

# Basic ECG Course in a Virtual Classroom Live from Houston, TX

Brought to you by the American Board of Cardiovascular Medicine and the Society of Cardiac Monitoring

February 4 - March 8, 2019

Presented by  
Joseph Ponce de Leon





## Basic ECG Course in a Virtual Classroom Live from Houston, TX

Mark your Calendar for February 4 – March 8, 2019 to Attend our 30-hour Virtual Basic ECG Course and Board Certification Opportunity, coming to you live from Houston, TX.

This Comprehensive Basic ECG Course was designed by Joseph Ponce de Leon, and approved by the American Board of Cardiovascular Medicine, Inc., to train Cardiac Monitoring Technical Specialists and sharpen the skills of Cardiac Telemetry Nurses they will work with.

Unlike any other Basic ECG Course available anywhere in Houston, this Course is being taught by the only Board-Certified ECG Instructor in the Greater Houston area, and it culminates with the Basic ECG Board Certification Examination leading you to a career as a Certified Cardiac Monitoring Technology Specialist.



# How the Virtual Classroom Works

- Local students meet with the Instructor for one hour on the first day to go over the details of the course and to provide the course manual.
- Out of town students will have their manuals mailed to them upon completion of their registration.
- Subsequent classes will be brought to you in the comfort of your own home through the use of your computer.
- The Instructor can see you and you can see him. You can ask questions and interact with the Instructor and other students in the class.
- The course officially ends on March 6<sup>th</sup> and the final certification examination given on March 8<sup>th</sup>, however, you may have longer to study and prepare should you not feel ready after the course is completed. Your exam is also taken from home on your computer.



# Meet the Faculty



**Joseph Ponce de Leon** is a Board-Certified ECG Instructor through the American Board of Cardiovascular Medicine, Inc., and as such qualifies to teach the art of ECG Recording and Reading to all Health Care Professionals from technician to physician. Joseph is certified to teach both Basic and 12-Lead ECG.

During a career spanning just over a decade, Joseph Ponce de Leon blossomed from an EMT in Los Angeles, CA, to becoming one of the best Clinical Cardiac Monitor Technicians in the Houston, TX area, and did not quit until he had accomplished his goal of becoming the first and only Board-Certified ECG Instructor in the Greater Houston, TX area in July of 2016.

He has worked as a Cardiac Monitor Technician for several Hospitals in the Greater Houston, TX area for many years, and during this time, has developed his own curriculum for teaching Basic ECG to Cardiac Monitoring Students based on the standards set by the American Board of Cardiovascular Medicine, Inc.

*“Joseph is one of the best teachers of electrocardiography that I have seen in a long time and we are delighted that he has agreed to join the Faculty of the American Board of Cardiovascular Medicine, Inc. He comes to you with a wealth of knowledge and an uncanny ability to make the most complex simple; I recommend him to anyone needing to master the subject and become Board Certified as a Clinical Cardiac Monitoring Specialist.”*

*Jonni Cooper, CEO-ABCM, Inc.*

When you attend his course, you will enjoy his refreshing passion for Electrocardiography. He is rated excellent by his students, and most will comment on his relaxed style and willingness to help them learn. He is patient and determined to see that you succeed in your goals. Hope to see you in class February 4<sup>th</sup>.



# Course Fees

\$1,200 which includes:

1. Basic ECG Course
2. National Board Certification Exam by the American Board of Cardiovascular Medicine, Inc.

Payment Options:

1. Prepay \$1,200
2. Pay 3 installments of \$400 each

\*Grades not released until course fees paid in full.



# How to Register

- To register for the Basic ECG Course, we need your application filled out and submitted for approval. Follow this link: <https://www.weebly.com/editor/main.php#/> to the Course Application. After your application is approved, you may make your payment arrangements.
- All payments should be made online with a credit or debit card.
- You will then be sent confirmation that you have been accepted into the class and the invite to access the Course from your home computer (which requires a built in or attached web-cam); if you don't have one, they cost about \$15 from your local Walmart.



# Basic ECG Course Includes

- 30 classroom hours of instruction
- Course manual
- Board Certification Examination
- Certificate of successful completion of course
- Certificate for passing Board Certification Exam
- Gold plated CMT Board Certification lapel pin award



# Basic ECG Course Outline

1. Basic Anatomy and Physiology
2. Understanding and Recording the Electrical System
3. Calculating Heart Rate using several methods
4. Identify 4 forms of Artifact in the ECG
5. Right and Left Bundle Branch Block patterns
6. Normal Sinus Rhythms
7. Sinus Bradycardia
8. Sinus Arrhythmia
9. Sinus Tachycardia
10. Sinus Pause & Sinus Arrest
11. Premature Atrial Beats or APBs with and without BBB
12. Wandering Atrial Pacemaker vs Multifocal Atrial Tachycardia
13. Atrial Tachycardia with Varying Conduction Ratios
14. Supraventricular Tachycardia with and without BBB
15. Atrial Flutter
16. Atrial Fibrillation
17. Premature Junctional Beats or JPBs
18. Junctional Escape Rhythm
19. Accelerated Junctional Rhythm
20. Junctional Tachycardia
21. Premature Ventricular Beats or VPBs
22. Ventricular Escape Rhythm
23. Accelerated Ventricular Rhythm
24. Ventricular Tachycardia (Polymorphic vs. Monomorphic, & Torsade de Pointes)
25. Sustained VT vs Non-Sustained VT
26. Ventricular Fibrillation
27. 1<sup>st</sup> degree AV Block
28. 2<sup>nd</sup> degree AV Block Type I
29. 2<sup>nd</sup> degree AV Block Type I with 2:1 conduction
30. 2<sup>nd</sup> degree AV Block Type II (Mobitz II) - fatal
31. 2<sup>nd</sup> degree AV Block Type II with 2:1 conduction
32. 3<sup>rd</sup> degree AV Block or Complete Heart Block
33. Basics of Cardiac Pacing (Single and Dual Chambered)
34. ICD devices and how to trouble shoot for abnormal function



# Basic ECG Course Objectives

1. Identify the structures of the heart and its conduction system
2. Understand the anatomy and physiology of the heart and its conduction system  
how electrical current affects the tracing in respect to electrical movement in respect to the leads
3. Understand the electrical system of the heart
4. Calculate heart rate utilizing various methods
5. Be able to identify 4 different forms of artifact
6. Identify the morphology of right and left bundle branch block
7. Identify the various sinus rhythms
8. Identify the various atrial rhythms
9. Identify the various junctional rhythms
10. Identify the various ventricular rhythms
11. Identify the various forms of AV block
12. Understand how to analyze a pacemaker rhythm strip
13. Understand the basics of pacemaker troubleshooting for single and dual chamber pacemakers



# First Meeting – Let's Get Acquainted

- You will meet with the faculty on the first day of class to sign in, pick up your training manual, and go over the details of the course. Students from out of town will phone in and be interviewed by the Faculty and manuals will be mailed to these students.
- This gives the Faculty and students a chance to meet each other, be it on the phone or in person, and to make sure each one understands how to access the course from their own computer. Email communication with the Faculty is encouraged.
- Location of First Meeting: TBD and announced soon.



# What Happens If I Cannot Attend Class?

- If you are sick and cannot attend a scheduled class, you will be responsible to read the assignment and take the post test to assure that you understand the material. You may call or email the Faculty with questions you may have. You will be responsible to make up the material by studying independently or by studying with another fellow student.
- There are no make-up days at this time.

# Basic ECG Course Agenda

**Course Meets 3 times per week for 2 hours per session.**

Feb 4, Day 1 A. Basic anatomy & physiology of the heart B. Understanding the electrical system and how to properly record it with lead placement	Feb 6, Day 2 A. Calculating heart Rate using several methods B. Four forms of artifact in the ECG	Feb 8, Day 3 Right bundle branch block Left bundle branch block
Feb 11, Day 4 Sinus rhythms	Feb 13, Day 5 Atrial rhythms	Feb 15, Day 6 Junctional rhythms
Feb 18, Day 7 Ventricular rhythms	Feb 20, Day 8 Ventricular rhythms	Feb 22, Day 9 AV Blocks
Feb 25, Day 10 Understanding the ICD codes for single and dual chambered pacemakers  How to trouble shoot the single chambered pacemaker	Feb 27, Day 11 How to trouble shoot the dual chambered pacemaker	March 1, Day 12 The basics of an ICD/Pacemaker and how to trouble shoot the device
March 4, Day 13 Review for Exam	March 6, Day 14 Review for Exam	March 8, Day 15 Final Exam