

MEDICAL ROBOTICS

GRADES 8–12

This document lists the Florida learning standards addressed by Medical Robotics, True Robotics' grades 8–12 robotics curriculum. Standards are grouped by subject and grade level, with codes and wording as published by the Florida Department of Education.

5

SCIENCE

7

CS

12

TOTAL STANDARDS

SCIENCE

5 STANDARDS

Based on the Florida state standards

GRADE	CODE	STANDARD
8	SC.6.L.14.5	Identify and investigate the general functions of the major systems of the human body (digestive, respiratory, circulatory, reproductive, excretory, immune, nervous, and musculoskeletal) and describe ways these systems interact with each other to maintain homeostasis.
8	SC.6.P.13.3	Investigate and describe that an unbalanced force acting on an object changes its speed, or direction of motion, or both.
9–12	SC.912.L.14.44	Describe the physiology of the respiratory system including the mechanisms of ventilation, gas exchange, gas transport and the mechanisms that control the rate of ventilation.
9–12	SC.912.P.12.3	Interpret and apply Newton's three laws of motion.
9–12	SC.912.N.4.2	Weigh the merits of alternative strategies for solving a specific societal problem by comparing a number of different costs and benefits, such as human, economic, and environmental.

COMPUTER SCIENCE

7 STANDARDS

Based on the Florida state standards

GRADE	CODE	STANDARD
8	SC.6.PE.3.5	Create a visual representation of a solution to a problem.
8	SC.7.PE.1.5	Identify the types and uses of variables in a program.
8	SC.6.PE.1.1	Identify the types of operations that can be performed on different data types.
8	SC.6.PE.1.11	Design solutions that use repetition and two-way selection.

GRADE	CODE	STANDARD
9-12	SC.912.PE.3.2	Decompose a problem by defining new code segments.
9-12	SC.912.TI.1.6	Describe how technology impacts personal life.
9-12	SC.912.TI.1.5	Describe the impact of computing on business and commerce.

SOURCES & NOTES

- The official science and computer science standards for Florida, as published by the Florida Department of Education.
- Codes and standard wording are reproduced from the official standards documents. Clarification statements, examples and assessment boundaries are omitted.
- Grade shows the grade level at which True Robotics lessons address each standard. A range (for example K-2) marks a standard written for a grade band.
- Standards text remains the property of its publisher and is reproduced here for alignment reference only.
- A lesson-level crosswalk is available on request at info@truerobotics.org.