

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
<b>A. Anatomy and Physiology</b>																											
<b>Standard 1.0 - The student will explore the organizational structures of the body from the molecular to the organism level.</b>																											
<b>Learning Expectations</b>																											
1.1 Distinguish between anatomy and physiology.	✓	X																									
1.2 Investigate the structure of the major body systems and relate the functions.	✓	X							X			X	X	X				X		X	X	X	X	X	X	X	X
1.3 Investigate the major body cavities and the subdivisions of each cavity.	✓	X													X												
1.4 Apply correct anatomical terminology of body parts and regions.	✓	X										X	X	X		X	X	X		X	X	X	X	X	X	X	X
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Define anatomy and physiology and describe their subdivisions, using a concept map.	✓	X																									
1.2 Classify organ systems of the body as protection, support and movement, regulation and integration, transport or absorption and excretion.	✓	X																									
1.3 Construct a concept map to illustrate the cavities in the body and the organs contained within each area.	✓	X																									

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
1.4 Illustrate the directional terms that refer to the body using correct anatomical terminology.	✓	X															X										
1.5 Analyze anatomical position.	✓	X										X															
<b>Standard 2.0 - The student will explore the integumentary, skeletal, muscular systems and relate the structures of the various parts to the functions they serve.</b>																											
<b>Learning Expectations</b>																											
2.1 Relate the functions of the integumentary system and explain the physiological mechanisms that make the functions of this system possible.	✓	X										X						X				X	X	X			
2.2 Illustrate the skeletal system (the bones and their parts) and relate the physiological mechanisms that help the skeletal system fulfill its function.	✓	X							X			X						X	X					X			
2.3 Illustrate the various kinds of muscles, including major muscles, of the body, and explain the physiology of muscle contraction.	✓	X							X			X								X				X			
2.4 Analyze cellular metabolism and respiration.	✓	X							X								X					X	X				
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Relate the biochemical and/or molecular processes involved in the growth and repair of integumentary tissues.	✓	X																									
2.2 Construct a model of skin layers, labeling the functions of each layer and identifying the functions of the skin.	✓	X																									

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2.3 Observe, draw and/or label the different types of muscle tissues, noting the function and anatomical differences of each type.	✓	X																									
2.4 Use HOSA medical terminology and spelling guidelines for medical terminology on the integumentary, skeletal and muscular systems.	✓	X										X	X	X		X	X	X	X		X	X	X	X	X	X	
2.5 Illustrate lab and diagnostic findings or analyze interdependency of ecological and biological systems.	✓																X					X					
<b>Standard 3.0 - The student will investigate, compare and contrast methods of body control by the nervous and endocrine systems.</b>																											
<b>Learning Expectations</b>																											
3.1 Compare and contrast the anatomy and physiology of the central and peripheral nervous systems.	✓	X																									
3.2 Describe the structure, function and developmental aspects of neurons and their supporting glial cells.	✓	X																									
3.3 Investigate the physiology of electrochemical impulses and neural integration.	✓	X																									
3.4 Investigate organs utilized by the body for perception of external stimuli and to the maintenance of homeostasis.	✓	X																									
3.5 Investigate the major organs of the endocrine system and demonstrate the relation of each structure to hormonal regulation of homeostasis.	✓	X																									
3.6 Analyze the parts of the spinal cord, neurons, neuroglia and the neuromuscular junction, using microscopic slides, diagrams, or models.	✓	X																									

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3.7 Analyze sensory perceptions.	✓	X										X									X						
3.8 Analyze diseases as related to each system.	✓	X																									
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1 Relate the function of each of the major organs in the nervous system.	✓	X																									
3.2 Demonstrate stimuli by the use of touch, pressure, heat, cold, environmental toxins, and internal chemicals.																											
3.3 Compare and contrast body systems by the use of experiments.																											
3.4 Design an experiment showing stimulation from the sensory organs.																											
3.5 Investigate diseases of the nervous and endocrine systems.	✓	X																									
3.6 Design slides showing the parts of the spinal cord, neurons, neuroglia and the neuromuscular junction.	✓	X																									
3.7 Investigate sensory perceptions using experimentation.																											
3.8 Design and interpret graphs of diseases (example) blood sugar levels to pancreatic function.	✓	X																									

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Standard 4.0 - The student will investigate the structure and function of the cardiovascular system with an emphasis on the blood, heart, and the lymphatic system and attention to the immune response.																											
Learning Expectations																											
4.1 Describe the molecular and cellular components of the blood.	✓	X																									
4.2 Describe the functions of the blood within the human body.	✓	X																									
4.3 Demonstrate an understanding of the anatomy of the heart and the flow of blood through the heart.	✓	X																									
4.4 Elucidate the biochemical and physiological nature of the heart's functions.	✓	X																									
4.5 Describe the structure of blood vessels and label the major arteries and veins.	✓	X																									
4.6 Describe the physiological basis of circulation and blood pressure.	✓	X																									
4.7 Demonstrate the role of the cardiovascular system in maintaining homeostasis.	✓	X																									
4.8 Describe the major organs of the lymphatic system.	✓	X																									
4.9 Demonstrate an understanding of the immune response.	✓	X																								X	

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<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Investigate the blood types and their genetic role in cross-matching.	✓																										
4.2 Describe the functions of the blood within the human body.	✓	X																									
4.3 Trace the biochemical pathway of plug formation and blood clotting.	✓																										
4.4 Construct a model of the heart and show blood flow through the heart.	✓	X																									
4.4a Perform blood pressure and pulse screening. Record findings.	✓										X																
4.5 Create a PowerPoint presentation of the structure and function of the blood vessels.	✓	X																									
4.6 Demonstrate a variety of methods to measure blood pressure and pulse.	✓										X																
4.7 Analyze biochemical mechanism for maintaining homeostasis within the circulatory or immune system using drawings. Label the drawings.																											
4.8 Create a model and label the major organs of the lymphatic system.	✓	X																									
4.8a Investigate the cause and effect relationship of cell, organ and system dysfunction.	✓	X																									

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4.9a Research and debate a topic on untreated dysfunction, using National HOSA Biomedical Debate guidelines.																											
4.9b Compare and calculate cost of an electrocardiogram and electroencephalogram using national HOSA Medical Math guidelines.																											
4.9c Interpret lab values, EKG, etc., from a case history relative to diagnostic purposes.																											
4.9d Develop and present a research paper on system dysfunction that is evaluated on accuracy and completeness.	✓	X																									
<b>Standard 5.0 - The student will investigate the structures of the body associated with the absorption and excretion of materials, from the molecular, cellular, organ and system levels of function.</b>																											
<b>Learning Expectations</b>																											
5.1 Analyze the major organs of the digestive system.	✓	X																	X	X				X			
5.2 Observe the gross anatomy of each organ within the digestive and the urinary systems.	✓	X																									
5.3 Describe mechanisms of digestion and absorption within the body.	✓	X																	X	X				X			
5.4 Relate how nutrition, metabolism, and body temperature are interrelated.	✓	X								X																	
5.5 Describe the role of the urinary system in body waste management.	✓	X																	X	X				X			

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5.6 Examine the physiological basis for the elimination of water and salts through the skin and lungs.	✓	X																X	X					X			
5.7 Demonstrate OSHA guidelines for chemical and radiation standards in a health care facility.	✓	X					X								X												
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1 Construct a model of each organ within the digestive and urinary systems. Label the functions of each organ.	✓	X																									
5.2 Demonstrate an understanding of the relationship between the structure and function of villi.	✓	X																									
5.2a Create a PowerPoint presentation illustrating the relationship between the structure and function of villi.	✓	X																									
5.2b Using HOSA Medical Spelling and Medical Terminology guidelines, research the spelling and definitions of Arachnoid villi, chorionic villi, intestinal villi and synovial villi.																											
5.3 Trace a particular food item through the digestive tract, listing biochemical reactions, enzymes and resultant substances formed.																											
5.4 Investigate the relationship of nutrition, metabolism and body temperature.	✓	X																									
5.5 Demonstrate the biochemical processes that allow for the movement of water through kidney filtration, reabsorption, and excretion.	✓	X																									
5.6 Research and prepare a demonstration on chemical, digestive and radiation absorption in the body.	✓	X																									



Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
5.7 Investigate OSHA guidelines, policies, and procedures for a health care facility on radiation exposure and standard precautions.	✓						X									X											
<b>Standard 6.0 - The student will investigate the reproductive system and its association with the growth and development of organisms.</b>																											
<b>Learning Expectations</b>																											
6.1 Identify the structures and related functions of the male and female reproductive system.	✓	X																								X	
6.2 Compare and contrast the hormonal regulations found in the reproduction system.	✓	X																									
6.3 Compare and contrast the processes and products of oogenesis and spermatogenesis.																											
6.4 Indicate the duration and relate the major events at each stage of gestation.																											
6.5 Investigate congenital disorders; their physiological, biochemical, hormonal, and chromosomal causes.	✓	X																									
6.6 Investigate how the structure of DNA relates to growth and development.	✓												X														
<b>Performance Indicators: Evidence Standard Is Met</b>																											
6.1 Relate and identify the steps of reproduction.	✓	X																									

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6.2 Analyze step by step hormonal changes in reproduction.	✓	X																									
6.3 Examine microscopic slides of oogenesis and spermatogenesis.																											
6.4 Create drawings of major events at each stage of gestation.																											
6.5 Investigate congenital disorders and the causes.	✓	X																									
6.6 Research and prepare a power point presentation on the structure of DNA.	✓	X																									
<b>B. Biomedical Applications</b>																											
<b>Standard 1.0 - The student will know and apply the academic subject matter required for entrance into the field of biomedical research.</b>																											
<b>Learning Expectations</b>																											
1.1 Evaluate the history of biomedical research in respect to time, culture, religion, and regions.	✓																										
1.2 Use biomedical terminology including root words, prefixes, suffixes, and abbreviations.	✓																										
1.3 Develop the foundation in scientific knowledge and skills necessary for a successful career in biomedical research.	✓																										

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		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
1.5 Discuss the benefits and risk of biomedical research.	✓													X													
1.6 Use knowledge gained to demonstrate proficiency in reading and interpreting biomedical research.	✓													X													
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Develop a research paper illustrating the history of biomedical research. Orally report on the history of health care using National HOSA Research/Persuasive Speaking guidelines.																											
1.2 Demonstrate symbols, abbreviations, and medical terminology usage by implementing National HOSA Medical Terminology and Medical Spelling guidelines.	✓	X												X	X	X		X	X	X	X		X	X	X	X	
1.3 Demonstrate guidelines using medical and dental terminology and medical and dental spelling.	✓																X										
<b>Standard 2.0 - The students will demonstrate proficiency in understanding basic skills and safety in the laboratory.</b>																											
<b>Learning Expectations</b>																											
2.1 Read, interpret, verbalize, and apply policies and procedures appropriate to the biomedical research setting.	✓													X													
2.2 Demonstrate the safe and appropriate use of equipment and supplies; utilize proper communication, critical thinking and problem solving techniques.	✓							X					X			X	X	X	X	X		X		X	X		

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
2.3 Demonstrate proficiency with basic microbiology laboratory skills.	✓												X		X			X					X				
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Research policies and procedures, reporting and documenting in a biomedical research setting and document information.	✓													X													
2.2 Use math skills and show proper use of exponents, decimals, conversions.	✓										X	X		X	X		X	X		X	X		X	X		X	
2.3 Demonstrate proficiency working with microorganisms important in biomedical research.	✓												X														
<b>Standard 3.0 - The students will demonstrate proficiency in understanding and manipulating DNA.</b>																											
<b>Learning Expectations</b>																											
3.1 Describe the two different functions of DNA.	✓													X													
3.2 Illustrate how the structure of DNA relates to these functions.	✓													X													
3.3 Outline the stages involved in transcription and translation.																											
3.4 Describe the role of a plasmid and restriction enzymes in genetic engineering.	✓													X													

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3.5 Describe how recombinant DNA is constructed and analyzed.	✓													X													
3.6 Describe how polymerase chain reaction works and is used in biomedical research.																											
3.7 Demonstrate proficiency in DNA techniques fundamental to biomedical research: transformation, gel electrophoresis and polymerase chain reaction.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1 Perform three laboratory tasks fundamental to biomedical research: transformation, gel electrophoresis, and polymerase chain reaction.																											
3.2 Using the Internet, find examples of genetic engineering that yield health benefits.	✓													X													
3.3 Using National HOSA prepared speaking guidelines, present findings to class.																											
<b>Standard 4.0 - The students will demonstrate proficiency in understanding protein expression and purification.</b>																											
<b>Learning Expectations</b>																											
4.1 Describe the four different classes of proteins.																											
4.2 Illustrate how the structure of protein relates to these functions.																											

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		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
4.3 Describe how peptide bonds are formed.																											
4.4 Compare and contrast different methods of protein purification.																											
4.5 Describe how beneficial protein products are made by recombinant DNA technology.																											
4.6 Demonstrate proficiency in protein purification by monitoring protein separation using chromatography.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Demonstrate knowledge of protein purification by separating compounds with chromatography.																											
4.2 Using the Internet, find examples of research involving protein purification and the resulting health benefits from the purified protein.																											
4.3 Using National HOSA prepared speaking guidelines, present findings to class.																											
<b>Standard 5.0 - The students will demonstrate proficiency in understanding tissue and cell culture.</b>																											
<b>Learning Expectations</b>																											
5.1 Describe the composition of blood and various cell types.	✓	X																									

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5.2 Demonstrate an understanding of how the human immune system works.	✓	X																X				X					
5.3 Compare and contrast cells grown in vivo and in vitro.																											
5.4 Demonstrate proficiency in growing cells in tissue culture by growing and counting cells.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1 List all the components found in circulation of blood and how the various cell types function.	✓	X												X	X												
5.2 Describe the various components of the human immune systems and how they function.	✓	X																X				X					
5.3 Use the Internet to find examples of scientific knowledge gained from cells in vivo and cells used in in vitro studies. Using National HOSA prepared speaking guidelines, present findings to class.																											
5.4 Grow and count cells in culture.																											

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Standard 6.0 - The students will demonstrate proficiency in understanding the legal environment and technology transfer aspects of biomedical research.																										
Learning Expectations																										
6.1 Examine and evaluate issues relating to intellectual property rights.																										
6.2 Demonstrate knowledge of how scientific developments are legally protected and receive FDA approval.	✓																							X		
6.3 Research proper methods of documenting scientific research in the laboratory.																										
6.4 Describe the role of technology transfer and patent lawyers in the biomedical field.	✓												X													
Performance Indicators: Evidence Standard Is Met																										
6.1 Demonstrate steps from laboratory bench to Office of Patent and Trademark.																										
6.2 Chart the route from the laboratory through clinical trials to get FDA approval on a potential therapeutic product.	✓																							X		
6.3 Using a patent lawyer, estimate the time and cost involved in patenting a biomedical product.																										
6.4 Follow a case study of a biomedical product and determine the value generated from the patient (such as the patent on humulin by Genetech).	✓																							X		



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6.5 Examine and evaluate various issues that relate to patent regulation and intellectual property rights of research developed by biomedical/biotechnology companies.	✓																									X	
<b>Standard 7.0 - The students will demonstrate skills in the laboratory.</b>																											
<b>Learning Expectations</b>																											
7.1 Read, interpret, verbalize, and apply policies and procedures appropriate to the biomedical research setting.	✓													X													
7.2 Participate in a biomedical research orientation prior to a research setting.	✓													X													
7.3 Utilize proper communication, critical thinking, and problem-solving techniques.	✓				X				X				X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.4 Demonstrate the safe and appropriate use of equipment and supplies.	✓							X					X			X	X	X	X				X		X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1 Research policies and procedures, reporting and documenting in a biomedical research facility. Document information.																											
7.2 Use knowledge gained to anticipate future development and employment opportunities in biomedical research.	✓													X													
7.3 Be prepared to adapt to changes in the life science industry.																											

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7.4 Prepare a resume and job application for a specific job.	✓				X																						
7.5 Job shadow in a biomedical research facility.	✓												X														
<b>C. Clinical</b>																											
Standard 1.0 - The student will demonstrate an understanding of the academic subject matter required for proficiency in health care.																											
Learning Expectations																											
1.1 Interpret and apply written and oral information to patient care.	✓		X	X		X	X						X	X		X	X		X		X	X	X	X	X	X	
1.2 Use appropriate medical terminology in written and oral communication.	✓	X	X		X	X	X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.3 Use mathematical functions as demonstrated in health care.	✓									X			X	X	X			X		X	X		X	X			
1.4 Demonstrate knowledge of anatomy and physiology, as related to body systems and functions.	✓	X											X	X					X						X		
Performance Indicators: Evidence Standard Is Met																											
1.1 Demonstrate use of facility policies and procedures.	✓		X	X	X	X		X					X	X		X	X	X		X		X			X	X	

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
1.2 Use appropriate abbreviations, prefixes, suffixes, root words and spelling of medical terminology.	✓	X	X												X	X	X	X	X		X	X	X	X	X	X	
1.3 Perform mathematical functions necessary for clients/patients in health care.	✓									X		X		X	X			X		X	X		X	X			
1.4 Compare normal and abnormal functions of body systems.	✓	X							X			X	X	X	X	X			X		X	X	X				
<b>Standard 2.0 - The student will demonstrate various communication methods to give and obtain information from clients/patients.</b>																											
<b>Learning Expectations</b>																											
2.1 Demonstrate communication skills appropriate to client's/patient's, individual's/family's need, i.e., age and development, and multicultural/multilingual needs and level of understanding.	✓		X		X		X				X			X			X		X	X	X						
2.2 Examine client/patient interview tools used at clinical site.																											
2.3 Examine methods of patient documentation used at clinical site.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Use a scenario to assess students' ability to communicate effectively with individuals at all levels of understanding.	✓	X			X	X																					
2.2 Review Policy and Procedures manuals for interview tools at the health care facility. Prepare a list of tools necessary for interview.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.3 Research and evaluate patient documentation at the health care facility.	✓		X			X	X										X		X	X	X		X	X			
<b>Standard 3.0 - The student will examine the role of the student's work in the context of the health care setting, relate key systems to the services performed and assess the impact of the services on the quality of care.</b>																											
<b>Learning Expectations</b>																											
3.1 Differentiate between various health care services available.	✓			X																							
3.2 Evaluate needs and services of clients/patients.	✓			X		X	X					X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
3.3 Examine patient quality assurance methods used by clinical sites.	✓					X	X					X												X			
3.4 Distinguish between various services available.	✓			X																							
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1 Analyze a complete system of information for health care services available.	✓			X																							
3.2 Demonstrate skills necessary for meeting the needs and services of clients/patients.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.3 Review and write a paper on patient quality assurance methods.	✓			X																							

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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3.4 Compare and contrast various services available in a health care facility.	✓			X																							
<b>Standard 4.0 - The student will assess the value of skills acquisition to employment prospects.</b>																											
<b>Learning Expectations</b>																											
4.1 Demonstrate employment skills: i.e., attendance, time management, responsibility, professional conduct, and appearance.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.2 Assess situations and adapt to changing situations as allowed by the facility.	✓	X	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.3 Observe and assist with performance of patient care procedures under the supervision of licensed health care professionals.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Demonstrate professional skills necessary for a health care worker.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.2 Research and analyze career options in a health care facility, illustrating a career ladder of jobs, education, licensure and salary.	✓			X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.3 Secure and evaluate job description of licensed health care professionals.	✓			X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
Standard 5.0 - The student will understand legal responsibilities, limitations, and the implications of their actions within the health care setting and perform all duties in accordance with laws, regulations, policies, and legislated rights of patients.																										
<b>Learning Expectations</b>																										
5.1 Investigate methods used to assure confidentiality of patient care and records at clinical site.	✓				X	X						X								X						
5.2 Investigate provider liability and common medical legal violations—negligence, malpractice, abuse, defamation, invasion of privacy.	✓		X		X	X						X														
<b>Performance Indicators: Evidence Standard Is Met</b>																										
5.1 Compare samples of confidential records related to patient care.	✓																			X						
5.2 Examine and evaluate various malpractice and liability insurance policies comparing coverage and costs, documenting the findings.	✓		X		X																					

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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Standard 6.0 - The student will analyze and evaluate accepted ethical practices with respect to cultural, social, and ethnic differences in the health care setting and perform all duties conscientiously and within established ethical guidelines.																											
Learning Expectations																											
6.1	Employ techniques to ensure implementation of the client's/patient's rights.	✓				X	X						X														
6.2	Demonstrate equal and proper treatment for all patients.	✓	X			X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Performance Indicators: Evidence Standard Is Met																											
6.1	Demonstrate and perform duties within established ethical guidelines supporting sensitive and quality health care delivery.	✓				X	X						X	X	X	X		X	X	X	X	X	X	X	X	X	X
6.2	Research, contrast, and evaluate legal and ethical rights of all clients/patients and co-workers.	✓				X	X																				

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<p><b>Standard 7.0 - The student will be aware of and react to existing and potential hazards to patients, coworkers and self and will prevent injury or illness through safe work practices and compliance with health and safety policies and procedures.</b></p>																										
<p><b>Learning Expectations</b></p>																										
7.1 Use Standard Precautions and OSHA standards to control the spread of infection.	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.2 Demonstrate the principles of body mechanics.	✓							X					X						X						X	
7.3 Use appropriate instruments and equipment as allowed by the clinical facility.	✓							X					X		X	X	X	X				X		X	X	
7.4 Examine and use facility safety manual and procedure manual.	✓							X							X											
<p><b>Performance Indicators: Evidence Standard Is Met</b></p>																										
7.1 Exhibit the knowledge of Standard Precautions and OSHA standards by demonstrating the ability to pass the test on Standard Precautions and OSHA standards to 100% accuracy.																										
7.2 Demonstrate proper body mechanics. Use a check list for check off of procedures.																										



Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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7.3 Research instruments and equipment, including their comparative costs, used by the clinical facility.	✓			X																							
7.4 Prepare mock emergencies. Review the safety manual and procedure manual in each medical emergency.	✓						X																				
<b>Standard 8.0 - The student will know the disciplinary protocols and guidelines for collecting data, will report results and will assist the care team in identifying needs, strengths, and problems.</b>																											
<b>Learning Expectations</b>																											
8.1 Research guidelines/tools for collecting patient data.	✓		X			X	X																				
8.2 Examine documents for developing client/patient care plan.	✓		X			X	X																				
8.3 Examine a patient care plan as directed by mentor.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
8.1 Collect data and extract required information from sample medical records.	✓																										
8.2 Analyze and assemble a client/patient electronic record in correct format.	✓																										
8.3 Design an electronic patient care plan.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
Standard 9.0 - The student will evaluate the purpose and components of the care plan and assist in planning procedures according to disciplinary protocols.																											
Learning Expectations																											
9.1 Distinguish between short and long term goals on a client's/patient's care plan.	✓			X																							
9.2 Evaluate treatment plans and propose changes.	✓			X								X	X	X		X	X	X	X	X	X	X	X	X	X	X	X
Performance Indicators: Evidence Standard Is Met																											
9.1 Evaluate short term and long term goals in the client/patient's care plan.	✓			X																							
9.2 Use the Internet to research treatments in a related health care field.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Standard 10.0 - The student will complete a clinical internship in an area of interest.																											
Learning Expectations																											
10.1 Demonstrate client/patient care skills as allowed by clinical site.	✓			X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
10.2 Demonstrate the use of appropriate medical terminology at clinical site and in written documentation.	✓		X	X		X	X						X		X		X	X		X		X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
10.1 Demonstrate all skills necessary for a health care worker.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.2 Demonstrate communication skills—verbal, nonverbal and written by the use of medical terminology.	✓		X	X		X	X						X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>D. Diagnostic Medicine</b>																											
<b>Standard 1.0 - Students will interpret an imaging diagnostic request, select appropriate equipment, and identify basic anatomy on the resulting images.</b>																											
<b>Learning Expectations</b>																											
1.1 Evaluate the request for services, reporting inconsistencies in the patient's history.	✓																					X					
1.2 Match resources/image system with diagnostic needs.	✓			X																							
1.3 Demonstrate the role of the professional in each stage of the imaging chain.	✓																		X								
1.4 Apply patient and personnel radiation protection where appropriate.	✓																		X								

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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1.5 Prepare the imaging unit for an imaging procedure.	✓																			X							
1.6 Evaluate the resulting diagnostic image for quality.	✓																			X							
1.7 Identify basic anatomy on medical images, static, and fluoroscopic videos.	✓																		X								
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 The student is able to construct a flowchart of the imaging chain for film and video radiography, computed topography, magnet resonance imaging, nuclear medicine, and ultra-sonography. Role-play a procedure and evaluate images for anatomy on each.																											
<b>Standard 2.0 - Students will know and apply various communication methods to give, obtain and transmit information, and evaluate the use of tele-health care in the delivery of health care in clinical and home setting.</b>																											
<b>Learning Expectations</b>																											
2.1 Determine provider's ability to understand and respond to client's concerns and fears.	✓		X	X	X						X	X	X				X		X	X	X					X	
2.2 Put into practice the use of technology to deliver tele-health care.	✓										X									X							

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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2.3 Analyze data received via tele-health.	✓											X									X					
2.4 Apply diagnostic principles and technology to deliver health care via tele-health.	✓											X									X					
2.5 Use language appropriate to the situation, reassuring and informing the client of what to expect.	✓		X			X	X						X													
2.6 Use facility guidelines for giving health care information.	✓					X	X						X													
2.7 Respect client's cultural differences.	✓			X	X		X						X								X					
2.8 Transmit diagnosis electronically or manually to client records or referring professionals.																										
2.9 Document and report information about changes in conditions that might introduce risks to clients or staff.	✓					X																				
<b>Performance Indicators: Evidence Standard Is Met</b>																										
2.1 Student will communicate effectively both orally and in writing, validating the patient history, comforting the client, eliciting cooperation by the client, and recording results to the electronic patient record.	✓		X																							
2.2, 2.3, 2.4 Student will demonstrate the use of technology, using appropriate computers/videophone to deliver patient information.	✓											X									X					

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.1, 2.3 Discuss normal and abnormal functions of body systems.	✓	X											X	X	X	X	X			X		X	X	X			
2.1, 2.3, 2.4, 2.5, 2.6, 2.7 Demonstrate client/patient care based on age, physical status and psycho social aspect of client needs through the use of role-playing.	✓		X																								
<b>Standard 3.0 - Students will distinguish between sinus, atrial, and ventricular rhythms and assess cardiac output and tissue perfusion.</b>																											
<b>Learning Expectations</b>																											
3.1 Sketch gross heart anatomy and the related cardiac conduction pathways.	✓	X													X												
3.2 Analyze four lead cardiac rhythm strips and differentiate between critical and non-critical sinus, atria and ventricular dysrhythms.																											
3.3 Assess cardiac output and tissue perfusion using a pulse oximeter and/or capillary refill.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1, 3.2, 3.3 The student will analyze telemetry strips and correctly arrange them as non-critical/critical sinus, atrial, or ventricular dysrhythms and will differentiate between adequate and inadequate tissue perfusion.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
3.1, 3.2, 3.3 The student will compare and contrast cost of insurance versus cost of procedures from the client/patient.	✓			X																							
<b>Standard 4.0 - The student will perform an electrocardiogram and an electromyogram and evaluate the results.</b>																											
<b>Learning Expectations</b>																											
4.1 Sketch lead placements as they relate to topographical anatomy.																											
4.2 Prepare client mentally and physically for the procedures.	✓		X										X														
4.3 Perform the procedures using proper equipment and technique.	✓							X					X	X													
4.4 Analyze and report results as appropriate.	✓												X	X													
4.5 Restore equipment to original state, i.e., calibration, storage.	✓													X													
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1, 4.2 Perform an electrocardiogram and an electromyogram and differentiate between normal and abnormal results.																											
4.3 Demonstrate performing an EKG on a hearing impaired person and a patient or client who uses English as a second language.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
4.4 Analyze chain of command for reporting EKG results. Calculate equipment cost used in performing an electrocardiogram. Calculate cost if equipment is under service contracts.																											
<b>Standard 5.0 - The student will collect, label, and process artificial samples of body fluids and tissues for laboratory assessment and analyze results.</b>																											
<b>Learning Expectations</b>																											
5.1 Demonstrate the steps in obtaining and labeling venous and capillary blood samples for laboratory, diagnostics, or on laboratory models.																											
5.2 Simulate specimen collection and processing for over-the-counter screening test (example: blood glucose or strep test).																											
5.3 Collect, measure, and test artificial samples of urine using reagent strips and gross analysis.																											
5.4 Relate laboratory data to specific disease processes.	✓																		X								
5.5 Describe a quality assurance plan for a laboratory.																											
5.6 Identify basic anatomy of the renal system.	✓	X																									
5.7 Research clinical applications for new products.	✓																								X		



Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
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<b>Performance Indicators: Evidence Standard Is Met</b>																										
5.1 Obtain and label body fluid and tissue samples for laboratory test.																										
5.2a Analyze specimen collection.																										
5.2b Research and calculate the cost of screening test for blood glucose and strep test. Compare cost in an emergency room, doctor's office, and over the counter.																										
5.2c Research accuracy of over the counter screening test. Using National HOSA's Research/Persuasive Speaking Guidelines present information to chemistry class.																										
5.3, 5.4, 5.5 Evaluate results of test using medical clinical guidelines.																										
5.3, 5.4, 5.5 Follow a blood sample from physician's order, through collection, labeling, processing and reporting process; documenting the correct procedures or discuss a scenario of a patient receiving the wrong blood transfusion.																										
5.6 Make a model of kidney or nephrons with model magic.																										
5.7 Research advances in blood products for transfusions.																										

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine		
Standard 6.0 - Students will interpret an optical prescription, select the equipment, and initiate the procedure for obtaining corrective lenses.																												
Learning Expectations																												
6.1 Differentiate between normal and abnormal anatomy of the eye.	✓	X																										
6.2 Analyze equipment used in the optical lab to diagnose diseases of the eye.																												
6.3 Formulate an appropriate eye wear product and complete the order form for a client according to facility guidelines.																												
6.4 Observe a lensometer to obtain a prescription for validation and quality control.																												
6.5 Assess post prescription vision and give instructions for care of eyewear product.																												
Performance Indicators: Evidence Standard Is Met																												
6.1 Illustrate normal and abnormal anatomy of the eye.	✓	X																										
6.2, 6.3 Demonstrate the use of optical equipment such as lensometer, topography, funds photography, auto refractory, visual field, and horopito.	✓																											
6.4 Analyze a sample prescription for contact lenses and glasses.																												

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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6.5 Select the appropriate lenses and frame for a client.																											
<p><b>Standard 7.0 - The student will be aware of the existing and potential hazards to clients, co-workers, and self; prevention of injury or illness through safe work practices, and adherence to health and safety policies and procedures.</b></p> <p><b>Learning Expectations</b></p>																											
7.1 Use standard precautions and OSHA Standards to control the spread of infection.	✓						X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
7.2 Prevent fire and electrical hazard.	✓						X								X												
7.3 Manage materials safely, following emergency procedures, protocols, and procedures to reduce waste and contain costs.	✓						X								X												
7.4 Use equipment safely.	✓						X					X	X		X	X	X	X	X		X				X	X	
7.5 Analyze equipment performance to standards by performing quality control tests.																											
<p><b>Performance Indicators: Evidence Standard Is Met</b></p>																											
7.1 Demonstrate use of standard precautions by following medical clinical guidelines.	✓						X																				

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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7.2 Calculate the cost of an electrical fire in a health care facility.																											
7.3 A. Calculate the cost of emergency room materials and equipment used in treatment of trauma.																											
7.3 B. Research medical supply waste by workers in a health care facility.																											
7.4 Demonstrate equipment usage.	✓						X					X	X		X	X	X	X	X		X			X	X		
7.5 In a lab setting, perform quality control tests on diagnostic equipment following written guidelines for operation and equipment care.																											
<b>Standard 8.0 - The student will maintain client comfort, monitor and assess client status, and report results to the treatment team while safely performing diagnostic studies.</b>																											
<b>Learning Expectations</b>																											
8.1 Measure and report client vital signs or other indications of health status.	✓										X			X		X			X						X	X	
8.2 Record client health status according to facility protocol.	✓										X			X		X			X						X	X	
8.3 Assist in determining the need for follow-up or alternative care.	✓									X			X														
8.4 Observe ways to maintain patient airway and IV fluid maintenance during diagnostic procedures.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
8.5 Position client to ensure comfort, using appropriate transport or transfer equipment.	✓						X							X			X		X								
<b>Performance Indicators: Evidence Standard Is Met</b>																											
8.1 Demonstrate measuring and recording vital signs.	✓									X				X			X			X					X	X	
8.2 Research health status indicators.	✓									X				X			X			X					X	X	
8.3 Write a care plan for determining health status follow-up or alternative care.	✓													X	X				X						X	X	
8.4 Observe and prepare a journal of steps in maintaining patient airways and IV fluids during diagnostic procedure.																											
8.5 Through electronic simulation and role-play, safely perform diagnostic procedures as prescribed evaluating the results of the diagnostic procedures ordered.																											
<b>Standard 9.0 - The student will examine the range of diagnostic services and the professionals who provide those services and clinical laboratory professionals.</b>																											
<b>Learning Expectations</b>																											
9.1 Compare the role and academic requirements to practice in the diagnostic areas of radiography, nuclear medicine, and ultrasonography.	✓																			X							

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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9.2 Compare the diagnostic roles of medical technology, clinical laboratory sciences, and subspecialties and settings for employment.	✓			X	X						X		X		X				X	X	X	X	X		X		
9.3 Compare the educational requirement, certification, and licensures for performing ECG, EKG, and telemetry and vision care professions.	✓																		X		X						
9.4 Compare the continuing professional development requirements for the various diagnostic professions.	✓				X							X	X	X	X	X	X	X	X	X	X	X	X	X	X		
9.5 Operate within medical legal requirements for diagnostic careers.	✓				X	X	X					X	X	X		X			X		X	X	X	X	X		
<b>Performance Indicators: Evidence Standard Is Met</b>																											
9.0 Compose a career plan for diagnostic careers using the Internet to determine educational requirements, certification/licensure, supply and demand, and salary.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	
9.1 Illustrate health careers using National HOSA Career Health Display Guidelines.																											
9.2 Research and compare diagnostic roles of a medical technologist and clinical laboratory workers.	✓							X			X				X					X							
9.3 Illustrate and compare education requirement, certification, and licensure for performing diagnostic services and clinical laboratory professionals; analyze.																											
9.4 Analyze Internet information on continuing professional development for various diagnostic professions.	✓				X							X	X	X		X			X		X	X	X	X	X		

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
9.5 Calculate the cost of following medical legal requirements for an x-ray technician versus no legal requirements.																											
<b>Standard 10.0 - The student will perform classroom laboratory activities and apply knowledge and skills in a health care diagnostic clinical setting.</b>																											
<b>Learning Expectations</b>																											
10.1 Read, interpret, verbalize, and apply policies and procedures appropriate to the health care setting.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.2 Participate in a health care facility orientation prior to clinical experience.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.3 Demonstrate the use of pertinent safety precautions and aseptic techniques.	✓						X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.4 Utilize proper communication, critical thinking, and problem-solving techniques.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.5 Demonstrate the safe and appropriate use of equipment and supplies.	✓						X					X		X	X	X	X	X	X	X	X	X	X	X	X		
10.6 Perform skills safely and effectively as outlined in policy and procedures of the health care facility and standards of the health care profession.	✓						X		X		X	X	X	X	X	X	X	X		X	X	X	X	X	X		
<b>Performance Indicators: Evidence Standard Is Met</b>																											
10.1 Perform activities efficiently and without injury to patients or self.	✓						X		X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
10.2 Convey pertinent information to patient and appropriate team members within a timely manner.	✓		X		X	X	X		X			X	X	X	X	X	X		X		X	X	X	X	X	X	
10.3 Prepare a checklist observing team members using aseptic techniques.																											
10.4 A. Evaluate student response to written scenario documenting communication.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.4 B. Illustrate scenario by using Creative Problem Solving Guidelines Research.																											
10.5 A. Research equipment guidelines for proper use in a diagnostic lab.	✓							X				X		X	X	X	X	X	X	X	X	X	X	X	X		
10.5 B. Illustrate equipment usage by using Health Poster guidelines.	✓							X				X		X	X	X	X	X	X	X	X	X	X	X	X		
10.6 Demonstrate diagnostic skills following facility policies and procedures.	✓								X	X		X	X	X		X	X		X		X	X	X	X	X		
<b>Standard 11.0 - The student will relate respiratory care and procedures to the use of respiratory diagnostic equipment.</b>																											
<b>Learning Expectations</b>																											
11.1 Analyze basic cardio/respiratory anatomy and physiology.	✓	X								X				X													
11.2 Evaluate various respiratory procedures and the application for diagnostic equipment.	✓	X												X													



Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
11.3 Compare gas laws and their application to health care.																											
11.4 Research the function, indication and precautions of oxygen therapy devices.	✓																	X								X	
11.5 Describe safety precautions concerning medical gases and related storage systems (piping and cylinders).																											
11.6 Put into practice healthcare worker CPR/First Aid skills.	✓									X							X										
<b>Performance Indicators: Evidence Standard Is Met</b>																											
11.1 Identify anatomical chest landmarks and compare auscultation of normal versus abnormal breath sounds.																											
11.2 Describe how a bronchoscopy procedure aid in the diagnosis of lung cancer. Discuss use of a lung biopsy.																											
11.3 Use chemistry to integrate gas laws.																											
11.4 Students apply various oxygen devices such as nasal cannula, no re-breather mask to different patient scenarios.																											
11.5 Create a virtual PowerPoint presentation of a visit to a hospital or respiratory center and observe their O2 delivery systems.																											
11.6 Use National HOSA Guidelines for CPR/First Aid/First Aid.	✓									X							X										

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
<b>E. Emergency Medical Services (EMS)</b>																											
Standard 1.0 - The student will know and apply the academic subject matter required for proficiency within emergency medicine.																											
Learning Expectations																											
1.1 Complete a patient history in the Emergency Room, demonstrating proper documentation and verbal communication concerning patient care according to local protocol.	✓	X																			X						
1.2 Perform mathematical functions to estimate client/patient weight, and convert standard weight to kilograms.	✓								X																		
1.3 Interpret body structure including anatomical design and structure and function of the body systems.	✓	X										X	X					X						X			
1.4 Use health care terminology to relate client/patient information.	✓		X	X	X	X	X				X	X	X			X	X	X	X	X						X	
1.5 Relate the history for Emergency Medicine and the EMS Service.	✓									X						X											
Performance Indicators: Evidence Standard Is Met																											
1.1 Demonstrate appropriate verbal communication and written documentation to a written scenario in regard to patient information and patient care provided.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
1.2 Calculate math conversions using medical math guidelines.	✓									X	X	X		X	X		X	X		X	X		X	X			
1.3 Compare normal and abnormal functions of the body system.	✓	X		X						X	X		X	X	X		X	X	X	X	X	X	X	X	X		
1.4 Analyze body structure and functions of the body system.	✓	X								X			X	X	X		X	X	X	X	X	X	X	X	X		
1.5 Complete a research paper on the history of emergency medicine.																											
<b>Standard 2.0 - The student will examine various communication methods and communicate effectively, orally and in writing.</b>																											
<b>Learning Expectations</b>																											
2.1 Assess the importance of effective communication in emergencies by using rules of communication and listening skills.	✓							X								X											
2.2 Adapt communication to individual needs, including age-appropriate communication, multi-cultural and multilingual needs and death and/or dying situations.	✓		X		X		X				X			X			X		X	X	X					X	
2.3 Distinguish between components of an emergency medicine service and radio/communication system.																											
2.4 Interpret and apply radio procedures, using technology to deliver tele-health, using facility-specific guidelines for sending and receiving information.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
2.5 Access and analyze data received via tele-health access and use any electronically produced information relative to local protocol.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Evaluate effectiveness of communication used in scenarios for clarity of message.	✓	X									X										X						
2.2 Demonstrate proper utilization of an emergency service radio/communication system.																											
2.3 Simulate an emergency medical service situation, using a radio/communication system.																											
2.4 Develop a research project on emergency medical service policies and procedures for sending and receiving information using creative problem-solving guidelines. Use appropriate computers/videophone to deliver patient care.																											
2.5 Job shadow an emergency medical technician or a paramedic and an emergency room nurse.	✓														X		X										
2.6 Demonstrate client/patient care based on age, physical status and psycho-social aspects of client needs.	✓	X	X									X	X		X		X		X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<p><b>Standard 3.0 - The student will evaluate the role and the responsibilities of the emergency health care worker and the worker's impact on quality of care given within the context of the total services provided by the health care system.</b></p>																										
<p><b>Learning Expectations</b></p>																										
3.1 Distinguish between and compare various components that make up the emergency medical system, including roles and responsibilities and methods used by the public to access emergency medical services.	✓			X				X							X		X									
3.2 Interpret the specific statutes and regulations in Tennessee regarding the emergency medical system.																										
3.3 Examine the range of services offered in emergency medical services.	✓						X							X		X										
3.4 Analyze and compare how changes in health care have affected the delivery of emergency treatment, including reimbursement for services and prevention of unnecessary waste and duplication.	✓			X	X																					
3.5 Demonstrate care during emergency situations involving multiple patients and multiple injuries.																										
<p><b>Performance Indicators: Evidence Standard Is Met</b></p>																										
3.1 Evaluate the accuracy of a student-generated survey detailing services available in the EMS community.																										

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
3.2 Illustrate Tennessee laws and regulations.																											
3.3 Evaluate the accuracy of mathematical calculations of the cost of emergency medical service.																											
3.4 Analyze insurance plans and forms for duplication and calculate the cost of insurance versus no health care coverage.	✓			X																							
3.5 Demonstrate care for an emergency with multiple injuries.																											
<b>Standard 4.0 - The student will demonstrate key employability skills in emergency medicine and assess the value of maintaining and upgrading these skills as needed to the enhancement of employment opportunities and job satisfaction.</b>																											
<b>Learning Expectations</b>																											
4.1 Demonstrate personal skills such as attendance, time management, individual responsibility, professional conduct, and appearance.	✓			X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.2 Display various career options in emergency medicine and the preparation required for each.	✓						X										X										
4.3 Analyze the need to upgrade skills, including recertification, in-service, and continuing education credits.	✓			X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<b>Performance Indicators: Evidence Standard Is Met</b>																										
4.1. Evaluate the accuracy of a personal skill evaluation tool.																										
4.2a. Using National HOSA's Career Health Display competitive event guidelines, evaluate completeness of career health display in emergency medicine.	✓																	X								
4.2b. Role-play a scenario of proper and improper professional conduct and appearance.	✓	X		X	X	X	X	X	X	X	X															
4.3a. Illustrate an education and certification/licensure career ladder for emergency medicine.																										
4.3b. Demonstrate a "mock" job interview using job seeking skills guidelines.	✓			X																						
<b>Standard 5.0 - They will perform duties in accordance with laws, regulations, policies, and legislated rights.</b>																										
<b>Learning Expectations</b>																										
5.1 The student will analyze worker legal responsibilities, limitations, and implications of employee actions within the health care delivery setting.	✓			X		X	X						X	X			X		X		X			X	X	
5.2 Interpret and apply malpractice and liability issues and examine legal aspects of client/patient care, including client confidentiality, as it relates to HIPPA, negligence, abuse, consent, abandonment, duty to act, Good Samaritan Law, Do Not Resuscitate (DNR), and Advance Directives (AD).	✓					X																				

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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5.3 Analyze legal requirements in documentation as it relates to EMTALA and HIPAA.	✓					X																					
5.4 Operate within the scope of practice as dictated by state practice acts and governing board.	✓					X	X						X				X				X			X			
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1 Evaluate accuracy of legal ramifications as presented by the student in a case study.	✓					X																					
5.2 Research the Good Samaritan Law, Do Not Resuscitate, and Advance Directives used in emergency medical services.																											
5.3 Using National HOSA's Research/Persuasive Speaking Guidelines, prepare a research paper and speak on the research.																											
5.4 Prepare and evaluate sample documentation of emergency care workers.	✓																X										
<b>Standard 6.0 - The student will perform duties within established ethical guidelines, supporting sensitive and quality health care delivery.</b>																											
<b>Learning Expectations</b>																											
6.1 The student will analyze accepted ethical practices in emergency medicine with respect to cultural, social and ethnic differences.	✓					X											X										
6.2 Interpret and apply ethical behavior in the emergency medical workplace.	✓					X											X										



Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
6.3 Analyze the Patient's Bill of Rights.	✓					X	X																				
6.4 Interpret the profession's Code of Ethics.	✓						X																				
<b>Performance Indicators: Evidence Standard Is Met</b>																											
6.1 Evaluate the accuracy of the interpretation of the patient's rights from the scenario given.	✓					X	X																				
6.2 Using National HOSA's Biomedical Debate guidelines, evaluate the effectiveness of information presented in an ethical issue debate.																											
6.3 Interview recent patients using the Patient's Bill of Rights and HIPPA guidelines.																											
6.4a Job shadow an emergency worker.	✓																	X									
6.4b Prepare a check sheet on workers' ethical behavior.																											
<b>Standard 7.0 - They will prevent injury or illness through safe work practices and follow health and safety policies and procedures.</b>																											
<b>Learning Expectations</b>																											
7.1 The student will recognize the existing and potential hazards to clients, co-workers, and self in emergency medicine.	✓							X										X									

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
7.2 Use Standard Precautions and OSHA standards to control the spread of infection including aseptic techniques such as hand washing, personal protective equipment, and redundant.	✓							X						X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.3 Demonstrate principles of body mechanics, such as proper lifting techniques.	✓		X			X	X	X	X		X			X			X	X	X	X	X	X			X	X	
7.4 Determine the need for scene safety in the field and the emergency room after reviewing the situation for the such conditions as the following: fire and electrical hazards, hazardous material, violent behavior, crime scene, unstable vehicles, and traffic.																											
7.5 Use instruments and equipment needed in emergency medicine following local protocol.	✓							X										X									
7.6 Demonstrate emergency procedures and protocols related to situations such as cardiopulmonary resuscitation, patient assessment, and treatment modalities for trauma and illness. The student will follow regulatory guidelines such as OSHA standards and Standard Precautions.	✓							X										X									
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1 Identify the potential hazards in emergency medicine.	✓							X										X									
7.2 Evaluate the demonstration of aseptic procedures used in a scenario.	✓							X						X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.3 Demonstrate proper body mechanics.	✓		X			X	X	X	X		X			X			X	X	X	X	X	X			X	X	

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
7.4 Evaluate a demonstration of the use of personal protective equipment.	✓						X					X		X	X	X	X	X	X	X	X	X	X	X	X	X	
7.5 Evaluate a chart of trauma and medical conditions for accuracy.																											
7.6 Calculate the cost of a fire in an emergency room cost of liability insurance versus no liability insurance.																											
7.7 Compare and contrast emergency room procedures.	✓						X										X										
<b>Standard 8.0 - The student will interact as an effective and sensitive member of the health care team.</b>																											
<b>Learning Expectations</b>																											
8.1 The student will understand the role and responsibilities of individual members as part of the health care team, including their ability to promote the delivery of quality health care.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.2 Practice team membership skills.	✓							X				X				X	X		X		X				X		
8.3 Use conflict resolution strategies within the school setting.	✓		X						X																		
8.4 Apply stress management techniques to situations involving emergency medicine, including burn-out, difficult patients, death, etc.	✓						X										X										

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<b>Performance Indicators: Evidence Standard Is Met</b>																										
8.1 Describe the characteristics of team members in quality health care delivery.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.2 Use National HOSA's First Aid/CPR competitive event guidelines to assess skill demonstration and teamwork.	✓																X									
8.3 Evaluate the effectiveness of stress management in resolving a role-play situation.	✓		X		X	X	X	X	X	X	X															
8.4 Using National HOSA's Creative Problem Solving guidelines, evaluate the effectiveness of strategies used to reduce conflict, including death of a co-worker.																										
<b>Standard 9.0 - The student will evaluate the use of tele-healthcare in the delivery of health care in a clinical and a home setting.</b>																										
<b>Learning Expectations</b>																										
9.1 Use technology to deliver tele-health.	✓											X										X				
9.2 Analyze data received via tele-health.	✓											X										X				
9.3 Apply nursing principles and technology to deliver health care via tele-health.	✓											X										X				

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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<b>Performance Indicators: Evidence Standard Is Met</b>																										
9.1 Use appropriate computers/videophone to deliver patient care.	✓			X							X									X						
9.2 Compare normal and abnormal functions of the body system.	✓	X							X			X	X	X	X	X			X		X	X	X			
9.3 Demonstrate client/patient care based on age, physical status and psycho-social aspects of clients needs utilizing tele-health.	✓										X								X							
<b>F. Forensic Science</b>																										
<b>Standard 1.0 - Students will know and apply the academic subject matter required to understand the history and development of the field of forensic science.</b>																										
<b>Learning Expectations</b>																										
1.1 Demonstrate proficiency in the definition and history of forensic science.	✓																		X							
1.2 Examine the timeline and significant players in the field of forensic science.	✓																		X							
1.3 Investigate the evolution of the crime lab from initial tests to modern instruments.	✓																		X							
1.4 Demonstrate proficiency in the history and evolution of techniques from basis to more complex.	✓																		X							

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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1.5 Demonstrate proficiency in understanding the steps and positions involved in modern forensic science (such as criminal science, lab analysis, and courtroom testimony).	✓																	X									
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Develop a research paper illustrating the history of Forensic Science.	✓																	X									
1.2 Orally report on the history of forensic science using National HOSA Research/Persuasive Speaking guidelines.																											
1.3 Demonstrate symbols, abbreviations, and medical and dental terminology usage by implementing National HOSA Medical Terminology and Medical Spelling guidelines.	✓	X										X	X	X		X	X	X	X		X	X	X	X	X	X	X
1.4 Demonstrate National HOSA guidelines using medical and dental terminology and medical and dental spelling.	✓	X										X	X	X		X	X	X	X		X	X	X	X	X	X	X
1.5 Draw a concept map linking the history and key events.																											
<b>Standard 2.0 - The students will apply information gained about DNA, its structure and role in heredity to forensic science.</b>																											
<b>Learning Expectations</b>																											
2.1 Describe the two different functions of DNA.	✓	X											X					X									

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.2 Illustrate how the structure of DNA relates to these functions.	✓	X											X					X									
2.3 Outline the stages involved in transcription and translation.																											
2.4 Describe the role of DNA in heredity.	✓	X											X					X									
2.5 Demonstrate proficiency in DNA techniques fundamental to forensic science: DNA isolation, restriction digestion and gel electrophoresis.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Perform three laboratory tasks fundamental to forensic science: DNA isolation, restriction digestion and gel electrophoresis.																											
2.2 Using the Internet, find and explore the DNA timeline and activities on DNA.	✓	X																									
2.3 Examine examples of genetic engineering that yield health benefits. Using National HOSA Prepared Speaking Guidelines, present findings to class.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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<p><b>Standard 3.0 - The students will demonstrate proficiency in understanding of the science behind forensic identification of individuals, including facial recognition software, DNA markers, fingerprints and other unique human features.</b></p>																										
<p><b>Learning Expectations</b></p>																										
3.1 Compare various methods used to identify human remains.	✓																		X							
3.2 Demonstrate proficiency in the use of search data bases.																										
3.3 Demonstrate proficiency in analyzing fingerprints.	✓																		X							
3.4 Demonstrate proficiency in understanding key facial features used in facial recognition software.																										
3.5 Demonstrate proficiency in reading dental records.	✓																X									
<p><b>Performance Indicators: Evidence Standard Is Met</b></p>																										
3.1 Develop a research paper illustrating the use of databases in forensic science.																										
3.2 Using National HOSA Research/ Persuasive Speaking Guidelines, research the use of data bases to solve crimes and present to the classroom using PowerPoint.																										



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3.3 Develop a poster to explain how dental records are read.																											
3.4 Compare and contrast different sets of fingerprints.	✓																	X									
3.5 Explain which facial features are used in facial recognition software.																											
<b>Standard 4.0 - The students will compare the analysis of high profile drugs and how they influence human physiology.</b>																											
<b>Learning Expectations</b>																											
4.1 Be proficient in understanding the biological response that occurs in the presence of certain illegal substances and high profile drugs (such as cocaine, LSD and ecstasy).	✓									X																	
4.2 Examine the emotional and financial impact of illegal substances on society and law enforcement.	✓									X																	
4.3 Examine methods used to identify high profile drugs at crime scenes and in blood samples.	✓																X										
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Compare and contrast the biological response of the effect of different drugs.	✓									X																	
4.2 Develop a PowerPoint illustrating how different drugs are identified.	✓									X																	

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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4.3 Using Internet, determine the financial impact of illegal substances on the nation's taxpayers. Using National HOSA Prepared Speaking guidelines, present findings to class.																											
4.4 Explore the field of toxicology and examine how substances are metabolized by the body.	✓									X																	
4.5 Identify basic data to determine the presence or absence of an illegal substance.	✓									X																	
<b>Standard 5.0 - The student will be aware of procedures for collecting, preserving, and securing forensic samples at the crime scene and in the laboratory.</b>																											
<b>Learning Expectations</b>																											
5.1 Be proficient in the terminology and basic procedures for preserving crime scenes, including recognizing, recording, collecting, labeling and storing evidence.	✓																		X								
5.2 Analyze methods for securing, searching, documenting, and collecting different types of samples (blood, fingerprints, tracks, and other evidence).	✓																		X								
5.3 Be proficient in the basic procedures for securing the crime scene.	✓																		X								
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1 Illustrate Tennessee laws and regulations related to forensic science.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways															
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5.2 Research and document professional practice in forensic science.	✓																		X									
5.3a Research the use of modern forensic instrumentation and present the findings to the class using PowerPoint.																												
5.3b. Examine examples of forensic instrumentation and their capabilities. Using National HOSA Prepared Speaking guidelines, present findings to class.																												
<b>Standard 6.0 - The students will demonstrate proficiency in understanding the proper methods and instruments used in the modern crime laboratory to analyze forensic samples.</b>																												
<b>Learning Expectations</b>																												
6.1 Become proficient in understanding the basic principles behind the following scientific instruments used in forensic science: Gas-Chromatography, Capillary Electrophoresis, Polymerase Chain Reaction, Scanning Electron Microscope and crime site imager.																												
6.2 Become proficient in knowing when to use the proper instrument.	✓																											
6.3 Match methods and instruments with the proper forensic evidence, data and outcome.	✓																											
6.4 Evaluate the results from basic forensic data.	✓																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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<b>Performance Indicators: Evidence Standard Is Met</b>																										
6.1 Research and prepare National HOSA Bowl questions on forensic science.																										
6.2 Interpret lab values from a case history relative to forensic purposes.																										
6.3 Match data from Gas-Chromatography, Capillary Electrophoresis, Scanning Electron Microscope and crime site imager with instrument.																										
6.4 Evaluate the cost of forensic data.																										
<b>Standard 7.0 - Students will interpret their understanding of the legal aspects of forensic science, its application in the judicial system and apply this knowledge to societal issues.</b>																										
<b>Learning Expectations</b>																										
7.1 Determine the legal requirement to obtain a search warrant.	✓																		X							
7.2 Use language appropriate to the legal aspects of forensic science.	✓																		X							
7.3 Use language appropriate to interviewing both crime scene witnesses and scientific expert witnesses.	✓																		X							
7.4 Evaluate different methods that evidence is obtained and legal protections are guaranteed by the constitution.	✓																		X							

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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7.5 Examine a criminal case study in which legal procedures were not followed properly. Identify what was done incorrectly and how this changed the outcome.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1 Evaluate the movement of forensic evidence from crime scene, through the laboratory to the court room.																											
7.2 Develop a research paper or power point illustrating legal procedures that must be followed in a forensic science investigation involving forensic science.																											
7.3 Orally report on the history of forensic science using National HOSA Research/Persuasive Speaking guidelines.																											
7.4 Identify new laws involving investigations of personal computers, Internet use and cellular phones.																											
7.5 Using National HOSA Biomedical Debate guidelines, prepare a debate of individual rights versus the law enforcements rights.																											
<b>Standard 8.0 - The student will be aware of OSHA regulations, proper attire at the crime scene and in the forensic laboratory and safety guidelines that apply to biohazardous waste.</b>																											
<b>Learning Expectations</b>																											
8.1 Orally report on universal precautions, its history, and how these precautions and how these precautions differ from those used in medical settings.																											

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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8.2 Analyze OSHA guideline that must be followed in forensic science.																											
8.3 Research safety guidelines that apply to biohazardous waste.	✓						X								X												
8.4 Research sources of biohazardous waste in forensic science.	✓																X										
<b>Performance Indicators: Evidence Standard Is Met</b>																											
8.1 Define anatomy and physiology and describe their subdivisions, using a concept map.	✓	X																									
8.2 Classify organ systems of the body as protection, support and movement, regulation and integration, transport or absorption and excretion.	✓	X																									
8.3 Construct a concept map to illustrate the cavities in the body and the organs contained within each area.																											
<b>Standard 9.0 - Students will examine the range of careers available in the forensic science and related fields. Careers such as forensic anthropology, entomology, pathology, nursing, district attorney, and police work.</b>																											
<b>Learning Expectations</b>																											
9.1 Read, interpret, verbalize and apply policies and procedures appropriate to a forensic setting.	✓																	X									

Tennessee Health Science Education Standards I	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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9.2 Participate in an orientation prior to a research setting.																											
9.3 Utilize proper communication, critical thinking and problem-solving techniques.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
9.4 Research careers in forensic science.	✓																	X									
<b>Performance Indicators: Evidence Standard Is Met</b>																											
9.1 Use National HOSA Career Health Display guidelines, select a career and present the career to the class.																											
9.2 Design and complete a resume for a forensic job.																											
9.3 Research and analyze career options in Forensic Science. Illustrate a career ladder of jobs, education, licensure and salary.	✓																	X									
9.4 Secure and evaluate job descriptions for careers options.	✓			X									X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways															
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<b>G. Health Informatics</b>																												
<b>Standard 1.0 - The student will demonstrate knowledge of the academic subject matter required for proficiency within health care management.</b>																												
<b>Learning Expectations</b>																												
1.1 Read and evaluate patient/client charts, reports, and facility manuals.	✓											X				X	X					X	X					
1.2 Perform mathematical functions.	✓									X	X	X	X	X		X	X	X	X		X	X	X	X	X	X		
1.3 Use health care terminology.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.4 Use computerized database.																												
<b>Performance Indicators: Evidence Standard Is Met</b>																												
1.1a Using National HOSA Administrative Medical Assisting guidelines, interpret patient/client charts and records.																												
1.1b Examine reports as assigned (operative, pathology, discharge summaries, radiology, history and physical reports).																												
1.1c Research and interpret various policy and procedure manuals used in health care agencies.	✓			X	X	X																						



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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1.2a Complete insurance forms using appropriate medical terminology.																											
1.2b Calculate the monthly cost of insurance for a family of four. Record the findings.																											
1.2c Compare and contrast the cost of services provided by different insurance companies.	✓			X																							
1.3a Using National HOSA Medical Terminology and Medical Spelling guidelines, prepare questions for terminology test and abbreviation, prefix, and root words for medical spelling.																											
1.3b Job shadow in a health care facility, observing and documenting the use of medical terminology in a large database system.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.4 Research the Internet for uses of computerized databases.																											
<b>Standard 2.0 - Students will demonstrate various effective communication methods for giving and obtaining health care information.</b>																											
<b>Learning Expectations</b>																											
2.1 Assess others' ability to understand health care reporting.	✓	X	X	X							X			X			X	X	X	X						X	
2.2 Adapt communication to individual needs, including paraphrasing or translating.	✓	X	X	X							X			X			X	X	X	X						X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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2.3 Apply communication skills for the special needs client.																											
2.4 Demonstrate the ability to assess multicultural and multilingual clients.	✓			X	X		X						X								X						
2.5 Use facility specific guidelines and methods of sending and receiving information.	✓			X																							
2.6 Access and use electronically produced information.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Communicate effectively, orally and in writing.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.2 Electronically research and report on a different culture.	✓			X																							
2.3 Demonstrate the use of databases and the use of e-mail.	✓										X										X						
2.4 Demonstrate communication skills with multicultural and multilingual clients.	✓			X	X		X						X								X						
2.5 Research and evaluate facility-specific guidelines on sending and receiving information.	✓										X										X						
2.6 Using the Internet, access insurance forms. Complete and return to insurance company.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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2.7 Use technology and analyze data sent and received via tele-health.	✓										X										X						
<b>Standard 3.0 - The student will understand the sources, routes, and flow of information in a health care facility.</b>																											
<b>Learning Expectations</b>																											
3.1 Analyze the complete system of information.	✓			X																							
3.2 Analyze system functions to improve efficiency.	✓			X																							
3.3 Ensure data security and confidentiality by controlling access and release of information using Health Insurance Portability and Accountability Act (HIPPA).	✓					X	X																				
3.4 Construct a healthcare delivery system model.	✓			X																							
3.5 Calculate the cost effectiveness of two separate health care delivery systems using the same client procedure.	✓			X																							
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1 Evaluate the design and implementation of new or revised systems or processes.	✓			X																							
3.2 Demonstrate computer entry access.	✓																				X						

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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3.3a Evaluate a release of information form.																											
3.3b Evaluate a confidentiality form/statement.																											
3.4a Demonstrate the role of teams, their organization and the overall health care environment in a health care facility.	✓			X					X								X										
3.4b Demonstrate factors as cost, managed care, technology, an aging population, access to care, alternative therapies and lifestyle changes that may affect various health care delivery system models.	✓			X																							
<b>Standard 4.0 - The student will understand how employability skills enhance their employment opportunities and job satisfaction.</b>																											
<b>Learning Expectations</b>																											
4.1 Exhibit personal skills such as attendance, time management, and individual responsibility.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.2 Demonstrate professional conduct and appearance.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.3 Use analytical skills to solve problems and make decisions.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.4 Adapt to changing situations in the health care industry.	✓			X	X																						

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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4.5 Upgrade technology skills.	✓											X									X						
4.6 Analyze various career options and the preparation required for each career.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.7 Anticipate needs of clients and co-workers.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1a Using National HOSA Job Seeking Skills guidelines, demonstrate key employability skills.																											
4.1b Demonstrate professional skills necessary for a health care worker.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.2 Research and calculate the cost to the health care facility if an employee is 30 minutes, one hour or two hours late for the job. Present documented information to class.																											
4.3 Design and complete a resume for a health informatics job.																											
4.4a Secure and evaluate job descriptions for career options.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X		
4.4b Using National HOSA Career Health Display guidelines, select a career and present the career to a community agency.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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4.5 Demonstrate new and innovative technology in health informatics.	✓											X									X						
4.6a Research and analyze career options in health care. Illustrate a career ladder of jobs, education, licensure, and salary.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X		
4.6b Write a job description for a bio-photographer, medical illustrator, health service administrator, technical writer, health science librarian, medical coder, and a medical assistant.																											
4.7a Demonstrate the use of a time card using classroom attendance. Calculate gross pay from the lowest level of the career ladder to the highest level.																											
4.7b Using National HOSA Creative Problem Solving guidelines, research and analyze specific health care needs of clients and co-workers.																											
<b>Standard 5.0 - Students will understand the legal responsibilities, limitations, and the implications of their actions within the health care management delivery systems.</b>																											
<b>Learning Expectations</b>																											
5.1 Research and evaluate malpractice and liability issues.	✓				X	X							X														

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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5.2 Demonstrate and apply client confidentiality.	✓					X	X					X	X								X						
5.3 Analyze legal responsibilities and implications of specific actions within the health care delivery setting.	✓					X	X						X														
5.4 Comply with legal requirements for documentation	✓					X	X						X														
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1 Demonstrate and perform duties in accordance with laws, regulations, policies and legislated rights of clients/patients.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
5.2a Design and develop an interview check sheet for maintaining client confidentiality.																											
5.2b Using a check sheet, interview and document a health care management professional.																											
5.3a Obtain a copy of the patient's rights from a health care facility. Analyze and evaluate client's rights versus a health care worker's rights.	✓					X	X																				
5.3b Design and demonstrate steps for operating within a health care worker's scope of practice.	✓		X										X														
5.3c Compare and contrast behaviors and practices that could result in malpractice, liability, or negligence.	✓					X	X						X						X						X		
5.4a Examine and evaluate various malpractice and liability insurance policies comparing coverage and costs. Document findings.																											

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5.4b Job shadow with an insurance company. Document and journal policies on malpractice and liability insurance.																											
5.4c Using a health care lawyer, estimate cost of an average malpractice suit against a health care facility.																											
5.4d Using National HOSA Biomedical Debate guidelines, select a malpractice issue, research, and present findings on the issue. Debate the issue.																											
<b>Standard 6.0 - The student will demonstrate accepted ethical practices with respect to cultural, social, and ethnic differences, particularly within the health care management environment.</b>																											
<b>Learning Expectations</b>																											
6.1 Demonstrate loyalty and compassion to fellow workers and the health care organization.	✓	X	X		X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
6.2 Document and demonstrate respect for the client rights.	✓		X		X	X						X															
6.3 Demonstrate equal treatment of all persons.	✓		X			X		X									X										
6.4 Document and report any activity that affects the health, safety, or welfare of clients or co-workers.	✓				X	X		X																			



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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<b>Performance Indicators: Evidence Standard Is Met</b>																										
6.1a Demonstrate and perform duties within established ethical guidelines supporting sensitive and quality health care delivery.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
6.1b Research, contrast, and evaluate legal and ethical rights of all clients/patients and co-workers.	✓					X	X							X												
6.2a Analyze and complete incident and reporting forms. Evaluate forms for accuracy.																										
6.2b Research the Internet for court cases demonstrating client's rights. Document information and present to class.	✓					X	X																			
6.3a Research laws and regulations on equal treatment for all persons.	✓					X	X																			
6.3b Analyze laws and regulations. Prepare a debate on equal treatment versus unequal treatment of patients/clients. Use National HOSA Biomedical Debate guidelines for debate.																										
6.4a Job shadow in a health care facility. Observe and document any activity that affects the health, safety, or welfare of clients or co-workers. Document findings.	✓													X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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6.4b Using a scenario, create an activity affecting the health and safety of clients, and co-workers. Evaluate results. Make a plan for improving health, safety, and welfare for all individuals in the health care facility.	✓	X	X	X	X	X	X	X	X	X	X	X															
<b>Standard 7.0 - The student will assess and evaluate the quantitative and qualitative requirements for client information.</b>																											
<b>Learning Expectations</b>																											
7.1 Analyze and document client information.	✓		X									X				X	X		X								
7.2 Demonstrate computer programs for process information.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.3 Research and prepare computerized reports.	✓		X	X	X	X	X		X																		
7.4 Compare and contrast requirements of external agencies such as insurance companies, courts, and regulatory bodies.	✓			X	X	X	X	X																			
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1a Assess and document information gathered from patient/client charts.	✓											X										X					
7.1b Interview a health information management employee regarding various methods of chart analysis. Document findings.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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7.2 Using the Internet, process information on a specific disease. Document all information in a charting format and reporting forms.																											
7.3 Using National HOSA Research Persuasive Speaking guidelines, research and prepare a research paper on a new disease in the community. Demonstrate proper reports for the health care facility as a part of the research.																											
7.4 Research the requirements of external agencies, such as insurance companies, courts, and regulatory bodies. Using National HOSA Prepared Speaking guidelines, speak to the research obtained.																											
<b>Standard 8.0 - The student will demonstrate the ability to read and interpret a medical record, using knowledge of anatomy, physiology, disease processes, and medical terminology.</b>																											
<b>Learning Expectations</b>																											
8.1 Locate information in the record for various purposes, such as filing, coding, or information processing.																											
8.2 Recognize standardized coding systems and uniform data definitions.																											
8.3 Convert narrative information into a statistical database.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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8.4 Use automated systems.																											
8.5 Maintain specialty registries.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
8.1a Collect data and extract required information from the medical record.																											
8.1b Analyze and assemble a patient record in correct format.																											
8.2 Demonstrate appropriate procedure and diagnostic codes manually and electronically.																											
8.3 Collect, analyze, and standardize client information by converting narrative information into a statistical database.																											
8.4 Job shadow in a health care facility. Demonstrate automated systems in the facility.																											
8.5 Research and prepare a written report of specialty registries. Using National HOSA Prepared Speaking guidelines, present findings to class.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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<b>Standard 9.0 - Students will evaluate the content and multiple uses of health information in health care delivery settings.</b>																										
<b>Learning Expectations</b>																										
9.1 Obtain and record client information using appropriate terminology.	✓											X														X
9.2 Create, route, and mail correspondence regarding the medical record.																										
9.3 Transcribe health information.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
9.4 Perform admission, discharge, and transfer functions.																										
9.5 Categorize and prioritize health information requests.																										
<b>Performance Indicators: Evidence Standard Is Met</b>																										
9.1a Using National HOSA Administrative Medical Assisting guidelines, collect and analyze information for admissions from patient/client.																										
9.1b Document and complete appropriate admission forms.	✓											X													X	
9.1c Simulate the release of a patient record following legal guidelines.	✓											X													X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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9.2 In a scenario, the student will evaluate current legal guidelines in Tennessee for creating, routing, and mailing correspondence in a medical record. Document findings.																											
9.3 Using National HOSA Administrative Medical Assisting guidelines, transcribe an assigned report, which could include a history, physical, radiology, pathology, operative, or discharge summary.																											
9.4 Job shadow in a health care facility. Demonstrate the admission, discharge, and transfer functions of a patient/client. Document and journal activities.	✓											X	X	X		X	X		X	X	X	X	X	X	X	X	
9.5 Each student will be given a set of health information requests. The student will categorize and prioritize the information. Demonstrate a set of completed health information as used in a health care facility.																											
<b>Standard 10.0 - Students will demonstrate the operations used to enter, retrieve, and maintain information.</b>																											
<b>Learning Expectations</b>																											
10.1 Select and use automated systems.	✓																									X	

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10.2 Maintain equipment and supplies.	✓												X		X	X	X		X		X				X	X	
10.3 Perform general troubleshooting.	✓												X		X	X	X		X		X				X	X	
10.4 Use and maintain database, storage, and retrieval systems.	✓																			X							
<b>Performance Indicators: Evidence Standard Is Met</b>																											
10.1 Demonstrate the use of health information equipment and materials. Analyze safety and efficiency in daily operations. Document findings.	✓													X		X	X	X		X		X			X	X	
10.2a Demonstrate the proper way to access and log-off automated systems/programs.	✓										X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.2b Develop and maintain a database of inventory for supplies.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	
10.3 Develop a database containing information on warranty, care, and maintenance of equipment.																											
10.4a Demonstrate a database using bio-informatics systems.																											
10.4b Job shadow in a health care facility. Perform filing, storage, and retrieval of reports. Document and journal findings.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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<b>Standard 11.0 - The student will perform classroom laboratory activities and apply knowledge and skills in a health care clinical setting.</b>																										
<b>Learning Expectations</b>																										
11.1 Read, interpret, verbalize, and apply policies and procedures appropriate to health care setting.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.2 Participate in a health care facility orientation prior to clinical experience.																										
11.3 Demonstrate the use of pertinent safety precautions and aseptic techniques.	✓						X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.4 Utilize proper communication, critical thinking, and problem-solving techniques.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.5 Demonstrate the safe and appropriate use of equipment and supplies.	✓						X			X		X	X		X	X	X	X			X				X	X
11.6 Perform skills safely and effectively as outlined in policy and procedures of the health care facility and standards of the health care profession.	✓						X			X		X	X		X	X	X	X			X				X	X
<b>Performance Indicators: Evidence Standard Is Met</b>																										
11.1 Perform activities efficiently and without injury to patients or self.	✓						X			X			X		X	X	X		X		X				X	X
11.2 Convey pertinent information to patient and appropriate team members within a timely manner.	✓	X	X			X		X				X	X	X	X	X	X		X		X	X	X	X	X	X



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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11.3 Using National HOSA Medical Assisting guidelines, demonstrate safety precautions and aseptic techniques.																											
11.4 Demonstrate communication skills to a person who is hard of hearing, a person who has impaired vision, and a person who speaks English as a second language. Evaluate communication skills.																											
11.5 Evaluate safe and appropriate use of equipment and supplies.	✓						X			X		X	X		X	X	X	X	X		X			X	X		
11.6 Demonstrate skills in a health care facility following policies and procedures. Journal skills activities.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>H. Health Science Education</b>																											
<b>Standard 1.0 - The student will know and apply the academic subject matter required for entrance within the Health Science Career Cluster.</b>																											
<b>Learning Expectations</b>																											
1.1 Compare and complete various patient forms used in documenting client/patient information.	✓										X										X						
1.2 Perform mathematical operations to convert body temperature using Celsius/Fahrenheit methods and convert weight to metric measurement.	✓								X																		
1.3 Use medical terminology including root words, prefixes, suffixes, and abbreviations.	✓						X					X	X	X	X		X		X		X		X				

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1.4 Employ principles of basic anatomy and body organization in assessing health.	✓	X							X			X	X	X	X	X		X			X	X	X	X			
1.5 Evaluate the history of health care in respect to time, culture, religion, and regions.	✓		X							X		X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Evaluate the patient forms/charts for completeness, grammar, and writing skills by implementing National HOSA Administrative Medical Assisting guidelines.																											
1.2 Calculate math conversions between English and metric from a given scenario using National HOSA Medical Math guidelines.																											
1.3 Demonstrate symbols, abbreviations, and medical terminology usage by implementing National HOSA Medical and Dental Terminology and Medical and Dental Spelling guidelines.																											
1.4 Demonstrate guidelines using medical and dental terminology and medical and dental spelling.	✓	X	X									X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.5 Develop a research paper illustrating the history of health care. Orally report on the history of health care using National HOSA Research/Persuasive Speaking guidelines.																											

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1.6 Distinguish function and basic components of body systems and relative terms related to body organization.	✓	X															X					X			X		
<b>Standard 2.0 - Students will explain the various methods of giving and obtaining information, demonstrate use of all forms of communication, and evaluate roles and responsibilities.</b>																											
<b>Learning Expectations</b>																											
2.1 Assess the importance of effective communication using rules of communication and appropriate listening skills including sending and receiving information.	✓	X																				X					
2.2 Adapt communication to individual needs (age and development specific) and multicultural and multilingual needs.	✓	X																									
2.3 Research use of tele-health care in a health care setting	✓										X											X					
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Evaluate a written and oral report of role-play situations by implementing National HOSA Prepared Speaking guidelines.																											
2.2 Critique speaking skills by implementing National HOSA Extemporaneous Speaking guidelines.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.3 Participate in a Biomedical Debate using HOSA guidelines on the use of telemedicine.																											
<b>Standard 3.0 - The student will understand how health care workers' roles fit into their department, organization, and overall health care environment and will demonstrate how key systems affect services they perform and quality of care given.</b>																											
<b>Learning Expectations</b>																											
3.1 Analyze the range of services offered to clients through various health care facilities.	✓		X		X	X	X				X	X									X						
3.2 Evaluate the impact of current healthcare trends including reimbursement and duplication of services.	✓		X																								
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1a Diagram a flow chart of services offered to client/patients.																											
3.1b Evaluate flow chart for duplication of services. Illustrate a new flow chart.																											
3.2 Research fees paid for services under managed care and not under managed care by implementing National HOSA Medical Math guidelines.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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Standard 4.0 - The student will analyze how employability skills enhance employment opportunities and job satisfaction and will demonstrate key employability skills and procedures/training to maintain skills as needed for the job market.																										
<b>Learning Expectations</b>																										
4.1 Demonstrate employability skills such as attendance, time management, individual responsibility, professional conduct, and appearance.	✓				X									X	X	X	X	X	X	X	X	X	X	X	X	X
4.2 Demonstrate interview, application, and resume writing skills necessary for job attainment by implementing National HOSA Job Seeking Skills guidelines.																										
4.3 Demonstrate problem-solving and critical thinking skills.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.4 Demonstrate proficiency in keyboarding skills, including equipment operation, computer systems, and computer applications.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.5 Compare various career options in each health care cluster and the required education, certification, licensure and registries.	✓				X									X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Performance Indicators: Evidence Standard Is Met</b>																										
4.1a Design a check sheet of employability skills necessary in a local health care facility.	✓				X									X	X	X	X	X	X	X	X	X	X	X	X	X
4.1b Using a check sheet, job shadow in the health care facility. Observe and complete check sheet for necessary skills.	✓													X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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4.2a Prepare a resume and job application for a specific job.																											
4.2b Participate in a job interview. Use National HOSA Job Seeking Skills guidelines as check-off for interview.																											
4.3 Evaluate student response to a written scenario employing problem solving and critical thinking skills.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.4 Evaluate student's proficiency in keyboarding skills, equipment, computer system and computer applications.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.5a Investigate career options in the health care cluster.	✓	X		X	X								X	X	X	X	X	X	X	X	X	X	X	X	X		
4.5b Using National HOSA Career Health Display guidelines, prepare a display on one sub-cluster.																											
<b>Standard 5.0 - The student will evaluate legal responsibilities, limitations, and implications of actions within the health care delivery system.</b>																											
<b>Learning Expectations</b>																											
5.1 Examine legal aspects of client/patient care including HIPPA guidelines, confidentiality, consent, and negligence.	✓					X	X																				
5.2 Analyze the phrase "operate within the scope of care" including licensure, accreditation, and legislation affecting professions and facilities.	✓					X							X														
5.3 Analyze legal requirements in documentation.	✓					X	X																				

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
5.4 Examine global, ethnic and cultural issues, negligence, and legal documentation.	✓					X	X																				
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1a Analyze consent forms, facility policies, and procedure and patient confidentially.	✓					X	X																				
5.1b Evaluate and report on a medical television program, documenting various legal issues.																											
5.2 Evaluate, research, and report on patient confidentiality by implementing National HOSA Research Persuasive Speaking guidelines.																											
5.3a Job shadow a health care professional and complete an evaluation of observations.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	
5.3b Interview a health care lawyer. Report on legal requirements for documentation.																											
5.4 Evaluate medical records for accuracy.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
Standard 6.0 - The student will evaluate accepted ethical practices with respect to cultural, social, and ethnic differences within the health care environment.																										
Learning Expectations																										
6.1 Analyze the Patients' Bill of Rights and compare the needs of client/patient who have cultural, social, and ethical differences in regard to the Patients' Bill of Rights.	✓					X																				
6.2 Interpret a Code of Ethics.	✓					X																				
Performance Indicators: Evidence Standard Is Met																										
6.1 Research facility's safety policy and procedures for clients/patients who use English as a second language.																										
6.2 Evaluate written report contrasting various Codes of Ethics by implementing National HOSA Research Persuasive Speaking guidelines.																										



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<p><b>Standard 7.0 - The student will analyze the existing and potential hazards to clients, co-workers, and self and will prevent injury or illness through safe work practices and follow health and safety policies and procedures.</b></p>																										
<p><b>Learning Expectations</b></p>																										
7.1 Use Standard Precautions and OSHA Standards to control the spread of infection including aseptic techniques such as hand washing, personal protective equipment, isolation, and personal hygiene.	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	X
7.2 Apply principles of body mechanics including proper lifting techniques, positioning, moving, and transferring.	✓							X					X				X		X						X	X
7.3 Demonstrate cleaning methods for instruments, equipment, and environmental surfaces.	✓							X					X		X	X	X		X		X	X	X	X	X	X
7.4 Employ emergency procedures and protocols regarding fire and electrical hazards and hazardous materials, using health care guidelines such as OSHA Standards.	✓							X																		
7.5 Analyze activities that adversely affect the health, safety, or welfare of clients/patients.	✓					X	X		X																	
7.6 Perform medical and surgical aseptic techniques, including packaging, gloving, and gowning.	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<b>Performance Indicators: Evidence Standard Is Met</b>																										
7.1a Demonstrate safety practices using OSHA Standards for sterile gloves, gowns, and dispensable equipment.	✓							X						X	X	X	X	X	X	X	X	X	X	X	X	X
7.1b Evaluate demonstration of safety practices by implementing National HOSA Medical Clinical Guidelines.																										
7.2 Evaluate student demonstration of body mechanic principles by implementing National HOSA's guidelines for Nursing Assistant and Physical Therapy.																										
7.3 Observe culture medium for growth of microorganisms by implementing HOSA's Medical Laboratory guidelines.																										
7.4 Appraise the application of standards to given hazards.	✓							X								X										
7.5 Evaluate documents on risk factors.	✓							X								X										
7.6 Using National HOSA Medical Clinical guidelines, demonstrate medical and surgical aseptic techniques. Evaluate the demonstration.																										



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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<b>Standard 9.0 - The student will perform skills necessary for physical assessment of health status and emergency care.</b>																											
<b>Learning Expectations</b>																											
9.1 Demonstrate principles of first aid application in emergency conditions such as bleeding, shock, poisoning, burns, heat, cold exposures, muscle skeletal injuries and sudden illness.	✓										X							X									
9.2 Demonstrate cardiopulmonary resuscitation emergency procedures.	✓										X							X									
9.3 Measure vital signs.	✓										X			X			X			X					X	X	
9.4 Perform health assessment including measures such as height, weight, nutritional analysis, and psychosocial skills.	✓									X		X															
9.5 Employ principles of nutrition including assessment techniques, of energy needs, diet adequacy, and conditions that alter nutrient needs.	✓			X						X		X	X							X		X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
9.1 Evaluate demonstration on the principle of first aid using National HOSA's First Aid guidelines.	✓									X										X							
9.2 Using National HOSA's CPR guidelines, evaluate a cardiopulmonary resuscitation demonstration.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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9.3 Using National HOSA Nursing Assisting guidelines, measure and record vital signs. Evaluate demonstration.																											
9.4a Perform nutritional assessment using patient's height, weight, age, activity, and stress factors.	✓								X			X	X							X		X	X	X	X		
9.4b Evaluate adequacy of diet comparing diet history/diary to assessed caloric/nutrient needs.	✓								X			X	X							X		X	X	X	X		
9.5 Using National HOSA Medical Clinical guidelines, demonstrate medical and surgical aseptic techniques. Evaluate the demonstration.																											
<b>I. Medical Therapeutics</b>																											
<b>Standard 1.0 - The student will demonstrate client interaction skills by explaining planned procedures and goals to clients/patients.</b>																											
<b>Learning Expectations</b>																											
1.1 Demonstrate their ability to adapt communication to individual's level of understanding and cultural differences.	✓			X	X		X				X			X			X		X	X	X					X	
1.2 Use verbal and nonverbal communication skills.	✓			X	X		X				X			X			X		X	X	X					X	
1.3 Demonstrate appropriate medical telephone techniques.	✓										X									X							

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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1.4 Apply a variety of interviewing techniques that reflect an understanding of the client's/patient's age, condition, development, cultural background, and interpersonal skills.	✓																				X						
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Communicate with patients who have cultural differences in which the client/patient verbalizes understanding.	✓		X	X	X		X							X								X					
1.2 Communicate using medical terms with nonverbal and verbal communication skills.	✓	X	X										X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.3 Demonstrate methods of communications and their barriers.	✓		X						X				X		X	X			X	X	X	X		X	X	X	
1.4 Using National HOSA Administrative Medical Assisting guidelines, apply telephone communication skills as evidenced giving responses applicable to the work setting.																											
1.5 Compare communication styles appropriate to age, including children, teenagers and adults.	✓		X																								
1.6 Analyze patients' charts focusing on clarity and completeness.																											
1.7 Demonstrate effective interpersonal skills.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways																
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<b>Standard 2.0 - Students will research therapeutic careers, education requirements, licensure, and scope of practice.</b>																													
<b>Learning Expectations</b>																													
2.1 Examine various therapeutic careers and their scope of practice.	✓				X													X	X	X		X			X		X	X	X
2.2 Evaluate the use of tele-health care in the delivery of health care in a clinical and home setting.																													
2.3 Adopt and demonstrate a professional attitude.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.4 Demonstrate an understanding of medical legal requirements.	✓		X	X	X	X	X	X	X			X	X	X		X			X		X	X		X	X				
2.5 Analyze various quality improvement initiatives.	✓			X						X				X	X	X	X	X	X	X	X	X	X	X	X	X	X		
2.6 Compare and contrast the various health care delivery systems and payment sources.	✓			X																									
<b>Performance Indicators: Evidence Standard Is Met</b>																													
2.1a Using National HOSA Research/Persuasive Speaking guidelines, differentiate various therapeutic careers—their scope of practice and educational requirements.																													

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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2.1b Using National HOSA Career Health Display guidelines, prepare a display of a chosen therapeutic career.																										
2.2a Demonstrate the importance of maintaining a professional attitude with patients and other individuals.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.2b Using National HOSA Biomedical Debate guidelines, select a topic from the list below and debate the issues involved.																										
<ul style="list-style-type: none"> <li>Maintain strict confidentiality of patient information.</li> </ul>																										
<ul style="list-style-type: none"> <li>Recognize and honor patient's privacy and the patient's right to choose treatment options or to refuse treatment.</li> </ul>																										
<ul style="list-style-type: none"> <li>Differentiate between living will, advanced directives, and medical durable power of attorney.</li> </ul>																										
2.2c Using National HOSA Creative Problem Solving Guidelines, team members will select a topic and brainstorm to solve the problem. Topics are:																										
<ul style="list-style-type: none"> <li>Accepting responsibility for own actions</li> </ul>																										
<ul style="list-style-type: none"> <li>Promoting quality patient care</li> </ul>																										
<ul style="list-style-type: none"> <li>Utilizing principles of group dynamics</li> </ul>																										
<ul style="list-style-type: none"> <li>Recognizing the importance of all members of health care team</li> </ul>																										



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.3 Contrast and compare medical-legal requirements of various health care team members.	✓		X	X	X	X	X	X	X			X	X	X		X			X		X	X		X	X		
2.4 Distinguish between various quality control initiatives focusing on improved patient care.	✓		X						X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.5 Interpret health care systems and analyze methods of payment.	✓			X																							
<b>Standard 3.0 - Students will monitor client status; utilize principles of body mechanics; and plan, implement, and analyze the care provided based on age, physical, and psycho-social needs.</b>																											
<b>Learning Expectations</b>																											
3.1 Demonstrate the following skills:	✓										X			X			X			X					X	X	
• vital signs	✓									X				X			X										
• cardiopulmonary resuscitation/basic first aid	✓									X						X											
• oral hygiene: brushing and flossing	✓														X												
• basic client transfers	✓					X											X	X		X							
• specimen collections	✓																X					X					

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways												
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine
3.1 Demonstrate the following skills: • hand washing	✓						X					X	X	X	X	X	X	X	X	X	X	X	X	X	X
• isolation techniques	✓						X					X		X	X	X		X	X	X	X	X	X	X	X
• proper body mechanics	✓		X			X	X	X	X		X			X	X	X	X	X	X	X	X	X		X	X
• height and weight	✓								X	X															
3.2 Demonstrate use of standard precautions.	✓						X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.3 Use appropriate medical language.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
3.4 Compare and contrast how care is provided based on age, physical status, and psycho-social aspects of client's needs	✓								X	X		X								X					
3.5 Analyze client's specific health education needs. Implement National HOSA Newsletter guidelines and provide resource and community service information to the community.																									

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1 Using National HOSA guidelines, perform skills for a variety of clients, based on age, physical, and psycho-social needs. A. Skill: Vital signs; HOSA Guidelines: Medical Clinical																											
B. Skill: Cardiopulmonary Resuscitation/First Aid; HOSA Guidelines: CPR																											
C. Skill: Oral hygiene - brushing and flossing; HOSA Guidelines: Dental Hygienist																											
D. Skill: Basic client transfers and positioning; HOSA Guidelines: Physical Therapy																											
E. Skill: Artificial specimen collection (urine, stool, sputum, secretions); HOSA Guidelines: Medical Lab																											
F. Skill: Hand washing; HOSA Guidelines: Personal Care Skills																											
G. Skill: Isolation techniques; HOSA Guidelines: Medical Clinical																											
H. Skill: Proper body mechanics; HOSA Guidelines: Physical Therapy																											
I. Skill: Height/Weight; HOSA Guidelines: Nursing Assisting																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
3.2 Use standard precautions while performing patient care skills. Journal patient care and standard precautions used with the skill.																											
3.3 Interpret patient's medical information utilizing appropriate medical terminology.	✓									X			X				X			X				X	X		
3.4 Provide care based on age, physical status, and psycho-social aspects of all patients.	✓								X	X		X								X							
3.5 Examine various community resources based on identified patient's needs. Using National HOSA Community Awareness guidelines, select a project based on needs. Implement the project.																											
<b>Standard 4.0 - Students will provide care to patients based on fundamentals of wellness and the prevention of disease processes.</b>																											
<b>Learning Expectations</b>																											
4.1 Investigate available preventive health screening and examinations.	✓			X			X		X										X								
4.2 Analyze alternative health practices.	✓			X					X			X															
4.3 Employ preventive health practices such as good nutrition and stress management.	✓								X			X															
4.4 Appraise patients of health risk factors and methods of reduction.	✓								X				X	X					X								

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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4.5 Demonstrate knowledge of illness prevention.	✓			X			X		X				X	X		X			X		X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Interpret various health screening and examinations.	✓			X			X		X										X								
4.2 Compare and contrast various health practices.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.3 Illustrate preventive health practices.	✓			X			X		X				X	X		X			X		X	X	X	X	X	X	
4.4 Categorize health risk factors and methods of reduction.	✓								X				X	X		X			X		X	X	X	X	X	X	
4.5 Differentiate between illness prevention and wellness.	✓								X																		
<b>Standard 5.0 - Students will analyze the facility protocol and guidelines for collecting data.</b>																											
<b>Learning Expectations</b>																											
5.1 Employ facility policies and procedures by the use of data collection.																											
5.2 Assess the patient and the living environment.	✓								X																		

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine		
5.3 Assemble, compare, and use appropriate patient information.	✓										X										X							
<b>Performance Indicators: Evidence Standard Is Met</b>																												
5.1 Analyze the patient and the environment; journal findings.	✓									X																		
5.2 Demonstrate use of facility policy and procedures.	✓			X	X	X	X	X	X		X	X	X												X			
5.3a Interpret and use patient information.	✓										X	X	X	X		X				X	X	X	X	X	X	X		
5.3b Implement National HOSA Extemporaneous Writing guidelines for interpreting and using patient information.																												
<b>Standard 6.0 - The student will analyze the general purpose and components of the treatment plan.</b>																												
<b>Learning Expectations</b>																												
6.1 Involve the patient and primary caregivers in planning patient care.	✓			X																								
6.2 Compose a list of patient problems and apply possible interventions.																												
6.3 Distinguish between various types of supplies and equipment needed to implement patient care plan.	✓			X							X	X	X		X				X	X	X	X	X	X	X			

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<b>Performance Indicators: Evidence Standard Is Met</b>																										
6.1 Devise a care plan that includes the patient and the primary care giver.	✓			X																						
6.2 Choose appropriate care as related to the identified patient needs. Design a care plan by implementing Tennessee HOSA guidelines.																										
6.3a Choose appropriate supplies and equipment for care plan.	✓			X						X	X	X	X	X			X	X	X	X	X	X	X	X	X	X
6.3b Calculate the cost of supplies and equipment for care plan.	✓			X																						
<b>Standard 7.0 - Students will apply basic pharmacological knowledge.</b>																										
<b>Learning Expectations</b>																										
7.1 Demonstrate the ability to educate patients/clients on the benefits and risks of medication.	✓							X	X			X												X		
7.2 Illustrate safe administration of medication.	✓							X	X			X												X		
7.3 Research and document medications based on therapeutic classifications.	✓								X															X		
7.4 Demonstrate knowledge of medication rights, drug interactions or complications.	✓								X															X		

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
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<b>Performance Indicators: Evidence Standard Is Met</b>																										
7.1 Illustrate the benefits and risks of medication to a patient/client.	✓					X	X			X															X	X
7.2 Compare and contrast modes of drug administration.	✓									X															X	
7.3 Differentiate the classification of drugs.	✓									X															X	
7.4 Calculate basic medication dosages.	✓																								X	
<b>Standard 8.0 - Students will perform classroom laboratory activities and apply knowledge and skills in a health care clinical setting.</b>																										
<b>Learning Expectations</b>																										
8.1 Read, interpret, verbalize, and apply policies and procedures appropriate to the health care setting skills.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.2 Participate in a health care facility orientation prior to clinical experience.																										
8.3 Demonstrate the use of pertinent safety precautions and aseptic techniques. Utilize proper communication, critical thinking, and problem-solving techniques, safety, and aseptic techniques.	✓							X						X	X	X	X	X	X	X	X	X	X	X	X	X



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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8.4 Demonstrate the safe and appropriate use of equipment and supplies.	✓						X					X		X	X	X	X	X	X	X	X	X	X	X	X	X	
8.5 Perform skills safely and effectively as outlined in policy and procedures of the health care facility and standards of the health care profession.	✓						X			X		X	X	X	X	X	X	X	X		X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
8.1 Perform activities efficiently and without injury to patients or self.	✓						X			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8.2 Convey pertinent information to patient and appropriate team members within a timely manner.	✓		X		X	X	X		X				X	X	X	X	X	X		X		X	X	X	X	X	
8.3 Perform safety precautions and aseptic techniques.	✓						X			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8.4 Perform proper verbal and nonverbal communication skills, critical thinking, and problem-solving techniques.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
8.5 Use appropriate equipment and supplies safely.	✓						X					X		X	X	X	X	X	X	X	X	X	X	X	X	X	
8.6 Use health care facilities policies and procedures. Document procedures used.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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Standard 9.0 - The student will complete an 8-hour feeding course as outlined by the Tennessee Department of Health.																											
Learning Expectations																											
9.1 Analyze feeding techniques.	✓																										X
9.2 Illustrate feeding assistance and use of feeding devices.																											
9.3 Choose communication and interpersonal skills appropriate to the residents' needs.	✓	X		X		X					X			X			X		X	X	X						X
9.4 Evaluate appropriate responses to resident behavior.	✓	X		X	X	X					X			X			X		X	X	X						X
9.5 Relate appropriate safety and emergency procedures including the Heimlich maneuver.																											
9.6 Apply information control principles.	✓			X		X	X				X	X									X						
9.7 Illustrate resident rights.	✓					X	X					X															
9.8 Analyze amount and type of food intake and report feeding and/or swallowing issues.																											
9.9 Analyze resident behavior related to typical changes in the elderly.	✓	X		X																							

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<b>Performance Indicators: Evidence Standard Is Met</b>																												
9.1 Put into practice feeding techniques appropriate to the residents' needs.																												
9.2 Assist with feeding and hydration, with possible use of assistive feeding devices.																												
9.3 Use communication and interpersonal skills appropriate to the residents' needs.	✓	X	X		X								X	X	X	X	X	X	X	X	X						X	
9.4 Analyze appropriate responses to resident behavior.	✓		X		X	X						X	X	X		X		X	X	X	X	X	X	X	X	X	X	
9.5 Use appropriate safety and emergency procedures including Heimlich maneuver as needed.																												
9.6 Put into practice infection control procedures.	✓		X				X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
9.7 Support residents' rights during meal time.																												
9.8 Report and/or chart amount and type of food intake and report feeding and or swallowing issues.																												
9.9 Evaluate changes in residents that are consistent with their normal behavior and the importance of reporting those changes to the supervisory nurse/charge nurse.																												

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways															
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<b>Standard 10.0 - The student will evaluate the use of tele-healthcare in the delivery of health care in a clinical and home setting.</b>																												
<b>Learning Expectations</b>																												
10.1 Use technology to deliver tele-health.	✓											X																
10.2 Analyze data received via tele-health.	✓											X																
10.3 Apply nursing principles and technology to deliver health care via tele-health.	✓											X																
<b>Performance Indicators: Evidence Standard Is Met</b>																												
10.1 Use appropriate computers/videophone to deliver patient care.	✓											X																
10.2 Compare normal and abnormal functions of the body system.	✓	X		X							X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	X
10.3 Demonstrate client/patient care based on age, physical status and psycho-social aspects of clients needs utilizing tele-health.																												

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<b>J. Nursing Education</b>																											
<b>Standard 1.0 - The student will know and apply the academic subject matter required for proficiency within nursing education.</b>																											
<b>Learning Expectations</b>																											
1.1 Demonstrate the use of medical terminology by writing case plans for client's disorder.	✓	X									X	X	X	X		X			X	X	X	X	X	X	X	X	X
1.2 Demonstrate appropriate documentation on facility policies, procedures, charts, and reports.	✓		X		X	X						X		X	X	X				X	X	X	X	X	X	X	X
1.3 Use mathematical functions as demonstrated in health care.	✓								X			X		X	X			X		X	X		X	X			
1.4 Demonstrate knowledge of anatomy and physiology, as related to body system and functions.		X										X		X					X						X		
1.5 Demonstrate knowledge of infection control, chemistry, and physics as related to patient and employee safety.	✓	X											X														
1.6 Identify and utilize scientific principles and fundamental skills.	✓	X											X					X					X				
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Use appropriate abbreviation, prefixes, suffixes, root words, and spelling of all medical terminology.	✓	X	X		X	X	X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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1.2a Demonstrate use of facility policies and procedures.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
1.2b Examine and utilize charts and reports.	✓			X			X									X					X		X			
1.3 Perform mathematical functions to convert body temperature (using Celsius/Fahrenheit method) client/patient weight and height and intake and output.	✓									X																
1.4a Compare normal to abnormal functions of body systems.	✓	X		X						X	X		X	X	X		X	X	X	X	X	X	X	X	X	
1.4b Use microbiology by utilizing standard precautions while performing client/patient care.	✓																									
1.5a Demonstrate infection control by utilizing standard precautions while performing client/patient care.	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	
1.5b Demonstrate proper use of body mechanics during patient transfer and positioning.	✓									X						X	X		X							
1.5c Examine and analyze chemicals in a health care facility by reviewing MSDS documents.	✓							X							X											
1.6a Demonstrate scientific principles used in nursing education.	✓	X											X				X						X			
1.6b Demonstrate fundamental skills necessary for nursing education.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
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<p><b>Standard 2.0 - The student will evaluate the organizational chart beginning with the nursing assistant and other health care professionals, documenting responsibilities of each worker focusing on direct patient care.</b></p>																										
<p><b>Learning Expectations</b></p>																										
2.1 Demonstrate the role of the health care team, with specific roles, responsibilities and functions.	✓			X	X	X	X		X					X	X	X	X	X	X	X	X	X	X	X	X	X
2.2 Apply behavior codes as related to legal and ethical responsibilities.	✓					X	X	X						X	X											
2.3 Examine the individual rights of the client/residents in a health care facility.	✓					X	X							X												
2.4 Compare and contrast career opportunities in nursing education.	✓			X	X									X	X	X	X	X	X	X	X	X	X	X	X	X
2.5 Use HOSA leadership skills in applying direct patient care.	✓								X																	
2.6 Demonstrate a knowledge of assessment skills.	✓			X						X	X			X	X	X		X	X	X	X	X	X	X	X	X
2.7 Attend a pre-conference, document the report, rating specific personal care, treatments, and status of the client.																										

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<b>Performance Indicators: Evidence Standard Is Met</b>																										
2.1 Prepare a poster or role-play team member specific roles, responsibilities, and functions.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X								X				X
2.2 Utilize National HOSA Research Persuasive Speaking guidelines; write a research paper on a selected legal and ethical issue in health care. Present the research paper to the class.																										
2.3 Using National HOSA Biomedical Debate guidelines, debate issues as related to the rights of the client in a health care facility.																										
2.4a Interview a Nurses Aide, Licensed Practical Nurse, Registered Nurse, and an advanced degree nurse.																										
2.4b Compare the education, salary, and responsibilities of each person in a health care team.	✓			X									X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.5 Analyze leadership skills necessary for a health care worker.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.6 Compare assessment skills used by health care professionals.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
2.7 Present a report of findings to the class obtained at the pre-conference.																										



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<p><b>Standard 3.0 - The student will demonstrate client/patient interaction skills depending on the social, emotional, spiritual and related needs of the person and/or family.</b></p>																										
<p><b>Learning Expectations</b></p>																										
3.1 Demonstrate the ability to adapt communication to individual's/family's needs, i.e., age and development, and multicultural/multilingual needs.	✓	X		X		X					X			X		X		X	X	X						X
3.2 Compare body, physical and psychological changes that may occur during the aging process.	✓			X										X	X						X					
3.3 Demonstrate preventative and restorative care as related to body systems in the aged.	✓			X										X	X						X					
3.4 Demonstrate nursing measures designed to prevent complication of immobility.	✓			X		X																				
3.5 Analyze problems, treatments, and nursing interventions related to common diseases/disorders found in the elderly.	✓			X										X	X						X					
<p><b>Performance Indicators: Evidence Standard Is Met</b></p>																										
3.1a Using a scenario, assess students' ability to communicate effectively with individuals at all levels of understanding.	✓	X		X		X					X			X		X		X	X	X						X
3.1b Create a list of basic Medicare and health phrases. Communicate with ESL patients and family using the created list.																										

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3.2 Research the Internet for growth and development changes that occur in the elderly.	✓			X																							
3.3 Using HOSA Care Plan guidelines, develop a care plan as related to changes identified for each body system of the geriatric patient.																											
3.4 Demonstrate passive/or active range of motion exercises, change of positions, and positioning procedures, client transfer, coughing and deep breathing.	✓											X													X		
3.5 Research primary degenerative dementia, secondary dementia, and Alzheimer's disease. Document the research.	✓			X																							
<b>Standard 4.0 - The student will compare and contrast between basic human needs during health and emergency illness for the client/patient and analyze ways to maintain dignity and respect for all persons.</b>																											
<b>Learning Expectations</b>																											
4.1 Demonstrate a knowledge of safety practices.	✓							X	X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.2 Analyze advance directives in emergency situations.	✓				X																						
4.3a Compare and contrast reality orientation measures and activities of clients/patients.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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4.3b Research life spans of acute, chronically ill and disabled persons in a health care facility.	✓			X		X	X											X									
4.4a Demonstrate care of the terminally ill.	✓			X																							
4.4b Recognize the grief process.	✓																	X									
4.5 Demonstrate skills necessary for a geriatric nursing assistant.	✓			X																							
4.6 Demonstrate appropriate nursing care and needs of personal care and hygiene.	✓			X																							
4.7 Research client assessment processes.	✓			X						X	X		X	X	X		X	X	X	X	X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Prepare mock emergencies. Students will demonstrate safety practices in each of the medical emergencies.	✓							X																			
4.2 Develop advance directives for emergencies. Implement the process for handling an advance directive using policies and procedures of the local health care facility.	✓					X																					
4.3a Evaluate reality orientation on measures and activities used at the local health care facility.																											

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4.3b Adapt appropriate nursing care to meet the needs of the acute, chronically ill, and disabled person throughout the life span.				X																							
4.4a Research information and write a research paper on caring for a terminally ill client/patient.																											
4.4b Research the grief process to include trauma, terminal illness and complication of peri-operative care.	✓																X										
4.5 Demonstrate skills necessary for a geriatric nursing assistant. Check off skills as performed for accuracy.	✓			X																							
4.6 Analyze client's needs in different health care situations.	✓			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Standard 5.0 - The student will evaluate the use of tele-healthcare in the delivery of health care in a clinical and home setting.</b>																											
<b>Learning Expectations</b>																											
5.1 Use technology to deliver tele-health.	✓											X										X					
5.2 Analyze data received via tele-health.	✓											X										X					
5.3 Apply nursing principles and technology to deliver health care via tele-health.																											

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<b>Performance Indicators: Evidence Standard Is Met</b>																										
5.1 Use appropriate computers/video phone to deliver patient care.	✓											X														
5.2 Compare normal and abnormal functions of the body system.	✓	X		X						X	X		X	X	X		X	X	X	X	X	X	X	X	X	X
5.3 Demonstrate client/patient care based on age, physical status and psycho-social aspects of clients needs utilizing tele-health.																										
<b>Standard 6.0 - The student will complete hours in pre-clinical training as outlined in the Federal Guidelines Standards for Nursing Homes and put into practice the skills and knowledge outlined.</b>																										
<b>Learning Expectations</b>																										
6.1 Demonstrate the following skills in a nursing lab. • Hand washing	✓						X						X	X	X	X	X	X	X	X	X	X	X	X	X	
• Performing CPR/Abdominal Thrusts all age groups																										
• Measuring vital signs	✓									X					X			X			X				X	X
• Transferring clients	✓					X												X	X		X					

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6.1 Demonstrate the following skills in a nursing lab.																										
• Positioning clients																										
• Performing ROM exercises																										
• Bed making																										
• Performing hygiene measures	✓				X					X		X					X			X					X	
• Assisting with elimination																										
• Collecting specimens	✓																	X								
• Applying anti-embolism stockings																										
• Feeding																										
• Measuring Intake/Output																										
• Performing sterile procedures	✓													X	X	X	X	X	X	X	X	X	X	X	X	X
• Maintaining client safety	✓													X		X		X	X	X		X	X	X	X	X

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6.1 Demonstrate the following skills in a nursing lab. • Utilizing Universal/Standard precautions	✓						X					X	X	X	X	X	X	X	X	X	X	X	X	X	X
• Performing wound care	✓						X										X								
• Applying principles of the nursing process		X		X	X	X	X	X		X		X		X		X	X		X		X	X	X	X	X
• Performing post-mortem care	✓																X								
• Applying and removing restraints	✓																								X
6.2 Analyze and discuss the following: communication, residents' rights, information control, Health Insurance Portability and Accountability Act (HIPPA).	✓					X	X																		
6.3 Research the proper procedure in administering the following competencies. • Administering a feeding tube																									
• Supplying oxygen therapy																									
• Providing tracheotomy care																									
• Suctioning																									

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6.3 Research the proper procedure in administering the following competencies. • Performing catheterization																											
6.4 Observe a demonstration of proper procedures necessary in a health care facility.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
6.1 Demonstrate all skills necessary for a nurses aide.																											
6.2a Demonstrate communication skills.	✓	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
6.2b Research and document residents rights in a health care facility.	✓				X	X						X															
6.2c Demonstrate information control of patient records, i.e., confidentiality, legal and ethical issues that are involved in patient information.	✓				X	X																					
6.2d Research the Health Insurance Portability and Accountability Act (HIPPA). Document findings.	✓				X	X																					
6.3 Demonstrate, in the nursing lab, competencies necessary for certain individuals in a health care facility.																											
6.4 Observe demonstrations of the following skills: • Hand washing	✓						X						X	X	X	X	X	X	X	X	X	X	X	X	X		



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6.4 Observe demonstrations of the following skills:																										
• Abdominal shave and prep																										
• Bladder irrigation																										
• Enema, retention/cleansing																										
• Application of a K-Pad																										
• Peri-care																										
• Specimen Collection																										
a. wound																										
b. throat																										
c. Urine																										
d. Stool																										
• Specimen from indwelling catheter																										
• Application of anti-embolic hose																										

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
6.4 Observe demonstrations of the following skills:																										
• Catheterization																										
• Gastric Tube-care/irrigation																										
• Oxygen administration																										
• Catheter care																										
• Aseptic measures	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	X
• Dressing change-sterile/clean	✓																X									
• Isolation procedures	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	X
• Packs, sterile/warm/moist																										
• Pharyngeal suctioning																										
• Tube feeding																										
• Vital Signs a. Temperature	✓										X						X									

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
6.4 Observe demonstrations of the following skills:	✓																									
• Vital Signs																										
b. radial pulse	✓																									
c. apical pulse	✓																									
d. Respirations	✓																									
e. blood pressure	✓																									
• Assessing pulses	✓																									
• Bed making																										
a. Occupied																										
b. Unoccupied																										
c. Surgical																										
d. special beds																										
• Oral hygiene	✓																									

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
6.4 Observe demonstrations of the following skills:																											
• Perineal care																											
• Bed bath																											
• Personal hygiene	✓				X								X	X	X		X	X	X	X		X	X	X	X	X	
• Restraints																											
• Vaginal irrigation/sitz bath																											
• Heat and cold application																											
Standard 7.0 - The student will complete an 8-hour feeding course as outlined by the Tennessee Department of Health.																											
Learning Expectations																											
7.1 Analyze feeding techniques.																											
7.2 Illustrate feeding assistance and use of feeding devices.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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7.3 Choose communication and interpersonal skills appropriate to the residents' needs.	✓			X	X				X		X		X	X	X		X	X		X	X	X	X	X	X	X	
7.4 Evaluate appropriate responses to resident behavior.	✓			X		X	X						X		X		X			X		X	X	X	X	X	
7.5 Relate appropriate safety and emergency procedures including the Heimlich maneuver.																											
7.6 Apply information control principles.	✓			X				X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	
7.7 Illustrate resident rights.	✓					X	X						X														
7.8 Analyze amount and type of food intake and report feeding and/or swallowing issues.																											
7.9 Analyze resident behavior related to typical changes in the elderly.	✓			X																							
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1 Put into practice feeding techniques appropriate to the residents' needs.																											
7.2 Assist with feeding and hydration, with possible use of assistive feeding devices.																											
7.3 Use communication and interpersonal skills appropriate to the residents' needs.	✓	X		X		X					X			X			X		X	X	X					X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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7.4 Analyze appropriate responses to resident behavior.	✓			X		X	X							X	X		X			X		X	X	X	X	X	
7.5 Use appropriate safety and emergency procedures, including Heimlich maneuver, as needed.																											
7.6 Put into practice infection control procedures.	✓			X				X						X	X	X	X	X	X	X	X	X	X	X	X	X	
7.7 Support residents' rights during meal time.																											
7.8 Report and/or chart amount and type of food intake and report feeding and or swallowing issues.																											
7.9 Evaluate changes in residents that are consistent with their normal behavior and the importance of reporting those changes to the supervisory nurse/charge nurse.	✓					X	X														X						
<b>K. Rehabilitative Therapy</b>																											
Standard 1.0 - Students will differentiate between rehabilitative career options.																											
Learning Expectations																											
1.1 Compare and contrast the educational requirements for each rehabilitative career.	✓			X										X											X		

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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1.2 Compare and contrast the scope of practice for each career.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.3 Research applicable national and or state licensing, credentialing, or registration requirements.	✓					X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.4 Compare and contrast the starting salaries of associate, Baccalaureate, masters and Doctoral prepared practitioners.	✓				X																						
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Obtain and complete an application to a postsecondary rehabilitation therapy program of choice.	✓				X																						
1.2 Document the roles and responsibilities of people who have careers in the field of rehabilitative therapy.	✓			X									X												X		
1.3 Obtain and complete an application for national or state licensing, credentialing or registration for a rehabilitation credential.																											
1.4 Utilize the World Wide Web to access the Web sites of the professional national organizations to extract the requirements for each level of a rehab therapy and the salaries for each professional.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine
<b>Standard 2.0 - The students will demonstrate various communication methods to give and obtain information from therapy patients.</b>																										
<b>Learning Expectations</b>																										
2.1 Adapt communication to individual patient needs by verbal and nonverbal methods.	✓					X					X			X			X		X	X	X					X
2.2 Check for patient understanding through patient demonstration of instructions or paraphrasing instructions.	✓			X		X						X								X						
2.3 Effectively document (written and electronically) patient information.	✓										X									X						
2.4 Evaluate the use of tele-health in the delivery of health care in a clinical and home setting.																										
<b>Performance Indicators: Evidence Standard Is Met</b>																										
2.1a. Demonstrate ability to communicate with patient (verbally and nonverbally).	✓					X					X			X			X		X	X	X					X
2.1b. Demonstrate ability to communicate with patient who is hard of hearing, has impaired vision, and uses English as a second language.																										
2.2 Elicit the desired behavior from the patient, thereby demonstrating an understanding of therapy goals, treatments and outcomes.	✓		X									X								X						X
2.3a. Document patient outcomes in charts and journals.																										



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.3b. Relate patient outcomes to therapy team.	✓			X								X															
2.4 Use technology and analyze data sent and received via tele-health.	✓										X									X							
<b>Standard 3.0 - The students will understand their roles in the rehabilitation setting, identifying how each of the rehabilitation therapies contribute to the rehabilitation team and affect quality of care.</b>																											
<b>Learning Expectations</b>																											
3.1 Present the range of rehabilitative services offered.	✓			X								X													X	X	
3.2 Read and interpret policies, procedures and other facility resources.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
3.1a. Distinguish between various therapy services available. Implement National HOSA Physical Therapy guidelines as referenced.																											
3.1b. Evaluate therapy needs and services for patients.																											
3.2a. Demonstrate ability to locate policy and procedure manuals.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
3.2b. Research and read treatment protocol in policy and procedure manuals.	✓					X	X							X	X	X	X	X	X	X	X	X	X	X	X	X	
3.2c. Job shadow in a health care facility. Journal therapy services, policy and procedures, treatment plans and ways to improve quality care for the patient.	✓													X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Standard 4.0 - The student will demonstrate how professional behavior will enhance employment opportunities.</b>																											
<b>Learning Expectations</b>																											
4.1 Demonstrate personal skills such as attendance, time management, and individual responsibility.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.2 Demonstrate professional conduct and appearance.	✓		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
4.3 Adapt to changing situations.	✓				X																						
4.4 Demonstrate health care technology skills.	✓										X										X						
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1a. Research and document tardiness and attendance records of students in the class.																											
4.1b. Calculate cost to a health care facility if you are 5, 15, or 30 minutes late for work. Calculate the cost if you miss 10 days in a six month period of time.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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4.1c. Using HOSA medical Math guidelines, prepare questions and answers on cost containment in a health care facility.																											
4.2a. Adhere to facility policy and procedures for dress, hair styles, and expected appearance on the job.	✓				X																						
4.3 Demonstrate changes in patient care procedures and modify behavior in response to changes in policy and procedures.	✓			X																							
4.4a. Demonstrate equipment use according to policies and procedures as described in facility manuals.	✓						X			X		X	X		X	X	X	X	X		X			X	X		
4.4b. Job shadow and document professional practices, changes in patient care procedures and skills necessary on equipment. Journal job shadowing experience.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X		
<b>Standard 5.0 - The student will understand legal responsibilities, limitations, and the implications of actions within the rehabilitation setting, performing duties in accordance with laws, regulations, policies, and legislated rights of patients.</b>																											
<b>Learning Expectations</b>																											
5.1 Evaluate malpractice, liability and scope of practice issues.	✓				X	X						X				X				X			X				
5.2 Research the patients' rights of confidentiality, including HIPAA.	✓				X	X																					

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
5.3 Evaluate and respect patient rights and self-determination.	✓			X			X																				
5.4 Ensure equal and proper treatment for all patients.	✓			X			X		X								X										
5.5 Analyze and evaluate accepted ethical practices with respect to cultural and ethnic differences.	✓			X	X		X						X								X						
<b>Performance Indicators: Evidence Standard Is Met</b>																											
5.1 Research and evaluate malpractice, negligence and liability issues using National HOSA Research/Persuasive Speaking guidelines; document information.																											
5.2a. Research the patient's rights of confidentiality.	✓					X	X						X								X						
5.2b. Using National HOSA Biomedical Debate guidelines, select a confidentiality topic; research, debate, and document findings.																											
5.3a. Interpret the Patients' Bill of Rights.	✓						X																				
5.3b. Evaluate student's response to written scenario documenting equal treatment for all patients.	✓					X	X																				
5.3c. Calculate the cost of a liver transplant for a 6-year-old, a 20-year-old, a 50-year-old, and a 90-year-old.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
5.3d. Calculate the expected life span of each patient receiving the liver transplant																											
<b>Standard 6.0 - The student will be aware of and react to existing and potential hazards to patients, co-workers, and self and will prevent injury or illness through safe work practices and compliance with health and safety policies and procedures.</b>																											
<b>Learning Expectations</b>																											
6.1 Use standard precautions and OSHA standards to control the spread of infection.	✓						X								X												
6.2 Demonstrate principles of body mechanics.	✓	X			X	X	X	X		X		X	X	X	X	X	X	X	X			X	X				
6.3 Demonstrate appropriate use of equipment and devices as directed by rehab professionals.																											
6.4 Demonstrate emergency procedures and protocols.	✓						X								X												
<b>Performance Indicators: Evidence Standard Is Met</b>																											
6.1a. Using National HOSA Medical Clinical Guidelines, demonstrate the use of standard precaution techniques.																											

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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6.1b. Compare the results of cultures from various items for presence of pathogenic organisms. Use National HOSA Medical Lab guidelines and document the results.																											
6.2 Demonstrate proper patient handling and body mechanical techniques.	✓						X					X													X	X	
6.3a. Analyze facility equipment policies and procedures.	✓			X						X		X	X	X		X			X	X	X	X	X	X	X	X	
6.3b Inspect equipment and facility and evaluate for potential physical and environmental hazards.	✓			X						X		X	X	X		X			X	X	X	X	X	X	X	X	
6.4a. Demonstrate steps to follow in an emergency using facility protocols.	✓						X								X												
6.4b. Job shadow in a health care facility; journal documentation.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Standard 7.0 - The student will know the disciplinary protocols and guidelines for collecting data, and will report results and assist the treatment team in identifying therapy needs, strengths, and problems.</b>																											
<b>Learning Expectations</b>																											
7.1 Research and document facility policy and procedures.	✓			X	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
		Academic Foundations	Communications	Systems	Employability Skills	Legal Responsibilities	Ethics	Safety Practices	Teamwork	Health Maintenance Practices	Technical Skills	Information Technology Skills	Alternative Medicine	Biomedical Applications	Cardiac Diagnostics	Clinical Laboratory Science	Dental Diagnostics	First Aid/CPR	Forensic Science	Imaging Diagnostics	Medical Office Technology	Optical Diagnostics	Pathogens and Disease	Pharmacology	Sports Medicine	Veterinary Medicine	
7.2 Research guidelines for collecting data. Record and report information.	✓											X										X					
7.3 Demonstrate care of the patient as directed by the mentor.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1 Using National HOSA's Medical Reading guidelines, research facility policy and procedures; document violations in the health care facilities.																											
7.2a. Evaluate policies for collecting data. Collect data, record information and findings using facility protocol.	✓											X										X					
7.2b. Job shadow in a health care facility. Demonstrate patient care techniques as instructed by a mentor.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Standard 8.0 - Students will collaborate with the supervisor to develop a treatment plan.</b>																											
<b>Learning Expectations</b>																											
8.1 Collaborate with rehabilitation professionals to address patient needs and determine treatment goals.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.2 Contribute to the development of a treatment plan and address the patient's needs.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
8.3 Analyze patient's limitations and apply appropriate therapy.	✓			X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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8.4 Assist the patient in therapy goal setting.	✓			X								X	X		X			X		X	X	X	X	X	X		
8.5 Design and implement short and long term goals for the patient's therapy.	✓			X								X	X		X			X		X	X	X	X	X	X		
<b>Performance Indicators: Evidence Standard Is Met</b>																											
8.1 Evaluate the patient's needs.	✓		X	X							X	X	X		X			X		X	X	X	X	X	X		
8.2 Using the Internet, research rehabilitation treatments for physical therapy, sports medicine, audiology, occupational therapy, speech therapy, music therapy, and art therapy. Implement National HOSA guidelines.																											
8.3 Design a care plan for a rehabilitation patient.	✓											X												X			
8.4 Identify goals as they relate to individual rehab patients.	✓											X												X			
8.5a. Job shadow in rehabilitates therapies. Document and journal treatment plans in physical therapy, sports medicine, speech therapy, music therapy, art therapy and dance therapy.	✓											X												X			
8.5b. Demonstrate National HOSA competition in physical therapy and sports medicine.	✓																							X			



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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<b>Standard 9.0 - The student workers will assist in the evaluation of patient status and implement treatment to achieve rehabilitation goals.</b>																											
<b>Learning Expectations</b>																											
9.1 Demonstrate care of the patient as directed by the mentor.																											
9.2 Demonstrate use of equipment and instruments according to established protocols.	✓						X			X		X		X	X	X		X		X				X	X		
9.3 Collect and organize patient data and document actions.	✓										X									X							
<b>Performance Indicators: Evidence Standard Is Met</b>																											
9.1a. Design a treatment plan and assemble equipment used in patient treatment.	✓			X						X		X		X	X	X		X		X	X	X	X	X	X	X	
9.1b. Document patient outcomes to mentor and teacher.	✓											X												X	X		
9.2 Demonstrate and operate equipment as directed.	✓						X			X		X		X	X	X		X		X				X	X		
9.3 Collect and organize treatment outcomes of patients in different therapies.	✓			X						X		X		X		X		X		X	X	X	X	X	X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
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<b>Standard 10.0 - The student will understand the procedures within the discipline and the goals and objectives of the treatment plan.</b>																										
<b>Learning Expectations</b>																										
10.1 Use appropriate evaluation tools and instruments as indicated by the mentor.	✓							X			X			X		X	X	X		X					X	X
10.2 Communicate patient treatment outcomes to treatment team.	✓								X				X		X		X	X				X	X	X	X	X
10.3 Document and modify or improve treatment plan.	✓			X							X		X		X		X	X				X	X	X	X	X
<b>Performance Indicators: Evidence Standard Is Met</b>																										
10.1 Demonstrate proper use of tools/instruments as instructed.	✓							X			X			X		X	X	X		X					X	X
10.2 Apply outcomes to patient treatment as documented.	✓			X							X		X		X		X	X				X	X	X	X	X
10.2 Communicate patient treatment outcomes to treatment team.	✓								X				X		X		X	X				X	X	X	X	X
10.3a .Assess achieved goals and formulate new goals.	✓			X	X				X				X		X		X	X				X	X	X	X	X
10.3b. Job shadow. Document treatments and improvements in treatment plans. Journal documentation.	✓													X	X	X	X	X	X	X	X	X	X	X	X	X

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways													
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Standard 11.0 - Students will participate in a clinical internship in their area(s) of interest.																										
Learning Expectations																										
11.1 Demonstrate skills in patient care.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.2 Demonstrate the use of terminology.	✓	X	X		X	X	X			X			X	X	X	X	X	X	X	X	X	X	X	X	X	X
11.3 Evaluate the patient care hierarchy.	✓			X																						
Performance Indicators: Evidence Standard Is Met																										
11.1 Evaluate skills demonstrated in Clinical Internship.																										
11.2 Evaluate charting and other documentation of treatment.	✓			X			X				X					X				X	X		X			
11.3 Demonstrate referral and notification processes of change in patient status.	✓										X						X			X				X	X	

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways															
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<b>L. Support Services</b>																											
Standard 1.0 - The student will perform effective verbal and nonverbal communication skills with co-workers, patient/client, family and friends of patient/client.																											
<b>Learning Expectations</b>																											
1.1 Demonstrate communication skills with the client who has special needs.	✓	X																									
1.2 Demonstrate professional communication techniques in a courteous way with co-workers and clients.	✓	X	X	X	X	X		X			X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.3 Analyze limitations and barriers to effective communication.	✓	X	X	X	X	X		X		X		X		X	X			X	X	X	X		X	X	X		
1.4 Evaluate verbal and nonverbal body language of co-workers and clients/patients.	✓	X										X								X							
1.5 Direct calls to the appropriate person by receiving, managing, and directing telephone calls.	✓										X									X							
<b>Performance Indicators: Evidence Standard Is Met</b>																											
1.1 Demonstrate appropriate verbal and nonverbal communication.	✓	X																		X	X			X			

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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1.2 Research and document facility policies and procedures.	✓		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
1.3 Demonstrate communication techniques with a patient/client who is hard of hearing, has impaired vision, and uses English as a second language.																											
1.4 Design a plan to evaluate verbal and nonverbal body language. Document results.	✓		X																	X	X			X			
1.5 Using National HOSA Administrative Medical Assisting guidelines, receive telephone calls, listen for appropriate communications, take messages, manage the call, and direct call to the appropriate person.																											
<b>Standard 2.0 - The student will demonstrate the responsibilities of their assigned roles as defined in their job description.</b>																											
<b>Learning Expectations</b>																											
2.1 Construct a diagram of careers and educational requirements for each career.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.2 Interpret job descriptions for specific jobs.	✓				X								X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.3 Perform job duties while adhering to the ethical and legal rights of the patient.	✓					X	X						X														

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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2.4 Employ leadership skills while working as a member of a health care team and as member of National HOSA.																											
2.5 Retrieve information from electronic sources.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
2.6 Research and select the environmental services profession of choice.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
2.1 Demonstrate medical and legal ethics while maintaining a professional attitude.	✓					X	X							X	X	X	X		X	X	X	X	X		X	X	
2.2 Research and interpret job descriptions in the health care facility.	✓				X									X	X	X	X	X	X	X	X	X	X	X	X	X	
2.3 Compose a resume and prepare an application for a specific job in a health care facility.	✓				X																						
2.4 Demonstrate job duties in the laboratory adhering to the ethical and legal rights of the patient.	✓						X									X			X								
2.5 Create teams in the laboratory. Design an instrument for collecting information on team work while serving as a member of the health care team.	✓															X			X								
2.6 Using National HOSA Recognition Guidelines, organize a HOSA leadership meeting.																											



Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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3.4 Collect and compare biomedical contracts.	✓												X														
3.5 Using National HOSA Administrative Assisting guidelines, follow documenting and filing procedures.																											
<b>Standard 4.0 - The student will comply with state and federal regulations and laws to ensure that their actions are within all guidelines for the operation of a business.</b>																											
<b>Learning Expectations</b>																											
4.1 Understand different levels of requirements by local, state, and federal agencies to conduct business in a designated health care setting.	✓				X	X							X	X	X	X	X	X	X	X	X	X	X	X	X	X	
4.2 Become aware of legal consequences of unprofessional conduct and/or criminal activities.	✓			X	X	X							X	X		X		X		X			X	X			
4.3 Properly report compliance issues according to the organizational structure and/or government officials, both as it relates to patients' bill of rights and personal safety.	✓					X	X		X																		
<b>Performance Indicators: Evidence Standard Is Met</b>																											
4.1 Research and evaluate state and federal rules, regulations, and laws in a health care facility.	✓					X	X																				





Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations										Health Science Career Pathways														
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<b>Performance Indicators: Evidence Standard Is Met</b>																										
5.1 Prepare food following dietary orders.	✓										X			X												
5.2 Prepare a food tray with the proper diet and needed utensils.																										
5.3a Deliver trays to the specified area of the health care facility.																										
5.3b Using National HOSA Nursing Assisting guidelines, prepare the patient for a meal																										
5.4a Using state and federal standards for food temperatures, follow guidelines for inspecting the safety of food.																										
5.4b Job shadow in a health care facility. Demonstrate preparing a patient for a meal. Document and journal information.	✓											X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Standard 6.0 - The student will demonstrate and use the correct transport equipment.</b>																										
<b>Learning Expectations</b>																										
6.1 Use the client's name and identification number to identify client prior to transporting.																										
6.2 Demonstrate proper body mechanics and safety measures while transferring and escorting the client to the designated location.	✓									X								X	X		X					

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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6.3 Properly follow discharge planning procedures to completion.																											
<b>Performance Indicators: Evidence Standard Is Met</b>																											
6.1 Using National HOSA Creative Problem Solving guidelines, assess the issue of transporting a patient to surgery versus a patient to radiology.																											
6.2 Practice proper body mechanics and safety measures while transferring a patient from an emergency room to the assigned room. Document results of transfer.	✓								X								X	X		X							
6.3 Demonstrate the planning procedures for discharging.																											
<b>Standard 7.0 - The grounds and environment service student will demonstrate safety and the ability to effectively operate equipment used in the aseptic and aesthetic up-keep of the inside and outside of the facility.</b>																											
<b>Learning Expectations</b>																											
7.1 Inventory the appropriate equipment to be used for a specified task.	✓						X		X		X	X		X	X	X	X	X		X				X	X		
7.2 Demonstrate safety precautions necessary while operating specified equipment.	✓						X		X		X	X		X	X	X	X	X		X				X	X		

Tennessee Health Science Education Standards II	Applied Technologies Health Science	Health Science Foundations											Health Science Career Pathways														
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7.3 Create an environment that is conducive to the promotion of health.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
7.1 Demonstrate safe and effective use of equipment.	✓							X			X		X	X		X	X	X	X		X				X	X	
7.2 Demonstrate safe and effective use of internal facility equipment.	✓							X			X		X	X		X	X	X	X		X				X	X	
7.3 Demonstrate aseptic and aesthetic of the health care facility using standard precautions and OSHA standards.	✓							X					X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Standard 8.0 - The student will distinguish and differentiate between biomedical equipment in a health care setting.</b>																											
<b>Learning Expectations</b>																											
8.1 Identify the appropriate biomedical equipment to be used in a specified setting.	✓													X													
8.2 Score the functioning of equipment to ensure proper functioning within manufacturer guidelines.																											
8.3 Demonstrate safety measures related to biomedical equipment.	✓													X													



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<b>Performance Indicators: Evidence Standard Is Met</b>																										
9.1 Research and document safety violations in a given area.	✓							X																		
9.2 Measure and document the temperature in the environment.																										
9.3 Monitor and inspect cleanliness of a facility using a task checklist to ensure all tasks are completed.	✓												X	X	X	X	X	X	X	X	X	X	X	X	X	X
<b>Standard 10.0 - Demonstrate performance skills in the laboratory. Following check-off of skills, students will be eligible for a clinical internship. Students will demonstrate knowledge and skills in a health care clinical setting.</b>																										
<b>Learning Expectations</b>																										
10.1 Read, interpret, verbalize, and apply policies and procedures appropriate to health care setting.	✓		X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.2 Participate in a health care facility orientation prior to clinical experience.																										
10.3 Utilize proper communication, critical thinking, and problem-solving techniques.	✓	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
10.4 Demonstrate the safe and appropriate use of equipment and supplies.	✓						X			X		X	X		X	X	X	X	X		X			X	X	

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10.5 Perform skills safely and effectively as outlined in policy and procedures of the health care facility and standards of the health care profession.	✓							X			X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	
<b>Performance Indicators: Evidence Standard Is Met</b>																											
10.1 Research policies and procedures, reporting and documenting in a health care facility. Document information.	✓					X	X				X										X						
10.2 Attend orientation in a health care facility. Prepare a report on orientation process.																											
10.3 Perform activities efficiently and without injury to patients or self.	✓							X			X		X		X	X	X		X		X			X	X		
10.4 Convey pertinent information to patient and appropriate team members within a timely manner.	✓		X	X			X						X	X	X	X	X		X		X	X	X	X	X		
10.5 Demonstrate skills in a health care facility.	✓	X	X	X	X			X			X		X	X	X	X	X	X	X	X	X	X	X	X	X		