

**STUDY & EVALUATION SCHEME**  
**OF**  
**VALUE ADDED COURSE**  
**P.B.B.Sc. Nursing (I YEAR)**

**COURSE TITLE: ELECTROCARDIOGRAPHY: DIAGNOSTIC AND  
MONITORING PERSPECTIVES IN HEALTHCARE**



Accredited with NAAC **A** Grade

**12-B Status from UGC**

**TEERTHANKER MAHAVEER UNIVERSITY**  
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**TEERTHANKER MAHAVEER UNIVERSITY**  
**COLLEGE OF NURSING**  
(Established under Govt. of U. P. Act No. 30, 2008)  
NH-24, Delhi Road, Moradabad (U.P)

<i>Study &amp; Evaluation Scheme</i>	
<u>SUMMARY</u>	
<b>Institute Name</b>	<b>TEERTHANKER MAHAVEER COLLEGE OF NURSING, TMU, MORADABAD.</b>
<b>Name of the course</b>	Electrocardiography: Diagnostic and Monitoring Perspectives in Healthcare
<b>Placement</b>	P.B.B.Sc Nursing I Year
<b>Duration</b>	30 hours
<b>Medium of instruction</b>	English
<b>Minimum Required Attendance</b>	Theory 75%

Course Developed by: Prof. Jitendra Singh HOD MSN Department

**Course Outcomes:**

**At the end of the course, the students will be able to:**

CO-1 Remembering the basic anatomy of the heart and the principles of cardiac electrophysiology relevant to ECG interpretation.

CO-2 Understanding the standard components of a normal ECG tracing and their physiological significance.

CO-3 Applying the ECG interpretation skills to recognize common abnormalities such as arrhythmias, ischemic changes, and conduction defects.

CO-4 Analyzing the ECG patterns in clinical case scenarios to distinguish between normal and abnormal cardiac rhythms.

CO-5 Evaluating the accuracy and clinical relevance of ECG findings to assist in clinical decision-making.

<b>Course code:</b> <b>VAC-07</b>	<b>ELECTROCARDIOGRAPHY: DIAGNOSTIC AND MONITORING PERSPECTIVES IN HEALTHCARE</b>	<b>L- 20 P-10</b>
<b>Course Content:</b>		
Unit-I	<b>Introduction to ECG</b> - Overview of cardiac conduction system - Electrophysiology of heart - Components of ECG (P wave, QRS complex, T wave, etc.) - ECG machine: parts, leads, paper speed, and calibration	2 Hours
Unit-II	<b>Normal ECG Interpretation</b> - Standard 12-lead ECG - Steps of ECG interpretation - Normal values and waveforms - Sinus rhythm and its variations	8 Hours
Unit-III	<b>Abnormal ECG Findings</b> - Bradycardia, tachycardia, atrial fibrillation - Ventricular arrhythmias - Myocardial infarction changes - ST elevation/depression, T wave inversion - Bundle branch blocks, AV blocks	8 Hours
Unit-IV	<b>Clinical Application of ECG</b> - Interpretation in emergency care - Nursing responsibilities during ECG recording - Documentation and interpretation reports	2 Hours
Unit-V	<b>Hands-on Skill Practice</b> - Lead placement and machine use - Simulated ECG tracing interpretation - Case-based scenarios.	10 Hours
References	<b>Reference Books</b> 1. Chaurasia, B.D. <i>Human Anatomy</i> . 2. Dubin, D. <i>Rapid Interpretation of ECGs</i> , Latest Edition. 3. Karthikeyan, G. <i>Textbook of Electrocardiography</i> . 4. Brunner & Suddarth's <i>Textbook of Medical-Surgical Nursing</i> . 5. Marieb, E.N. <i>Essentials of Human Anatomy and Physiology</i> .  <b>Journal References</b>	

1. *Indian Heart Journal*
2. *Journal of Cardiovascular Nursing*
3. *Indian Journal of Critical Care Medicine*

**Net References**

1. <https://www.ecglibrary.com>
2. <https://www.ekginterpretation.com>
3. <https://www.clevelandclinic.org/health/diseases/16846-electrocardiogram>
4. <https://www.heart.org>