

Prepared by the Department of Health Sciences  
Date of Departmental Approval: November 27, 2017  
Date approved by Curriculum and Programs: February 28, 2018

Effective: Fall 2018

1. **Course Number:** DTC102  
**Course Title:** EKG Technician
2. **Description:** This 30-hour course prepares the student to function as an EKG technician and assist with Holter monitoring and stress testing. Upon completion, the student will be eligible to take the national certification exam for EKG technicians.
3. **Student Outcomes:**  
Upon successful completion of this course, students are able to do the following:
  - Demonstrate basic understanding of anatomy and physiology as it relates to the pathological conditions associated with cardiovascular testing.
  - Describe the cardiac conduction system, and commonly seen dysrhythmias.
  - Demonstrate proficiency in the technique of EKG including skin preparation and lead placement, detection and recording of EKG wave patterns and correct usage of EKG equipment.
  - Recognize electrical interference (“artifact”) in the EKG reading, and describe how to correct for this
  - Explain concepts of Holter Monitoring including indications and contraindications, preparation techniques, lead placement and interpretation.
  - Recognize commonly-used cardiac medications in relation to their effects on heart rate and their correlation to arrhythmias.
  - Prepare the patient through clear, caring, and respectful communication.
  - Present on one of the many cardiovascular conditions affecting patients today
4. **Credits:** 2 credits
5. **Satisfies General Education Requirement:** No
6. **Prerequisite:** None
7. **Semester(s) Offered:** Fall, Spring
8. **Suggested General Guidelines for Evaluation:** Didactic knowledge and procedural proficiency will be evaluated through cognitive testing and laboratory demonstration.
9. **General Topical Outline (Optional):**

**DTC102. EKG Technician Course Outline**

1. Basic Cardiovascular Anatomy and Physiology
2. Basic Cardiovascular Electrophysiology
3. Basic Dysrhythmia (ECG Rhythm) Review
4. ECG Techniques and Recognition
5. Holter Monitoring and Stress Testing  
Techniques Indications and Contraindication
6. Cardiac Medications
7. Special Considerations when performing an EKG
8. Communication addressing explanation of the procedure through the use of caring, professional conduct, ensuring patient privacy and safety
9. Laboratory Practice of Skills
10. Student Presentation on a cardiovascular topic