vehicle extrication
- 24.b. M9.3.2. Demonstrate the safe removal of a patient from a vehicle involved in an accident

25. M9-4. Identify potential Weapons of Mass Destruction incidents and their management.

Assessment Strategies

- 25.1. Wisconsin HAZWOPER Requirements
- 25.2. Wisconsin WMD Requirements

Criteria

You will be a successful Advanced EMT when:

- 25.1. you meet HAZWOPER training requirements for Wisconsin.

25.2. you meet Wisconsin WMD Training requirements for Wisconsin.

Learning Objectives

25.a. M9-4.1. Meet HAZWOPER training requirements for Wisconsin

25.b. M9-4.2. Meet Wisconsin WMD Training requirements for Wisconsin