

FOLSOM CORDOVA UNIFIED SCHOOL DISTRICT



Medical and Pathological Technologies

Board Approval Date: January 18, 2024	Course Length: 1 Semester
Grading: A-F	Credits: N/A
Proposed Grade Level(s): 7, 8	Subject Area: Elective Elective Area (if applicable): Science
Prerequisite(s): None	Corequisite(s):
CTE Sector/Pathway:	
Intent to Pursue 'A-G' College Prep Status: No	
A-G Course Identifier:	
Graduation Requirement: No	
Course Intent: Program (if applicable):	
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COURSE DESCRIPTION:

Students will delve into the fascinating world of medical diagnostics, innovative medical technologies and forensic investigations. This course equips students with the knowledge and skills necessary to understand and apply cutting edge techniques in the fields of medicine and forensics, with a focus on their practical applications in solving real-world challenges.

DETAILED UNITS OF INSTRUCTION:

Unit Number/Title	Unit Essential Questions	Examples of Formative Assessments	Examples of Summative Assessment
1. Vital Signs	What are vital signs? What can vital signs tell providers about the health of a patient?	*Taking vital signs correctly *Implications of vital signs	*Health Report
2. Identifying Medical Conditions and Treatments	How can symptom identification lead to a diagnosis? What does an afflicted organ look like compared to a healthy organ? How do organs create a body system?	*Organ dissection *Symptom identification chart *Disease and treatment research project	*Presentation of specific condition with symptoms, diagnostic processes and treatment plan
3. Forensics	What types of biological evidence are used to recreate a crime? What are the processes involved in gathering and processing evidence?	*Fingerprinting identification *Forensic interviews *Blood typing *DNA extraction *Blood spatter *Autopsies	*Crime Scene analysis paper

ESSENTIAL STANDARDS:

Middle School NGSS Science Standards

Middle School NGSS Engineering Design Standards

MS-LS1-3. Use arguments supported by evidence for how the body is a system of interacting subsystems composed of groups of cells.

MS-LS1-8. Gather and synthesize information that sensory receptors respond to stimuli by sending messages to the brain for immediate behavior or storage as memories.

MS-LS1-1. Conduct an investigation to provide evidence that living things are made of cells; either one cell or many different numbers and types of cells

MS-ETS1-1. Define the criteria and constraints of a design problem with sufficient precision to ensure a successful solution, taking into account relevant scientific principles and potential impacts on people and the natural environment that may limit possible solutions.

MS-ETS1-2. Evaluate competing design solutions using a systematic process to determine how well they meet

the criteria and constraints of the problem.

MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

MS-ETS1-4. Develop a model to generate data for iterative testing and modification of a proposed object, tool, or process such that an optimal design can be achieved.

RELEVANT STANDARDS AND FRAMEWORKS, CONTENT/PROGRAM SPECIFIC STANDARDS:

Link to Common Core Standards (if applicable):

Educational standards describe what students should know and be able to do in each subject in each grade. In California, the State Board of Education decides on the standards for all students, from kindergarten through high school.

<https://www.cde.ca.gov/be/st/ss/documents/finalelaccsstandards.pdf>

<https://www.cde.ca.gov/be/st/ss/documents/ccssmathstandardaug2013.pdf>

Link to Framework (if applicable):

Curriculum frameworks provide guidance for implementing the content standards adopted by the State Board of Education (SBE). Frameworks are developed by the Instructional Quality Commission, formerly known as the Curriculum Development and Supplemental Materials Commission, which also reviews and recommends textbooks and other instructional materials to be adopted by the SBE.

Link to Subject Area Content Standards (if applicable):

Content standards were designed to encourage the highest achievement of every student, by defining the knowledge, concepts, and skills that students should acquire at each grade level.

Health Science Medical Technology Standards B1.0 Recognize the integrated systems approach to health care delivery services: prevention, diagnosis, pathology, and treatment B1.1 Know relationship and use of an integrated health care delivery system. B1.2 Understand the range between prevention, diagnosis, pathology, and treatment procedures. B1.3 Understand the significance of nontraditional approaches to health care in relationship to delivery systems. B2.0 Understand the basic structure and function of the human body and relate normal function to common disorders. B2.1 Know basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment.

Link to Program Content Area Standards (if applicable):

Program Content Area Standards apply to programs such as International Baccalaureate, Advanced Placement, Career and Technical Education, etc.

TEXTBOOKS AND RESOURCE MATERIALS:

Textbooks

Board Approved	Pilot Completion Date (If applicable)	Textbook Title	Author(s)	Publisher	Edition	Date
		N/A				

Other Resource Materials

Teacher created instructional materials.

Supplemental Materials

Board approved supplemental materials (Including but not limited to: Film Clips, Digital Resources, Supplemental texts, DVDs, Programs (Pebble Creek, DBQ, etc.):

N/A