

Program Description: The Academy of Health Professions program uses project and problem-based learning, clinical experiences, and classroom and lab instruction to teach students about the field of health care. This is a two year intensive program. During the first year, the focus of study is primarily Anatomy and Physiology. The second year focuses on basic patient care skills. Students will also have the opportunity to earn state and/or nationally recognized certification as well as articulated credits in a post-secondary institution. Students are instructed in professional conduct and safe practices prior to entering the lab. Industry standard uniform is required.

Level I Course of Study

Introduction to the Health Care Industry

- Career Exploration
- Summer Project Presentation
- Medical Terminology/Abbreviations

Foundations of Human Anatomy and Physiology

- The Language of Anatomy and Physiology

Microbiology and Human Disease

- Classification of Disease
- Medical Diagnosis and Diagnostic Techniques
- Infection: Common Microbes
- Chain of Infection
- Common Infectious Disease and Treatments
- *Skill: Aseptic Hand Washing*

Infection Control

- Medical Asepsis
- Standard Precautions
- Personal Protective Equipment (PPE)
- Transmission Based Precautions: Airborne, Droplet, and Contact
- *Skill: Application and Removal of PPE*

Membranes and the Integumentary System

- Structure and Function
- Injuries and Disorders of the Skin
- *Lab: Simple Dressing Change:*
- *Skill: Unoccupied Bed Making: Hospital bed*

Cardiovascular System

- Heart Anatomy and Function of the Cardiovascular System
- Regulation of the Heart

- Blood Vessels and Circulation
- Heart Disease
- **Lab:** Identification of Pulse Sites and Doppler Use
Heart Dissection
- **Field trip:** *The Dome Experience* <http://inovaheart.org/the-dome-experience>
- **Skill:** Vital Signs (Temperature, Pulse, Respiration)
Beginning Procedure Actions and Procedure Completion Actions

Communication Skills

- Communication in Healthcare
- Methods of Communication
- Comfort Pain Rest and Sleep
- Cultural Awareness and Sensitivity for the HCW

Observation Reporting and Documentation

- Making Observations and Reporting
- Pain Assessment
- Electronic Record Keeping

Skeletal System

- Bone as a Living Tissue
- Axial and Appendicular Skeleton
- Joints
- Common Injuries and Disorders of the Skeletal System
- **Skill:** Measuring Height and Weight with Documentation

Muscular System

- Muscle Tissue Categories and Functions
- Skeletal Muscle Actions
- The Major Skeletal Muscles
- Common Injuries and Disorders of Muscles

Environmental and HCW Safety

- The Patient Environment
- Safety Measures
- Fire Safety
- Other Emergencies and HCW Safety
- **Lab:** *Body Mechanics*
- **Skill:** First Aid Certification: American Heart Association

Nervous System

- Transmission of Nerve Impulses
- Function and Anatomy of the Central Nervous System

- Function and Anatomy of the Peripheral Nervous System
- Injuries and Disorders of the Nervous System
- **Lab:** *Brain Dissection*

Sensory System

- The Eye
- The Ear
- Smell and Taste
- **Lab:** *Eye Dissection*

Respiratory System

- Functions and Anatomy
- Respiration: Mechanics and Control
- Respiratory Disorders and Diseases
- **Lab:** *Pulse Oximetry, Nebulizer Treatments*
- **Skill:** *Splinting/Coughing and Deep Breathing Exercises*

Digestive System and Nutrition

- Nutrition
- Anatomy and Physiology
- Disorders and Diseases

Urinary System

- Anatomy of the Kidney
- Urine Formation, Storage and Excretion
- Diseases and Disorders
- **Lab:** *Urinalysis, Kidney dissection*

The Male and Female Reproductive Systems

- Reproduction and Development of the Human Reproductive System
- Male Reproductive System Anatomy and Physiology
- Female Reproductive System Anatomy and Physiology
- Fertilization, Pregnancy and Birth
- Disorders and Diseases

Ethical and Legal Issues Affecting the HCW (Home Study Unit)

- Legal and Ethical Standards
- Ethics Questions and Legal Issues
- Professional Boundaries
- Working in a Virtual World & Social Media
- Health Insurance Portability and Accountability Act

Optional Units

Lymphatic System

- Structure and Function

- Nonspecific and Specific Defenses
- Disorders and Diseases

Endocrine System

- Function and Control
- Major Endocrine Organs
- Endocrine Disorders and Diseases

Level II Course of Study

Medical Abbreviations

Cardiology

- CPR: Health Care Provider Training and Certification (AHA)
- Blood Pressure Measurement and Documentation
- Electrocardiography
- Doppler and Pulse Oximeter Use

Basic Patient Care Skills

- Admission, Transfer, and Discharge Skills
- Toileting Skills: Bedpan, Urinal, and BSC
- Urinary Catheter Devices and Care: Internal and External
- Ostomy Care
- Intake and Output
- Patient Bathing and Grooming Skills
- Mouth and Denture Care
- Dressing Patients with an Affected Extremity
- Application of Anti-Embolism Stockings
- Skin care: Focus on Decubitus Ulcer Care
- Patient Positioning
- Occupied Bed Making
- Health Care Facility Diets
- Feeding Techniques/Tube Feeding
- Patient mobility: Transfer skills
- Heat and Cold Therapy

Womb to Tomb

- Growth and Development
- Behavioral Theorists: Erikson and Maslow
- The Aging Process and Caring for the Geriatric Patient
- Alzheimer's Disease and Dementia
- The Stages of Death and Dying
- Post Mortem Care

Assisting in the Exam Room: Medical Office

- Communication/Transcription
- Preparing the Room for a Physical Exam
- Instrument Identification
- Positioning and Draping
- Obtaining Health History
- Vision Screening
- Documentation
- Specimen Collection and Transport
- The Physical Exam
- Range of Motion: Active and Passive
- Assistive Devices: Canes/Crutches/Walkers

Surgical Assisting

- Use of Autoclave: Cleaning, Disinfecting, Sterilization
- Surgical Scrub and Surgical Technique
- Anesthesia, Pre and Postoperative Pt Education
- Suturing/Suture Removal/Staple Removal
- Drains: Penrose, Jackson Pratt, Hemovac

Introduction to Pharmacology/Med Administration

- Terminology: OTC vs. Rx Medications/Narcotics
- Drug Classifications
- Research Drug Reference Resources
- Medication Administration
- Injections: Intradermal, Subcutaneous, Intramuscular
- Pharmacology Project

Phlebotomy

- Vein Identification and Inspection
- Blood Drawing Technique
- Specimen Collection/Labeling/Transport
- Use of a Centrifuge
- Intravenous infusion: Site inspection, insertion and removal of an IV catheter

General Office Procedures

- Scheduling
- Insurance Processing
- CPT Coding
- Bookkeeping

Additional Topics Covered

Job Skills with Mrs. Hobbs

- Sources of employment
- Writing a resume'
- Completing an application
- Interviewing techniques
- Characteristics of a good employee
- Employer Guest Speakers

Clinical Experience

Selected students have the opportunity to participate in a Certified Nursing Assistant (CNA) Clinical Experience. Teacher approval is required. The student must also maintain appropriate classroom grades:

- AOHP classroom grade: 75%
- Home school classroom grades: 70%.

CNA candidates will be prepared for the Maryland State Certification Exams (CNA and possibly GNA dependent on clinical location).