



Dual Credit (College in the High School) 2023-24 FCCTC



Sharla Dunlap, Marla Moore

- AH 140** 3 cr, (\$250.50) **Introduction to Allied Health** - An introduction to the allied health professions. The course reviews the evolution and current status of health care delivery and introduces the student to the concepts of human growth and development, cultural diversity, safety in the workplace, communication skills, aspects of management, securing employment and strategies for becoming a successful employee. Special emphasis is placed on medical terminology and health care law and ethics. *Course on hold*
- AH 105** 3 cr (\$250.50) **Medical Terminology** - The study of frequently used medical terms, abbreviations, and symbols as found within their usual contexts. Approached through an integrative review of anatomy and physiology, common pathophysiological states, and related diagnostic tests and treatments (including an introduction to the metric system).
- TBA – decision to offer on hold until 2025-2026 or after**
- AUTO 101** 3 cr (\$250.50) **Automotive Fundamentals** - An overview of automotive service practices and procedures, shop equipment, use of shop manuals, basic diagnosis and minor repairs, identification of components and component nomenclature.
- AUTO 151** 3 cr (\$250.50) **Braking Systems** - Fundamentals of brake hydraulics; theory and operation of drum and disc brakes. Troubleshooting and diagnostic procedures are introduced for various types of anti-lock braking and traction control systems. Pre or co requisite: AUTO 101.
- AUTO 153** 3 cr (\$250.50) **Suspension Systems** – Provides students with an introduction to wheels and tires, suspension, and steering system components and service. This course emphasizes the safe use of shop equipment to mount and balance tires, to change suspension components, and to perform wheel alignments. Diagnosing and testing steering and suspension systems is also included, as well as the Pennsylvania Vehicle Safety Inspection Certification. Pre or co requisite: AUTO 101.
- Dwight Munson and Dan Stockman (Electrical all 4, Mecha ELOC153 and IA201)**
- ELOC 153** 4 cr (\$334) **Fundamentals of Electricity** – Presents basic electrical terms, units and Ohm's Law, analysis of series, parallel and series/parallel circuits, and the operation and use of batteries. The use of capacitance in DC currents and the operation of magnetic circuits are also covered. The course introduces alternating current waveforms, average and effective values, and capacitors and inductors in AC circuits. Reactance and impedance are defined. The operation of series and parallel AC circuits, resonance circuits (series and parallel), and polyphase systems are covered.
- ELOC 157** 4 cr (\$334) **Electrical Wiring 1**- Provides an introduction to residential wiring practices, including safety procedures and introduction to basic tools. Cutting, stripping, and splicing Romex wire, duplex and basic receptacles, lighting circuits, singlepole systems and three- and four-way systems are covered. Students wire combination lighting/receptacle circuits, water heaters, baseboard heaters, dryers, range circuits and the rewiring of existing systems. Installing fused and fuseless panels is also covered. Prerequisites: ELOC 153 and 172, and GTEC 130 with grades of C or higher; or permission of the instructor.
- ELOC 172** 2 cr (\$167) **National Electric Code** – Layout of the National Electrical Code with emphasis on requirements for service, feeder, and branch circuits, conductor sizing and grounding. An analysis of appropriate wiring methods for residential and commercial buildings is provided.
- IA 201** 4 cr (\$334) **Motors and Controls I** – The theory and operation of AC and DC motors and controls. Topics include basic AC and DC motors, basic motor control devices, motor starters, and basic control circuits. Students wire control circuits for specific motors and applications. Prerequisites: ELOC 153 or IMT 102, or permission of the program coordinator

Kenneth Boxler

- HVAC 101** 4 cr (\$334) **Basic Electrical Fundamentals** – Introduction to basic electricity fundamentals. Topics include circuitry, meter usage, reading or wiring diagrams schematics and automatic controls as related to HVAC.
- HVAC 103** 4 cr (\$334) **Fundamentals of Air Conditioning I** – Designed to introduce the physics and science theory relevant to the understanding of air-conditioning fundamentals. Emphasis is placed on components and controls used in air conditioning equipment. CFC federal laws are reviewed. Prerequisite: HVAC 101 or permission of coordinator.
- HVAC 109** 4 cr (\$334) **Heating Systems** – The fundamentals of heating systems including installation, trouble-shooting, controls and servicing. Prerequisite: HVAC 101 or permission of coordinator.