

2014-15

Electrocardiograph Technician
Syllabus

PRESTIGE
MEDICAL SOLUTIONS

Introduction:

At Prestige Medical Solutions we are fully vested in helping students succeed. Our vision is to be a great place to learn, where people are inspired to better themselves through education and be trained to exceed the expectations of their prospective employers. To help us establish a safe, enjoyable, and rewarding classroom experience we have set non-negotiable site policy and procedures. They cover class etiquette, uniform/identification requirements, and other material relevant to each student. Each student is expected to become familiar with our standards, and individual classroom requirements prior to attending class.

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

2nd Edition

Additional Material: (Will be reference, not mandatory for student purchase)

Bruce Shade;

Fast and Easy ECGs

2nd Edition

In-Class Material: Numerous handouts and online material will be provided

Tentative Course Outline: 48 Clinical Hours

Lesson	Reading Assignment	Lecture/Review
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> <ul style="list-style-type: none"> • Intro to Anatomy/Physiology of Cardiovascular System • Cardiac Cycle, Conduction pathways • The ECG Aide/Tech Role

		<ul style="list-style-type: none"> • The Purpose of Electrocardiograms
2		<ul style="list-style-type: none"> • ECG terminology • Equipment/supplies required for ECG • Orientation of ECG exam room/lab
3		<ul style="list-style-type: none"> • ECG instrumentation • Lead placement • Vectors
4		<ul style="list-style-type: none"> • Normal ECGs • Calculating rate • Introduce rhythms
5		<ul style="list-style-type: none"> • Patient Preparation for ECG test • Finding Heartbeat • Performing ECGs
6		<ul style="list-style-type: none"> • Identifying Rhythms
7		<ul style="list-style-type: none"> • 25 Common Dysrhythmia
8		<ul style="list-style-type: none"> • Charting ECGs
9		<ul style="list-style-type: none"> • Reading ECGs
10		<ul style="list-style-type: none"> • Recognize interferences/malfunctions • Correction of interferences/malfunctions
11		<ul style="list-style-type: none"> • Recognizing, responding to, reporting emergencies • Emergency response in lab setting
12	<p>Review: ECG technique, rhythms, rates, charting, lead placement, patient preparation & education.</p>	<p>*FINAL EXAM & Skills Competence Testing*</p> <ul style="list-style-type: none"> • Review of Final • All Lab work Due • Preparation for National Exam

13	Review: Final Exam	*National Exam*
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Grading:

A=90-100%

B=80-89%

C=75-79% (minimal requirements to pass the course & final)

Fail=below 75%

Quizzes and Exams:

Quizzes: Quizzes will be administered prior to start of every class/lab.

(Multiple Choice, True/False, Fill in the Blank, Rhythm Strip Analysis)

Quizzes count for 20% of the final grade

Final Exam*: **Final counts for 50% of the final grade.** Students must earn a 75% or higher on the didactic examination and successfully pass the lab practical examination. Any test or practical exam missed due to illness may be taken one time within one week of the absence. A doctor's note will be required to re-take the exam, which will be a revised version of the one administered on the scheduled day.

Each student must complete **assigned hours of clinical/lab practice.** Additional clinical practice hours have been provided to allow students to meet the minimum requirements. **Lab Assignments count for 30%.**

Classroom Conduct/Student Responsibility: Please refer to the adopted student handbook.