Section:

Academic Resume

Richard W. Lippert

Portfolio

15FA - 16SP

Richard W. Lippert, MBA, CSP, NCEE, NRP

ACADEMIC RESUME

Assistant Professor
Clinical Coordinator
Paramedic Program

Community College of Allegheny County - Boyce Campus
Room N-306B
595 Beatty Road
Monroeville, PA 15146-1396

Educational Background

Post-Graduate

Point Park University
Pittsburgh, Pennsylvania
Master of Business Administration

California University of Pennsylvania
California, PA 15419
M.S.Ed. (Incomplete)

Undergraduate

University of Pittsburgh
Pittsburgh, Pennsylvania
Bachelor of Science, Psychology

Other Training

Armstrong County Memorial Hospital
Kittanning, Pennsylvania
Pennsylvania State Paramedic Certification

Professional Credentials

Board of Certified Safety Professionals

2015- Present Associate Safety Professional or ASP

Pennsylvania Department of Health

1995- Present	Emergency Medical Technician Paramedic
1995- Present	Emergency Medical Technician-Instructor
1994- Present	Basic Vehicle Rescue - Instructor
1993- Present	Hazardous Materials Technician
1992	Basic Vehicle Rescue
1992	Basic Rescue Practices
1992- Present	Emergency Medical Technician

Richard W. Lippert, MBA, CSP, NCEE, NRP

Emergency Medical Services Educator Certification Services (EMSECS)
2009- Present Nationally Certified EMS Instructor (NCEE)

National Registry of Emergency Medical Technicians
1998- Present National Registered Emergency Medical Technician Paramedic

American Academy of Pediatrics
2001-Present ALS Course Coordinator, Pediatric Education for Prehospital Professionals
Pediatric First Aid for Caregivers and Teachers (PedFACTS) Instructor

American College of Emergency Physicians: Pennsylvania
2001-Present Pediatric International Trauma Life Support-Instructor
1999-Present Pediatric International Trauma Life Support Provider
1998-Present International Trauma Life Support- Affiliate Faculty/Instructor
1996-Present International Trauma Life Support Provider

American Heart Association
2000-Present Neonatal Advanced Life Support
1998-Present Advanced Cardiac Life Support- Regional Faculty/Instructor
1998-Present Pediatric Advanced Life Support-Regional Faculty/Instructor
1996-Present Advanced Cardiac Life Support
1996-Present Pediatric Advanced Life Support
1995-Present Basic Cardiac Life Support- Regional Faculty/Instructor
1991-Present Basic Cardiac Life Support

National Disaster Life Support Foundation, Inc
2009 - Present Instructor
- Core Disaster Life Support (CDLS)
- Basic Disaster Life Support (BDLS)
- Advanced Disaster Life Support (ADLS)

Emergency Care and Safety Institute
2008 - Present Training Center Institute and Course Coordinator

National Highway Traffic Safety Administration/National Safe Kids Organization
2002-Present Child Passenger Safety Technician-Instructor
2001-Present Child Passenger Safety Technician

National Association of Emergency Medical Technicians
2013- Present Pre Hospital Trauma Life Support Instructor

Richard W. Lippert, MBA, CSP, NCEE, NRP

Teaching Responsibilities

ALH 106 Basic Life Support

Pre-requisite(s): None

Co-requisite(s): None

Course Description: This course in Basic Life Support (BLS)for Health Care Providers includes background information about heart disease, risk factors, prudent heart living and heart and lung function. One- and two-rescuer adult cardiopulmonary resuscitation (CPR), foreign body airway obstruction management, and pediatric resuscitation are also taught. Students receive certification from the American Heart Association. This course requires a per credit health career fee; check the tuition and fee schedule for the current rate.

ALH 140 Medical Terminology

Pre-requisite(s): None

Co-requisite(s): None

Course Description: This course is a basic study of the professional language of medicine. It is designed to include word construction, pronunciation, spelling, definition and use of terms related to all areas of medical science, hospital service and health related professions. This course is designed to give the student a basic knowledge of anatomy, pathology, surgical procedures, diagnostic procedures and symptomatology.

PAM 103 Cardiology & Pulmonology – Lecture and Lab

Pre-requisite(s): BIO-115 or BIO-162, PAM-101, PAM-102 & PAM-112

Co-requisite(s): PAM-104, PAM-105 & PAM-116

Course Description: This course covers cardiology and pulmonology for the paramedic, involving interpretation of cardiac rhythms, treatment protocols and assessment and intervention of respiratory deficiencies. Emphasis is placed on identifying EKG rhythms and using patient assessment information.

PAM 116 Paramedic Clinical 2

Pre-requisite(s): BIO-115 or BIO-162, PAM-101, PAM-102 & PAM-11

Co-requisite(s): PAM-104, PAM-105 & PAM-116

Course Description: This course covers cardiology and pulmonology for the paramedic, involving interpretation of cardiac rhythms, treatment protocols and assessment and intervention of respiratory deficiencies. Emphasis is placed on identifying EKG rhythms and using patient assessment information.

PAM 201 Medical Emergencies

Pre-requisite(s): PAM-103, PAM-104, PAM-105 & PAM-116

Co-requisite(s): PAM-202, PAM-213 & PAM-214

Course Description: This course covers pathophysiology and psychosocial needs to assess and treat the following medical emergencies: Neurological, Abdominal and Gastrointestinal; Immunology; Endocrine; Toxicological; Hematological; Genitourinary/gynecological; Psychiatric; Infectious diseases.

PAM 202 Integrated Paramedic Concepts

Pre-requisite(s): PAM-103, PAM-104, PAM-105 & PAM-116

Co-requisite(s): PAM-201, PAM-213 & PAM-214

Course Description: This course will integrate paramedic program information and skills in accordance with the National Registry of EMTs psychomotor and didactic testing.

Richard W. Lippert, MBA, CSP, NCEE, NRP

PAM 213 Paramedic Clinical 3

Pre-requisite(s): PAM-103, PAM-104, PAM-105 & PAM-116

Co-requisite(s): PAM-210, PAM-202 & PAM-214

Course Description: This course is a clinical rotation which will involve hospital and field application of skills and techniques learned in the classroom. Students will complete required patient contacts and track interventions. Students are responsible for providing and paying for transportation to all clinical sites as well as all other related costs. This course is graded on a pass/fail basis.

PAM 214 Paramedic Field Externship

Pre-requisite(s): PAM-103, PAM-104, PAM-105 & PAM-116

Co-requisite(s): PAM-210, PAM-202 & PAM-213

Course Description: This course incorporates all paramedic program knowledge, skills and affective techniques into a comprehensive field externship. Each student will be assigned to an EMS service and will perform as a team leader under supervision of a specified preceptor. Students will complete required patient contacts and track interventions. Students are responsible for providing and paying for transportation to all clinical sites as well as all other related costs. This course is graded on a pass/fail basis.

Section:

One Course Outline

Richard W. Lippert

Portfolio

15FA - 16SP

INSTRUCTOR SYLLABUS/ COURSE OUTLINE

Instructor:	**Richard W. Lippert**	**Office Hours:**	**As Posted**
Telephone:	**724-325-6884 / 724-964-6731 (text)**	**Office Location:**	**Boyce Campus N-220**
E-Mail Address:	**rlippert@ccac.edu**		

Class Section(s) Time & Location:

Section	Dates	Days	Time	Room
BC01	1/12 – 5/8	M/W	12:30-2:10PM	N-316

This Course Outline has been reviewed and approved by:

Neil R. Jones, M.Ed.,NREMT-P
Paramedic Program Director
1/19/16
Date

Thomas Stein, M.D.
Program Medical Director
23 JAN 16
Date

Course Number: PAM-103 BC 01

Course Title: Cardiology and Pulmonology

Course Credits: 5

Lecture hours: 4 **Lab hours:** 2 **Other hours:**

Pre-requisite(s): BIO-115 or BIO-162, PAM-101, PAM-102 & PAM-112

Co-requisite(s): PAM-104, PAM-105 & PAM-116

Course Description: This course covers cardiology and pulmonology for the paramedic, involving interpretation of cardiac rhythms, treatment protocols and assessment and intervention of respiratory deficiencies. Emphasis is placed on identifying EKG rhythms and using patient assessment information.

Learning Outcomes: Upon successful completion of the course, the student will:

1. **Describe components in a normal EKG tracing and correlate to activity in the cardiac cycle.**
2. **Identify abnormal EKGs including tachycardias, bradycardias, AV blocks, atrial rhythms, ventricular rhythms, premature contractions, paced rhythms and asystole in both 3-lead and 12-lead format.**
3. **Demonstrate proper electrode placement and technique to obtain 3-lead and 12-lead EKG readings.**
4. **Apply rhythm interpretation and select proper treatment interventions for various cardiac dysrhythmias.**
5. **Demonstrate ability to use cardiac monitor/defibrillators to deliver appropriate therapeutic electrical interventions.**
6. **List treatment for various cardiovascular conditions.**

7. **Classify respiratory system dysfunctions and proper treatment interventions.**
8. **Utilize pulse oximetry and capnography to assess respiratory system function.**
9. **Describe V/Q mismatch and appropriate interventions.**
10. **Apply paramedic pharmacology to cardiac and pulmonary conditions.**

A student completing the lecture portion of this course with a letter grade of "C" or better will be able to:

1. **Describe risk factors related to cardiovascular disease.**
2. **Understand the basic structure and function of the cardiovascular system.**
3. **Identify the major normal and abnormal heart sounds.**
4. **Describe the cardiac cycle, including diastole and systole.**
5. **Identify the various types of blood vessels.**
6. **Explain how the heart functions as a pump, including the concepts of cardiac output, stroke volume, heart rate, and ejection fraction.**
7. **Understand how electrical conduction activity occurs within the heart.**
8. **Understand how the autonomic nervous system controls the functioning of the heart.**
9. **Identify the various classes of drugs that influence the sympathetic nervous system.**
10. **Understand how the sympathetic nervous system regulates blood pressure.**
11. **Explain patient assessment procedures for cardiovascular problems, including scene size-up, primary assessment, history taking, secondary assessment, and reassessment.**
12. **Recognize the medications commonly prescribed to patients with cardiovascular diseases.**
13. **Describe the placement of leads and electrodes in 3-lead ECG monitoring.**
14. **Identify the components of an ECG rhythm strip.**
15. **Understand how to determine heart rate.**
16. **Describe the placement of 12-lead ECG leads.**
17. **Describe the placement of 15- and 18-lead ECG leads.**
18. **Understand how to interpret 12-lead ECG findings, including atrial, junctional, and ventricular rhythms.**
19. **Recognize normal sinus rhythm, and list the various types of cardiac dysrhythmias.**
20. **Discuss manual defibrillation, cardioversion, and transcutaneous pacing as techniques for managing cardiac emergencies.**
21. **Understand the indications and procedure for operating an automated external defibrillator (AED).**
22. **Describe emergency medical care for the symptomatic patient with bradycardia.**
23. **Describe emergency medical care for the symptomatic patient with tachycardia.**
24. **Describe emergency medical care for the patient with cardiac arrest, including the elements of basic life support (BLS) and advanced cardiac life support (ACLS).**
25. **Describe the components of care following resuscitation, including how to determine return of spontaneous circulation.**
26. **Describe the pathophysiology of atherosclerosis, peripheral vascular disorders, acute coronary syndrome, and angina pectoris.**
27. **Discuss the assessment and management of coronary disease and angina.**
28. **List the signs and symptoms of acute myocardial infarction (AMI).**
29. **Explain the procedure for managing AMI and suspected AMI in the field, including STEMI and non-STEMI presentations.**
30. **Understand the benefits of reperfusion techniques (fibrinolysis and percutaneous intervention) in patients with AMI or suspected AMI.**
31. **Discuss the pathophysiology of congestive heart failure and its signs, symptoms, and treatment.**
32. **Discuss the pathophysiology of cardiac tamponade and its signs, symptoms, and treatment.**
33. **Discuss the pathophysiology of cardiogenic shock and its signs, symptoms, and treatment.**
34. **Describe the pathophysiology, assessment, and management of aortic aneurysms, including both acute dissecting aneurysm of the aorta and expanding and ruptured abdominal aortic aneurysms.**
35. **Discuss the pathophysiology of hypertensive emergencies and their signs, symptoms, and treatment.**
36. **Describe the risks posed by thromboembolism.**
37. **Identify types of congenital heart disease.**
38. **Describe the pathophysiology of hypertrophic cardiomyopathy.**
39. **Describe the pathophysiology of other cardiovascular anomalies: coarctation of the aorta, truncus arteriosus, tricuspid atresia, hypoplastic left heart syndrome, tetralogy of Fallot, transposition of the great arteries, and total anomalous pulmonary venous return.**

40. **Describe how infections—endocarditis, pericarditis, and rheumatic fever—can damage the heart.**
41. **Discuss the epidemiology, morbidity, and mortality of respiratory illness in the United States.**
42. **Define hypoventilation and hyperventilation, and outline the conditions with which they are often associated.**
43. **List the structures of the upper and lower airways and accessory structures of the respiratory system.**
44. **List the three primary functions of the respiratory system.**
45. **Explain how gas exchange occurs at the interface of the alveoli and the pulmonary capillary bed.**
46. **Analyze the neurologic, cardiovascular, muscular, and renal mechanisms of respiratory control.**
47. **Analyze proper measures for ensuring scene safety when called to care for a patient with dyspnea.**
48. **Describe the factors that contribute to a general impression of the patient's condition and an accurate estimation of his or her degree of respiratory distress.**
49. **Discuss the typical presentation of a patient with dyspnea, and list the signs and symptoms that indicate a high level of respiratory distress.**
50. **Explain the special patient assessment and care considerations for older adult patients with respiratory distress.**
51. **Identify breathing alterations that may indicate respiratory distress, and become familiar with the signs of increased work of breathing.**
52. **Describe the abnormal breathing patterns associated with neurologic insults that depress the respiratory center in the brain.**
53. **Become familiar with the signs of lung consolidation, including abnormal breath sounds associated with excessive fluid in the lungs.**
54. **Explain how to assess the adequacy of the circulation of a patient with dyspnea.**
55. **Discuss how transport decisions are made for patients with respiratory distress.**
56. **Describe how to investigate the chief complaint of a patient who is having trouble breathing.**
57. **Identify each component of the SAMPLE history as it applies to patients with dyspnea.**
58. **List the over-the-counter medications likely to be used by patients with respiratory conditions, and explain what each is used for.**
59. **Describe the components of the physical examination of a patient with dyspnea.**
60. **Survey the devices used to monitor patients with respiratory complaints.**
61. **Describe interventions available for treating patients with dyspnea.**
62. **Discuss the pathophysiology, assessment, and management of a patient whose upper airway has an anatomic or foreign body obstruction.**
63. **Discuss the pathophysiology, assessment, and management of a patient who has upper airway inflammation caused by infection.**
64. **Discuss the pathophysiology, assessment, and management of a patient who has aspirated food, liquid (including blood), or a foreign body.**
65. **Discuss the pathophysiology, assessment, and management of a patient with an obstructive lower airway disease.**
66. **List and explain the three features that characterize asthma and how each is treated.**
67. **Compare the signs and symptoms of asthma, emphysema, and chronic bronchitis.**
68. **Discuss complications that can cause a patient with COPD to decompensate.**
69. **Explain the concepts of hypoxic drive and auto-PEEP as they relate to COPD.**
70. **Discuss the pathophysiology, assessment, and management of patients with pulmonary infections, atelectasis, cancer, toxic inhalations, pulmonary edema, and acute respiratory distress syndrome.**
71. **Discuss the pathophysiology, assessment, and management of patients with pneumothorax, pleural effusion, and pulmonary embolism.**
72. **Describe age-related variations in respiratory anatomy and the pathophysiology of respiratory disease.**
73. **Discuss the importance of the American Heart Association's five links of the Chain of Survival to a successful code.**
74. **Describe the management acronym SMART and each of its objectives.**
75. **Describe how progressive communities can improve survival of prehospital cardiac arrest patients.**
76. **Discuss the use of simulation in CPR training.**
77. **Discuss some of the revisions made by the American Heart Association (AHA) and International Liaison Committee on Resuscitation (ILCOR) to the Emergency Cardiovascular Care (ECC) and CPR guidelines.**
78. **Describe how you, your crew, and your agency can incorporate the latest guidelines into the**

management of field codes.

79. **Discuss some of the theories that have shifted the focus of certain CPR techniques.**
80. **Summarize the steps of the BLS healthcare provider algorithm and identify the key to a successful outcome in patients with cardiac arrest.**
81. **Explain how two-rescuer CPR can benefit the paramedic and the patient.**
82. **Explain the steps in providing two-rescuer adult CPR, including the method for switching positions during the process.**
83. **Identify the various age groups of infants and children for the purposes of resuscitation procedures and equipment.**
84. **Explain the steps in providing child and infant CPR, including the method for switching positions during the process.**
85. **Discuss guidelines for circumstances that require the use of an automated external defibrillator (AED) on both adult and pediatric patients experiencing cardiac arrest.**
86. **Describe situations in which manual or automated defibrillation would be appropriate.**
87. **Summarize how to perform manual defibrillation on an adult and child/infant.**
88. **Summarize how to use an automated external defibrillator.**
89. **Describe how to manage a witnessed arrest versus a nonwitnessed arrest.**
90. **Explain special situations related to the use of automated external defibrillation.**
91. **Review the management of a cardiac arrest based on analysis of the electrocardiogram (ECG) as either a shockable (ventricular fibrillation or ventricular tachycardia) or a nonshockable (pulseless electrical activity or asystole) rhythm.**
92. **List the "Hs and Ts" and how they can be managed in the field.**
93. **Describe the different mechanical devices that are available to assist in delivering improved circulatory efforts during CPR.**
94. **Describe the general steps of postresuscitative care.**
95. **Describe the ethical issues related to patient resuscitation, providing examples of when not to start CPR on a patient.**
96. **Explain the various factors involved in the decision to stop CPR once it has been started on a patient.**
97. **Discuss the value of scene choreography at a field code.**
98. **Describe the typical roles of the code team leader and code team members at a field code.**
99. **Plan for a code by reviewing a sample script for a typical prehospital cardiac arrest resuscitation.**

A student completing this course with a letter grade of "C" or better will be able to:

1. **Demonstrate how to assess and provide emergency medical care for a patient with chest pain or discomfort.**
2. **Demonstrate how to perform cardiac monitoring.**
3. **Demonstrate how to acquire a 12-lead ECG.**
4. **Demonstrate how to perform manual defibrillation.**
5. **Demonstrate how to perform defibrillation with an AED.**
6. **Demonstrate how to perform cardioversion.**
7. **Demonstrate how to perform transcutaneous cardiac pacing.**
8. **Demonstrate how to manage symptomatic bradycardia.**
9. **Demonstrate how to perform ACLS care.**
10. **Demonstrate how to perform postresuscitative care.**
11. **Demonstrate the process of history taking for a patient with dyspnea.**
12. **Demonstrate how to help a patient use a metered-dose inhaler.**
13. **Demonstrate how to teach a patient to use a small-volume nebulizer.**
14. **Demonstrate the application of a CPAP/BiPAP unit.**
15. **Demonstrate how to perform one- and two-rescuer adult CPR.**
16. **Demonstrate how to perform CPR in a child who is between age 1 year and the onset of puberty.**
17. **Demonstrate how to perform CPR in an infant who is between ages 1 month and 1 year.**
18. **Demonstrate how to perform manual defibrillation in an adult patient.**
19. **Demonstrate how to perform manual defibrillation in an infant or child.**
20. **Demonstrate how to manage a patient in ventricular fibrillation or ventricular tachycardia.**
21. **Demonstrate how to manage a patient in asystole or pulseless electrical activity.**
22. **Demonstrate the steps of postresuscitative care.**
23. **Demonstrate how to be committed to the success of the team.**

24. Demonstrate the roles of the code team member and the code team leader.

Materials and Resources:

Required Text(s):	**Emergency Care in the Streets – 7th Edition Nancy Caroline/Jones & Bartlett** **Prehospital Emergency Pharmacology – 7th Edition; Bledsoe & Clayden/Prentice Hall**
Required Materials:	**ECG Measuring Calipers**
Recommended Text(s):	**N/A**
Audio-Visual Materials:	**N/A**
Directed Study:	**N/A**
Open Lab, Tutoring, etc.	**N/A**

Teaching Methods:

This course is presented in a classroom environment, utilizing lecture, case studies, small group discussion and individual/group-work assignments. Students are expected to prepare for each class session by completing the reading assignments and any homework assigned. The student should check the Blackboard Announcements and Course Documents button for weekly information. The anticipated student preparation time required to be successful in this class is an average of 1-2 hours daily.

Evaluation Plan:

The Allied Health Department utilizes the following classroom grading system:

93% and above = A
86% - 92% = B
75% - 85% = C
65% - 74% = D
64% and below = F

- **Quizzes (260 points possible):** One quiz per week maximum, 13 quizzes- 20 points each
- **Video – Cardiac Patient Assessment: (50 points possible)**
- **Exam 1 (100 points possible):** Covering Chapter 17 (up through Pg. 964) and assigned medications
- **Exam 2 (100 points possible):** Covering Chapter 17 (primarily Pgs. 964 – 1035) and assigned medication
- **Exam 3 (100 points possible**): Covering Chapter 16 and assigned medication
- **Final Exam (150 points possible):** Covering Chapters 16-17 and assigned medications

Other Policies and Procedures:

1. Attendance Policy
Students are expected to attend all didactic sessions, to be prompt and to remain in the classroom for the entire scheduled time. Students are responsible for all information, materials and skills presented at didactic sessions. Students may miss a maximum of 4 didactic sessions. For every session missed over 4, the student's letter grade will be reduced each time.

2. Assignment Information
Due dates for all assignments are listed in the Course Plan contained in this document. Quizzes will not be announced in advance. The Exam Schedule is listed in the Course Plan.

3. Special Accommodations
It is the student's responsibility to inform the instructor of this course their needs for special accommodations. The student must also provide proper and current documentation from CCAC's Supportive Services for Students with Disabilities department with what specific accommodations are necessary. This information and required documentation must be presented to the instructor no later than the end of Week One (1) of the semester.

4. Course Success
- Complete assignments on time as written in the course outline.
- Studying every day (1-2 hour average).
- Communicating regularly with course instructor if you have a problem.

5. Assessment of Student Learning
CCAC has a college-wide assessment program, the purpose of which is the improvement of instruction and student learning. Course outcomes, program objectives and the general education goals (Communication, Technology Competency, Information Literacy, Critical Thinking and Problem Solving, Quantitative and Scientific Reasoning, Culture and Society) will be assessed. As a student, you should focus on the goals, objectives and learning outcomes of your courses and program of study to help you analyze your performance and make your learning most effective. It is always CCAC's goal to have students function at their fullest capacity.

6. Additional Policies and Procedures
All students are required to adhere to the policies and procedures contained in the current CCAC Student Handbook. This includes but is not limited to the policies regarding cheating and plagiarism. In addition, all PAM students are required to adhere to the Paramedic Program Policies and Procedures contained in the Fall 2014 Manual. This manual may be updated as needed throughout your PAM Program; if updated, students will be provided with the revised copy.

7. Non-Discrimination Policy
CCAC does not discriminate based upon race, color, religion, national origin, ancestry or place of birth, sex, gender identity or expression, sexual orientation, disability, marital status, familial status, veteran status, age or use of a guide or support animal because of blindness, deafness or physical disability of any individual. Questions may be emailed to diversity@ccac.edu.

Drop/ Add/ Withdrawal
Notifying the instructor of your intention to drop or withdraw does NOT count as an official withdrawal from a course. Procedures for drop/add/withdrawal can be found at www.ccac.edu/registration-services/.
Students receiving financial assistance through grants, loans, and veterans benefits should consult with the Financial Aid or Military and Veterans Service Center before dropping, adding, or withdrawing from class. Students' aid may be impacted by a change to the total number of credits in which the student is enrolled, or by receiving a W grade in one or more classes.

Consult the Academic Calendar on MyCCAC portal for these important deadline dates. Note that courses that do not meet within the standard 16- and 14-week terms have unique drop/withdrawal deadlines. Failure to process these forms with the Registration office by the published deadline may result in F grades and have financial consequences.

Students with Disabilities:
The Community College of Allegheny County makes every effort to provide reasonable accommodations for students with disabilities. Questions about services and procedures for students with disabilities should be directed to the Office of Supportive Services at your campus.

Title IX Notification
Know your rights as a student. Title IX, the Clery Act and the SaVE Act prohibits sexual harassment, sexual misconduct and acts of sexual violence, including sexual assault, domestic violence, dating violence, and stalking. See the complete policy and how to report at https://www.ccac.edu/nondiscrimination/.

MyCCAC Portal and Academic Email
The MyCCAC portal provides access to all course, grade and administrative information at https://my.ccac.edu. All email correspondence regarding your academic work is to be conducted to and from your CCAC academic email account.

Access your course information, email, Student Handbook, incident reporting and college services at:

https://my.ccac.edu

Course Outline Corrections:
During the semester/session, reasonable changes to the course outline may be academically appropriate. Students will be notified of these adjustments by the instructor in a timely manner.

Course Plan: PAM 103 Section: BC01 Cardiology and Pulmonology

Class Week/Date	Lesson or Topic	Learning Activities	Assignments	Evaluation
1 Jan 19-25	Anatomy and Physiology Caroline: Chapter 7 Pgs. 240 – 255 Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 908 – 918 **LAB** None	Chapter 17: YOU are the Medic: Parts 1- 2		
2 Jan 26-Feb 1	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 918 – 927 **LAB** Adult CPR and Obstructed Airway Skill Drill 4: Performing Defibrillation With an AED (Caroline: 996)			
3 Feb 2-Feb 8	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 927 – 936 **LAB** Infant CPR and Obstructed Airway	Chapter 17: YOU are the Medic: Part 3 Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Norepinephrine – Pg. 465 Phenylephrine – Pg. 137 Isoproterenol – Pg. 452 Dopamine – Pg. 439	

4 Feb 9-15	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 936 – 946 **LAB** Skill Drill 1: Performing Cardiac Monitoring (Caroline: 938) Skill Drill 2: Acquiring a 12-Lead ECG (Caroline: 967)	Chapter 17: YOU are the Medic: Part 4 Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Dobutamine – Pg. 438 Inamrinonel – Pg. 450 Milrinone – Pg. 460 Vasopressin – Pg. 479	
5 Feb 16-22	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 947 – 964 Review **LAB** ECG Interpretation	Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Propranolol – Pg. 471 Sotalol HCL – Pg. 476 Metoprolol – Pg. 458 Labetalol – Pg. 453	
6 Feb 23-29	Exam 1 Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 964 – 990 **LAB** ECG Interpretation	Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Atenolol – Pg. 152 Esmolol – Pg. 443 Lidocaine – Pg. 454 Procainamide – Pg. 470	**Exam 1 - 100 points Covering Chapter 17 up through Pg. 964**

7 March 1-7	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 964 – 990 **LAB** ECG Interpretation Skill Drill 3: Performing Manual Defibrillation (Caroline: 994) Skill Drill 5: Performing Cardioversion (Caroline: 998)	Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Adenosine – Pg. 425 Verapamil – Pg. 480 Diltiazem – Pg. 436 Amiodarone – Pg. 428	
8 March 8-14	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 990 – 1011 **LAB** ECG Interpretation Skill Drill 6: Performing Transcutaneous Pacing (Caroline: 1000) Child CPR and Obstructed Airway	Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Phenytoin – Pg. 468 Edrophonium – Pg. 440 Magnesium Sulfate – Pg. 455 Atropine – Pg. 431	
9 March 15-20	Cardiovascular Emergencies Caroline: Chapter 17 Pgs. 1011 - 1035 **LAB** ECG Interpretation Administering Sublingual Nitroglycerin Cardiac Arrest Management	Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Digoxin – Pg. 436 Heparin – Pg. 446 Enoxaparin – Pg. 440 Clopidogrel – Pg. 434	

March 21-28	**Mid-Term Break**			
10 March 29- April 4	Review Chapter 17 Exam 2 **LAB** ECG Interpretation Cardiac Arrest Management	Chapter 17: Prep Kit	Chapter 17: Assessment in Action – Pg. 1035	**Exam 2 - 100 points Covering Chapter 17, primarily Pgs. 964 - 1035**
11 April 5-11	Anatomy and Physiology Caroline: Chapter 7 Pgs. 232 – 240 Respiratory Emergencies Caroline: Chapter 16 Pgs. 850 – 863 **LAB** ECG Interpretation Skill Drill 12: Assisting Metered-Dose Inhaler (Caroline 530) Skill Drill 13: Administering Med via Nebulizer (Caroline 532)	Chapter 16: YOU are the Medic: Parts 1- 2 Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Abciximab – Pg. 424 Eptifibatide – Pg. 442 Tirofiban – Pg. 479 Streptokinase – Pg. 477	
12 April 12 – 18	Respiratory Emergencies Caroline: Chapter 16 Pgs. 863 – 880 **LAB** ECG Interpretation Skill Drill 11: Using CPAP (Caroline: 765)	Chapter 16: YOU are the Medic: Part 3 Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Anistreplase – Pg. 429 Alteplase – Pg. 426 Tenectplase – Pg. 191 Reteplase – Pg. 472	

13 April 19-25	Respiratory Emergencies Caroline: Chapter 16 Pgs. 880 – 888 **LAB** ECG Interpretation Respiratory and Cardiac Patient Management	Chapter 16: YOU are the Medic: Part 4 Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Sodium Bicarbonate – Pg. 474 Furosemide – Pg. 445 Bumetanide – Pg. 431 Calcium Chloride – Pg. 432	
14 April 26- May2	Respiratory Emergencies Caroline: Chapter 16 Pgs. 888 – 907 **LAB** ECG Interpretation Respiratory and Cardiac Patient Management	Chapter 16: Prep Kit Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Chapter 16: Assessment in Action – Pg. 907 Bledsoe/Clayden - Appendix B Nesiritide – Pg. 461 Nicardipine – Pg. 462 Clevidipine – Pg. 433 Nifedipine – Pg. 462	
15 May 3-9	Exam 3 Review Chapters 16 & 17 **LAB** ECG Interpretation Respiratory and Cardiac Patient Management	Bledsoe/Clayden Student must know medication name, mechanism of action, indications, contraindications, complications, routes of administration, side effects, interactions, dose and any specific administration considerations	Bledsoe/Clayden - Appendix B Enalaprilat – Pg. 440 Captopril – Pg. 432 Sodium Nitroprusside – Pg. 475 Hydralazine – Pg. 447	**Exam 3 - 100 points Covering Chapter 16**
16 May 10-16	**Final Exam Week**			**Final Exam - 150 points Covering Chapters 16-17**

Section:

Sample Assignments

Richard W. Lippert

Portfolio

15FA - 16SP

Sample Assignment

... Updated from previous portfolio...

PART 1

Writing activity: You will see your name next to a topic. You are responsible for preparing a written paper on causes, signs, symptoms, treatment, and any other related information. **You will have an opportunity to present your findings on Tuesday, September 15th in class.**

Name	Topic
Name removed for privacy	Cholecystitis and biliary tract disorders
Name removed for privacy	Appendicitis
Name removed for privacy	Diverticulitis
Name removed for privacy	Pancreatitis
Name removed for privacy	Crohn disease
Name removed for privacy	Acute gastroenteritis
Name removed for privacy	Gastroesophageal reflux disease (GERD)

Upload your writing activity to Blackboard by Monday, September 14 at noon in the Assignment section under "Class Assignment

Section:

Sample of Lab Assignment

Richard W. Lippert

Portfolio

15FA - 16SP

Sample Lab Assignment

PAM 103 Cardiology & Pulmonology - Lab

This course covers cardiology and pulmonology for the paramedic, involving interpretation of cardiac rhythms, treatment protocols and assessment and intervention of respiratory deficiencies. Emphasis is placed on identifying EKG rhythms and using patient assessment information.

This lab assignment was chosen begin to address the following objectives of the course:

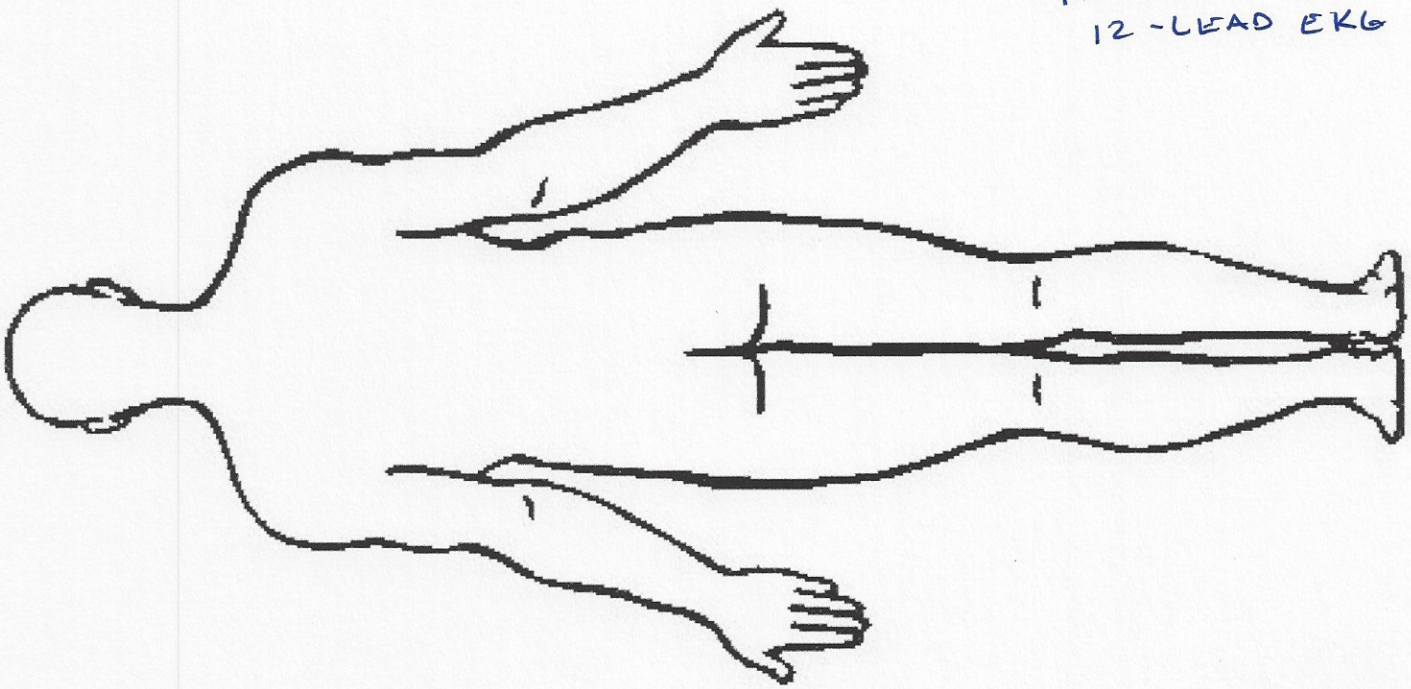
1. Describe components in a normal EKG tracing and correlate to activity in the cardiac cycle.
2. Identify abnormal EKGs including tachycardias, bradycardias, AV blocks, atrial rhythms, ventricular rhythms, premature contractions, paced rhythms and asystole in both 3-lead and 12-lead format.
3. Demonstrate proper electrode placement and technique to obtain 3-lead and 12-lead EKG readings.

Overview

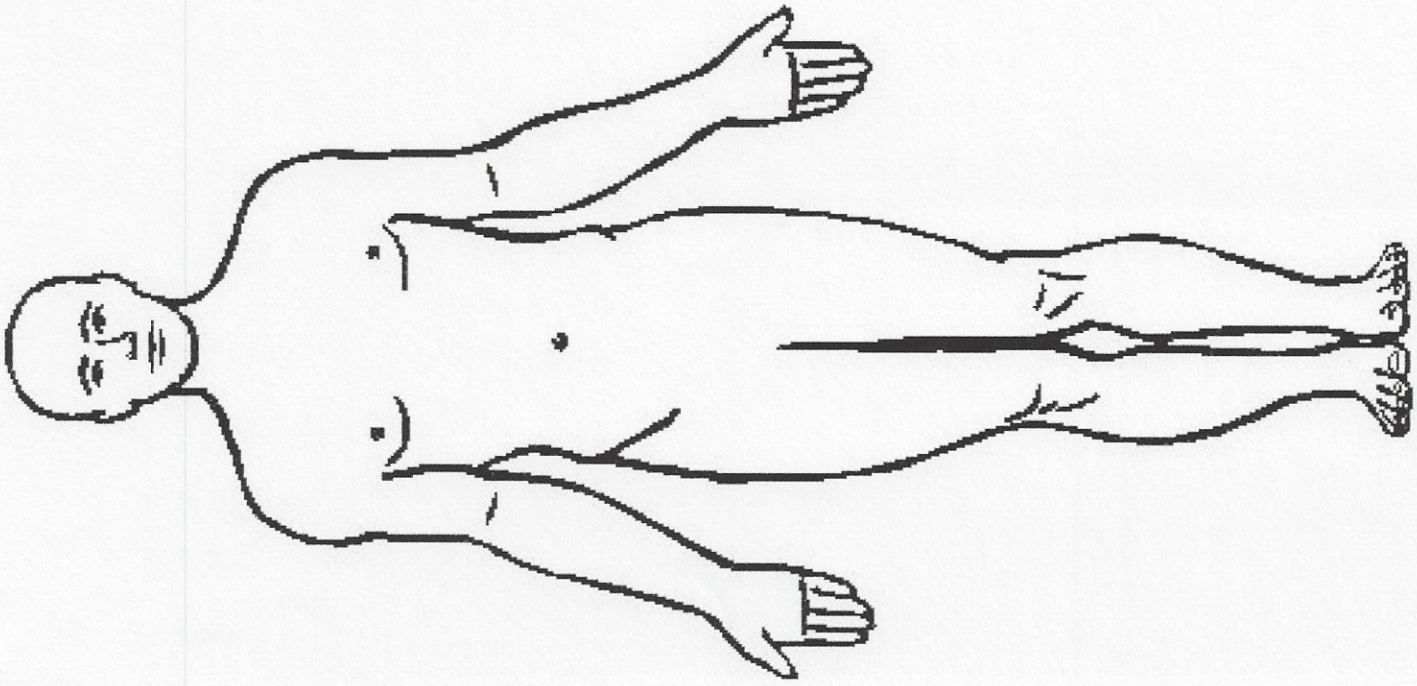
The students found this an effective lab assignment as indicated by verbal feedback.

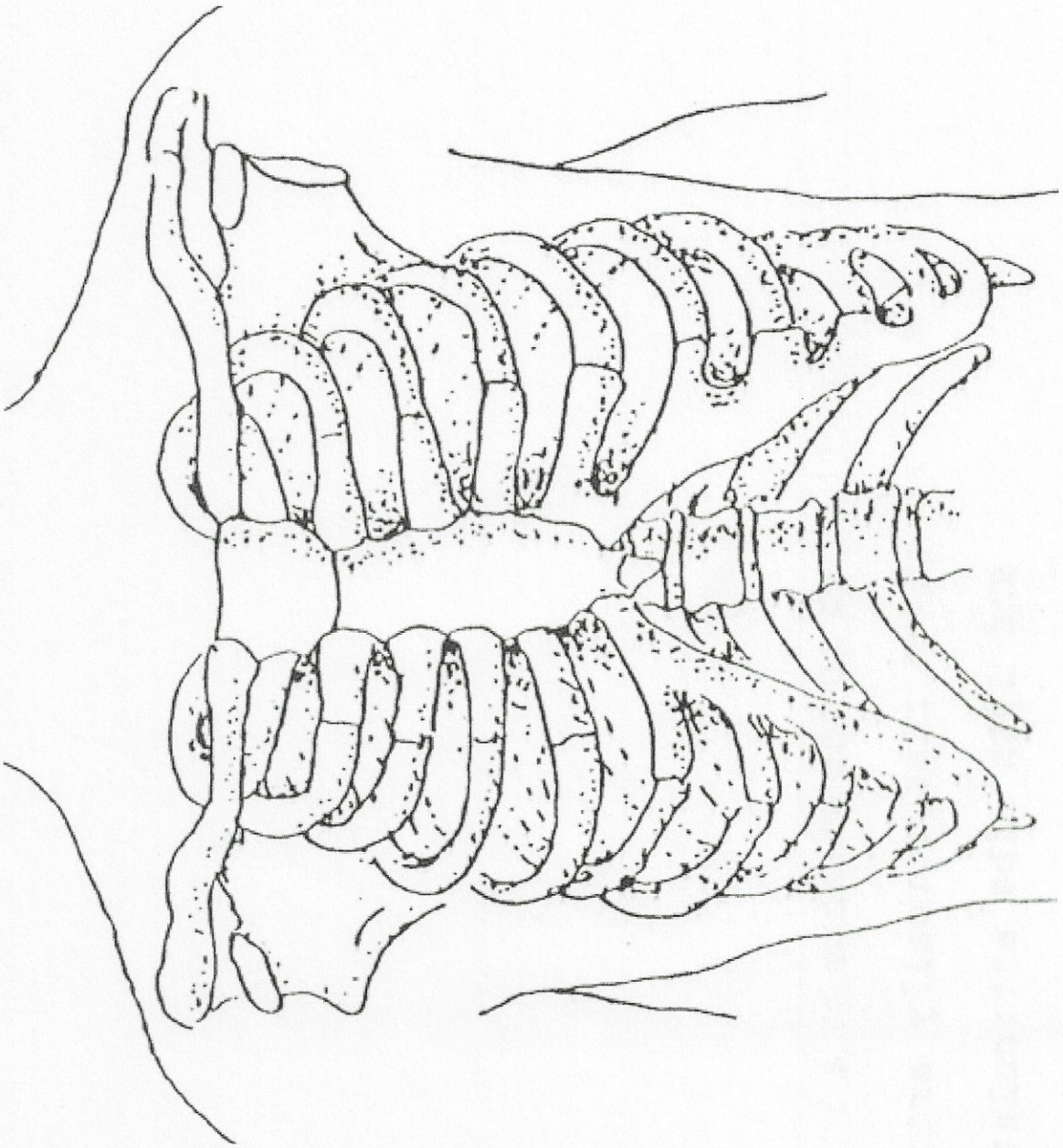
12-LEAD HANDOUT
SP 15

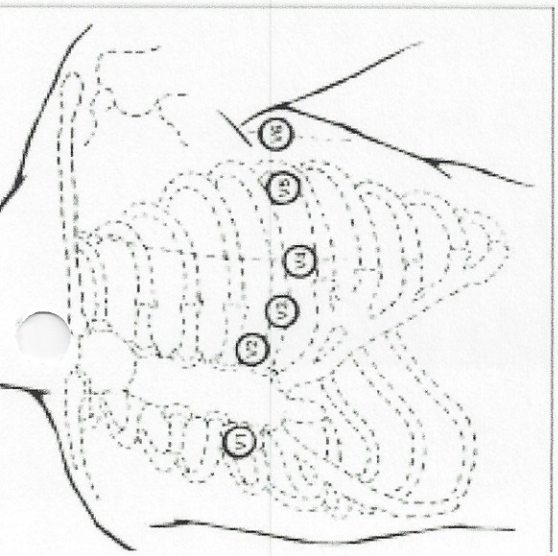
Application of
12-LEAD EKG

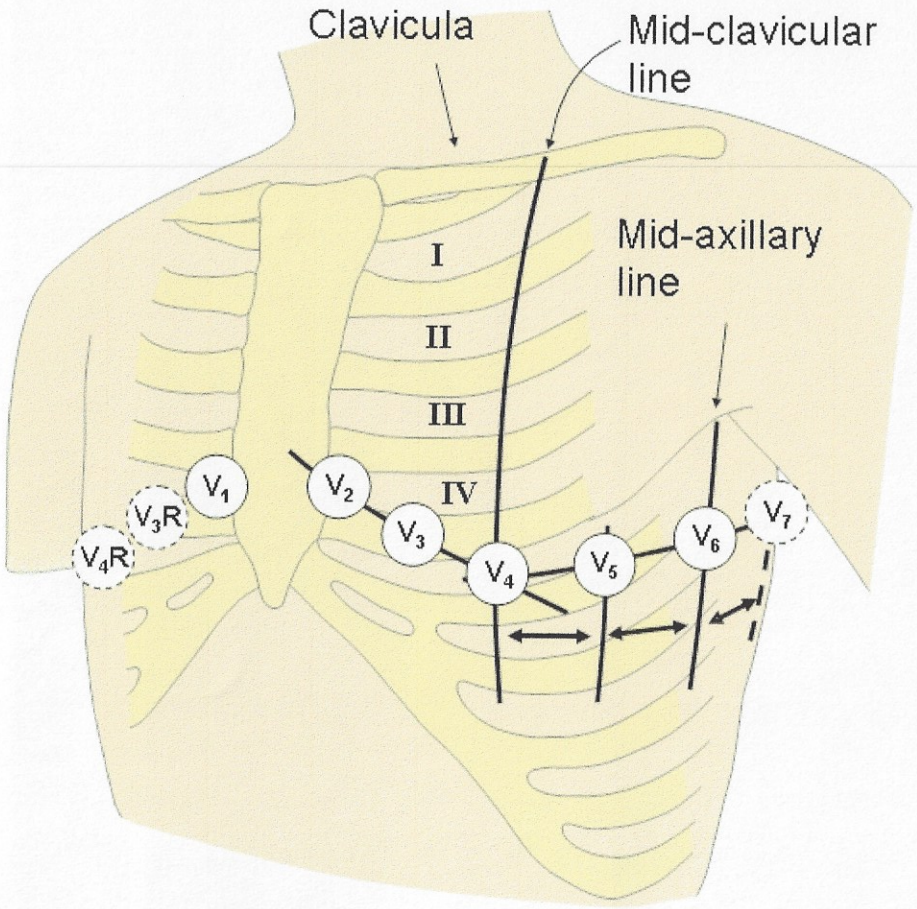


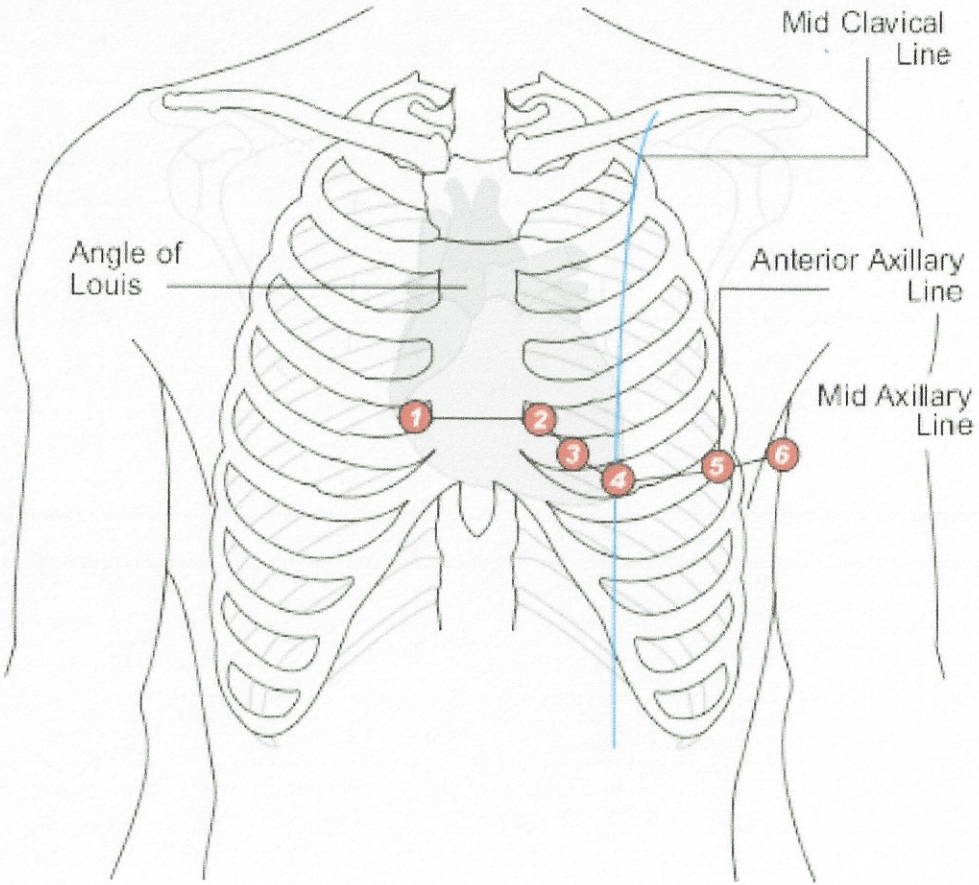
Lead F...cement






2
3
4
5
6
7


Clavicula
Mid-clavicular line
Mid-axillary line
I
II
III
IV
V1
V2
V3
V4
V5
V6
V7
V3R
V4R


Mid Clavical Line
Angle of Louis
Anterior Axillary Line
Mid Axillary Line
1
2
3
4
5
6

Section:

Sample or Examination
and/or Writing Assignment

Richard W. Lippert

Portfolio

15FA - 16SP

Name: _____ Date: _____

1.	Normally, the ST segment should be:
A)	**at the level of the isoelectric line.**
B)	elevated by no more than 1 mm.
C)	depressed by no more than 2 mm.
D)	invisible on a normal ECG tracing.

2.	Stimulation of the parasympathetic nervous system:
A)	completely blocks the AV node, preventing ventricular depolarization.
B)	causes a decrease in the production of epinephrine and norepinephrine.
C)	is characterized by a large P wave and a PR interval that is shorter than normal.
D)	**slows SA nodal discharge and decreases conduction through the AV node.**

3.	Cholinesterase is a naturally occurring chemical that:
A)	increases epinephrine production.
B)	**regulates acetylcholine in the body.**
C)	stimulates activity of the vagus nerve.
D)	causes a natural slowing of the heart rate.

4.	Sympathetic nerves are regulated primarily by:
A)	adrenaline.
B)	epinephrine.
C)	cholinesterase.
D)	**norepinephrine.**

5.	Stimulation of alpha and beta receptors affects the:
A)	heart only.
B)	heart and blood vessels.
C)	blood vessels and lungs.
D)	**heart, lungs, and blood vessels.**

6.	To increase myocardial contractility and heart rate and to relax the bronchial smooth muscle, you must give a drug that:
A)	**stimulates beta-1 and beta-2 receptors.**
B)	stimulates beta-2 and alpha receptors.
C)	blocks beta-1 and beta-2 receptors.
D)	blocks beta receptors and stimulates alpha receptors.

7.	Cardiac-related chest pain is often palliated by:
A)	stress.
B)	exertion.
C)	**nitroglycerin.**
D)	mild exercise.

8.	Myocardial ischemia occurs when the heart muscle:
A)	**is deprived of oxygen because of a blocked coronary artery.**
B)	undergoes necrosis because of prolonged oxygen deprivation.
C)	suffers oxygen deprivation secondary to coronary vasodilation.
D)	experiences a decreased oxygen demand and an increased supply.

9.	You have restored spontaneous circulation in a 54-year-old man who was in ventricular fibrillation. During the arrest interval, you delivered 2 shocks, 1 mg of epinephrine, and 300 mg of amiodarone. The patient's blood pressure is 96/60 mm Hg, and the cardiac monitor displays a sinus rhythm at a rate of 70 beats/min with frequent premature ventricular complexes. Appropriate post-resuscitation care for this patient includes:
A)	0.5 mg of atropine sulfate.
B)	**an infusion of amiodarone.**
C)	a 20-mL/kg crystalloid bolus.
D)	a low-dose dopamine infusion.

10.	A 39-year-old man in asystole has been unresponsive to high-quality CPR and two doses of epinephrine. The patient is intubated and an IO catheter is in place. You should focus on:
A)	establishing a peripheral IV line
B)	providing mild hyperventilation.
C)	**searching for reversible causes.**
D)	transcutaneous cardiac pacing

11.	You are assessing the 12-lead tracing of a 40-year-old man with chest pain and note ST-segment elevation in leads II, III, and aVF. Lead V_4R shows 2-mm ST-segment elevation. The patient's blood pressure is 88/58 mm Hg, and his heart rate is 72 beats/min and regular. He denies any significant past medical history but is allergic to salicylates. After placing the patient on oxygen and starting an IV line of normal saline, you should:
A)	administer up to 325 mg of baby aspirin.
B)	give 2-mg increments of morphine sulfate.
C)	start a dopamine infusion at 2 µg/kg/min.
D)	**give crystalloid boluses to increase preload.**

12.	You are dispatched to a grocery store for a 39-year-old woman with a severe headache. The patient advises you that her headache, which was present when she woke up this morning, is located in the back of her head. She is conscious and alert, with a blood pressure of 194/112 mm Hg, pulse of 100 beats/min and strong, and respirations of 14 breaths/min and regular. She denies a history of hypertension or any other significant medical problems. The closest appropriate facility is located 15 miles away. You should:
A)	**administer supplemental oxygen, start an IV line of normal saline at a keep-open rate, and transport.**
B)	start an IV line of normal saline, give her 0.4 mg of sublingual nitroglycerin, and transport at once.
C)	give high-flow oxygen, establish vascular access, begin transport, and administer labetalol en route.
D)	administer oxygen as tolerated, give up to 5 mg of morphine IM, and transport promptly.

13.	Common causes of cardiac arrest include all of the following, EXCEPT:
A)	hypovolemia.
B)	**hyperglycemia.**
C)	cardiac tamponade.
D)	pulmonary embolism.

14.	Regardless of the patient's presenting cardiac arrest rhythm, the first IV or IO drug that should be given is:
A)	**a vasopressor.**
B)	calcium chloride.
C)	an inotrope.
D)	an antidysrhythmic.

15.	When performing CPR on an adult patient in cardiac arrest, it is important to:
A)	deliver at least 80 to 90 compressions per minute.
B)	limit interruptions in chest compressions to 20 seconds.
C)	deliver forceful ventilations between compressions.
D)	**allow the chest to fully recoil between compressions.**

16.	The proper compression-to-ventilation ratio for two-rescuer adult CPR when an oropharyngeal airway is in place is:
A)	5:1.
B)	15:2.
C)	**30:2.**
D)	asynchronous.

17.	A pathologic Q wave:
A)	generally indicates that an acute myocardial infarction has occurred within the past hour.
B)	is deeper than one quarter of the height of the R wave and indicates injury.
C)	**is wider than 0.04 seconds and indicates that a myocardial infarction occurred in the past.**
D)	can only be substantiated by viewing at least two previous 12-lead ECGs.

18.	Injury to the inferior wall of the myocardium would present with:
A)	T-wave inversion in leads V_1 through V_4.
B)	**ST-segment elevation in leads II, III, and aVF.**
C)	pathologic Q waves in leads V_4 and V_5.
D)	ST-segment depression in leads V_5, V_6, and aVL.

19.	Which of the following statements is correct?
A)	Lead I is contiguous with lead II.
B)	Lead II is contiguous with leads V_6 and aVL.
C)	Lead V_6 is contiguous with leads V_4 and V_5.
D)	**Lead III is contiguous with leads II and aVF.**

20.	Anatomically contiguous leads view:
A)	opposite walls of the heart.
B)	only the lateral wall of the heart.
C)	**the same general area of the heart.**
D)	only the anterior wall of the heart.

21.	The circumflex branch of the left coronary artery supplies the _____ wall of the left ventricle.
A)	septal
B)	**lateral**
C)	anterior
D)	inferior

22.	The inferior wall of the left ventricle is supplied by the:
A)	**right coronary artery.**
B)	left coronary artery.
C)	circumflex artery.
D)	left anterior descending artery.

23.	Leads V_1 to V_3 allow you to view the _____ wall of the left ventricle.
A)	septal
B)	lateral
C)	anterior
D)	**anteroseptal**

24.	Which of the following leads provides the BEST view of the anterolateral wall of the left ventricle?
A)	V_2 to V_3
B)	**V_4 to V_6**
C)	V_4 to V_5
D)	V_5 to V_6

25.	When viewing leads V_3 and V_4, you are looking at the _____ wall of the _____.
A)	septal, heart.
B)	lateral, left ventricle.
C)	**anterior, left ventricle.**
D)	inferior, right ventricle.

26.	Lead I views the _____ wall of the heart, while lead aVF views the _____ wall of the heart.
A)	**lateral, inferior**
B)	septal, anterior
C)	posterior, septal
D)	anterior, inferior

27.	A demand pacemaker:
A)	**generates pacing impulses only when it senses that the heart's natural pacemaker has fallen below a preset rate.**
B)	sends out single electrical impulses when the patient's inherent pacemaker rate exceeds 150 beats/min.
C)	is easily identified on a cardiac rhythm strip by noting the presence of pacer spikes before all of the QRS complexes.
D)	attaches to the atria and the ventricles and only generates an impulse if it senses that the patient is in ventricular fibrillation.

28.	What is the R-on-T phenomenon?
A)	**A premature ventricular complex (PVC) that occurs when the ventricles are not fully repolarized**
B)	When the R wave occurs at the J point of the next cardiac cycle
C)	A unifocal PVC that occurs during the upslope of any given T wave
D)	A PVC that occurs during a time when the ventricles are depolarizing

29.	Ventricular bigeminy occurs when:
A)	two premature ventricular complexes (PVCs) occur in a row.
B)	**every second complex is a PVC.**
C)	at least two differently shaped PVCs occur.
D)	a 6-second strip contains at least two PVCs.

30.	Monomorphic ventricular tachycardia:
A)	is characterized by QRS complexes that vary in size.
B)	**presents with wide QRS complexes of a common shape.**
C)	is treated as ventricular fibrillation if a pulse is present.
D)	is often irregular with occasional nonconducted P waves.

31.	Which of the following statements regarding treatment for a first-degree heart block is correct?
A)	**Treatment is generally not indicated unless the rate is slow and cardiac output is impaired.**
B)	Most first-degree heart blocks are associated with significant bradycardia and require atropine.
C)	First-degree heart block is often accompanied by a compensatory tachycardia that requires treatment.
D)	Transcutaneous cardiac pacing should be initiated without delay for patients with a first-degree heart block.

32.	A regular rhythm with inverted P waves before each QRS complex, a ventricular rate of 70 beats/min, narrow QRS complexes, and a PR interval of 0.16 seconds should be interpreted as a(n):
A)	ectopic atrial rhythm.
B)	junctional escape rhythm.
C)	supraventricular tachycardia.
D)	**accelerated junctional rhythm.**

33.	Atrial fibrillation can be interpreted by noting:

A)	PR intervals that vary from complex to complex.
B)	**an irregularly irregular rhythm and absent P waves.**
C)	a regularly irregular rhythm with abnormal P waves.
D)	the presence of wide QRS complexes and a rapid rate.

34.	Patients with a heart rate greater than 150 beats/min usually become unstable because of:
A)	**reduced ventricular filling.**
B)	an increase in the atrial kick.
C)	increased right atrial preload.
D)	a significantly reduced afterload.

35.	Common causes of bradycardia include:
A)	exercise.
B)	hyperthermia.
C)	amphetamines.
D)	**beta blocker use.**

36.	A normal QT interval lasts:
A)	0.15 to 0.25 seconds.
B)	0.30 to 0.40 seconds.
C)	**0.36 to 0.44 seconds.**
D)	0.38 to 0.48 seconds.

37.	The downslope of the T wave:
A)	is the point of ventricular repolarization to which a defibrillator is synchronized to deliver electrical energy.
B)	is the strongest part of ventricular depolarization and is often the origin of dangerous ventricular arrhythmias.
C)	represents a state of absolute ventricular refractoriness in which another impulse cannot cause depolarization.
D)	**represents a vulnerable period during which a strong impulse could cause depolarization, resulting in a lethal arrhythmia.**

38.	The _____ represents the end of ventricular depolarization and the beginning of repolarization.
A)	**J point**
B)	T wave
C)	ST segment
D)	T-P interval

39.	A wide QRS complex that is preceded by a normal P wave indicates:
A)	that the rhythm is ventricular in origin.
B)	rapid conduction through the ventricles.
C)	a delay in conduction at the AV junction.
D)	**an abnormality in ventricular conduction.**

40.	The duration of the QRS complex should be ____ milliseconds or less.
A)	100
B)	**120**
C)	140
D)	150

41.	A prolonged PR interval:
A)	is greater than 120 milliseconds.
B)	indicates that the AV node was bypassed.
C)	**indicates an abnormal delay at the AV node.**
D)	is a sign of rapid atrial depolarization.

42.	On the ECG graph paper, amplitude is measured in _____ and width is measure in _____.
A)	centimeters, seconds
B)	milliseconds, millimeters
C)	seconds, centimeters
D)	**millimeters, milliseconds**

43.	Bombardment of the AV node by more than one impulse, potentially blocking the pathway for one impulse and allowing the other impulse to stimulate cardiac cells that have already depolarized, is called:
A)	fusion.
B)	**reentry.**
C)	ectopy.
D)	excitability.

44.	It is MOST important to evaluate a cardiac arrhythmia in the context of the:
A)	patient's heart rate.
B)	patient's medical history.
C)	**patient's overall condition.**
D)	width of the QRS complex.

45.	Which of the following statements regarding an idioventricular rhythm is correct?
A)	**Most patients with an idioventricular rhythm are hemodynamically unstable.**
B)	Treatment for an idioventricular rhythm focuses on increasing blood pressure.
C)	Idioventricular rhythms are typically accompanied by nonconducted P waves.
D)	The most common cause of an idioventricular rhythm is failure of the SA node.

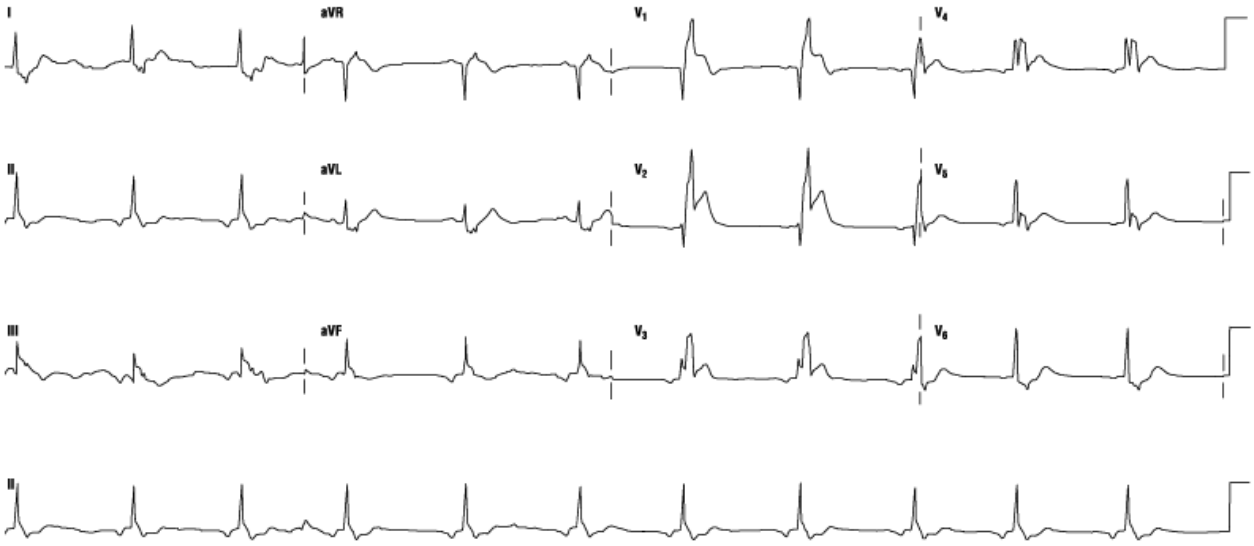
46.	On the ECG strip, a third-degree AV block usually appears as a:
A)	wide QRS complex rhythm with a rate between 50 and 70 beats/min.
B)	slow, narrow QRS complex rhythm with irregular P-P intervals.
C)	**slow, wide QRS complex rhythm with inconsistent PR intervals.**
D)	narrow QRS complex rhythm with a rate less than 60 beats/min.

47.	The left main coronary artery subdivides into the:
A)	left anterior ascending and descending arteries.
B)	**left anterior descending and circumflex arteries.**
C)	left posterior ascending and circumflex arteries.
D)	right coronary and left posterior descending arteries.

48.	Injury to or disease of the _____ may cause prolapse of a cardiac valve leaflet, allowing blood to regurgitate from the ventricle into the atrium.
A)	coronary sulcus
B)	**chordae tendineae**
C)	interatrial septum
D)	coronary sinus

49.	Cardiac output is influenced by:
A)	heart rate.
B)	stroke volume.
C)	**heart rate and/or stroke volume.**
D)	ejection fraction and heart rate.

50.	Repolarization begins when:
A)	**the sodium and calcium channels close.**
B)	calcium ions slowly enter the cardiac cell.
C)	potassium ions rapidly escape from the cell.
D)	the inside of the cell returns to a positive charge.

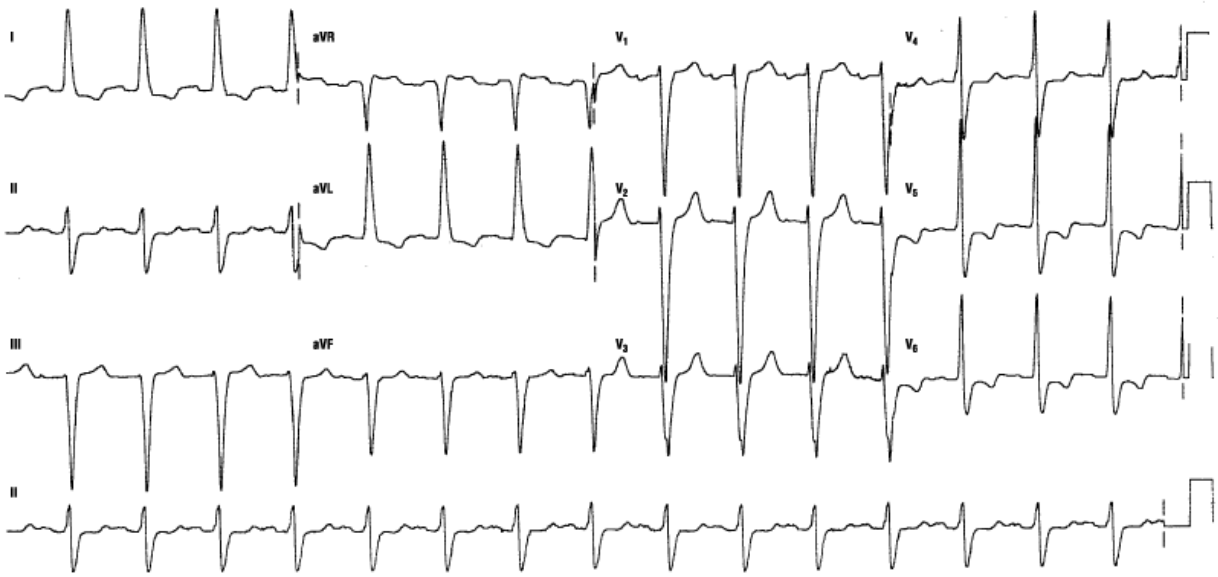


51. What is your interpretation of this rhythm?
Be as descriptive as possible

52. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

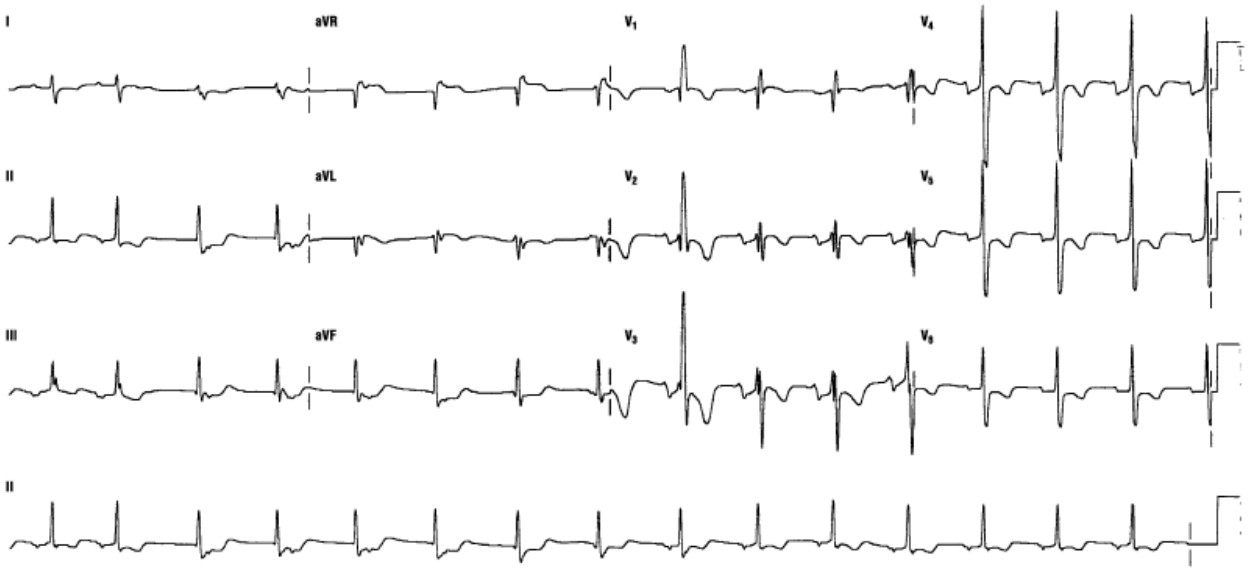


53. What is your interpretation of this rhythm?
Be as descriptive as possible

54. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

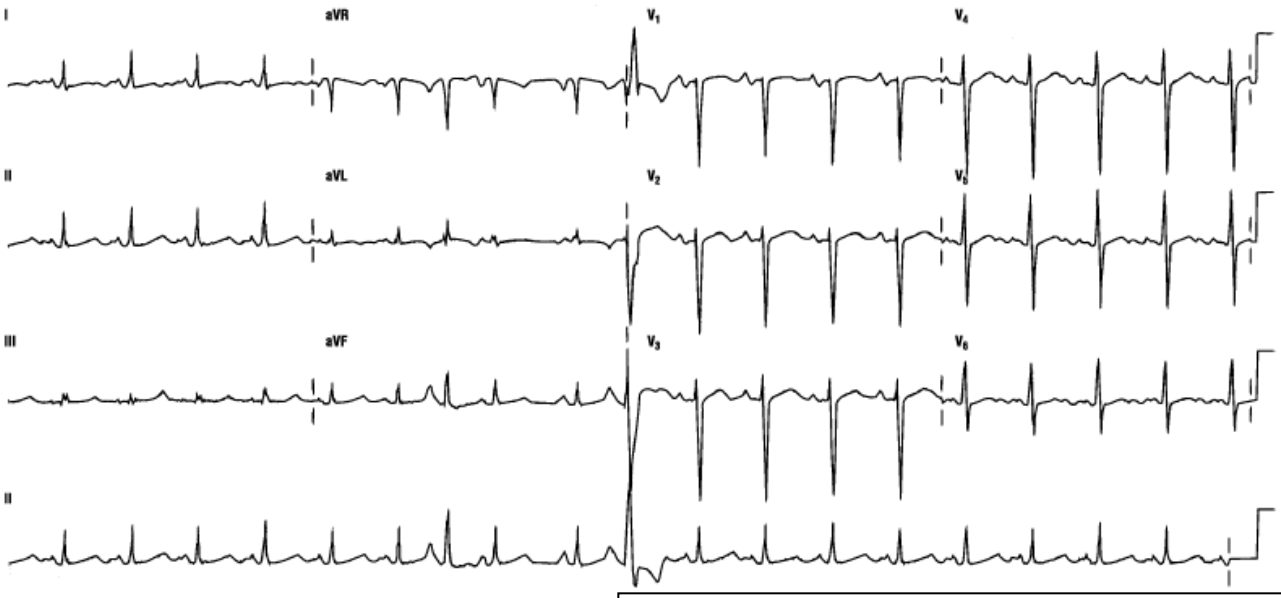


55. What is your interpretation of this rhythm?
Be as descriptive as possible

56. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

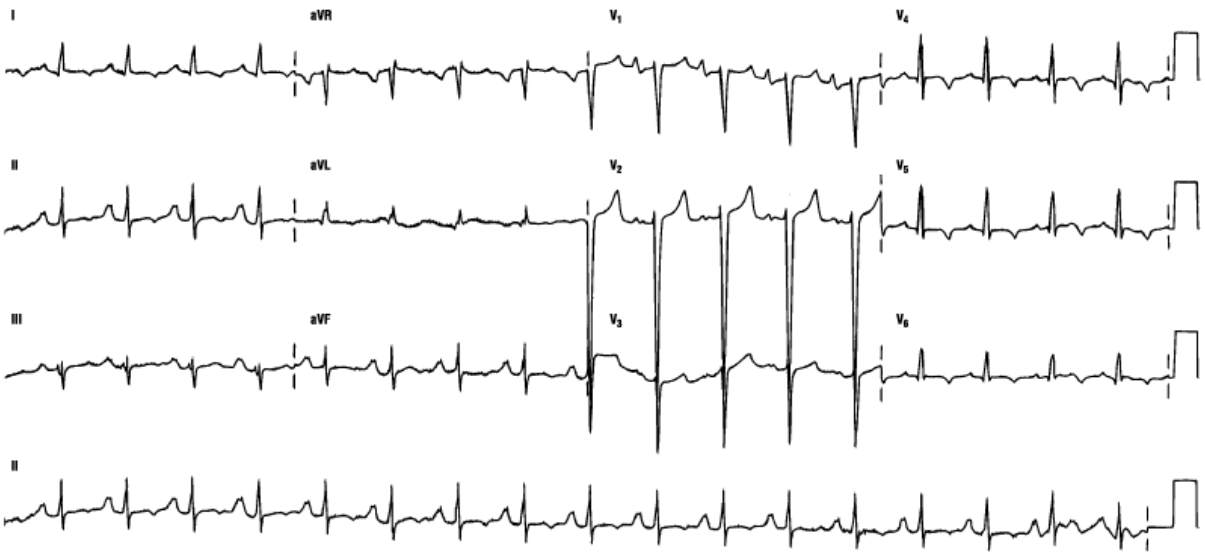


57. What is your interpretation of this rhythm?
Be as descriptive as possible

58. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

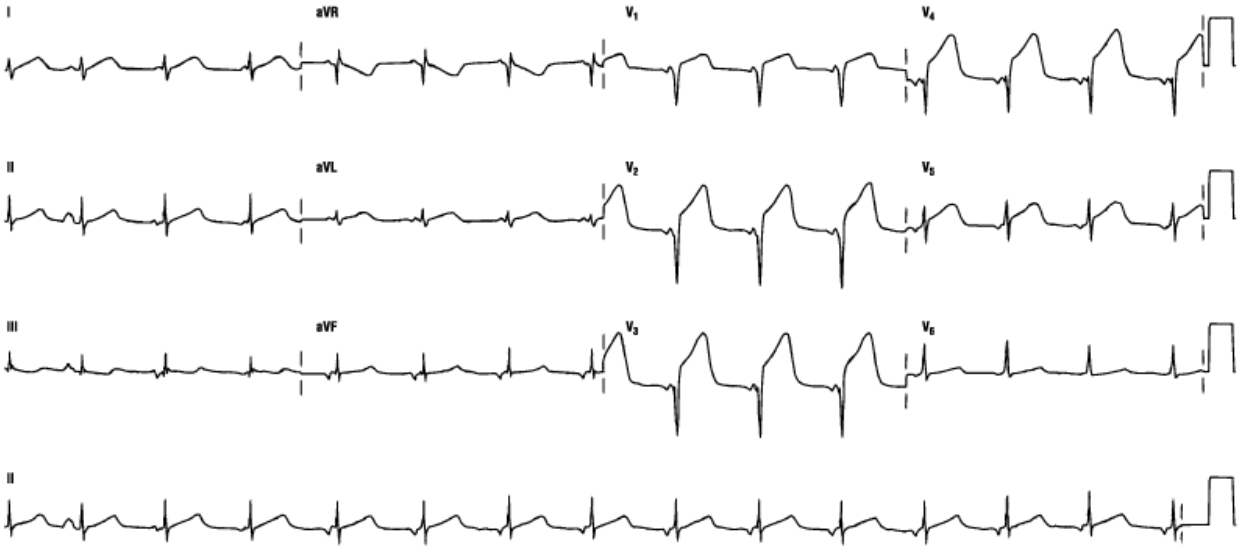


59. What is your interpretation of this rhythm?
Be as descriptive as possible

60. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

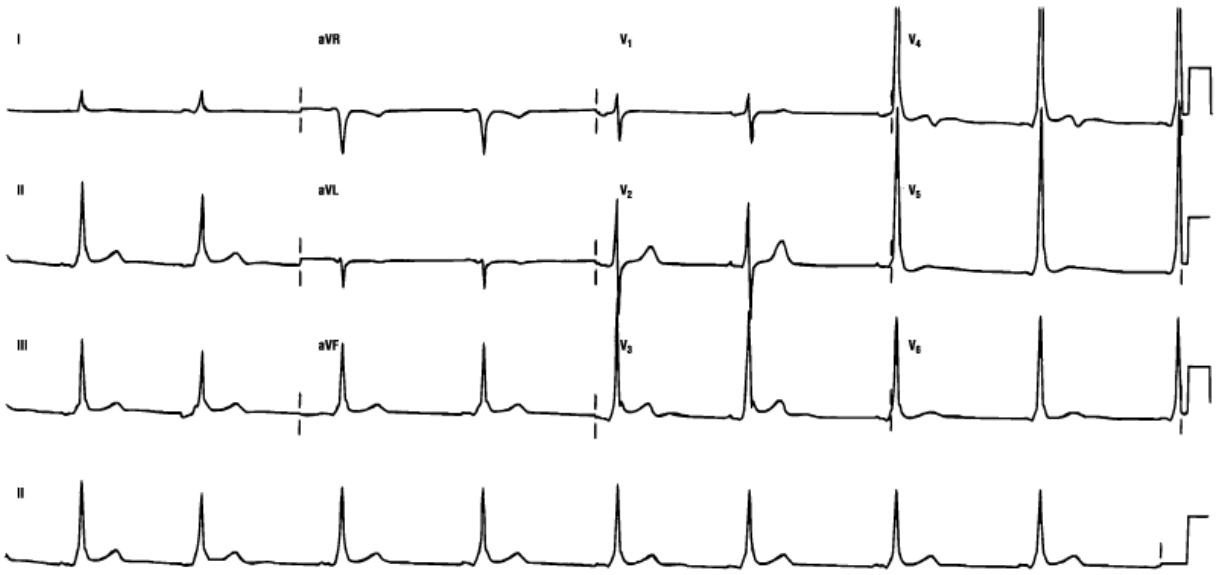


61. What is your interpretation of this rhythm?
Be as descriptive as possible

62. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

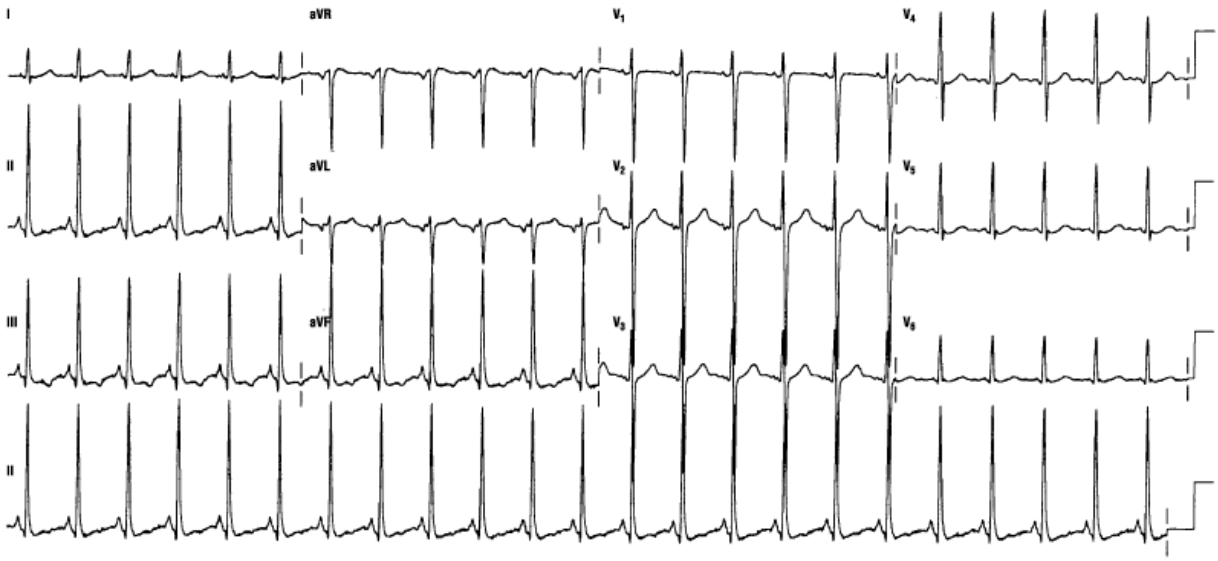


63. What is your interpretation of this rhythm?
Be as descriptive as possible

64. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

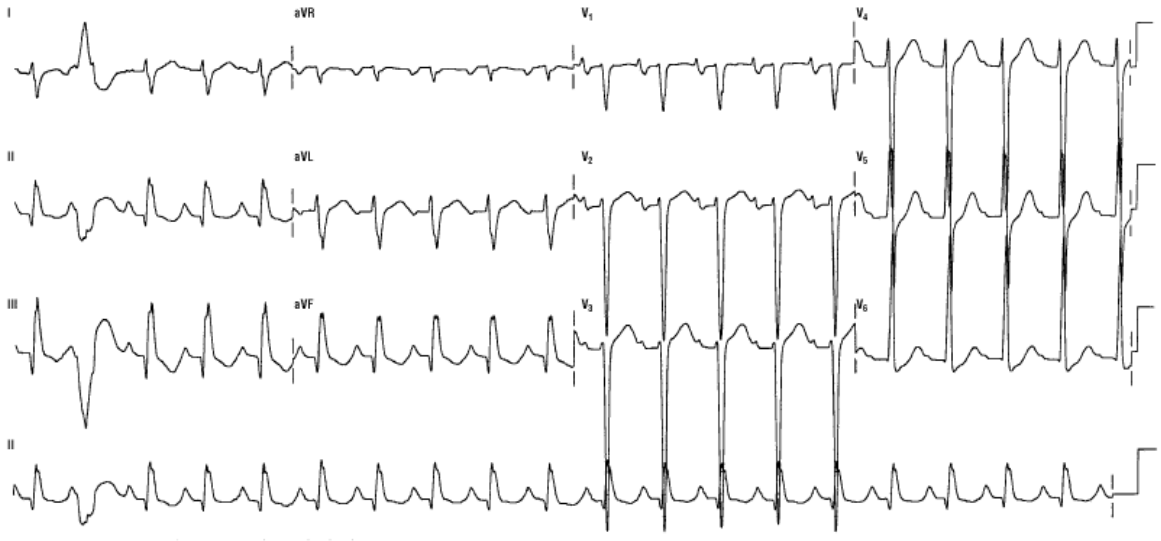


65. What is your interpretation of this rhythm?
Be as descriptive as possible

66. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation



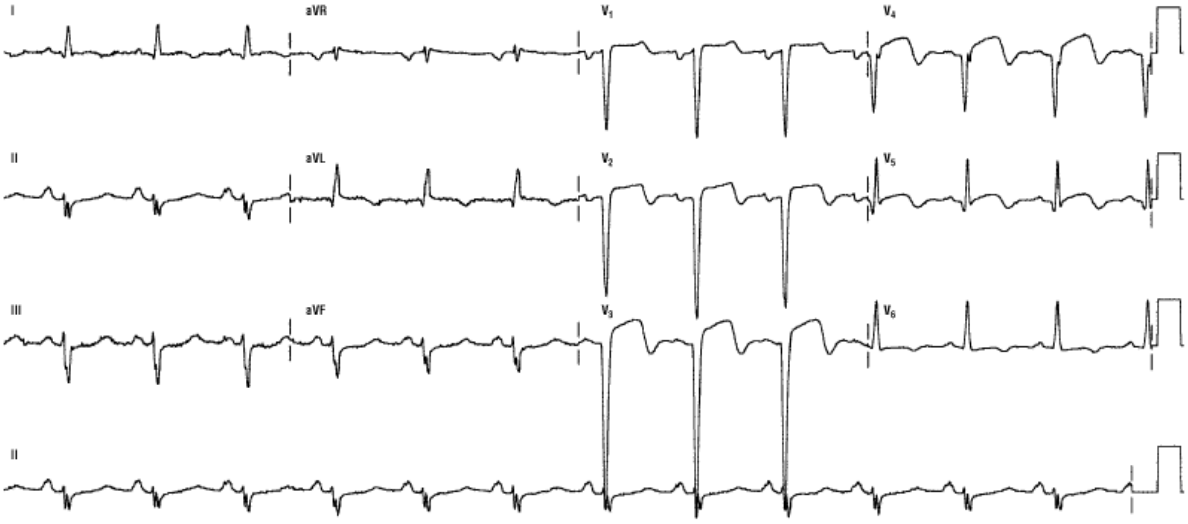
67. What is your interpretation of this rhythm?
Be as descriptive as possible

68. What is ST elevation present?
Circle your answer

Lead I Lead II LeadIII aVR aVL aVF

V1 V2 V3 V4 V5 V6

No ST Elevation



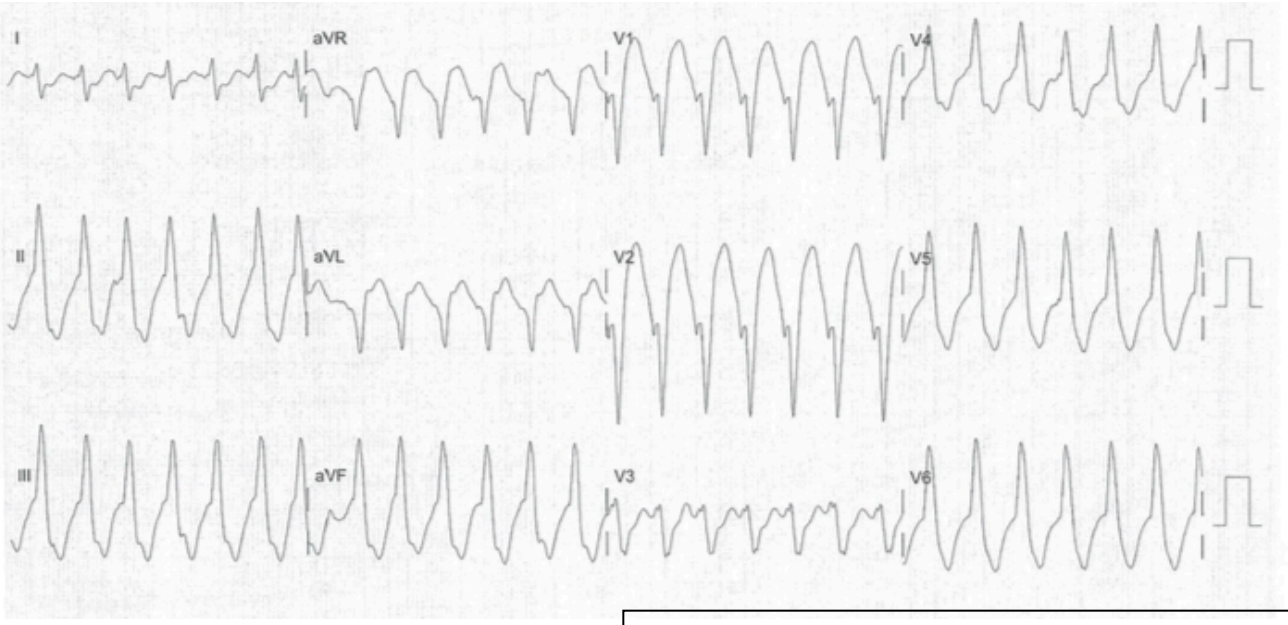
69. What is your interpretation of this rhythm?
Be as descriptive as possible

70. What is ST elevation present?
Circle your answer

Lead I Lead II LeadIII aVR aVL aVF

V1 V2 V3 V4 V5 V6

No ST Elevation

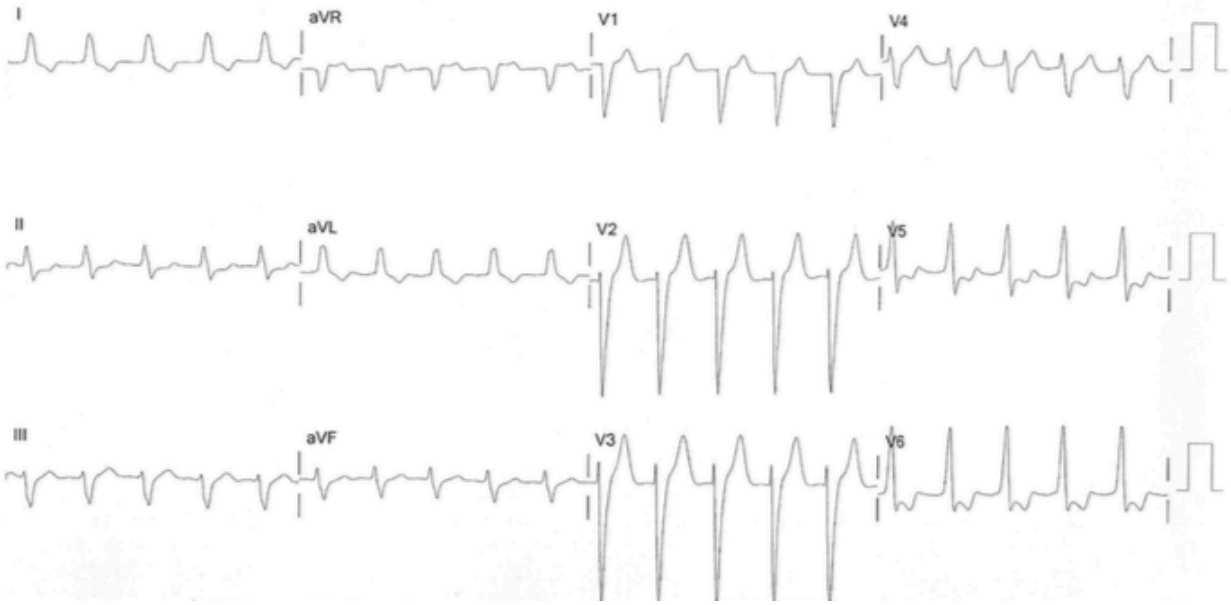


71. What is your interpretation of this rhythm?
Be as descriptive as possible

72. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

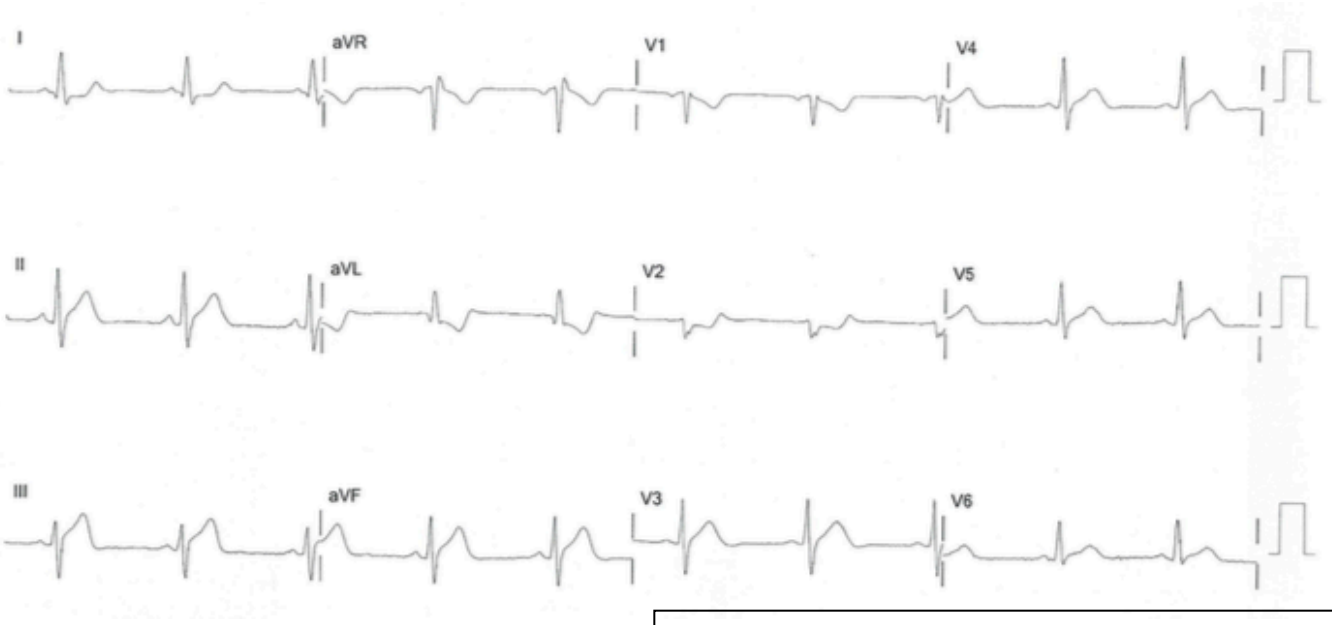


73. What is your interpretation of this rhythm?
Be as descriptive as possible

74. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation



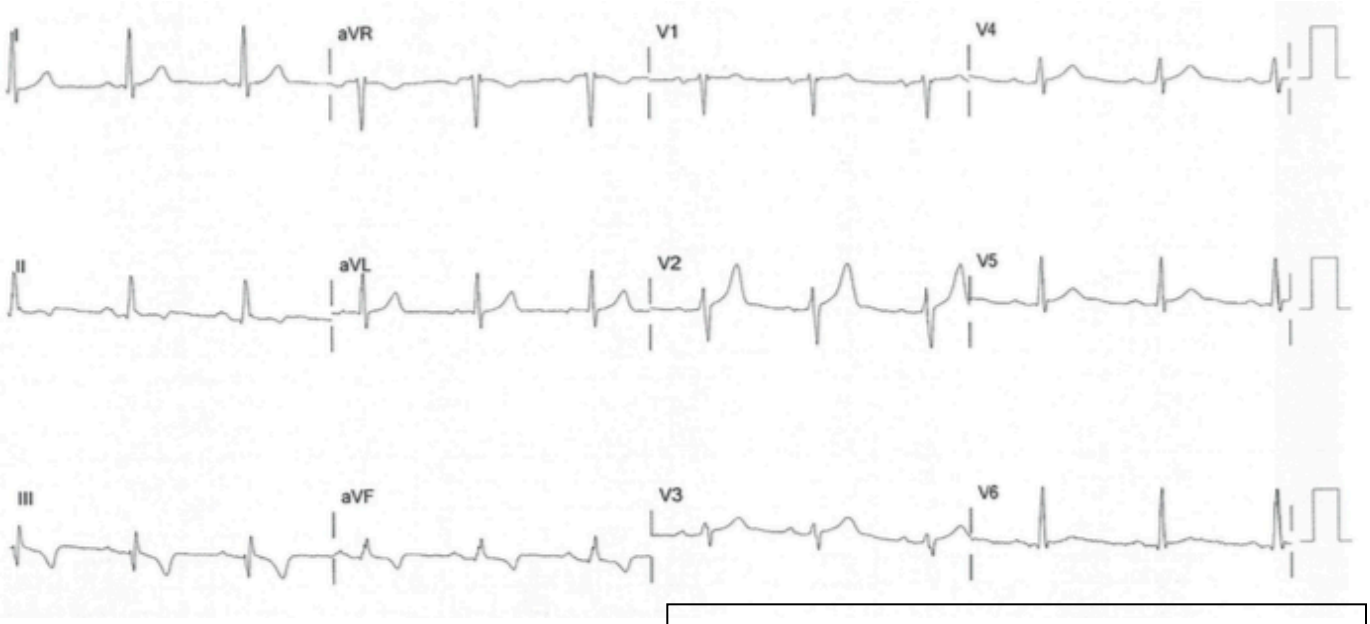
75. What is your interpretation of this rhythm?
Be as descriptive as possible

76. What is ST elevation present?
Circle your answer

Lead I Lead II LeadIII aVR aVL aVF

V1 V2 V3 V4 V5 V6

No ST Elevation



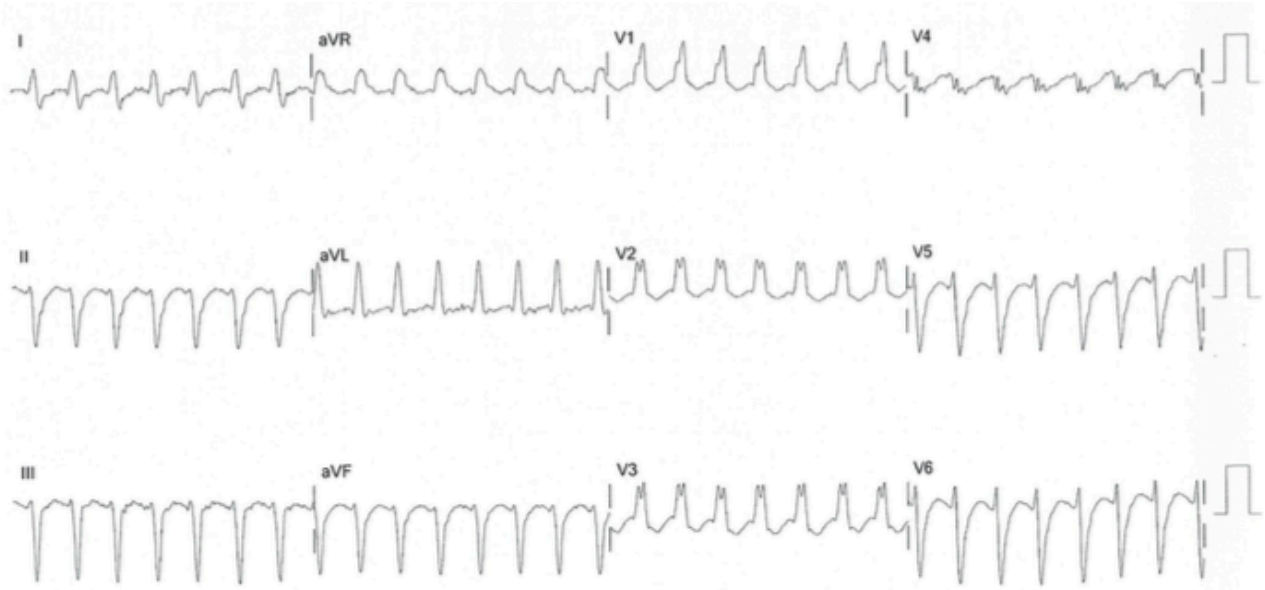
77. What is your interpretation of this rhythm?
Be as descriptive as possible

78. What is ST elevation present?
Circle your answer

Lead I Lead II LeadIII aVR aVL aVF

V1 V2 V3 V4 V5 V6

No ST Elevation



79. What is your interpretation of this rhythm?
Be as descriptive as possible

80. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

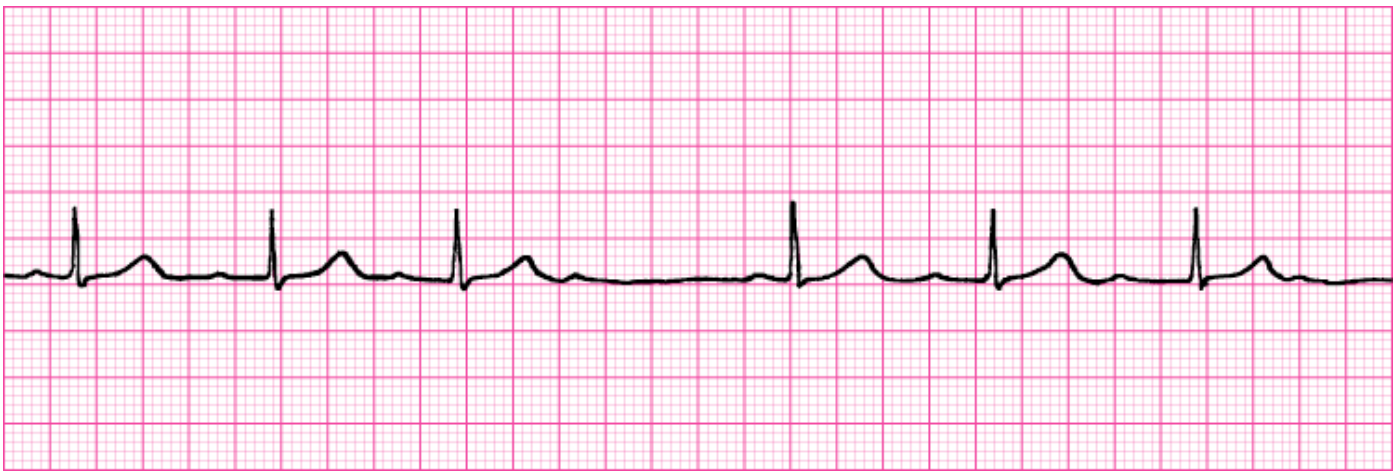
Right Axis deviation Extreme Right Axis deviation

81. What is your interpretation of this rhythm?
Be as descriptive as possible

82. What is the axis of this rhythm?
Circle your answer

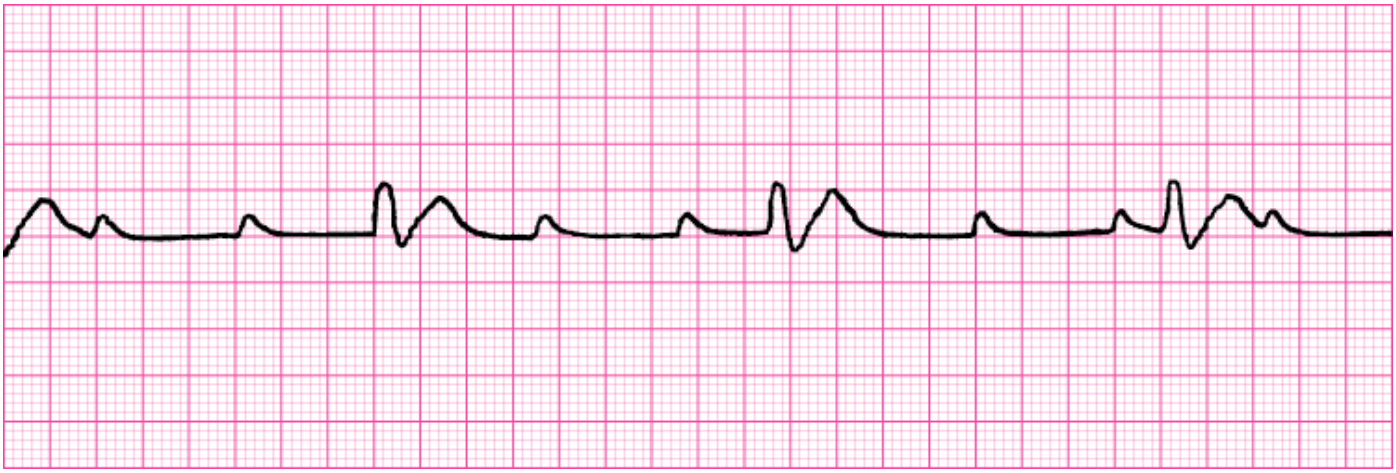
Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation



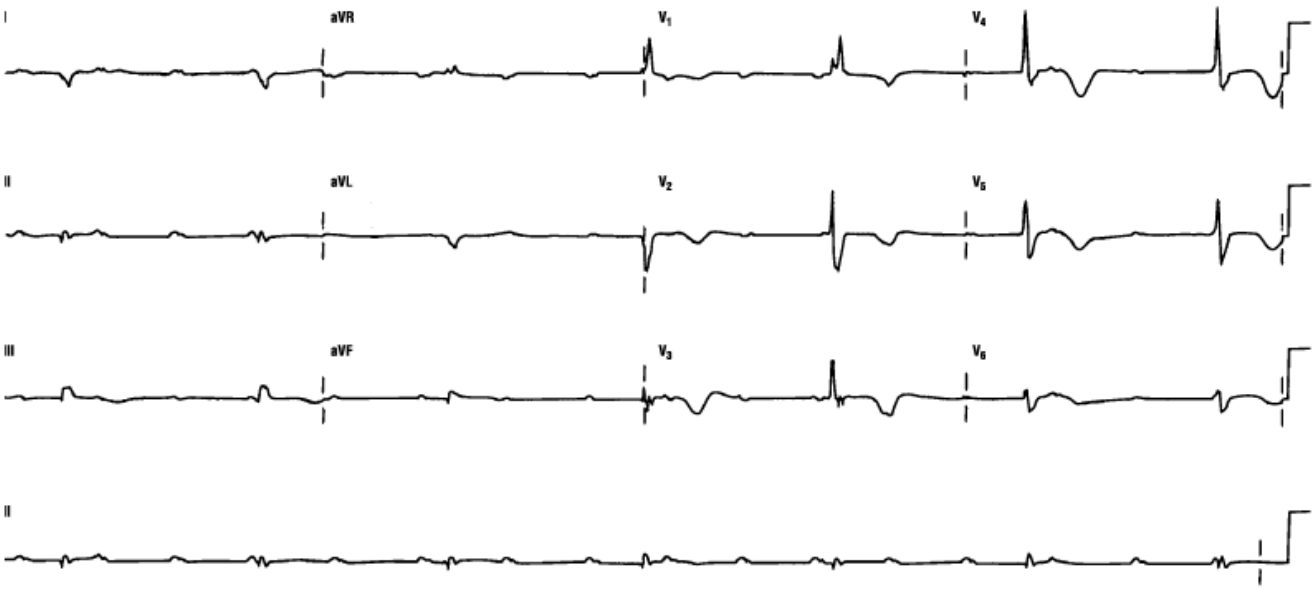
83. What is your interpretation of this rhythm?

Be as descriptive as possible



84. What is your interpretation of this rhythm?

Be as descriptive as possible



85. What is your interpretation of this rhythm?
Be as descriptive as possible

86. Third-degree AV block is characterized by:
Circle your answer

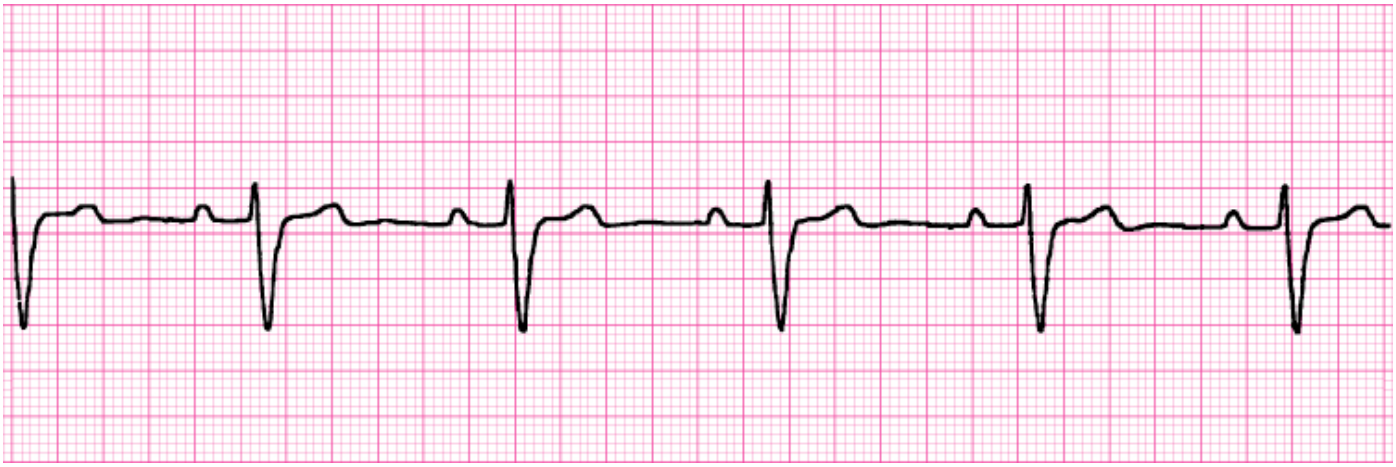
A. AV dissociation
B. More P waves than QRS complexes
C. Variable PR intervals
D. Junctional or ventricular escape rhythms
E. All answers are correct

87. What is your interpretation of this rhythm?
Be as descriptive as possible

88. What is the axis of this rhythm?
Circle your answer

Normal Axis Deviation Left Axis Deviation

Right Axis deviation Extreme Right Axis deviation

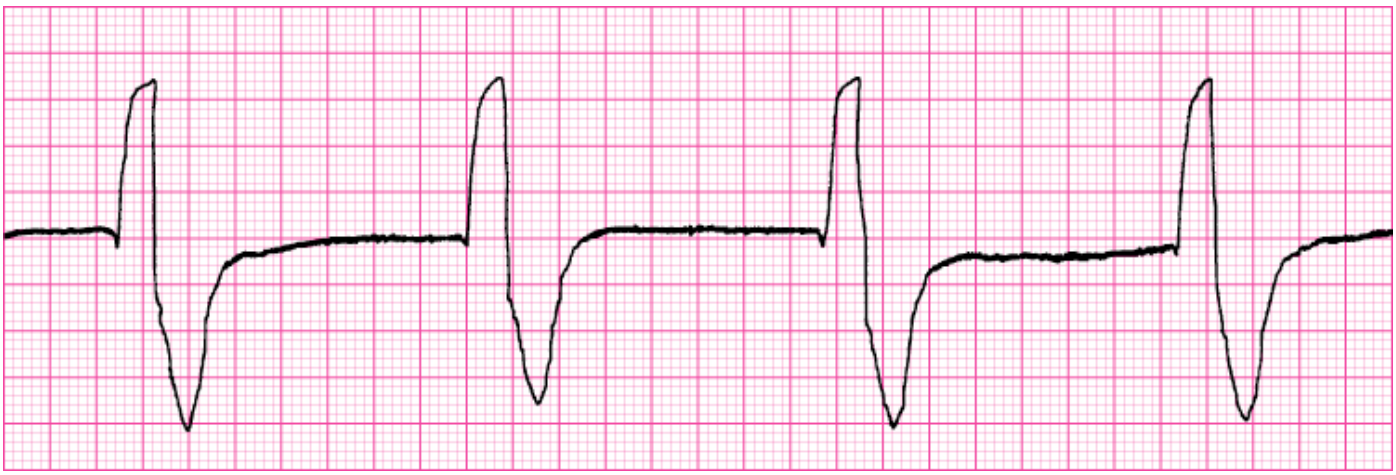


89. What is your interpretation of this rhythm?

Be as descriptive as possible

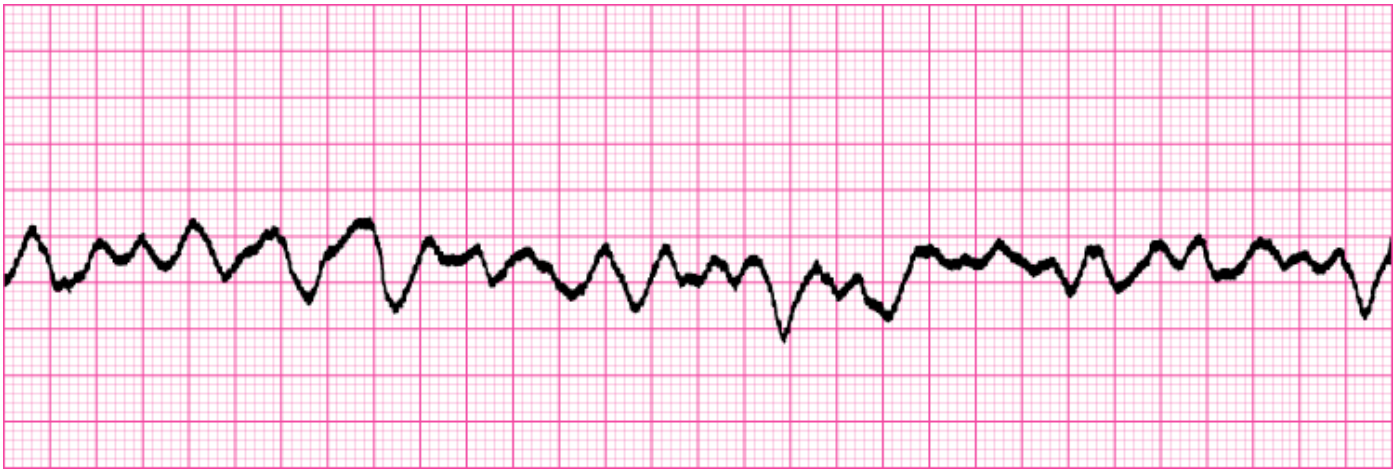
90. What is your interpretation of this rhythm?

Be as descriptive as possible



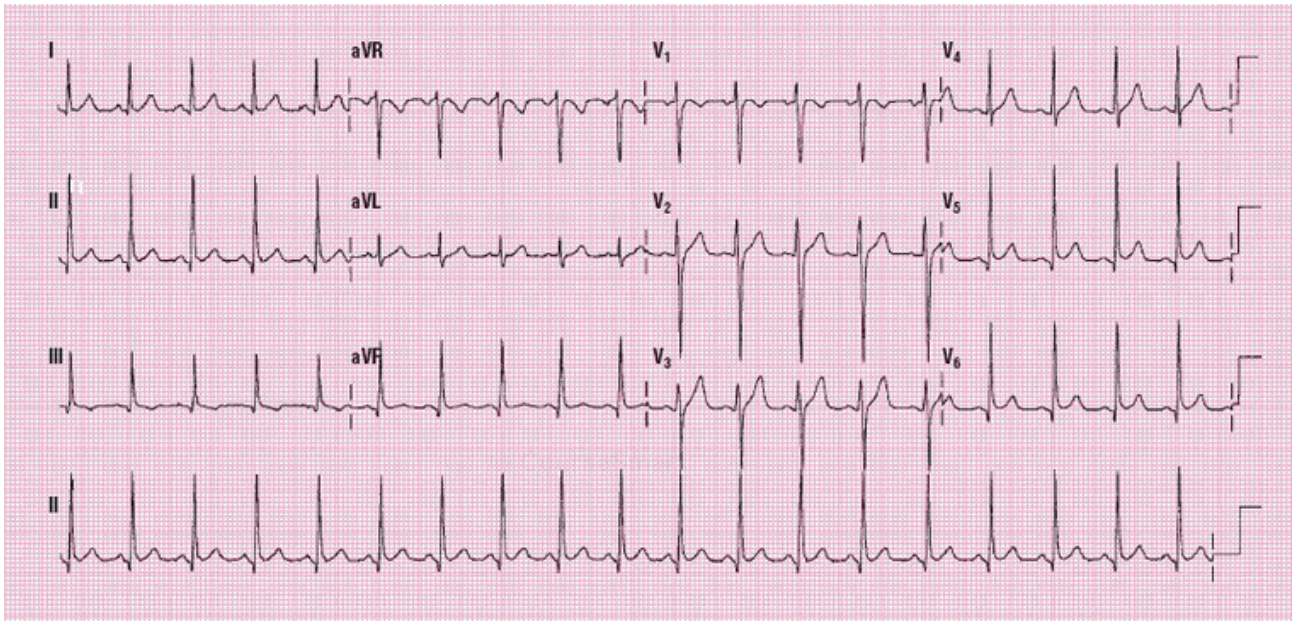
91. What is your interpretation of this rhythm?

Be as descriptive as possible



92. What is your interpretation of this rhythm?

Be as descriptive as possible



93. What is your interpretation of this rhythm?
Be as descriptive as possible

94. Is there ventricular hypertrophy? YES NO
If YES, explain your rationale: _____

95-100. Indicate what area the lead is viewing.

Lead I	*EX. Lateral Wall*
Lead II	
Lead III	
Lead aVR	
Lead aVL	
Lead aVF	
V1	
V2	
V3	
V4	
V5	
V6	

Section:

Summary of Student Survey

Richard W. Lippert

Portfolio

15FA - 16SP

Summary of Student Surveys

Student surveys were administered to all students for all classes that were taught. All categories were numerically scored as a **4.7** or higher out of a maximum of 5.0.

Overall the written responses were very favorable.

Examples:

- Very effective
- Very thorough, informative, real life scenarios, fun and interactive.
- I think it's extremely effective, especially for the amount of material being taught in a small amount of time.

Section:

Evidence of Professional Growth

Richard W. Lippert

Portfolio

15FA - 16SP

Portfolio

Not

Returned

No Data Available

Section:

Written Assessments from Reviewers

Richard W. Lippert

Portfolio

15FA - 16SP

Portfolio

Not

Returned

No Data Available

Section:

Information or Involvement in Assessment

Richard W. Lippert

Portfolio

15FA - 16SP

Portfolio

Not

Returned

No Data Available

Section:

Information related to Enhancing Equity and Diversity

Richard W. Lippert

Portfolio

15FA - 16SP

Portfolio

Not

Returned

No Data Available

Section:

Service to College and/or Community

Richard W. Lippert

Portfolio

15FA - 16SP

Section:

Statement of Anticipated Future Professional Growth

Richard W. Lippert

Portfolio

15FA - 16SP

Section:

Sample of Handouts

Richard W. Lippert

Portfolio

15FA - 16SP

Section:

Samples of Unsolicited Student Letters and Comments

Richard W. Lippert

Portfolio

15FA - 16SP

Section:

Peer/Professional Observation and Evaluation

Richard W. Lippert

Portfolio

15FA - 16SP