

**Course Title:** Health Science Foundations  
**Course Number:** 8417110  
**Course Credit:** 1

**Course Description:**

This course is part of the Secondary Health Core designed to provide the student with an in depth knowledge of the health care system and associated occupations. Emphasis is placed on communication and interpersonal skills, use of technology, ethics and the development of critical thinking and problem solving skills. Students will also learn first aid skills and demonstrate the measurement of vital signs. Students may shadow professionals throughout the course.

<b>CTE Standards and Benchmarks</b>	
01.0	Demonstrate knowledge of the health care delivery system and health occupations. – The student will be able to:
01.01	Identify the basic components of the health care delivery system including public, private, government and non-profit.
01.02	Identify common methods of payment for healthcare services.
01.03	Describe the various types of healthcare providers and the range of services available including resources to victims of domestic violence.
01.04	Describe the composition and functions of a healthcare team.
01.05	Identify the general roles and responsibilities of the individual members of the healthcare team.
01.06	Identify the roles and responsibilities of the consumer within the healthcare delivery system.
01.07	Identify characteristics of effective teams.
01.08	Recognize methods for building positive team relationships.
01.09	Analyze attributes and attitudes of an effective leader.
01.10	Recognize factors and situations that may lead to conflict.
01.11	Demonstrate effective techniques for managing team conflict.
01.12	Describe factors that influence the current delivery system of healthcare.
01.13	Explain the impact of emerging issues including technology, epidemiology, bioethics and socioeconomics on healthcare delivery systems.
02.0	Demonstrate the ability to communicate and use interpersonal skills effectively. – The student will be able to:
02.01	Develop basic speaking and active listening skills.
02.02	Develop basic observational skills and related documentation strategies in written and oral form.
02.03	Identify characteristics of successful and unsuccessful communication including communication styles and barriers.
02.04	Respond to verbal and non-verbal cues.
02.05	Compose written communication using correct spelling, grammar, a formatting and confidentiality and specific formats of letter writing.
02.06	Use appropriate medical terminology and abbreviations.
02.07	Recognize the importance of courtesy and respect for patients and other healthcare workers and maintain good interpersonal relationships.
02.08	Recognize the importance of patient/client education regarding healthcare.

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02.09	Adapt communication skills to varied levels of understanding and cultural orientation including diverse age, cultural, economic, ethnic and religious groups.
02.10	Analyze elements of communication using a sender-receiver model.
02.11	Distinguish between and report subjective and objective information.
02.12	Report relevant information in order of occurrence.
03.0	Demonstrate legal and ethical responsibilities. – The student will be able to:
03.01	Discuss the legal framework of the healthcare occupations including scope of practice legislation.
03.02	Explain practices that could result in malpractice, liability, negligence, abandonment, false imprisonment and fraud.
03.03	Demonstrate procedures for accurate documentation and record keeping.
03.04	Interpret healthcare facility policy and procedures.
03.05	Explain the “Patient’s Bill of Rights”.
03.06	Identify standards of the Health insurance Portability and Accountability Act (HIPAA).
03.07	Describe advance directives.
03.08	Describe informed consent.
03.09	Explain the laws governing harassment, labor and employment.
03.10	Differentiate between legal and ethical issues in healthcare.
03.11	Describe a code of ethics consistent with the healthcare occupation.
03.12	Identify and compare personal, professional, and organizational ethics.
03.13	Recognize the limits of authority and responsibility of health care workers including legislated scope of practice.
03.14	Recognize and report illegal and/or unethical practices of healthcare workers.
03.15	Recognize and report abuse including domestic violence and neglect.
03.16	Distinguish among the five schedules of controlled substances.
04.0	Demonstrate an understanding of and apply wellness and disease concepts. – The student will be able to:
04.01	Describe strategies for prevention of diseases including health screenings and examinations.
04.02	Identify personal health practices and environmental factors which affect optimal function of each of the major body systems.
04.03	Identify psychological reactions to illness including defense mechanisms.
04.04	Identify complementary and alternative health practices.
04.05	Discuss the adverse effects of the use of alcohol, tobacco, and both legal and illegal drugs on the human body and apply safety practices related to these and other high risk behaviors.
04.06	Explain the basic concepts of positive self-image, wellness and stress.
04.07	Develop a wellness and stress control plan that can be used in personal and professional life.
04.08	Explore and utilize the U.S. Department of Agriculture’s MyPlate food guide ( <a href="http://www.choosemyplate.gov">www.choosemyplate.gov</a> ).
04.09	Recognize the steps in the grief process.
05.0	Recognize and practice safety and security procedures. – The student will be able to:
05.01	Recognize safe and unsafe working conditions and report safety hazards.
05.02	Demonstrate the safe use of medical equipment.
05.03	Explain and apply the theory of root- cause analysis.
05.04	Identify and describe methods in medical error reduction and prevention in the various healthcare settings.
05.05	Identify and practice security procedures for medical supplies and equipment.
05.06	Demonstrate personal safety procedures based on Occupations Safety and Health Administration (OSHA) and Centers for Disease

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	Control (CDC) regulations including standard precautions.
05.07	Recognize Materials Data Safety Sheets (MSDS) and comply with safety signs, symbols and labels.
05.08	Demonstrate proper body mechanics and ergonomics.
05.09	Demonstrate the procedure for properly identifying patients.
05.10	Demonstrate procedures for the safe transport and transfer of patients.
05.11	Describe fire, safety, disaster and evacuations procedures.
05.12	Discuss The Joint commission patient safety goals ( <a href="http://www.jointcommission.org">www.jointcommission.org</a> ) and any other applicable accrediting/regulatory agency guidelines.
06.0	Recognize and respond to emergency situations. – The student will be able to:
06.01	Record and monitor vital signs.
06.02	Describe legal parameters relating to the administration of emergency care.
06.03	Obtain and maintain training or certification on cardiopulmonary resuscitation (CPR), automated external defibrillator (AED), foreign body airway obstruction (FBAO) and first aid.
06.04	Recognize adverse drug related emergencies and take appropriate first aid action.
07.0	Recognize and practice infection control procedures. – The student will be able to:
07.01	Define principles of infection control including standard and transmission based precautions.
07.02	Demonstrate knowledge of medical asepsis and practice procedures such as hand-washing and isolation.
07.03	Demonstrate knowledge of surgical asepsis.
07.04	Describe how to dispose correctly of biohazardous materials according to appropriate government guidelines such as OSHA.
08.0	Demonstrate an understanding of information technology applications in healthcare. – The student will be able to:
08.01	Describe technology applications in healthcare.
08.02	Define terms and demonstrate basic computer skills.
08.03	Recognize technology applications in healthcare.
08.04	Interpret information from electronic medical documents.
08.05	Identify methods of communication to access and distribute data such as fax, e-mail and internet.
09.0	Demonstrate employability skills. – The student will be able to:
09.01	Identify personal traits or attitudes desirable in a member of the healthcare team.
09.02	Exemplify basic professional standards of healthcare workers as they apply to hygiene, dress, language, confidentiality and behavior (i.e. telephone etiquette, courtesy and self-introductions).
09.03	Identify documents that may be required when applying for a job.
09.04	Write an appropriate resume.
09.05	Conduct a job search.
09.06	Complete a job application form correctly.
09.07	Examine levels of education, credentialing requirements including licensure and certification, employment opportunities, workplace environments and career growth potential.
09.08	Recognize levels of education, credentialing requirements, employment opportunities, workplace environments and career growth potential.
09.09	Identify acceptable work habits.
09.10	Recognize appropriate affective/professional behavior.
09.11	Compare careers within the health science career pathways (diagnostic services, therapeutic services, health informatics, support

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services and biotechnology research and development).

10.0 Demonstrate knowledge of blood borne diseases, including HIV/AIDS. – The student will be able to:

10.01 Recognize emerging diseases and disorders.

10.02 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens including Hepatitis B.

10.03 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens.

10.04 Identify "at risk" behaviors which promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases.

10.05 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following Centers for Disease Control (CDC) guidelines.

10.06 Demonstrate knowledge of the legal aspects of HIV/AIDS, including testing.

11.0 Apply basic math and science skills. – The student will be able to:

11.01 Draw, read, and report on graphs, charts and tables.

11.02 Measure time, temperature, distance, capacity, and mass/weight.

11.03 Make, use and convert using both traditional and metric units.

11.04 Make estimations and approximations and judge the reasonableness of the result.

11.05 Convert from regular to 24 hour time.

11.06 Demonstrate ability to evaluate and draw conclusions.

11.07 Organize and communicate the results obtained by observation and experimentation.

11.08 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions.

11.09 Calculate ratios.