



Advanced Emergency Medical Technician - Cardiac September 10, 2019 – December 21, 2019

Approved by the Rhode Island Department of Health,
Division of Emergency Medical Services

Course Approval 19-002 A

Instructor Coordinator

Charles H. Stimpson III

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Office Hours: by appointment

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Textbooks:

Advanced EMT: A Clinical - Reasoning Approach 2nd Ed.

By: Melissa Alexander, Richard Belle. ISBN 0-13-442012-8

- **NEW MyBradyLab -- Access Card -- for Advanced EMT: A Clinical-Reasoning Approach By Melissa Alexander, Richard Belle | ©2016 | Access Code Card, Required for Class.**

2015 Advanced Cardiac Life Support – Provider Manual

American Heart Association. ISBN 0-16-1669400-9

Understanding 12 Lead EKGs 3rd Ed.

Brenda M. Beasley 2013. ISBN 0-13-2921065

American Heart Association BLS Provider Manual

ISBN 978-1-61669-407-4

AHA Pediatric Advanced Life Support Provider Manual

ISBN 978-1-61669-599-0

Schedule: Tuesdays & Thursdays, 6:00 p.m. -10:00 p.m.
Saturdays: 8:30 a.m. – 12:30 p.m.

Location: Lectures Room

Labs: Nursing Lab Room 6560 6th floor
Knight Campus

Program Director:

Joseph Arsenault, Fire Science

Medical Director:

Dr. Herbert Brennan

Course Syllabus

Policies and Procedures

Course Description:

The Advanced Emergency Medical Technician - Cardiac course prepares students to provide pre-hospital assessment and care for patients of all ages with a variety of medical conditions and traumatic injuries. Area of study include; introduction to emergency medical services systems, roles and responsibilities of AEMTs, anatomy and physiology, medical emergencies, trauma, special considerations for working in the pre-hospital setting and providing patient transportation.

This program is approved by the Rhode Island Department of Health, Division of Emergency Medical Services and adheres to the *National Emergency Medical Services Education Standards, Rhode Island Curricula and Standards for EMT Training Programs* and the *American Heart Association*.

The course will include the following components:

- National Medications and Protocols
- Rhode Island Medications and Protocols
- Endotracheal Intubation Module (for Rhode Island state licensure)
- American Heart Association- Advanced Cardiac Life Support Certification

Successful completion of the course requirements, will allow students to apply for the National Registry of Emergency Medical Technicians (NREMT) AEMT certification exam and apply for licensure in Rhode Island for Emergency Medical Technician Cardiac.

Course Expectations

Students shall come to class prepared by reading assignments *before* each scheduled class. In addition, all students shall be responsible for the policies set forth in the CCRI student handbook found at

http://www.ccri.edu/advising/student_services/handbook.html and the College Catalog <http://www.ccri.edu/catalog>.

This course does not utilize the Blackboard Learning Management System. However, the class uses MYBRADY LAB, an online computer adaptive learning portal developed by Pearson, our textbook publisher. Students are required to complete online weekly assignments as a large part of the course grade. Assignments include readings, audio introduction, audio review, pretest, homework and post tests, and chapter tests. Students should also have access to CCRI email and check it regularly as part of the course.

Prerequisites

- CPR for Healthcare Providers
- NREMT Emergency Medical Technician certification
- Rhode Island Emergency Medical Technician Licensure

Student Learning Outcomes

By the end of the program, students will be able to successfully demonstrate the appropriate EMT knowledge and practical skill set at an acceptable level, as determined by national, state and local regulations.

Upon completion of this program, students should be able to:

- Practice professional standards by demonstrating a strong work ethic, positive attitude, respect for patients, ability to work cooperatively as a health care team member, and willingness to maintain and enhance technical skills.

- Communicate clearly and professionally using verbal and nonverbal communication techniques.
- Apply safety and infection control practices to maintain personal and professional well-being and to ensure patient safety.
- Assessment and management of patients of all ages with a variety of complaints, medical conditions and traumatic injuries.
- Manage emergency patient care and treatment appropriately within the scope of practice for an AEMT/Rhode Island Emergency Medical Technician-Cardiac.
- Apply legal knowledge and medical ethics to all patient care situations by documenting accurate and complete patient records and reports and maintaining patient confidentiality.
- Demonstrate competency in all minimum required psychomotor skills in accordance with National Education Standards and Rhode Island Advanced/Cardiac Psychomotor Skills Examinations.
- Use critical thinking skills to confidently and effectively manage emergency situations.
- Apply principles of emergency medical services operations, including considerations in ambulance and air medical transportation, multiple casualty incidents and responding to situations involving weapons of mass destruction.

Course Completion Requirements

In order to be eligible to test for the National Registry of Emergency Medical Technicians (NREMT) Advanced Examination, students must complete the following:

- Proof of pre-requisites and co-requisites
- Successful completion of final written exam with a score of 650 or above (students will be responsible for the cost of any re-test exams)
- Successful completion of final practical skills examinations, pass/fail
- Completion of clinical requirements including ALS field internship
- No more than three (3) excused absences, per the RI Division of EMS

Clinical Requirements

AEMT students are required to perform field clinical requirements, in accordance to the National Education Standards. At a minimum, the field preceptor must be certified as Rhode Island Cardiac or Paramedic. All preceptors must be familiar with the AEMT scope of practice, and the AEMT protocol that will be utilized during the program.

All clinical rotations and field internships will be coordinated by the Instructor Coordinator. Students will not be allowed to receive compensation during the rotations. Each student will be required to complete the following clinical rotations:

- 60 hours - Emergency Department
- 60 hours - ALS Field Internship

Co-Requisites

By the end of this course, the student will have completed the following clinical and online supplemental requirements:

- ICS 100: Introduction to Incident Command System
- ICS 200: ICS for Single Resources
- ICS 700: NIMS, An Introduction
- IS-5: Introduction to Hazardous Materials
- AWR 160 or equivalent

Course Delivery Mode

The field of EMS requires teamwork and organization. In this course you will be asked to work together and think alike. We will create and maintain a progressive learning environment. EMS requires a significant knowledge base to be effective.

This course may include, but are not limited to: lectures, assigned readings, homework, presentations, discussions, skills labs and class activities.

Homework/ Assignments/Quizzes- encourage students to keep up with the pace of the course. Quizzes are used as both as evaluation and teaching tools. Quizzes will take place at the beginning of class.

MyBRADY Lab- each text is accompanied by a student access code to the companion website. Students will have additional requirements online for quizzes.

Psychomotor Skills Labs- To become an AEMT, students must learn to *do what EMTs do*. Students must demonstrate mastery of practical skills. In order to demonstrate competency, skills labs will be demonstrated by instructors on each skill and provide guidance and feedback during practice sessions. Skills labs will be conducted very frequently throughout the course. Only perfect practice, practice, practice will allow students to perform under pressure.

Final Practical Psychomotor Evaluation-

In order to successfully complete the course, students must demonstrate mastery of Practical Skills Examinations.

- If a skill is failed on the first attempt, the student will be permitted to re-test, not necessarily on the same day. Student will NOT re-test with the same instructor.
- Students will be permitted remediation on the skill station before retesting.

Grading Formula

Student grades will be based on in-class assignments, homework, quizzes, written examinations and final practical skills examinations. All students are required to have a minimum grade of 70% to qualify for NREMT and RI Cardiac examinations. Final grades will be determined below

- 20% - My Brady Chapter Tests
- 25% - Mid-Term Exam
- Endotracheal Intubation 20% and ACLS, CPR, and PALS Exams – must pass for course completion
- Final Exam- HESI Computer Exam, students must achieve a grade of 650 for course completion. 35% of grade
- Final Practical Exam- must pass for course completion

Attendance Policy

If a student is unable to attend, he/she should send an email/call the instructor coordinator. According to the Rhode Island Department of Health, Center for EMS, Students may not miss more than 3 (three) excused classes.

Any student missing more than the maximum excused absences will be allowed to complete the course, but will not be authorized to sit for the state written exam. Students are responsible for any materials missed during his/her absences. Any student that will be missing class must notify instructor via email at cstimpson@ccri.edu.

Make-Up Policy:

Any and all work may be turned in prior to the due date. If a student provided notice at least 2 classes prior to a planned absence (in writing), any work that would have been missed will be administered during the class prior to the absence.

- **Quizzes and Homework:** must be turned in on or before the due date. No makeup work will be assigned. The lowest quiz grade will be dropped at the end of the course.
- **Exams:** by special arrangement with Instructor Coordinator. Exams must be made up within **two** classes of the original exam date.

Disability Policy

Any student requesting special academic accommodations must be approved through Academic Accommodations (phone number: 825-2164 or 333-7329). The forms with your special requirements must be presented to your faculty member.

Any student requesting special accommodations for the NREMT exams must contact the NREMT directly.

Academic Dishonesty per CCRI Student Handbook (effective Spring 2013)

Academic cheating and plagiarism are serious offenses that should not be overlooked. Students should be regularly cautioned that violations of academic integrity may result in suspension or expulsion from the college.

If an instructor can demonstrate that cheating or plagiarism has taken place, he or she will notify the student in question, present the evidence, and apply an academic penalty depending on the severity of the offense. The instructor will bear in mind that there are different degrees of academic dishonesty, and assign the academic penalty he or she considers most appropriate from the options listed below:

1. Require that a makeup test is taken or a makeup paper is written.
2. Reduce the grade on the paper or exam.
3. Reduce the final grade in the course by one or more levels.
4. Assign a grade of "F" to the exam or paper.
5. Assign a grade of "F" for the course.

Communication Devices

Cell phone use in the classroom for non-instructional purposes, with the exception of receiving emergency notifications, is prohibited.

Dress Code

Students must exhibit good personal hygiene and wear clothing that is appropriate for the material being presented or covered.

Grievance Policy

Students will have the right to expect that their issues to be addressed. Using the method outlined here will ensure that problems are properly documented and, therefore, properly addressed.

1. Students must *document* concerns, complaints or issues and make every attempt to get satisfaction from the lead instructor.
2. If the student is dissatisfied with the decision or result with lead instructor, the documented concern will be passed to the Program Director/Instructor coordinator.

Proof of Immunizations

- Hospitals may require proof of immunization against or demonstration of Rubella (German measles), Rubella (regular measles), Chicken Pox, PPD test with 6 months.
- CCRI Immunization form must be complete prior to performing clinical ER rotations.
- Failure to do so will prohibit you from taking the final written and practical exams.
- If immunization form is not complete and student performs clinical observation, s/he will be moved from the program immediately

This syllabus is subject to change at any time at the discretion of the instructor. Students are responsible for keeping current with changes made to this syllabus.

Advanced EMT – Cardiac Course

Student Acknowledgement

Signing below indicates that you have read, Understand, and abide by the course requirements as outlined in this document.

Student Signed: _____ Date: _____

Student Printed Name: _____

Course Schedule

Class # 1: Tuesday September 10th

Lecture: TBA

- Course Introduction / Policies and Procedures / Paperwork / Vaccinations
- AEMT- Chapter 1: Introduction to Advanced Emergency Medical Technician Practice
- AEMT- Chapter 2: Emergency Medical Services, Health Care and Public Health Systems
- AEMT- Chapter 3: Workforce Wellness and Personal Safety

Protocols

- www.health.ri.gov/programs/emergencymedicalservices
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Class # 2: Thursday September 12th

Lecture: TBA

- AEMT – Chapter 4: Ethical and Medical/Legal Considerations in Advanced EMT Practice
- AEMT - Chapter 5: Ambulance Operations and Responding to EMS Calls
- AEMT – Chapter 6: Communications and Teamwork
- AEMT – Chapter 7: Medical Terminology

Medications

- Medication List Hand Out
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Class # 3: Saturday September 14th

Lecture: TBA

- AEMT – Chapter 8: Human Body Systems
- AEMT - Chapter 9: Lifespan Development and Cultural Considerations

Medications

- National EMT Medication List
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Class # 4: Tuesday September 17th

Lecture: TBA

- AEMT - Chapter 10: Pathophysiology: Selected Impairments in Homeostasis
- AEMT – Chapter 11: Principles of Pharmacology

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Handout

- Medical Abbreviations

Medications

- EMT Medications
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Class # 5: Thursday September 19th

Lecture: TBA

- AEMT – Chapter 12: Medication Administration
- AEMT – Chapter 13: Medications

Medications

- Advanced EMT Medication List
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Class # 6: Saturday September 21st

Lab: TBA

- IV Access
 - Adult/Pediatric IO Access
 - Medications
 - Dosage Calculations
-

Class # 7: Tuesday September 24th

Lecture: TBA

- AEMT – Chapter 16: Airway Management, Ventilation, and Oxygenation
- Intubation Lecture

Protocols

Airway Protocols

Class # 8: Thursday September 26th

Lab: TBA

- Endotracheal Intubation – handouts and skill sheets
 - CPAP Overview – Handouts and Slides
 - End Tidal Co2
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Class # 9: Tuesday October 1st

ENDOTRACHEAL INTUBATION WRITTEN EXAM

Lecture: TBA

- AEMT - Chapter 14: General Approach to Patient Assessment and Clinical Reasoning
 - AEMT – Chapter 15: Scene Size-Up and Primary Assessment
 - AEMT – Chapter 17: Resuscitation: Managing Shock and Cardiac Arrest
 - AEMT – Chapter 18: Vital Signs and Monitoring Devices
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Class # 10: Thursday October 3rd

Lecture: TBA

- AEMT – Chapter 19: History Taking, Secondary Assessment and Reassessment
- AEMT – Chapter 20: Respiratory Disorders

- AEMT – Chapter 21: Cardiovascular Disorders

Protocols

- 9.2 RI Prehospital Formulary
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Class # 11: Tuesday October 8th

Lecture/ LAB: TBA

CPR

Class #12: Thursday October 10th

Lab: TBA

- Intubation / Advanced Airway
 - IV/IO insertion
 - Medication Administration
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Class # 13: Saturday October 12th

Lecture: TBA

- Understanding 12 Lead EKGs – Chapter 1: Anatomy of the Heart Structure
 - Understanding 12 Lead EKGs – Chapter 2: Cardiovascular Physiology: Function
 - Understanding 12 Lead EKGs – Chapter 3: Basic Electrophysiology
 - Understanding 12 Lead EKGs – Chapter 4: The Electrical Conduction System
 - Understanding 12 Lead EKGs – Chapter 5: The Electrocardiogram
 - Understanding 12 Lead EKGs – Chapter 6: Interpretation of the EKG
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Class # 14: Tuesday October 15th

Lecture: TBA

- Understanding EKGs – Chapter 7: Sinus Rhythms
- Understanding EKGs – Chapter 8: Atrial Rhythms
- Understanding EKGs – Chapter 9: Junctional Rhythms
- Understanding EKGs – Chapter 10: Ventricular Rhythms

Handout

- **Clinical Packets**
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Class # 15: Thursday October 17th

Lecture: TBA

- Understanding EKGs – Chapter 11: Heart Blocks
 - Understanding EKGs – Chapter 12: Paced Rhythms
 - Understanding 12 Lead EKGs – Chapter 7: Acute Myocardial Infarctions
 - Understanding 12 Lead EKGs – Chapter 8: Myocardial Ischemia, Injury, and Necrosis
 - Understanding 12 Lead EKGs – Chapter 9: Interpretation of Inferior Myocardial Infarctions
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Class # 16: Tuesday October 22nd

Lecture: TBA

- Understanding 12 Lead EKGs – Chapter 10: Interpretation of Anterior Myocardial Infarctions
- Understanding 12 Lead EKGs – Chapter 11: Interpretations of Septal Myocardial Infarctions
- Understanding 12 Lead EKGs – Chapter 12: Interpretation of Lateral Myocardial Infarctions
- Understanding 12 Lead EKGs – Chapter 13: Interpretation of Posterior Myocardial Infarctions
- Understanding 12 Lead EKGs – Chapter 14: Bundle Branch Blocks
- Understanding 12 Lead EKGs – Chapter 15: Therapeutic Modalities

Medications

- All to date

Protocols

- All to date
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Class # 17: Thursday October 24th

Lecture: TBA

- Understanding EKGs – Chapter 8: Atrial Rhythms
 - Understanding EKGs – Chapter 9: Junctional Rhythms
 - Understanding EKGs – Chapter 10: Ventricular Rhythms
 - Understanding EKG's – Chapter 11: Heart Blocks
 - Understanding EKG's – Chapter 12: Paced Rhythms
 - Understanding 12 Lead EKG – Chapter 16: Cardiovascular Pharmacology
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Class # 18: Saturday October 26th

Lab: TBA

ECG Lab

12 Lead

Medications

Airway

Class # 19: Tuesday October 29th

Lecture: TBA

- AEMT – Chapter 47: Rescue Operations
- AEMT – Chapter 48: Hazardous Materials
- AEMT – Chapter 49: Terrorism

Class # 20: Thursday October 31st

Lecture: TBA

Medications: Medication Lecture All Rhode Island and AEMT Medications

Class #21: Saturday November 2nd

Lab: TBA

Medication Administration Lab

ECGs

Class # 22: Tuesday November 5th

Lab: TBA

- Introduction to Mega Codes
 - Airway Lab
 - Medications
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Class # 23: Thursday November 7th

Lab: TBA

- 12 Lead
 - Defibrillation/Cardioversion
 - Pacing
- Medical Mega Codes and Trauma Mega Codes
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Class #24: Saturday November 9th

Mid - Term Exam

Lecture: TBA

Class # 25: Tuesday November 12th

Lecture: TBA

- AEMT – Chapter 22: Neurological Emergencies
 - AEMT – Chapter 23: Endocrine Emergencies
 - AEMT – Chapter 24: Abdominal Pain and Gastrointestinal Disorders
 - AEMT – Chapter 25: Renal, Genitourinary and Gynecological
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Class # 26: Thursday November 14th

Lecture: TBA

Disorders

- AEMT – Chapter 26: Hematologic Disorders
 - AEMT – Chapter 27: Immunologic Disorders
 - AEMT – Chapter 28: Infectious Diseases
 - AEMT – Chapter 29: Non-traumatic Musculoskeletal and Soft Tissue Disorders
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Class # 27: Saturday November 16th

Lecture/Lab: TBA

Advanced Cardiac Life Support (ACLS)

Class # 28: Tuesday November 19th

Lab: TBA

ALL SKILLS REVIEW

Class # 29: Thursday November 21st

Lecture: TBA

- AEMT – Chapter 30: Disorders of the Eye, Ear, Nose, Throat and Oral Cavity
 - AEMT – Chapter 31: Mental Illness and Behavioral Emergencies
 - AEMT – Chapter 32: Toxicological Emergencies
 - AEMT – Chapter 41: Environmental Emergencies
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Class # 30: Tuesday November 26th

Lecture: TBA

- AEMT – Chapter 43: Obstetrics and Care of Newborn
 - AEMT – Chapter 44: Pediatric Emergencies
 - AEMT – Chapter 45: Geriatrics
 - AEMT – Chapter 46: Patients with Special Challenges
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Class #31: Tuesday December 3rd

Lab: TBA

Simulation Lab Flanagan Campus 4:30pm – 7:30pm

Class # 32: Thursday December 5th

Lecture: TBA

- AEMT – Chapter 33: Trauma Systems and Incident Command
 - AEMT – Chapter 34: Mechanisms of Injury, Trauma Assessment, Trauma Triage
 - AEMT – Chapter 35: Burns and Soft-tissue Injuries
 - AEMT – Chapter 36: Musculoskeletal Injuries
 - AEMT – Chapter 42: Multi System Trauma and Trauma Resuscitation
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Class # 33: Tuesday December 10th

Lecture: TBA

- AEMT – Chapter 37 Head, Brain, Face & Neck Trauma
 - AEMT – Chapter 38 Thoracic Trauma
 - AEMT – Chapter 39 Abdominal Trauma
 - AEMT – Chapter 40 Spine Injuries
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Class # 34: Thursday December 12th

Lab: TBA

All Skills Review

Class # 35: Saturday December 14th

Lecture/Lab: TBA

Pediatric Advanced Life Support

Class # 36: Tuesday December 17th

Lab: TBA

All Skills Review

Class # 37: Thursday December 19th

Final Written Exam

(Hand in all clinical paperwork)

Lecture: TBA

Class # 38: Saturday December 21st

Final Practical Skill Evaluation

(Starts at 8:00 am sharp)

Lab: TBA

- All to date

Medications

- All to date

Protocols

- All to date
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