


**SYLLABUS**  
**FOR**  
**ECG TECHNICIAN**

 07-07-2020  
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Arunachal Pradesh  
Naharlagun

## SYLLABUS FOR ECG TECHNICIAN

### Course Overview

The Electrocardiograph (EKG) Technician performs electrocardiograms according to physician's orders and established practices and procedures. The EKG Technician tasks and responsibilities may include: processing and assembling equipment, maintaining inventory, processing data reports, and cylinder management for Respiratory Therapy. The EKG Technician performs diagnostic tests to assess the heart rhythm and rate in patients. EKG's are also performed before and after operations, during physical examinations of patients over 40, for patients with a history of heart disease, when patients are experiencing chest pains and when the doctor deems it necessary. The well-trained EKG technician is an integral part of the management of patients with heart disease.

Purpose: This course will prepare the Certified Electrocardiograph (ECG) Technician to work in a clinical environment and healthcare setting. Learning Objectives: By Conclusion of this course students will be able to:

1. Define the role of the Electrocardiograph technician.
2. Describe the state requirements related to ECG practice.
3. Describe legal and ethical issues related to ECG practices.
4. Demonstrate effective customer service skills.
5. Maintain a safe environment and infection control.
6. Describe the Anatomy and Physiology of the Cardiovascular System.
7. Incorporate pharmacology within fieldwork.
8. Review Basic Electrophysiology (ie: Four characteristics of cardiac cells, identify nodes, measure heart rate, review ECG waveforms and interpretations)
9. Chart and Read ECGs.
10. Recognize interference, loose leads, and other malfunctions
11. Recognize responding/reporting to emergency situations

Materials: Main Textbook: Review Textbook: Cohn, E. & Gilroy-Dooham, M.;

Flip and See ECG 2 nd Edition Additional Material: (Will be reference, not mandatory for student purchase) Bruce Shade;

Fast and Easy ECGs 2 nd Edition In-Class Material: Numerous handouts and online material will be provided Introduction to course, classroom, didactic class sessions, and clinical externship. Review State and Examination board requirements for a Certified Electrocardiogram Technician and Prestige Medical Solutions Policy/Procedures Manual.

Lesso	Reading Assignment	Lecture/Review
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1	Reading assignments will be assigned prior to each class. Students may utilize the syllabus to track what topics will be covered in future classes	<p><i>Introduction to course, classroom, didactic class sessions, and clinical externship. Review State and Examination board requirements for a Certified Electrocardiogram Technician and Prestige Medical Solutions Policy/Procedures Manual.</i></p> <p>Introduction to Anatomy / Physiology of Cardiovascular System Cardiac Cycle, Conduction pathways The ECG Aide/Tech Role The Purpose of Electrocardiograms</p>
2		ECG terminology Equipment/supplies required for ECG Orientation of ECG exam room/lab
3		ECG instrumentation Lead placement Vectors
4		Normal ECGs Calculating rate Introduce rhythm
5		Patient Preparation for ECG test Finding Heartbeat Performing ECGs
6		Identifying Rhythms
7		Common Dysarrhythmias
8		Charting ECGs
9		Reading ECGs
10		Recognize interferences/malfunctions Correction of interferences/malfunctions
11		Recognizing, responding to, reporting emergencies

		Emergency response in lab setting
12	Review: ECG technique, rhythms, rates, charting, lead placement, patient preparation & education.	*FINAL EXAM & Skills Competence Testing* Review of Final All Lab work Due Preparation for National Exam

  
**Dean & Principal**  
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