2025 - 2026

PROGRAM GUIDE

HEALTH SCIENCE CLUSTER

AND MIDDLE SCHOOL



ALABAMA STATE DEPARTMENT OF EDUCATION CAREER AND TECHNICAL EDUCATION LAURA BAILEY, HEALTH SCIENCE ADMINISTRATOR BECKY CORNELIUS, EDUCATION SPECIALIST LISA McGRADY, EDUCATION SPECIALIST STEPHENIA MCPHERSON, ADMINISTRATIVE ASSISTANT (334) 694-4750

Health Science Cluster Program Guide

The Health Science cluster provides students with essential knowledge and skills for pursuing careers in the following five pathways: Therapeutic Services, Diagnostic Services, Health Informatics, Support Services, and Biotechnology Research and Development. Rigorous and challenging content may include a variety of instructional strategies, work-based learning experiences, and simulation.

Courses night	ighted in yellow are shared with other clusters. See "Shared C		. <u>.</u>
Career Pathway Program Course		Lealth Science Program urses from this program list within tw ent in careers that involve planning, managing diagnostic services, health informatics, support	g, and providing healthcare services through
Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations
14002G1001 14252G1010 14252G1011 14999G1000 141999G1000 14055G1010 14055G1010 14055G1000 14298G2000 14298G2000 14298G2000 14298G2000 14298G1001 1405G1012 14254G1010 14154G1000 14051G2000 14152G1001 17049G1000 14062G1011 14099G1000 18105G1022	Foundations of Health Science – Required Foundation Course/Health Education Substitute Biotechnology I – Science credit eligible Biotechnology II – Science credit eligible Career Pathway Project in Health Science CTE Lab in Health Science Diagnostic Services Emergency Medical Services Emergency Services and Management Forensic Science and Crime Scene Investigation – Science credit eligible Health Science Internship – 1 credit option Health Science Internship – 2 credit option Human Body Structures and Functions – Science credit eligible Introduction to Veterinary Science Medical Mathematics – Math credit eligible Medical Terminology Nurse Aide Training Operating Room Essentials Patient Care Technician Pharmacy Technician Safety and Health Regulations Sports Medicine II Therapeutic Services Veterinary Science	 Alabama Certified Employee (ACE) Alabama Fire College Public Safety Telecommunicator Ambulance Operator– Skills for Success BACE – Biotechnology Aptitude and Competency Exam BLS Instructor Certified Billing and Coding Specialist (CBCS) Certified Clinical Medical Assistant (CCMA) Certified Electronic Health Records Specialist (CEHRS) Certified Medical Administrative Assistant (CMAA) Certified Patient Care Technician/Assistant (CPCTA) Certified Pharmacy Technician (CPHT) Community Health Worker – Skills for Success Elanco Veterinary Medical Applications Certification Emergency Medical Dispatcher (EMD) Lifeguard Certification (American Lifeguard Association or American Red Cross) Mental Health Worker – Skills for Success National Academy of Sports Medicine Certified Personal Trainer (NASM- CPT) National Emergency Medical Responder (EMR) National Emergency Medical Technician (EMT) Nursing Support Technician-Certified Veterinarian Assistant – Skills for Success 	 Cardiovascular Technologists & Technicians Clinical Laboratory Technologists & Technicians Dental Assistants Dental Hygienists Diagnostic Medical Sonographers Emergency Medical Technicians & Paramedics Licensed Practical Nurses Medical Assistants Medical Equipment Preparers Medical & Health Services Manager Medical Secretaries & Administrative Assistants Nurse Practitioners Occupational Therapy Assistants Ophthalmic Medical Technicians Pharmacists Pharmacy Technicians Phlebotomists Physical Therapists Physical Therapists Psychiatric Technicians Radiologic Technologists Registered Nurses Respiratory Therapists Speech-Language Pathologists Surgical Technologists Veterinarians Veterinarians Veterinary Assistants & Laboratory Animal Caretakers Veterinary Technologists & Technicians

Career Pathway Program	PL1 The Health Science Program prepares students for empl- professions in the following categories: therapeutic serv development.		
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations
14255G1000 14299G1002 14299G1003 14251G1001 14252G1002	Biomedical Innovation Human Body Systems – Science credit eligible Medical Interventions PLTW Capstone – Biomedical Science Principles of Biomedical Sciences	 Alabama Certified Employee (ACE) Alabama Fire College Public Safety Telecommunicator Ambulance Operator- Skills for Success BACE - Biotechnology Aptitude and Competency Exam BLS Instructor Certified Billing and Coding Specialist (CBCS) Certified Clinical Medical Assistant (CCMA) Certified EkG Technician (CET) Certified Electronic Health Records Specialist (CEHRS) Certified Medical Administrative Assistant (CMAA) Certified Nursing Assistant (CNA) Certified Patient Care Technician/Assistant (CPCTA) Certified Pharmacy Technician (CPT) Community Health Worker – Skills for Success Elanco Veterinary Medical Applications Certification Emergency Medical Dispatcher (EMD) Lifeguard Certification (American Lifeguard Association or American Red Cross) Mental Health Worker – Skills for Success National Academy of Sports Medicine Certified Personal Trainer (NASM- CPT) National Emergency Medical Responder (EMR) National Emergency Medical Technician (EMT) Nursing Support Technician-Certified Veterinarian Assistant – Skills for Success 	 Cardiovascular Technologists & Technicians Clinical Laboratory Technologists & Technicians Dental Assistants Dental Hygienists Diagnostic Medical Sonographers Emergency Medical Technicians & Paramedics Licensed Practical Nurses Medical Equipment Preparers Medical Equipment Preparers Medical & Health Services Manager Medical Record Specialists Medical Secretaries & Administrativ Assistants Nurse Practitioners Occupational Therapy Assistants Ophthalmic Medical Technicians Pharmacists Pharmacy Technicians Phlebotomists Physical Therapists Physical Therapists Psychiatric Aides Psychiatric Technicians Rediologist Technologists Registered Nurses Respiratory Therapists Speech-Language Pathologists Veterinarians Veterinary Assistants & Laboratory Animal Caretakers Veterinary Technologists & Technicians

Career Pathway Program	Health S Middle grades course content includes practices that prom medical math, medical terminology, and technical skills rel to apply their learning and demonstrate relevant interperson	ated to healthcare. These courses are designed	D , , , , , , , , , , , , , , , , , , ,
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations
22151G0608	Career Explorations	N/A	*See List Above
14001G0638	Health Science Discovery		
14001G0618	Healthcare Career Exploration]	
14001G0728	Medical Laboratory Science		
	Duciant Lass	the Wey Middle School Brogram	

Career Pathway Program	Project Lead Students play the role of real-life medical detectives as the through hands-on projects and labs, measure and interpre outbreaks.		ose disease. They solve medical mysteries
Course Number	Career Pathway Program Courses	Career Readiness Indicator (CRI)	In Demand Occupations
14001G0608	Medical Detectives	N/A	*See List Above
	is a purchased curriculum. LEAs must contact PLTW for add re submission of a signed copy of the Terms and Conditions, J		

<u>2025-2026 Subject and Personnel Codes</u> Health Science Cluster and Health Science Middle School Program

	Health Science	Cluster Courses	8
Course Number	Course Name	Course Number	Course Name
14255G1000	Biomedical Innovation (PLTW)	14299G1002	Human Body Systems (PLTW) - Science credit eligible
14252G1010	Biotechnology I – Science credit eligible	14254G1010	Medical Mathematics – Math credit eligible
14252G1011	Biotechnology II – Science credit eligible	14299G1003	Medical Interventions (PLTW)
14997G1010	Career Pathway Project in Health Science	14154G1000	Medical Terminology
14999G1000	CTE Lab in Health Science	14051G2000	Nurse Aide Training
14149G1000	Diagnostic Services	14254G1015	Operating Room Essentials
14055G1010	Emergency Medical Services	14051G1000	Patient Care Technician
14055G1000	Emergency Services and Management	14150012G1	Pharmacy Technician
15055G1000	Forensic Science and Crime Scene Investigation – Science credit eligible	14251G1001	PLTW Capstone-Biomedical Science
14002G1001	Foundations of Health Science – Required Foundation Course/Health Education Substitute	14252G1002	Principles of Biomedical Sciences (PLTW)
14298G1000	Health Science Internship – 1 credit option	14062G1010	Sports Medicine I
14298G2000	Health Science Internship – 2 credit option	14062G1011	Sports Medicine II
18105G1012	Introduction to Veterinary Science	14099G1000	Therapeutic Services
14299G1001	Human Body Structures and Functions – Science credit eligible	18105G1022	Veterinary Science

	Health Science Middle School Program Courses
Course	Course Name
Number	
22151G0608	Career Explorations
14001G0638	Health Science Discovery
14001G0618	Healthcare Career Exploration
14001G0608	Medical Detectives (PLTW)
14001G0728	Medical Laboratory Science

	Shared	l Courses	
Course Number	Course Name	Cluster(s)	Required Year to Implement COS
22151G0608	Career Explorations	Agriculture, Food and Natural Resources Business, Management, and Administration Law, Public Safety, Corrections and Security	2021-2022
14055G1000	Emergency Services and Management	Law, Public Safety, Corrections and Security	2021-2022
15055G1000	Forensic Science and Crime Scene Investigation	Law, Public Safety, Corrections and Security	2021-2022
18105G1012	Introduction to Veterinary Science	Agriculture, Food and Natural Resources	2021-2022
17049G1000	Safety and Health Regulations	Architecture and Construction Manufacturing Transportation, Distribution and Logistics	2022-2023
18105G1022	Veterinary Science	Agriculture, Food and Natural Resources	2021-2022

College and Career Readiness Indicator Course Matrix

Program	Health Science	PLTW Biomedical Science
Name Foundation Course(s)	Foundations of Health Science – Required Foundation Course	Foundations of Health Science (not required for the PLTW Biomed program)
Concentrator	Biomedical Innovation (PLTW)	Biomedical Innovation (PLTW)
Course(s)	Biotechnology I	Human Body Systems (PLTW)
	Biotechnology II	Medical Interventions (PLTW)
	Diagnostic Services	Principles of Biomedical Sciences (PLTW)
	Emergency Medical Services	
	Emergency Services and Management	
	Forensic Science and Crime Scene Investigation	
	Human Body Structures and Functions	
	Human Body Systems (PLTW)	
	Introduction to Veterinary Science	
	Medical Interventions (PLTW)	
	Medical Mathematics	
	Medical Terminology	
	Nurse Aide Training	
	Operating Room Essentials	
	Patient Care Technician	
	Pharmacy Technician	
	Principles of Biomedical Sciences (PLTW)	
	Safety and Health Regulations	
	Sports Medicine I	
	Sports Medicine II	
	Therapeutic Services	
	Veterinary Science	
Capstone	Career Pathway Project in Health Science	PLTW Capstone - Biomedical Science
Course(s)	CTE Lab in Health Science	
	Health Science Internship	
	PLTW Capstone - Biomedical Science	

To meet the CCR Indicator as a CTE completer, a student must earn three (3.0) credits with the grade of a "C" or higher in CTE courses that are part of an approved CTE program of study. Additional requirements are outlined in <u>Memorandum FY22-</u> 2065.

This matrix is intended for general guidance on the CCR completer status and is subject to change. For all CTE programming information, please refer to the CTE Cluster specific Program Guide. It contains a list of approved CTE programs, valid course numbers, approved Career Readiness Indicators (CRIs), and in demand occupations.

*Courses are listed in alphabetical order, not in sequential order.