

# Washtenaw Community College Comprehensive Report

## HSC 140 Cardiac Telemetry Monitoring Effective Term: Spring/Summer 2021

### Course Cover

**Division:** Health Sciences

**Department:** Health Science

**Discipline:** Health Science

**Course Number:** 140

**Org Number:** 15290

**Full Course Title:** Cardiac Telemetry Monitoring

**Transcript Title:** Cardiac Telemetry Monitoring

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** New Course

**Change Information:**

**Rationale:** This course is the course in the proposed Cardiac Telemetry Technician program.

**Proposed Start Semester:** Spring/Summer 2021

**Course Description:** In this course, students are introduced to the field of cardiac telemetry. Cardiac Telemetry Technicians are health professionals responsible for measuring and reporting the patient's heart rhythm and rate. Students will develop the skills necessary to measure electrocardiogram (ECG) wave forms, interpret results and differentiate the severity of abnormalities. Forms of reporting are introduced, including standard, urgent and life-threatening emergency procedures. Students will gain experience in troubleshooting different models of ECG equipment. This course includes clinical placements.

### Course Credit Hours

**Variable hours:** Yes

**Credits:** 0 – 5

**Lecture Hours: Instructor:** 60 **Student:** 60

**Lab: Instructor:** 30 **Student:** 30

**Clinical: Instructor:** 15 **Student:** 15

**Total Contact Hours: Instructor:** 0 to 105 **Student:** 0 to 105

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** YES (separate sections)

### College-Level Reading and Writing

College-level Reading & Writing

### College-Level Math

No Level Required

### Requisites

**Prerequisite**

Students must have a GED or high school diploma, attend a mandatory orientation prior to starting the course and complete a successful background check and

## **Prerequisite**

Continuing eligibility requirements that must be met prior to clinical placement: • Negative TB skin test • Complete Health History form (physical examination by practitioner) • Hepatitis immunization series or updated titers on file • Health Insurance • Current BLS/CPR from AHA • Background check/Drug/Fingerprinting per policy of hospital

## **General Education**

## **Request Course Transfer**

**Proposed For:**

## **Student Learning Outcomes**

1. Identify cardiac anatomy.

### **Assessment 1**

Assessment Tool: Outcome-related written test questions

Assessment Date: Spring/Summer 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 75% of students will score 76% or higher.

Who will score and analyze the data: Departmental faculty

2. Read and interpret cardiac rhythm strips by identifying common cardiac rhythms and arrhythmias.

### **Assessment 1**

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### **Assessment 2**

Assessment Tool: Skills Checklist

Assessment Date: Spring/Summer 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Skills checklist

Standard of success to be used for this assessment: 75% of students will correctly perform 80% of the skills.

Who will score and analyze the data: Departmental faculty

### **Assessment 3**

Assessment Tool: Clinical skill evaluation

Assessment Date: Spring/Summer 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 75% of students will correctly perform 80% of the items on the clinical evaluation form.

Who will score and analyze the data: Departmental faculty

### 3. Differentiate severity of arrhythmia blocks.

#### **Assessment 1**

Assessment Tool: Outcome-related written test questions

Assessment Date: Spring/Summer 2024

Assessment Cycle: Every Three Years

Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 75% of students will score 76% or higher.

Who will score and analyze the data: Departmental faculty

#### **Assessment 2**

Assessment Tool: Skills checklist

Assessment Date: Spring/Summer 2024

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Assessment Date: Spring/Summer 2024

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Course section(s)/other population: All sections

Number students to be assessed: All students

How the assessment will be scored: Departmentally-developed rubric

Standard of success to be used for this assessment: 75% of students will correctly perform 80% of the items on the clinical evaluation form.

Who will score and analyze the data: Departmental faculty

### **Course Objectives**

1. Properly identify the patient receiving the procedure.
2. Document patient medical history and current medications.
3. Explain the ECG procedure to the patient and instruct them regarding behavior throughout the test.
4. Follow Health Insurance Portability and Accountability Act (HIPAA) regulations regarding Protected Health Information (PHI).
5. Describe infection control standard precautions.
6. Provide ongoing monitoring of the patient during stress testing.
7. Recognize basic rhythm classifications such as Sinus, Atrial, Ventricular and Junctional.
8. Identify the signs of blocks, pacemaker spike, pulseless electrical activity (PEA) and asystole.
9. Describe the normal blood flow through the heart and the heart chambers.
10. Describe the properties of cardiac muscle.
11. Identify the rate of Sinoatrial (SA) node.
12. Identify the rate of Atrioventricular (AV) node.
13. Interpret cardiac strips.
14. Perform patient comfort and safety skills.
15. Obtain patient vital signs.
16. Provide patient instruction regarding the Holter monitor.
17. Place electrodes on the patient appropriately for the test such as stress, Holter, and telemetry.
18. Use additional instruments/devices for specific diagnostic tests including blood pressure cuff, treadmill and Holter monitor as needed.
19. Identify and describe the P wave, representing the time for the impulse to pass from the SA node through the AV junction.

20. Identify and describe the T wave, represented during the recovery phase.
21. Measure waveform characteristics such as P waves, T waves and QRS complexes on ECG tracings.
22. Calculate heartrate.

## New Resources for Course

### Course Textbooks/Resources

Textbooks  
Manuals  
Periodicals  
Software

### Equipment/Facilities

Computer workstations/lab  
TV/VCR  
Data projector/computer

<u>Reviewer</u>	<u>Action</u>	<u>Date</u>
<b>Faculty Preparer:</b> <i>Elizabeth Connors</i>	<i>Faculty Preparer</i>	<i>Oct 12, 2020</i>
<b>Department Chair/Area Director:</b> <i>Kiela Samuels</i>	<i>Recommend Approval</i>	<i>Oct 28, 2020</i>
<b>Dean:</b> <i>Valerie Greaves</i>	<i>Recommend Approval</i>	<i>Oct 29, 2020</i>
<b>Curriculum Committee Chair:</b> <i>Lisa Veasey</i>	<i>Recommend Approval</i>	<i>Dec 02, 2020</i>
<b>Assessment Committee Chair:</b> <i>Shawn Deron</i>	<i>Recommend Approval</i>	<i>Dec 04, 2020</i>
<b>Vice President for Instruction:</b> <i>Kimberly Hurns</i>	<i>Approve</i>	<i>Dec 07, 2020</i>