

NORTH CAROLINA CAREER AND TECHNICAL EDUCATION STANDARDS

Health Sciences Education

Grade: Grade 9 - 12

Course: Biomedical Technology

NCCTE.2016.HB11 - Biomedical Technology I

NCCTE.2016.HB11.01.00 - Understand biomedical research.

NCCTE.2016.HB11.02.00 - Understand the use and care of animals in biomedical research.

NCCTE.2016.HB11.03.00 - Understand the challenges to biomedical research.

NCCTE.2016.HB11.04.00 - Understand Cell Biology and Cancer.

NCCTE.2016.HB11.05.00 - Understand Emerging and Re-emerging Infectious Diseases.

NCCTE.2016.HB11.06.00 - Understand Pathology and Forensic Science.

Course: Pharmacy Technician

NCCTE.2017.HH32 - Pharmacy Technician

NCCTE.2017.HH32.01.00 - Understand pharmacology for technicians.

NCCTE.2017.HH32.02.00 - Understand pharmacy law and regulations.

NCCTE.2017.HH32.03.00 - Apply sterile and non-sterile compounding.

NCCTE.2017.HH32.04.00 - Understand medication safety.

NCCTE.2017.HH32.05.00 - Understand pharmacy quality assurance.

NCCTE.2017.HH32.06.00 - Apply medication order entry and fill process.

NCCTE.2017.HH32.07.00 - Apply pharmacy inventory management.

NCCTE.2017.HH32.08.00 - Apply pharmacy billing and reimbursement.

NCCTE.2017.HH32.09.00 - Understand pharmacy information systems usage and application.

Course: Nursing Fundamentals and Non-Practicum **New**

NCCTE.2020.HN42 - Nursing Fundamentals and NonPracticum

NCCTE.2020.HN42.01.00 - Understand the role, function, legal and ethical responsibilities of the nurse aide within the healthcare system.

NCCTE.2020.HN42.01.01 - Understand healthcare facilities and organization structure.

NCCTE.2020.HN42.01.02 - Understand nurse aide range of function as a member of the healthcare team.

NCCTE.2020.HN42.01.03 - Understand residents' rights, advocacy and grievance procedures.

NCCTE.2020.HN42.02.00 - Understand communication skills, interpersonal skills, and physical care skills that promote mental health and meet social and special needs of residents in long term care.

NCCTE.2020.HN42.02.01 - Understand communication and interpersonal skills needed to provide resident care and relate to team members.

NCCTE.2020.HN42.02.02 - Understand nurse aide observations, recording and reporting.

NCCTE.2020.HN42.02.03 - Understand basic human needs and nurse aide guidelines in meeting those needs.

NCCTE.2020.HN42.02.04 - Understand the dying process and needs of the resident nearing the



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end of life.

NCCTE.2020.HN42.03.00 - Understand infection control, safety and emergency skills within the nurse aide range of function.

NCCTE.2020.HN42.03.01 - Understand infection control within nurse aide range of function.

NCCTE.2020.HN42.03.02 - Understand safety and emergency care skills within nurse aide range of function.

NCCTE.2020.HN42.04.00 - Understand nurse aide skills related to residents' vital functions and movement.

NCCTE.2020.HN42.04.01 - Understand vital signs, height and weight measurement skills.

NCCTE.2020.HN42.04.02 - Understand the nurse aide's range of function in rehabilitative/restorative and maintenance care

NCCTE.2020.HN42.05.00 - Understand nurse aide skills related to residents' hygiene, grooming, skin integrity, and living environment needs.

NCCTE.2020.HN42.05.01 - Understand nurse aide skills needed for residents' hygiene and grooming.

NCCTE.2020.HN42.05.02 - Understand nurse aide skills needed to promote skin integrity.

NCCTE.2020.HN42.05.03 - Understand the nurse aide role in creating a safe and clean environment that fosters resident independence, contentment and self-esteem.

NCCTE.2020.HN42.06.00 - Understand nurse aide skills needed to provide for residents' nutrition, hydration, and elimination needs.

NCCTE.2020.HN42.06.01 - Understand nurse aide skills needed to meet the nutritional and hydration needs of residents.

NCCTE.2020.HN42.06.02 - Understand nurse aide skills needed to care for residents' elimination and urination needs

NCCTE.2020.HN42.07.00 - Apply nurse aide skills by completing a independent assignment.

Course: Nursing Fundamentals and Practicum **Updated**

NCCTE.2020.HN43 - Nursing Fundamentals and Practicum

NCCTE.2020.HN43.01.00 - Understand the role, function, legal and ethical responsibilities of the nurse aide within the healthcare system.

NCCTE.2020.HN43.01.01 - Understand healthcare facilities and organization structure.

NCCTE.2020.HN43.01.02 - Understand nurse aide range of function as a member of the healthcare team.

NCCTE.2020.HN43.01.03 - Understand residents' rights, advocacy and grievance procedures.

NCCTE.2020.HN43.02.00 - Understand communication skills, interpersonal skills, and physical care skills that promote mental health and meet social and special needs of residents in long term care.

NCCTE.2020.HN43.02.01 - Understand communication and interpersonal skills needed to provide resident care and relate to team members.

NCCTE.2020.HN43.02.02 - Understand nurse aide observations, recording and reporting.



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NCCTE.2020.HN43.02.03 - Understand basic human needs and nurse aide guidelines in meeting those needs.

NCCTE.2020.HN43.02.04 - Understand the dying process and needs of the resident nearing the end of life.

NCCTE.2020.HN43.03.00 - Understand infection control, safety and emergency skills within the nurse aide range of function.

NCCTE.2020.HN43.03.01 - Understand infection control within nurse aide range of function.

NCCTE.2020.HN43.03.02 - Understand safety and emergency care skills within nurse aide range of function.

NCCTE.2020.HN43.04.00 - Understand nurse aide skills related to residents' vital functions and movement.

NCCTE.2020.HN43.04.01 - Understand vital signs, height and weight measurement skills.

NCCTE.2020.HN43.04.02 - Understand the nurse aide's range of function in rehabilitative/restorative and maintenance care

NCCTE.2020.HN43.05.00 - Understand nurse aide skills related to residents' hygiene, grooming, skin integrity, and living environment needs.

NCCTE.2020.HN43.05.01 - Understand nurse aide skills needed for residents' hygiene and grooming.

NCCTE.2020.HN43.05.02 - Understand nurse aide skills needed to promote skin integrity.

NCCTE.2020.HN43.05.03 - Understand the nurse aide role in creating a safe and clean environment that fosters resident independence, contentment and self-esteem.

NCCTE.2020.HN43.06.00 - Understand nurse aide skills needed to provide for residents' nutrition, hydration, and elimination needs.

NCCTE.2020.HN43.06.01 - Understand nurse aide skills needed to meet the nutritional and hydration needs of residents.

NCCTE.2020.HN43.06.02 - Understand nurse aide skills needed to care for residents' elimination and urination needs

NCCTE.2020.HN43.07.00 - Apply nurse aide skills by providing hands on resident care during a 40 hour (minimum) clinical experience in an approved long term care facility.

Course: Fundamentals of Gerontology

NCCTE.HN44 - Fundamentals of Gerontology

NCCTE.HN44.01.00 - Understand geriatric resident care interaction/person centered care and stress management for nurse aides.

NCCTE.HN44.01.01 - Introduction to Gerontology for High School and (Module 1) The geriatric resident

NCCTE.HN44.01.02 - (Module 2) Culture change and person-centered care

NCCTE.HN44.01.03 - (Module 3) Stress management for nurse aide who care for geriatric residents



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NCCTE.HN44.02.00 - Understand infection control, pressure ulcers, mobility, and alternatives to restraints for the geriatric resident.

NCCTE.HN44.02.01 - (Module 4) Infection control related to geriatrics

NCCTE.HN44.02.02 - (Module 5) Pressure Ulcers related to geriatrics

NCCTE.HN44.02.03 - (Module 6) New approaches for enhancing mobility for geriatrics

NCCTE.HN44.02.04 - (Module 7) Alternatives for restraints for geriatrics

NCCTE.HN44.03.00 - Understand hydration and nutrition needs of the geriatric resident.

NCCTE.HN44.03.01 - (Module 8) Nutrition: MyPyramid

NCCTE.HN44.03.02 - (Module 9) Hydration needs for geriatrics

NCCTE.HN44.03.03 - (Module 10) Obesity and malnutrition in geriatrics

NCCTE.HN44.03.04 - (Modules 11 - 12) The eating process and the dining experience in geriatrics

NCCTE.HN44.04.00 - Understand mental health needs of geriatric residents.

NCCTE.HN44.04.01 - (Module 13) Mental health and mental illness in geriatric residents

NCCTE.HN44.04.02 - (Modules 14 - 17) Alzheimer's disease in geriatric residents

NCCTE.HN44.04.03 - (Module 18) Understanding challenging behaviors and key concepts in assisting the geriatric resident

NCCTE.HN44.05.00 - Understand pain management and palliative care for the geriatric resident within the scope of nurse aide practice.

NCCTE.HN44.05.01 - (Modules 19 - 20) Pain management in the geriatric resident

NCCTE.HN44.05.02 - (Modules 21 - 31) Palliative Care for the geriatric resident

Course: Public Health Fundamentals

NCCTE.HN45 - Public Health Fundamentals

NCCTE.HN45.01.00 - Understand public health basics and the role of home care in public health.

NCCTE.HN45.01.01 - (Module 00) Understand the basics of public health***

NCCTE.HN45.01.02 - (Module 1A) Understand the history of home care/home health.

NCCTE.HN45.01.03 - (Module 1B) Understand the care disciplines involved in home care.

NCCTE.HN45.02.00 - Understand the role and supervision of the home care aide.

NCCTE.HN45.02.01 - (Module 1C) Understand the role of the home care aide.

NCCTE.HN45.02.02 - (Module 1D) Understand the supervision of the home care aide.

NCCTE.HN45.03.00 - Understand legal/ethical issues and personal safety issues related to home care.

NCCTE.HN45.03.01 - (Module 2) Understand legal and ethical issues related to home care.

NCCTE.HN45.03.02 - (Module 3A-3E) Understand personal safety issues related to home care.

NCCTE.HN45.04.00 - Understand person-centered care and cultural considerations in home care.

NCCTE.HN45.04.01 - (Module 4) Understand person-centered care.

NCCTE.HN45.04.02 - (Module 5) Understand culture considerations related to home care.

NCCTE.HN45.05.00 - Understand age appropriate care, caregiver burnout, patient abuse, and infection control in home care.

NCCTE.HN45.05.01 - (Module 6) Understand age appropriate care, caregiver burnout, and patient



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abuse.

NCCTE.HN45.05.02 - (Module 7) Understand infection control in home care.

NCCTE.HN45.06.00 - Understand how to care for the patient's home environment and work efficiently using time management skills.

NCCTE.HN45.06.01 - (Module 8) Understand how to provide care for the patient's environment.

NCCTE.HN45.06.02 - (Module 9) Understand time management related to home care.

NCCTE.HN45.07.00 - Understand communication skills and relationship building skills needed to care for home care patients and the families.

NCCTE.HN45.07.01 - (Module 10) Understand relationships with patients and families.

NCCTE.HN45.07.02 - (Module 11A-D) Understand communications.

NCCTE.HN45.08.00 - Understand emergency preparedness and patient safety for home care.

NCCTE.HN45.08.01 - (Module 12A-D) Understand emergency preparedness for home care.

NCCTE.HN45.08.02 - (Module 13A-C) Understand patient safety within home care.

NCCTE.HN45.09.00 - Understand nutritional needs specific to home care patients.

NCCTE.HN45.09.01 - (Module 14A-14C) Understand "MyPlate", special diets, and food labels.

NCCTE.HN45.09.02 - (Module 14D-E) Understand grocery shopping for and hydration needs of the patient in home care.

NCCTE.HN45.10.00 - Understand how to care for patients with diseases most common to homebound individuals, provide restorative care, and assist in pain management for home care patients.

NCCTE.HN45.10.01 - (Module 15) Understand care needs of patients with diseases most common to homebound individuals.

NCCTE.HN45.10.02 - (Module 16) Understand restorative care for home care patients.

NCCTE.HN45.10.03 - (Module 18) Understand pain management for home care patients.

NCCTE.HN45.11.00 - Understand Alzheimer's Disease, mental health needs, and challenging behaviors.

NCCTE.HN45.11.01 - (Module 17) Understand Alzheimer's Disease.

NCCTE.HN45.11.02 - (Module 19A-C) Understand mental health needs of homebound patients.

NCCTE.HN45.11.03 - (Module 20A-D) Understand challenging behaviors in the home care setting.

NCCTE.HN45.12.00 - Understand palliative and end of life care in the home setting.

NCCTE.HN45.12.01 - (Module 21) Understand palliative care needs of patients in the home care setting.

NCCTE.HN45.12.02 - (Module 22A-D) Understand end of life care in the home care setting.

NCCTE.HN45.13.00 - Understand stress management for home care aides, role of medication administration by home care aides, and the Health Care Personnel Registry.

NCCTE.HN45.13.01 - (Module 23) Understand stress management for home care aides.

NCCTE.HN45.13.02 - (Module 24) Understand the role of the home care aide in medication administration.

NCCTE.HN45.13.03 - (Module 25A-C) Understand the Health Care Personnel Registry



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Course: Foundations of Health Science

NCCTE.HU10 - Health Team Relations

NCCTE.HU10.01.00 - Use medical abbreviations and terminology.

NCCTE.HU10.01.01 - Identify abbreviations commonly used in a health care setting.

NCCTE.HU10.01.02 - Define prefixes, suffixes and root words.

NCCTE.HU10.01.03 - Combine word parts to form commonly used medical terms.

NCCTE.HU10.02.00 - Evaluate historical contributions in the development of health care.

NCCTE.HU10.02.01 - Discuss medical treatments and beliefs from ancient civilizations through the Renaissance.

NCCTE.HU10.02.02 - Describe medical advances made in 16th- 20th century health care.

NCCTE.HU10.02.03 - Research men and women who made historical contributions to health care.

NCCTE.HU10.02.04 - Explore current trends in health care.

NCCTE.HU10.03.00 - Analyze services provided in the health care delivery system.

NCCTE.HU10.03.01 - Investigate the services of health care facilities.

NCCTE.HU10.03.02 - Describe government and nonprofit agencies.

NCCTE.HU10.03.03 - Discuss the basic principles of different health insurance plans.

NCCTE.HU10.04.00 - Demonstrate the personal and professional standards of health care workers.

NCCTE.HU10.04.01 - Demonstrate personal and professional appearance and characteristics.

NCCTE.HU10.04.02 - Utilize elements of effective communication.

NCCTE.HU10.04.03 - Apply principles of leadership and teamwork.

NCCTE.HU10.04.04 - Analyze stressors and stress management skills.

NCCTE.HU10.04.05 - Practice time management skills.

NCCTE.HU10.05.00 - Analyze medical and health care careers.

NCCTE.HU10.05.01 - Investigate educational requirements and levels of training.

NCCTE.HU10.05.02 - Analyze dental, diagnostic, emergency, and health information services.

NCCTE.HU10.05.03 - Analyze careers in health care facility services, medical services, and mental health and social services.

NCCTE.HU10.05.04 - Analyze mortuary, nursing, nutrition and dietary careers.

NCCTE.HU10.05.05 - Analyze therapeutic services, veterinary medicine, and vision services.

NCCTE.HU10.05.06 - Apply self-assessment for career planning and revise an individual career development plan.

NCCTE.HU10.06.00 - Analyze legal and ethical responsibilities in health care.

NCCTE.HU10.06.01 - Analyze the legal responsibilities that apply to torts.

NCCTE.HU10.06.02 - Analyze contracts, privileged communications, and HIPAA.

NCCTE.HU10.06.03 - Evaluate ethical and professional standards in a health care setting.

NCCTE.HU10.07.00 - Analyze cultural diversity in the delivery of health care.

NCCTE.HU10.07.01 - Discuss concepts of culture, ethnicity and race.

NCCTE.HU10.07.02 - Analyze behaviors and their cultural significance.



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NCCTE.HU10.07.03 - Evaluate cultural and spiritual beliefs regarding health care.

NCCTE.HU10.08.00 - Analyze the use of medical mathematics in the health care system.

NCCTE.HU10.08.01 - Identify and use household and metric units.

NCCTE.HU10.08.02 - Convert among metric and standard measurements.

NCCTE.HU10.08.03 - Use Roman numerals and the 24-hour clock.

NCCTE.HU10.09.00 - Explore selected topic(s) within the health care community.

NCCTE.HU10.09.01 - Identify and explore selected topics that relate to the health care community and pursuit of a health profession.

Course: Health Science I **Updated**

NCCTE.2020.HU40 - Health Science I

NCCTE.2020.HU40.01.00 - Understand structural organization of the body and roles of the first responder

NCCTE.2020.HU40.01.01 - Understand types of body tissues

NCCTE.2020.HU40.01.02 - Understand anatomical locations and terminology

NCCTE.2020.HU40.01.03 - Understand how to recognize and respond to emergencies as a first responder

NCCTE.2020.HU40.02.00 - Understand the body's support exchange systems

NCCTE.2020.HU40.02.01 - Understand the structures, functions, and disorders of the skeletal system

NCCTE.2020.HU40.02.02 - Understand the structures, functions, and disorders of the muscular system

NCCTE.2020.HU40.02.03 - Understand the structures, functions, and disorders of the integumentary system

NCCTE.2020.HU40.03.00 - Understand the body's nutrient exchange and communication systems

NCCTE.2020.HU40.03.01 - Understand the structures, functions, and disorders of the digestive system

NCCTE.2020.HU40.03.02 - Understand the structures, functions, and disorders of the urinary system

NCCTE.2020.HU40.03.03 - Understand the structures, functions, and disorders of the nervous system

NCCTE.2020.HU40.03.04 - Understand the structures, functions, and disorders of the sensory system

NCCTE.2020.HU40.04.00 - Understand the body's hormone control systems

NCCTE.2020.HU40.04.01 - Understand the structures, functions, and disorders of the lymphatic and immune systems

NCCTE.2020.HU40.04.02 - Understand the structures, functions, and disorders of the endocrine system

NCCTE.2020.HU40.04.03 - Understand the structures, functions, and disorders of the male and



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female reproductive systems

Course: Health Science II **Updated**

NCCTE.2020.HU42 - Health Science II

NCCTE.2020.HU42.01.00 - Understand employability skills for healthcare professionals

NCCTE.2020.HU42.01.01 - Understand characteristics and attributes of healthcare professionals

NCCTE.2020.HU42.01.02 - Understand trans-cultural awareness related to healthcare services

NCCTE.2020.HU42.01.03 - Understand legal and ethical issues related to healthcare

NCCTE.2020.HU42.02.00 - Understand healthcare safety and infection control procedures

NCCTE.2020.HU42.02.01 - Understand communicable disease pathology, treatment, and prevention

NCCTE.2020.HU42.02.02 - Understand infection control and aseptic procedures (may use Career Safe OSHA 10-Hour Healthcare module)

NCCTE.2020.HU42.02.03 - Understand safety considerations and procedures when providing healthcare services (may use Career Safe OSHA 10-Hour Healthcare module)

NCCTE.2020.HU42.03.00 - Understand cardiovascular and respiratory systems and how to respond to emergencies

NCCTE.2020.HU42.03.01 - Understand the structures, functions, and disorders of the respiratory system

NCCTE.2020.HU42.03.02 - Understand the structures, functions, and disorders of the circulatory system

NCCTE.2020.HU42.03.03 - Apply BLS CPR and AED skills to respond to respiratory and cardiovascular emergencies

NCCTE.2020.HU42.04.00 - Understand the domains of healthcare

NCCTE.2020.HU42.04.01 - Understand diagnostic and therapeutic services

NCCTE.2020.HU42.04.02 - Understand health informatics and support services

