

**Health Science Academy:  
PRE-NURSING  
2011-2012 Course Syllabus  
Mrs. Rowlands - Instructor**

**1. Course Description**

The Health Science Academy is designed for College Tech Prep and career technical education Trumbull County students in Grades 11-12. The course of study portion of this program reflects the academic and technical competencies for secondary education students. The technical focus is on the blending of a variety of Health Care concepts into hands-on applications for the improvement of life. Students transitioning to post-secondary education will receive reinforcement and additional training in these areas. During the first semester all Health Science Academy (HSA) students will complete coursework that is basic/core to all medical programs. They will then go into one of three pathways in the medical professions: therapeutic or hands on care will be taught in the pre-nursing pathway, the medical assisting program will focus on clinical and clerical administrative skills needed to work in an ambulatory health care setting, and pharmacological science, retail tasks and responsibilities, and institutional pharmacy technician skills will be the focus of the Pharm tech program.

Students will be prepared to advance into a post-secondary nursing, medical assisting or other type health care post-secondary education or take the certification exam if their chosen field is Pharmacy Technician. The Pharm Tech certification allows the graduates to work in this profession or use it as a basis for advancement in the career area or other health care profession of their choice. The Medical Assistant students when meeting certain grade, clinical and portfolio criteria can receive college credits for their high school courses at University of Akron or Eastern Gateway Community College. Pharm Tech and Medical Assisting students will take the Nurse Aide Training and Competency course and test as designed by the Ohio Department of Health, during the second semester of the Junior year. They will focus on their chosen pathway after completing and testing in this course. The Pre-Nursing students will begin their pathway in the second semester of the junior year and includes the Nurse Aide Training and Competency Program at the beginning of the senior year.

The students will receive instruction in the following areas:

- Career Exploration, Development, and Employability Traits
- Medical Terminology
- Health and Safety Practices
- General Knowledge of the Human Body
- Obtaining and Recording Subjective and Objective Client Data across the Lifespan, especially Vital Signs
- Healthcare Communication/HIPAA
- Legal & Ethical Issues Related to Health Care
- Business Processes Related to Health Care
- Medical Math
- Principles of Growth and Development throughout the lifespan including basic needs and family dynamics
- Emotional needs of the dying individual and their family
- Nurse Assistant Specialization
- Knowledge of basic pharmacology, including specific information regarding medications, classifications, actions, adverse reactions, safety factors, and methods of administration.
- Fundamental concepts of nursing, physical assessment, nursing procedures, and basic documentation skills

- Safety in the healthcare setting
- Basic nursing skills and procedures
- Employability skills
- Professionalism in the healthcare setting
- Basic critical thinking and decision making skills

## 2. Instructional Philosophy

A key component of the Ohio Career Field Initiative is a career pathway, which is a series of academic and technical career-focused course work and other learning experiences leading to a career specialty and employment in a career field. Pathways facilitate a seamless transition from high school to postsecondary education (including apprenticeships, adult education, two- and four-year colleges and graduate school) and from postsecondary education to the workplace.

To effectively facilitate the transition from secondary to postsecondary education and a career, high school career pathways should encompass:

- challenging technical course work in a chosen career field based on career field technical content standards;
- rigorous academics that meet Ohio's academic content standards and grade-level expectations;
- electives that relate to career objectives;
- instructional enhancements such as experiential and authentic learning opportunities (e.g. work-based learning, mentorships, internships) and career-technical student organization participation;
- opportunities for student certification (STNA)
- preparation for transition to further study that includes college readiness and opportunities to earn college credit while in high school;
- preparation for transition to employment with advancement opportunities; and
- performance targets that include high school academic and technical testing/exit and postsecondary entry/placement requirements

Students will have a clinical component during the STNA portion of the program, approximately 20 clinical hours in a local long-term care facility, with instructor supervision. Students will be expected to apply theoretical concepts to actual, real-life patient situations. Students will be responsible to complete the care of the assigned patients while maintaining patient confidentiality, following the health care facility policies while providing a safe environment for the patient. Pre-Nursing students will also participate in some visitations to community healthcare facilities.

## 3. Course Goals

Upon completion of the Health Science Academy: Pre-Nursing course, the student will be able to:

- Discuss Health Care Core material as prescribed by the ODE.
- Demonstrate communication skills which enhance collaboration with members of the health care team, patients, and families.
- Demonstrate accountability in delivering patient care.
- Implement and maintain a high standard of professional ethics and legal responsibilities.
- Utilize medical terminology and medical abbreviations correctly, including spelling.
- Provide a safe environment conducive to the well-being of patients, families, co-workers, and self.
- Successfully complete the STNA certification test
- Demonstrate knowledge of basic healthcare principles and skills.

- Demonstrate knowledge of Growth and Development through the lifespan.
- Demonstrate knowledge of basic pharmacology principles
- It is the goal of the program to prepare students for a seamless transition in to a two- or four-year post-secondary education setting or enter in to an entry-level position directly out of high school.

#### 4. Major Course Assignments and Projects

- **Research project during Career Exploration unit**  
The student will compare at least 2 different health care professions, one profession related to the pathway the student is currently pursuing and the other profession will be health care but unrelated to the first pathway. Students will research and present a variety of topics including a definition of the profession, amount of education required, and licensure tests/requirements, duties and skills, wages, where to find a job in this profession, etc.
- **Written Clinical Assignment:**  
The student is expected to apply theoretical concepts to patients in the clinical setting. Students will research their patient's disease process and complete a written assignment correlating the patient's diagnosis and appropriate nursing care. This will be started when the student is assigned to patient care in the clinical setting and will include written, poster and media presentation of the disorder.
- **TCTC Job Shadow Experience-junior year**  
Students will participate in TCTC's Job Shadow experience. This provides an opportunity for HSA students to explore healthcare career options that the student is interested in. The student will be responsible for arranging their shadow experience.
- **Nurse Aide Training Competency Program test as designed by the Ohio Department of Health-senior year**  
Students will complete the theory and clinical component of the STNA training. Approximately 20 clinical hours in a local long-term care facility will be completed with instructor supervision. Students will be expected to apply theoretical concepts to actual, real-life patient situations. Students will be responsible to complete the care of the assigned patients while maintaining patient confidentiality, following the health care facility policies while providing a safe environment for the patient.

#### 5. Course Assessment Plan

Student assessment will be based on written exams, tests, quizzes, final exams, clinical evaluation tools, individual completion of written clinical assignments, performance tests in lab, and projects related to coursework. A rubric will be used for special projects. Students will know, prior to completion of the project, how it will be graded and the point value of the project.

Students are expected to take and pass the STNA certification test. Students must have at least 74% in the STNA course to be eligible to take the STNA certification test.

Separate grades will be maintained for those courses which have Articulation Agreements with Trumbull Career & Technical Center's Adult Education Medical programs and credit will be awarded according to the Articulation Agreement.