



# **BAVTS Health Careers**

**Course Title/Number: CIP 51.9999**

**Health Professionals and Related Clinical Sciences**

**Health Careers**

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Additional Staff working with our class:

Mr. Craig Mosser, Computer Integration Lab Specialist

Mr. Chris Bosch, Literacy Specialist

Ms. Christal Vitko, Math Specialist

**Textbooks:**

**Simmers DHO:Health Science**

Louise Simers/Karen Simmers-Nartker/Sharon Simmers-Kobelak

ISBN:13:978-1-13370-380-8

**Dean Vaughn Medical Terminology 2nd Edition**

Dean Vaughn

ISBN:0-914901-12-5

**Medical Terminology for Health Professionals**

Anne Erlich/Carol L. Schroeder/Laura Erlich/Katrina A. Schroeder

ISBN: 978-1-305-63435-0

# Health Careers

## Course Description:

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This 2-3 year course provides a pathway of healthcare professions, education & licensing requirements, employment trends and salary ranges for health related careers. Students will have exposure to the history and development of healthcare. Healthcare issues will be discussed with an emphasis on ethical dilemmas as well as cultural diversity. We will increase knowledge of careers in healthcare through job shadow as well as various trips to local hospitals and nursing homes. The principles of critical thinking and communication will be taught and incorporated through simulated scenarios, discussions, presentations and guest speakers. Students will be offered the opportunity to learn necessary skills for entry level positions in healthcare as they graduate from the Health Careers Program. There is a co-op program in conjunction with St. Luke's Health Network which enables our students to reinforce classroom skills in the hospital, while helping with the healthcare worker shortage. Students are commonly employed by various medical facilities such as Lehigh Valley Health Network, St. Luke's Hospital, Country Meadows, Good Shepherd and various other nursing homes upon graduation.

## Average pay:

Health Careers CIP code 51.9999 has areas listed as High Priority Occupations in the Lehigh Valley. The average annual wage in the Lehigh Valley for SOC codes related to this CIP are as follows:

SOC code-29-1071.00 Physician Assistant - \$91,640

\*\*\*SOC code-29-1141.00 Registered Nurse - \$67,910

\*\*\*SOC code-29-2061.00 Licensed Practical Nurse - \$48, 160

\*\*\*SOC code-31-1014.00 Nurse Assistant - \$30, 880

SOC code-29-2053.00 Physical Therapy Assistant - \$34, 030

SOC code-31-2012.00 Occupational Therapy Assistant - \$50, 720

SOC code-29.2051.00 Dietetic Technicians - \$35, 030

SOC code-29.2034.00 Radiologic Technologists - \$58, 770

\*\*\* SOC code-31-9011.00 Medical Assistant - \$33, 330

SOC code-31.9011.00 Massage Therapist - \$44, 660

\*\*\* 2017 Lehigh Valley High Priority Occupations

## **Classroom Tools:**

Simulated Mannequins

Simulated Hospital Patient Care Areas

CPR Training Equipment

Anatomical Mannequins

First Aid Equipment

Phlebotomy Simulations

Simulated Medical Office

Professional Care Provider Role Play

Computer Cart

Student Laboratory Area

# Course Syllabus

## First Year Semester Year 1 Marking Period 1 Rotation - 11 Day Sequence

### Day 1

- Introduction, Expectations for the class, Student Information Sheet, Folder Handout
- Personality Tests
- Ice breaker activities
- Essay

#### **Subjects Covered:**

- Professionalism
- Personal and Professional Qualities of a Health Care Worker

### Day 2

- Warm Up
- Skills: Handwashing, Donning/Doffing Gloves
- Complete Hand Washing Packet

#### **Subjects Covered:**

- Infection Control
- Safety

### Day 3

- Warm Up
- Build a Body Poster
- Muscle Word Search
- Introduce medical terms for medical terminology quiz, define terms, make flash cards

#### **Subjects Covered:**

- Anatomy and Physiology
- Medical Terminology

## Day 4

- Warm Up
- Who Gets the Heart?
- Discussion of Ethics, How organ donation works, misconceptions about organ donation, how transplant committee works
- View *No Greater Love* - Organ Donation Documentary, answer questions

### **Subjects Covered:**

- Legal and Ethical Responsibilities
- Immune system
- Death and Dying

## Day 5

- Warm Up
- View *The 5th Quarter* - Movie about a high school athlete who is injured in an accident and his family has to make the hard choice to donate his organs
- Complete questions on *The 5th Quarter*
- Discuss the importance of signing up as an organ donor

### **Subjects Covered:**

- Legal and Ethical Responsibilities
- Death and Dying
- Personal and Professional Qualities of a Health Care Worker

## Day 6

- Warm Up
- Discuss Different Careers in Health Care
- Career Scavenger Hunt Activity

### **Subjects Covered:**

- Careers In Health Care

## Day 7

- Warm Up

- Discuss medical ethics cases in small groups and as a class
- Build a digestive system project - label and define major organs

**Subjects Covered:**

- Legal and ethical responsibilities
- Anatomy and Physiology

## Day 8

- Warm Up
- Medical Math Lesson -military math, Rule of Nines, or measuring height and weight
- Study for medical terminology quiz
- Play medical terminology BINGO for review

**Subjects Covered:**

- Medical Math
- Medical Terminology
- Nurse Assistant Skills

## Day 9

- Warm Up
- Sensory Deprivation Lab
- Vocabulary Quiz
- Skill: Abdominal Thrusts

**Subjects Covered:**

- Human Growth and Development
- Medical Terminology
- First Aid

## Day 10

- Warm Up
- Lecture on Chain of Infection
- Make Posters on Applying Chain of Infection - Assignment

**Subjects Covered:**

- Infection Control

# Day 11

-Warm Up

-View *World War Z*

-Fill in Chain of Infection for *World War Z* - Assignment

## **Subjects Covered:**

-Infection Control

## **First Semester Year 1 Marking Period 2**

### **Orientation and Safety:**

#### **Duty and Tasks Covered:**

103 Identify general course objectives

104 Follow clinical skill areas rules and regulations

105 Follow professional dress code

107 Differentiate between hospitals, long-term care agencies, and home health agencies as to their history, purpose, and their expectations of the health care professional

108 Follow clinical experience guidelines and procedures

109 Follow OSHA standards and the Center for Disease Control (CDC) Standard Precautions

110 Follow "Right to Know Laws" and the importance of maintaining Safety Data Sheets (SDS) for all chemicals

113 Identify and follow the "chain of command" in organizational structure

114 Follow safety and emergency procedures

115 Report non-functioning equipment

#### **Subjects Covered:**

Promotion of Safety

**Course Objective:** Students will practice safe and professional conduct in the classroom and the field.

### **Infection Control:**

#### **Duties and Tasks Covered:**

401 Identify diseases, their mode of transmission, and the use of transmission based precautions



- 402 Follow hand hygiene protocols
- 403 Follow standard precautions and infection control in the health care facility
- 404 Explain blood-borne pathogens, sharps disposal, and biohazards
- 405 Follow correct isolation and safety techniques in care of infectious clients, including the use of proper personal protective equipment (PPE)
- 407 Perform basic cleaning and disinfecting of objects to prevent disease transmission
- 408 Explain how the immune system protects the body from infectious diseases
- 409 Don and doff non-sterile gloves
- 410 Sterilize contaminated objects

**Subjects Covered:**

Infection Control

**Course Objective:** Students will practice effective infection control techniques in the classroom and during clinical practice.

**Basic Clinical Care Skills:**

**Duties and Tasks Covered:**

- 1203 Measure and record a client's oral, axillary, rectal, and electronic temperature
- 1204 Measure and record a client's radial and apical pulse
- 1205 Measure and record a client's respirations
- 1206 Measure and record a client's blood pressure
- 1207 Measure and record a client's pulse oximetry
- 1208 Apply elastic stockings
- 1209 Make an unoccupied bed
- 1210 Make an occupied bed
- 1211 Measure and record height and weight
- 1212 Discuss proper handling of soiled linen
- 1213 Providing for the client's safe, clean, and comfortable environment

**Subjects Covered:**

Vital Signs

Medical Assistant Skills

Nurse Assistant Skills

**Course Objective:** Students will be prepared to provide exceptional client bedside care.

### **Personal Care Skills:**

#### **Duties and Tasks Covered:**

- 901 Provide privacy when delivering personal care
- 902 Assist the client to dress and undress
- 903 Assist the client with bathing and personal grooming including the principles of hand and foot care
- 904 Observe and report the condition of the skin
- 905 Administer oral hygiene for the conscious/unconscious client
- 906 Identify and discuss the treatment of decubitus ulcers (bed or pressure sores)

#### **Subjects Covered:**

Nurse Assistant Skills

**Course Objective:** Students will be prepared to provide exceptional client bedside care.

## **First Year Semester Two Marking Period 3**

### **Communication:**

#### **Duties and Tasks:**

- 301 Practice effective communication
- 303 Document objective and subjective observations using appropriate terms
- 305 Communicate in a professional manner according to the client's stage of development and cultural background
- 307 Practice effective conflict management skills

#### **Subjects Covered:**

Personal and Professional Qualities of a Healthcare Worker

**Course Objective:** Student will practice effective professional communication

## **First Year Semester Two Marking Period 4**

### **Rehabilitation and Restorative Care:**

**Duties and Tasks:**

1401 Assist the client with ambulatory and transfer devices (e.g. cane, quad cane, walker, crutches, and wheelchair)

1402 Perform range of motion exercises

1403 Recognize various assistive devices when assisting the client

**Subjects Covered:**

Physical Therapy Skills

**Course Objective:** Student will provide exceptional client care

**Body Mechanics, Moving, Lifting, and Positioning****Duties and Tasks:**

801 Assist the client with dangling, standing, and walking

802 Transfer client from bed to chair/wheelchair and from stretcher to bed

803 Turn and/or position a client both in a bed and in a chair

804 Discuss safety hazards including slips, trips, and the risks of falls

805 Practice transferring, positioning, and transporting of a client with special needs, including bariatric clients

807 Operate a mechanical lift in laboratory setting

808 Discuss restraints and alternative measures of restraints

809 Utilize proper body mechanics

810 Demonstrate proper use of a gait belt

**Subjects Covered:**

-Nurse Assistant Skills

-Promotion of Safety

**Course Objective:** Students will provide exceptional client care.

## **Second Year Semester One Marking Period 1**

**Anatomy, Physiology and Pathology****Unit/Standard Covered**

1801 Identify the basic structure of the human body

1802 Label body planes, directions, and cavities

1803 Identify the organs, and explain the function of the respiratory system

1805 Identify the disease processes of the respiratory system

1806 Identify the organs and explain the function of the circulatory system

- 1808 Identify the disease processes of the circulatory system
- 1809 Identify the organs and explain the function of the integumentary system
- 1811 Identify the disease processes of the integumentary system
- 1812 Identify the organs and explain the function of the muscular system
- 1814 Identify the disease processes of the muscular system
- 1815 Identify the organs and explain the function of the nervous system
- 1817 Identify disease processes of the nervous system
- 1818 Identify the organs and explain the function of the digestive system
- 1820 Identify the disease processes of the digestive system

**Subjects Covered:**

Anatomy and Physiology

Body Structure

Planes, cavities, directions of the body, quadrants

Respiratory system

Diseases of the respiratory system

Circulatory system

Diseases of the circulatory system

Integumentary system

Diseases of the integumentary system

Muscular system

Diseases of the muscular system

Nervous system

Diseases of the nervous system

Digestive system

Diseases of the digestive system

**Course Objective:** Students will apply principles of Anatomy and Physiology during client care.

## **Second Year Semester One Marking Period 2**

### **Anatomy, Physiology and Pathology**

#### **Unit/Standard Covered**

- 1821 Identify the organs and explain the function of the urinary system
- 1823 Identify the disease processes of the urinary system
- 1824 Identify the organs and explain the function of the reproductive system
- 1826 Identify the disease processes of the reproductive system
- 1827 Identify the organs and explain the function of the lymphatic system
- 1829 Identify disease processes of the lymphatic system
- 1830 Identify the organs and explain the function of the endocrine system
- 1832 Identify the disease processes of the endocrine system
- 1833 Identify the organs and function of the special senses
- 1834 Identify the disease processes of the special senses
- 1835 Identify the organs and function of the skeletal system
- 1836 Identify the disease processes of the skeletal system

**Subjects Covered:**

- Urinary system
  - Diseases of the urinary system
- Reproductive system
  - Diseases of the reproductive system
- Lymphatic system
  - Diseases of the lymphatic system
- Endocrine system
  - Diseases of the endocrine system
- Special senses
- Skeletal system
  - Diseases of the skeletal system

**Course Objective:** Students will apply principles of Anatomy and Physiology during client care.

## **Second Year Semester Two Marking Period 3**

**Mental Health and Mental Illness:**

**Unit/Standard Covered:**

1301: Discuss the various types of mental health disorders

- 1302: Use reality orientation techniques with the confused client
- 1303: Use communication skills/techniques with easily agitated or frightened clients
- 1304: Use skills/techniques with clients repeating repetitive behaviors

**Subjects Covered:**

Mental illness types and examples of those behaviors  
Movies highlighting some of the mental illnesses discussed during class

**Course Objective:** Students will be able to identify and respond professionally and appropriately to clients diagnosed with a mental health disorder.

**Medical Terminology:**

**Unit/Standard Covered:**

- 1601: Differentiate roots/prefixes/suffixes in medical terms
- 1602: Define abbreviations used in medical documents
- 1603: Differentiate medical specialties
- 1604: Use medical language
- 1605: Use of anatomical medical terms when discussing health and illness of the body

**Subjects Covered:**

Dean Vaughn Medical Terminology 360 Second Edition

**Course Objective:** Students will be able to incorporate their knowledge of Medical terminology into their classroom and professional practice.

**Allied Health Skills:**

**Unit/Standard Covered:**

- 1701: Reserved
- 1702: Maintain client records
- 1703: Complete manual filing skills and discuss the use of electronic medical records (EMR)
- 1704: Position client for specific examinations as indicated by physician
- 1705: Perform visual acuity test
- 1706: Discuss methods of collection, special handling and labeling of specimens
- 1707: Discuss the principles of an EKG

1708: Discuss blood glucose measurement using a glucometer, proper strips and manufacturer glucose controls or standards

1709: Identify the importance of maintaining the client record

1710: Discuss the principles of admitting, discharging, and transferring a client

**Subjects Covered:**

Medical Assistant Skills

Vital Signs

Nurse Assistant Skills

**Course Objective:** Students will be able to provide exceptional care in an Allied Healthcare setting and the classroom.

## **Second Year Semester Two Marking Period 4**

**Mathematics in Allied Health:**

**Unit/Standard Covered:**

1901: Use of mathematics applications in healthcare

1902: Identify systems of measurements used in a clinical setting

1903: Identify and convert between measurement systems including metric system

**Subjects Covered:**

Medical Math

Measuring height and weight

Measuring temperature

Metric conversions

Rule of Nines - Burns

Military Math

Calculating medication dosages

Calculating intravenous drip rates

Height/weight charts

Reading syringes

Calculating Body Mass Index

**Course Objectives:** Students will be able to apply Allied Health Mathematical concepts in the classroom and during client care.

# Third Year Semester One Marking Period 1

## Human Needs and Human Development:

### **Unit/Standard Covered:**

701: Discuss human growth and development through the lifespan

702: Discuss cultural diversity

703: Identify psychosocial changes in the client

704: Assistance clients in expressing their personal faith and religious beliefs

705: Provide care for sensory deprived (blind or deaf) clients

### **Subjects Covered:**

Human Growth and Development

Cultural Diversity

**Course Objective:** Students will be able to demonstrate developmentally appropriate behavior in the classroom and during client care.

# Third Year Semester One Marking Period 2

## Death and Dying:

### **Unit/Standard Covered:**

1501: Discuss personal feelings and attitude about death

1502: Explain how culture and religion influence a person's attitude toward death and the bereavement process

1503: Discuss the goals of hospice care

1504: Discuss the stages of dying

1505: Report the common signs of a client's approaching death

1506: Discuss the postmortem care of a client while maintaining the client's right to dignity and respect

### **Subjects Covered:**

Death and Dying

Cultural Diversity

Nurse Assistant Skills

**Course Objective:** Students will be able to incorporate concepts of death and dying during class case studies.

## 21st Century Interpersonal Skills:



**Unit/Standard Covered:**

2001: Develop relationships with a range of stakeholders (clients, co-workers, external counterparts) who may represent a wide variety of cultural diversities

2002: Practice active listening skills to obtain and clarify information

2003: Exhibit ethical characteristics and behaviors

2004: Differentiate between productive and questionable ethical practices

2005: Describe and recognize discrimination and harrassment/bullying behaviors

2006: Describe and recognize positive leadership qualities

2007: Display effective communication skills, including eye contact, handshake, professional attire and positive professional body language

2008: Investigate stress management

2009: Exhibit ethical behaviors in telehealth medicine

**Subjects Covered:**

Stress Reduction Techniques

Cultural Diversity

Personal and Professional Qualities of a Health Care Worker

Legal and Ethical Responsibilities

**Course Objective:** Students will present themselves in a professionally competent manner in the classroom, client settings, interviews, and with community contacts.

## Third Year Semester Two Marking Period 3

**Legal and Ethical Issues:****Unit/Standard Covered:**

201: Identify client's advanced directives

202: Uphold confidentiality of records and information as required by HIPAA

203: Promote the client's right to make personal choices to accommodate individual needs

204: Practice professional standards for health care professionals

205: Apply legal responsibilities of the healthcare professional

206: Discuss ethical dilemmas as related to the health care professional

**Subjects Covered:**

Legal and Ethical Responsibilities

**Course Objective:** Students will apply the principles of ethics in the classroom and during clinical experiences.

## **Third Year Semester Two Marking Period 4**

### **Emergency Care and Disaster Preparedness:**

#### **Unit/Standard Covered:**

601: Perform cardiopulmonary resuscitation (CPR) and first aid

603: Follow Emergency Response/Crisis Plan Procedures in the facility

604: Identify potential fire hazards and safety procedures, including rescue, alarm, contain, and extinguish (RACE) and pull, aim, squeeze, and sweep (PASS)

#### **Subjects Covered:**

First Aid

Promotion of Safety

**Course Objectives:** Students will be able to demonstrate appropriate Emergency/Disaster response in the classroom and the community.

### **Urinary Elimination/Bowel Elimination:**

#### **Unit/Standard Covered:**

1001: Assist the client in toileting and bladder training

1002: Provide catheter care

1003: Demonstrate perineal care

1004: Apply briefs

1005: Provide standard bedpan and fracture pan assistance

1006: Document patient's fecal and urinary output

#### **Subjects Covered:**

Nurse Assistant Skills

**Course Objective:** Students will be able to apply the principles of Urinary/Bowel elimination in the classroom and in a clinical setting.

**Nutrition and Hydration:**

**Unit/Standard Covered:**

1101: List principles of nutrition

1102: Investigate therapeutic diets

1103: Assist a client with eating meals

1104: Feed a neurological or sensory deprived client

1105: Measure and record intake and output

**Subjects Covered:**

Nutrition and Diets

Nurse Assistant Skills

**Course Objective:** Students will apply the principles of Nutrition and Hydration in classroom simulations and during client interaction.

# Supplemental Learning Activities

Students who participate in this program will also have opportunities to participate in the following programs and school-sponsored activities:

**HOSA~Future Health Professionals:** The mission of HOSA is to empower future health care professionals to become leaders in their health care communities through education, collaboration and experience. HOSA begins at the state level where our students compete in various medical areas against other CTE students in the state of Pennsylvania. While they provide the financial portion to attend state level, BAVTS pays varying amounts for the International HOSA competition for students.

**SkillsUSA:** SkillsUSA is a national membership association serving high school, college and middle school students who are preparing for careers in trade, technical and skilled service occupations, including health occupations, and for further education. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps each student excel. Health Careers students compete in various areas.

**NTHS:** Level II and Level III students who have received an “A” in their career and technical program as well as a “B” average at their sending school are eligible to become a member of the BAVTS Chapter of the National Technical Honor Society.

**Cooperative Education:** Students who have attended six quarters in their career and technical programs are eligible to participate in a paid work experience during the PM session of BAVTS. Positions must be available and the students must be recommended by the CTE teacher to be eligible.

**Job Shadowing:** Students are eligible to visit business and industry partners for one or more days to view the day-to-day operations of this career area.

**Internships:** Students who have completed six or more quarters of their CTE program are eligible to work for business and industry partners with the recommendation of the instructor and the availability of assignments.

**Field Trips:** Students in this program will attend field trips that expose them to educational experiences within the career field.

**College Credit:** Health Professions and Related Clinical Sciences. Other students are eligible for advanced credit through a Statewide Articulation Agreement developed by the Pennsylvania Department of Education.

**Industry Certifications:**

- 1) Pennsylvania Personal Care Home Direct Care Staff Person Licensing
- 2) OSHA 10 Training - Bloodborne Pathogens
- 3) American Heart Association Basic Life Support Training for Health Care Providers