DISTANCE EDUCATION SAMPLE SYLLABUS

PCT103-DE	**Electrocardiograph Technique & Application**	**48 Total Clock Hours**	**24 Lecture Hours** **24 Laboratory Hours**	**3.0 Quarter Credits**

COURSE TITLE: ELECTROCARDIOGRAPH TECHNIQUE & APPLICATION

PREREQUISITE: AHC101 Introduction to Health Careers; BI0101 Anatomy & Physiology 1

INSTRUCTOR: TBA **CONTACT INFO:** Email - Phone -

OFFICE HOURS: On campus – (if applicable) Virtual -

COURSE SCHEDULE AND DELIVERY MODALITY:

- Lectures are held via Zoom on Tuesdays and Thursdays between 9am and 12noon
- Labs are scheduled on campus on Wednesdays between 9am and 12noon.
- Additional asynchronous classroom activities and assignments are posted on the school portal and are due by Sunday at midnight through the school portal

DIGITAL/ONLINE ACCESS:
Platform: XYZ. Account Creation and Access: MedVance Institute will send invitations to registered non-resident students via their student email address on how to login using their electronic device with internet access. If a student does not have computer audio, a call-in number will also be provided.

TECHNOLOGY ASSISTANCE:
An online login help tutorial is available. For technology challenges or questions, please contact Mr. Johns at 717-555-1234 or submit a helpdesk ticket by emailing helpdesk@iou.edu.

TECHNOLOGY REQUIREMENTS:

- Digital recorder or similar device.
- USB headset with microphone.
- A computer with an updated operating system (e.g. Windows, Mac, Linux) and an Internet browser (e.g. Mozilla Firefox seems to work best for this course.)
- Basic computer audio/video equipment
- DSL Internet connection or a connection speed no less than 7 MB/s
- A media player such as Flash Player or Windows Media Player
- Microsoft Word and PowerPoint

COURSE OVERVIEW: Acquiring a deeper understanding of the cardiovascular system and how it functions, students practice basic electrocardiograph patient care techniques, applying legal and ethical responsibilities. Students learn the use of medical instrumentation, electrocardiogram theory, identification of and response to mechanical problems, recognition of cardiac rhythm and response to emergency findings.

INSTRUCTIONAL STRATEGIES:
This course combines online lecture, completion of online activities, and in-person lab application. Class activities include lecture, demonstration, discussion, practical application, simulations, and presentations.

COURSE OBJECTIVES: Upon successful completion of this course, the student will be able to:

1. Define the key terms associated with electrocardiographs.
2. Describe the cardiac cycle and the conduction systems that controls the cardiac cycle.
3. Describe the electrocardiogram.
4. Maintain equipment for safety and accuracy; identify/eliminate or report interference and mechanical problems.
5. Identify the basic equipment and supplies required for electrocardiography.
6. Demonstrate proper lead placement.
7. Describe and demonstrate the step-by-step procedure for obtaining an EKG and use documentation skills to identify electrocardiographs.
8. Calculate rate and identify rhythms.
9. Recognize a cardiac emergency as seen on the EKG.

COURSE OUTLINE*

1. Review Anatomy and Physiology of Cardiovascular system; cardiac cycle, conduction pathways; role of the ECG Aide; purpose of Electrocardiograms.
2. Terminology, equipment and supplies required for ECG.
3. ECG Instrumentation; lead placement and vectors.
4. Normal ECGs, calculating rate, introduction to rhythms.
5. Patient preparation for ECG tests; finding the heartbeat, taking an ECG
6. Naming rhythms, types of rhythms, clues to identifying rhythms.
7. 25 common dysrhythmias
8. Charting ECGs
9. Reading ECGs
10. Recognizing interference, loose leads and other malfunctions
11. Recognizing, responding to, reporting emergency situations
12. Review & Final Exam.

* Session Course Outline may change as needed and shall be determined by the instructor. Content shall not change, and if so, students shall be given prior notice. However, depending on the term, the course breakout in sessions per week may vary, but all contact hours shall be met within the term, and within the class schedule parameters.

MEDIA, TEXT & RESOURCE REQUIREMENTS:
Cohn, E. & Gilroy-Doohan, M. (2002): Flip and See ECG, 2nd Edition Saunders Elsevier Publishing.
Young, A., et al. (2006): Kinn's The Medical Assistant, an Applied Learning Approach, 9th edition. Text & Workbook: Saunders (Elsevier) Publishing.

GRADING REQUIREMENTS:
Final grades will be determined as follows:

Grade Breakdown	Percentage	Score	Letter Grade	Credits
Quizzes	20%	100 - 90	A	4.0
Tests	25 %	89 - 80	B	3.0
Lab Assignments	30%	79 - 70	C	2.0
Final Exam	25%	69 & Below	F	0.00
Total	100%			

ATTENDANCE REQUIREMENTS:
It is important for the school to be notified when a student is not able to attend any class session. It is the student's responsibility to inquire about make-up work for both classroom lectures and laboratory sessions.

Tardiness and/or absence from any part of a class/lab will constitute a partial absence. A total of three partial absences will constitute a full absence.

Attendance will be recorded by logging in and participating in the regularly scheduled ZOOM sessions. Attendance during lab sessions will be recorded by a student's physical presence on campus to participate in and complete the laboratory hours.

For further information on the attendance policy, consult the current edition of the MedVance Institute catalog and applicable student handbook.

MAKE-UP WORK:
Make-up sessions may be scheduled during hours other than the regularly scheduled meeting times, including breaks and weekends. It is the student's responsibility to inquire about make-up work for both classroom and laboratory sessions. The instructor will not re-teach material, therefore there is no charge for make-up work. For information regarding make-up work, please consult the current edition of the catalog and applicable student handbook.

STUDENT RESPONSIBILITIES:
1. Academic Integrity: As a student in this course (and at this school) you are expected to maintain high degrees of professionalism, commitment to active learning and participation in this class and also integrity in your behavior in and out of the classroom. Any written/oral work that forms the basis of your final grade in the class MUST be your own original work. Do not plagiarize. This includes all quizzes and homework.
2. Accommodations: If you have a documented disability and verification from the Disability Coordinator and wish to discuss academic accommodations, please contact your instructor as soon as possible. It is the student's responsibility to provide documentation of disability to and meet with the Disability Coordinator to request special accommodation before classes start.
3. Participate
4. Complete Assignments on Time
5. Follow "Netiquette" Guidelines
    a. Do not dominate any discussion.
    b. Give other students the opportunity to join in the discussion.
    c. Do not use offensive language. Present ideas appropriately.
    d. Be cautious in using Internet language. For example, do not capitalize all letters since this suggests shouting.
    e. Popular emoticons such as ☺ or / can be helpful to convey your tone but do not overdo or overuse them.
    f. Avoid using vernacular and/or slang language. This could possibly lead to misinterpretation.
    g. Never make fun of someone's ability to read or write.
    h. Share tips with other students.
    i. Keep an "open-mind" and be willing to express even your minority opinion. Minority opinions must be respected.
    j. Think and edit before you push the "Send" button.
    k. Do not hesitate to ask for feedback.
    l. Using humor is acceptable

INSTRUCTOR RESPONSIBILITIES:
1. At the beginning of each course, the instructor will provide a course syllabus to each student in the class. Or emailed?
2. The instructor will evaluate each student's participation, assignments, assessments and projects based on the grading criteria published in the syllabus.
3. Accurate records of each student's attendance and grades will be maintained by the instructor, and retained at the campus. Attendance will be reported at the conclusion of each class meetings; course grade averages will be reported at the mid-term and final weeks, as a minimum.
4. Unannounced quizzes and special projects may be given at the instructor's discretion.

STUDENT: TEACHER RATIO
For information on maximum class capacity and student to teacher ratio for lecture and laboratory courses, please consult the current edition of the catalog.

Week/Hours	Session Topic	Resources	Assignments
Week 1/Hours: 1-8	**Lecture 6 hours Lab 2 hours** Introduction t o course, materials , publication & review of syllabus; review Anatomy and Physiology of Cardiovascular system; cardiac cycle, conduction pathways; role of the ECG Aide, purpose of Electrocardiograms. Discuss terminology associated with ECGs, demonstrate equipment and supplies required for ECG; orientation of ECG exam room/lab.	Text, lab instruction, lab equipment & supplies	**Assignments:** Class notes, participation in lab activities; read Kinn's Chapter 46.
Week 2/Hours 9-16	**Lecture 4 hours Lab 4 hours** Explain ECG Instrumentation; demonstrate lead placement and discuss/explain vectors; practice lead placement. Explain & view normal ECGs; demonstrate calculating rate, introduce rhythms. Practice calculating rate.	Text, lab instruction, lab equipment & supplies	**Assessments:** vocabulary quiz/test **Assignments**: Class notes, participation in lab activities; read Cohn's assigned chapters.
Week 3/Hours 17-24	**Lecture 6 hours Lab 2 hours** Describe patient preparation for ECG tests, finding the heartbeat, taking an ECG. Practice ECGs. Naming rhythms, types of rhythms; clues to identifying rhythms.	Text, lab instruction, lab equipment & supplies	**Assignments**: Class notes, participation in lab activities; read Cohn's assigned chapters.
Week 4/Hours 25-32	**Lecture 1-hour Lab 3 hours** Describe 25 common dysrhythmias: practice ECGs. Explain and demonstrate charting ECGs; practice ECGs.	Text, lab instruction, lab equipment & supplies	**Assessments**: rhythms quiz **Assignments**: Class notes, participation in lab; read Cohn's assigned chapters.
Week 5/Hours 33-40	**Lecture 3-hour Lab 5 hours** Practice reading ECGs. Recognizing interference, loose leads, and other malfunctions; simulate identification of and correction of malfunctions & interference.	Text, lab instruction, lab equipment & supplies	**Assignments**: Class notes, participation in lab activities; review Kinn's pp 947-948.
Week 6/Hours 41-48	**Lecture 1-hour Lab 3 hours** Recognizing; responding to emergency situations; simulate emergency response. Review of ECG technique, rhythms, rates, charting, lead placement, patient preparation & education. Final Exam & skills competence testing.	Text, lab instruction, lab equipment & supplies	**Assessments**: interference quiz **Assignments**: Class notes, participation in lab activities; review Cohn's (all chapters) and Kinn's chapter 46 to prepare for final exam.