

# 09\_Cardiovascular Diseases: Understanding Risks and Measures of Prevention

Content Area: **Science**  
Course(s):  
Time Period: **Full Year**  
Length: **3-4 weeks**  
Status: **Published**

## **General Overview, Course Description or Course Philosophy**

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This course is a university level course which tests student's knowledge of the impact of lifestyle on one's overall health and well-being including on their physical, mental, and emotional status. It examines interventions to improve health in the areas of nutrition, physical fitness, stress management, disease prevention, and addiction use disorders . An examination by Rutgers University is required to obtain 3 college credits and an official transcript from the university.

## **OBJECTIVES, ESSENTIAL QUESTIONS, ENDURING UNDERSTANDINGS**

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- There are ways to recognize cardiovascular disease
- We have different types of cardiac arrhythmias
- What atherosclerosis is and what types of statin treatments
- There are differences in various cardiac conditions
- There are lifestyles more prone to cardiac disease

## **CONTENT AREA STANDARDS**

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SCI.HS-LS1-2	Develop and use a model to illustrate the hierarchical organization of interacting systems that provide specific functions within multicellular organisms.
SCI.HS-LS1-3	Plan and conduct an investigation to provide evidence that feedback mechanisms maintain homeostasis.
12.9.3.HL.1	Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.

## **RELATED STANDARDS (Technology, 21st Century Life & Careers, ELA Companion Standards are Required)**

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WRK.9.2.12.CAP.2	Develop college and career readiness skills by participating in opportunities such as structured learning experiences, apprenticeships, and dual enrollment programs.
WRK.9.2.12.CAP.3	Investigate how continuing education contributes to one's career and personal growth.
TECH.9.4.12.CI.1	Demonstrate the ability to reflect, analyze, and use creative skills and ideas (e.g., 1.1.12prof.CR3a).

## **STUDENT LEARNING TARGETS**

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### **Declarative Knowledge**

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Students  
will know:

- Ways to recognize cardiovascular disease
- Types of cardiac arrhythmias
- Term atherosclerosis and types of statin treatments
- Differences in various cardiac conditions
- Lifestyles more prone to cardiac disease

### **Procedural Knowledge**

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Students  
will be able to:

- Define cardiovascular disease and recognize examples
- Describe 2 types of cardiac arrhythmia
- Define atherosclerosis and understand treatment with statins
- Differentiate coronary heart disease, stroke, hypertension, and metabolic syndrome
- Identify lifestyle factors that increase the risk of cardiovascular disease

## **EVIDENCE OF LEARNING**

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### **Formative Assessments**

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- Chapter reviews
- group projects
- worksheets

### **Summative Assessments**

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- - Benchmarks – departmental benchmark given at the end of MP1, MP2, or MP3 & MP4 b(Semester Based Course)
  - Alternative Assessments
    - Lab inquiries and investigations
    - Lab Practicals
    - Exploratory activities based on phenomenon
    - Gallery walks of student work
    - Creative Extension Projects
    - Build a model of a proposed solution
    - Let students design their own flashcards to test each other
    - Keynote presentations made by students on a topic
    - Portfolio

## **RESOURCES (Instructional, Supplemental, Intervention Materials)**

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Health and Wellness, 11th Edition

ISBN-13: 978-1449687106

ISBN-10: 1449687105

## **INTERDISCIPLINARY CONNECTIONS**

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- Informal writing
- Data analysis
- Computation

## **ACCOMMODATIONS & MODIFICATIONS FOR SUBGROUPS**

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See link to Accommodations & Modifications document in course folder.