

**CNMI Career Pathways Guides** 



Career pathways are integrative systems created to support secondary school students in enrolling in post-secondary transferable curricula and gaining practical work experience while obtaining their high school diplomas. Career pathways are designed to streamline and minimize the steps required for students to advance into jobs that align with their career aspirations. With specialized certifications gained upon high school graduation, students are ready to enter the workforce or seamlessly transition into college. A goal in establishing career pathways is to unify agencies across workforce development, education, and policy to determine processes and influence legislation that benefit students at all levels. Preparing students with marketable skills upon completing secondary school allows the students ample time within their careers to build upon an early foundation of basic knowledge. Providing adequate training and opportunities for certification keeps youth engaged with the workforce and supports them in building sustainable careers that contribute to the economic growth and future of the Commonwealth of the Northern Mariana Islands (CNMI). This curriculum guide will provide resources to guide the instruction of the pathway courses and pathway related activities and connections to post-secondary education and training.



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#### **Nursing Assistant Overview**

Career pathways are integrative systems created to support secondary school students with postsecondary transferable curricula and gaining practical work experience while obtaining their high school diplomas. Career pathways are designed to streamline and minimize the steps required for students to advance into jobs that align with their career With specialized aspirations. certifications gained upon high school graduation, students



are ready to enter the workforce or seamlessly transition into college.

A goal in establishing career pathways is to bridge agencies across workforce development, education, and policy to determine processes and influence legislation that benefit students at all levels. Upon completion of the secondary program the students will be prepared with an early foundation of basic knowledge and marketable skills to initiate a career in health care.

Providing adequate training and opportunities for certification keeps youth engaged with the workforce and supports them in building sustainable careers that contribute to the economic growth and future of the Commonwealth of the Northern Mariana Islands (CNMI).

Intended to assist the CNMI as it designs and implements new career pathway programs, this brief is focused on the nursing career path. It provides a description of the occupation, outlines career ladder opportunities and their associated educational credentials, and details projected growth and potential earnings in the field. Examples of some national and exceptional nursing career pathway programs are also provided.

## **CNMI** College and Career Readiness Definition

A CNMI student is college and career ready when he/she has achieved proficiency in academic standards, acquired essential skills for lifelong learning, and is able to transition into higher education and/or the workforce through and ongoing process of way finding for meaningful engagement.

## Job Description, Outlook, and Opportunities

Occupations in the nursing field range from certified nursing assistant (CNA) to licensed practical nurse (LPN), licensed vocational nurse (LVN), and registered nurse (RN). CNAs, LPNs, and LVNs assist with basic care, and RNs attend to medical care. Nurses work in a variety of settings such as hospitals, senior care centers, and patients' homes.

Position	Education Required 2016 CNMI Mean Hourly Wage <sup>a</sup>		Projected Growth by 2028 (United States)
CNA	Certification Program	\$9.01	9% <sup>b</sup>
LPN and LVN	Certification Program	\$12.86	11% <sup>c</sup>
RN	Bachelor's Degree	\$15.68	12% <sup>d</sup>

a http://i2io42u7ucg3bwn5b3l0fquc.wpengine.netdna-cdn.com/wp-content/uploads/2017/09/2016-PWWAS- Report-One-Full-Report-v1.1-1.pdf

b https://www.bls.gov/ooh/healthcare/nursing-assistants.htm

c https://www.bls.gov/ooh/healthcare/licensed-practical-and-licensed-vocational-nurses.htm

d https://www.bls.gov/ooh/healthcare/registered-nurses.htm

## Nursing Assistant CNMI PSS Curriculum Framework

#### **Purpose**

This program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Health Science career cluster.

This program of study is designed to prepare students for employment as nursing assistants in nursing homes, hospitals, or other health care facilities. The content includes, but is not limited to, interpersonal skills, medical terminology, legal and ethical responsibilities, safe and efficient work, gerontology, nutrition, pet-facilitated therapy, health, safety (including Cardio-pulmonary Resuscitation (CPR)—heart saver level), and employability skills.

#### Program of Study

This program is a planned sequence of instruction consisting of four credits.

Course Title	Length
Course 1: Health Science Foundations	1 credit
Course 2: Essential Healthcare Practices	1 credit
Course 3: Health Science Anatomy and Physiology	1 credit
Course 4: Nursing Assistant with CNA Certification and Clinicals	1 credit

#### **Common Career Technical Core (CCTC) Alignment**

The Common Career Technical Core (CCTC) are a set of rigorous, high-quality benchmark standards for Career Technical Education (CTE), the result of a state-led initiative. The goal of the CCTC is to provide students with the knowledge and skills needed to thrive in a global economy. The CCTC includes a set of end-of-program of study standards for each of the 16 Career Clusters® and their 79 Career Pathways, as well as an overarching set of Career Ready Practices, which address the knowledge, skills, and dispositions that are important to becoming career ready.

- 1. Determine academic subject matter, in addition to high school graduation requirements, necessary for pursuing a health science career.
- 2. Explain the healthcare worker's role within their department, organization, and the overall healthcare system.
- 3. Identify existing and potential hazards to clients, co-workers, visitors, and self in the healthcare workplace.
- 4. Evaluate the roles and responsibilities of individual members as part of the healthcare team, and explain their role in promoting the delivery of quality health care.
- 5. Analyze the legal and ethical responsibilities, limitations, and implications of actions within the healthcare workplace.
- 6. Evaluate accepted ethical practices with respect to cultural, social, and ethnic differences within the healthcare workplace.
- 7. Utilize communication strategies to answer patient/client questions and concerns on planned procedures and goals.
- 8. Communicate patient/client information among healthcare team members to

- facilitate a team approach to patient care.
- 9. Utilize processes for assessing, monitoring, and reporting patient's/client's health status to the treatment team within protocol and scope of practice.
- 10. Evaluate patient/client needs, strengths, and problems in order to determine if treatment goals are being met.

#### **Academic Alignment**

Academic alignment is an ongoing, collaborative effort of professional educators that provide clear expectations for progression year-to-year through course alignment. This initiative supports CTE programs by improving student performance through the integration of academic content within CTE courses.

#### Chamorro and Carolinian Language Heritage Studies alignment:

- 1.1A Interact using extended spoken, signed, or written communication by providing and obtaining information;
- 1.1E Interact in a wide range of situations using culturally authentic language and gestures;
- 1.3A Analyze information from a variety of oral, written, and visual sources by summarizing, critiquing, and explaining text;
- 2.2A Analyze, discuss, and report on a wide variety of products and perspectives of the Chamorro/Carolinian culture;
- 4.2A Analyze and discuss how products, practices, and perspectives of the students' own culture and the Chamorro/Carolinian culture overlap and differ:
- 5.1A Evaluate and discuss how understanding another language and culture enhances job skills and career options;
- 5.2A Sustain communication with people locally and around the world; and
- 5.2C Evaluate and discuss how understanding of another language and culture enhances job skills and career options.

#### Course 1: Health Science Foundations Student Standards

**Course Title:** Health Science Foundations

**Course Credit: 1** 

#### **Course Description**

This course is designed to provide the student with an in-depth knowledge of the healthcare 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.

#### **Standards and Benchmarks**

- 1.0 Demonstrate knowledge of the health care delivery system and health occupations. The student will be able to:
  - 1.1 Identify the basic components of the health care delivery system, including public, private, government and non-profit;
  - 1.2 Identify common methods of payment for healthcare services;
  - 1.3 Describe the various types of healthcare providers and range of services available including resources to victims of domestic violence;
  - 1.4 Describe the composition and functions of a healthcare team;
  - 1.5 Identify the general roles and responsibilities of the individual members of the healthcare team;
  - 1.6 Identify the roles and responsibilities of the consumer within the healthcare delivery system;
  - 1.7 Identify characteristics of effective teams;
  - 1.8 Recognize methods for building positive team relationships;
  - 1.9 Analyze attributes and attitudes of an effective leader:
  - 1.10 Recognize factors and situations that may lead to conflict;
  - 1.11 Demonstrate effective techniques for managing team conflict;
  - 1.12 Describe factors that influence the current delivery system of healthcare; and
  - 1.13 Explain the impact of emerging issues including technology, epidemiology, bioethics, and socioeconomics on healthcare delivery systems.

## 2.0 Demonstrate the ability to communicate and use interpersonal skills effectively. The student will be able to:

- 2.1 Develop basic speaking and active listening skills;
- 2.2 Develop basic observational skills and related documentation strategies in written and oral form;

- 2.3 Identify characteristics of successful and unsuccessful communication, including communication styles and barriers;
- 2.4 Respond to verbal and non-verbal cues;
- 2.5 Compose written communication using correct spelling, grammar, formatting, and taking into account confidentiality and specific formats of letter writing;
- 2.6 Use appropriate medical terminology and abbreviations;
- 2.7 Recognize the importance of courtesy and respect for patients and other healthcare workers and maintain good interpersonal relationships;
- 2.8 Recognize the importance of patient/client education regarding healthcare;
- 2.9 Adapt communication skills to varied levels of understanding and cultural orientation including diverse age, cultural, economic, ethnic, and religious groups;
- 2.10 Analyze elements of communication using a sender-receiver model;
- 2.11 Distinguish between and be able to report subjective and objective information; and
- 2.12 Report relevant information in order of occurrence.

#### 3.0 Demonstrate legal and ethical responsibilities. The student will be able to:

- 3.1 Discuss the legal framework of the healthcare occupations including scope of practice legislation;
- 3.2 Explain practices that could result in malpractice, liability, negligence, abandonment, false imprisonment, and fraud;
- 3.3 Demonstrate procedures for accurate documentation and record keeping;
- 3.4 Interpret healthcare facility policy and procedures;
- 3.5 Explain the "Patient's Bill of Rights";
- 3.6 Identify standards of the Health Insurance Portability and Accountability Act (HIPAA);
- 3.7 Describe advance directives:
- 3.8 Describe informed consent:
- 3.9 Explain the laws governing harassment, labor, and employment;
- 3.10 Differentiate between legal and ethical issues in healthcare;
- 3.11 Describe a code of ethics consistent with the healthcare occupation;
- 3.12 Identify and compare personal, professional, and organizational ethics;
- 3.13 Recognize the limits of authority and responsibility of health care workers, including legislated scope of practice;
- 3.14 Recognize and report illegal and/or unethical practices of healthcare workers;
- 3.15 Recognize and report abuse, including domestic violence and neglect; and
- 3.16 Distinguish among the five schedules of controlled substances.

## 4.0 Recognize and practice safety and security procedures. The student will be able to:

- 4.1 Recognize safe and unsafe working conditions and report safety hazards;
- 4.2 Demonstrate the safe use of medical equipment;
- 4.3 Explain and apply the theory of root-cause analysis;
- 4.4 Identify and describe methods in medical error reduction and prevention in the various healthcare settings;
- 4.5 Identify and practice security procedures for medical supplies and equipment;
- 4.6 Demonstrate personal safety procedures based on Occupational Safety and Health Administration (OSHA) and Centers for Disease Control (CDC) regulations including standard precautions;
- 4.7 Recognize Safety Data Sheets and comply with safety signs, symbols, and labels;
- 4.8 Demonstrate proper body mechanics and ergonomics;
- 4.9 Demonstrate the procedure for properly identifying patients;
- 4.10 Demonstrate procedures for the safe transport and transfer of patients;
- 4.11 Describe fire, safety, disaster, and evacuations procedures; and
- 4.12 Discuss The Joint Commission patient safety goals (<u>www.jointcommission.org</u>) and any other applicable accrediting/regulatory agency guidelines.

## 5.0 Recognize and practice infection control procedures. The student will be able to:

- 5.1 Define principles of infection control including standard and transmission-based precautions;
- 5.2 Demonstrate knowledge of medical asepsis and practice procedures such as handwashing and isolation;
- 5.3 Demonstrate knowledge of surgical asepsis; and
- 5.4 Describe how to dispose correctly of biohazardous materials according to appropriate government guidelines such as OSHA.

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

- 6.1 Recognize emerging diseases and disorders;
- 6.2 Distinguish between fact and fallacy about the transmission and treatment of diseases caused by blood borne pathogens, including Hepatitis B;
- 6.3 Identify community resources and services available to the individuals with diseases caused by blood borne pathogens;
- 6.4 Identify "at risk" behaviors that promote the spread of diseases caused by blood borne pathogens and the public education necessary to combat the spread of these diseases;

- 6.5 Apply infection control techniques designed to prevent the spread of diseases caused by blood borne pathogens to the care of all patients following CDC guidelines; and
- 6.6 Demonstrate knowledge of the legal aspects of HIV/AIDS, including testing.

## 7.0 Demonstrate an understanding of information technology applications in healthcare. The student will be able to:

- 7.1 Describe technology applications in healthcare;
- 7.2 Define terms and demonstrate basic computer skills;
- 7.3 Recognize technology applications in healthcare;
- 7.4 Interpret information from electronic medical documents; and
- 7.5 Identify methods of communication to access and distribute data such as fax, e-mail, and internet.

#### 8.0 Demonstrate employability skills. The student will be able to:

- 8.1 Identify personal traits or attitudes desirable in a member of the healthcare team;
- 8.2 Exemplify basic professional standards of healthcare workers as they apply to hygiene, dress, language, confidentiality, and behavior (e.g., telephone etiquette, courtesy, and self-introductions);
- 8.3 Identify documents that may be required when applying for a job;
- 8.4 Write an appropriate resume;
- 8.5 Conduct a job search;
- 8.6 Complete a job application form correctly:
- 8.7 Examine levels of education, credentialing requirements including licensure and certification, employment opportunities, workplace environments, and career growth potential;
- 8.8 Recognize levels of education, credentialing requirements, employment opportunities, workplace environments, and career growth potential;
- 8.9 Identify acceptable work habits and appropriate professional behavior; and
- 8.10 Compare careers within the health science career pathways (diagnostic services, therapeutic services, health informatics, support services and biotechnology research and development).

#### 9.0 Apply basic math and science skills. The student will be able to:

- 9.1 Draw, read, and report on graphs, charts, and tables;
- 9.2 Measure time, temperature, distance, capacity, and mass/weight;
- 9.3 Use and convert using both traditional and metric units;
- 9.4 Convert from regular to 24-hour time;
- 9.5 Demonstrate ability to evaluate and draw conclusions;

- 9.6 Organize and communicate the results obtained by observation and experimentation;
- 9.7 Ask appropriate scientific questions and recognize what is involved in experimental approaches to the solution of such questions; and
- 9.8 Calculate ratios.

#### Course 2: Essential Healthcare Practices Student Standards

**Course Title:** Essential Healthcare Practices

**Course Credit: 1** 

#### **Course Description**

This course builds on the curriculum introduced in Health Science Foundations. The course continues to develop enhanced written and oral communication skills and medical math principles. Students will be introduced to basic medical terminology roots, prefixes, and suffixes to communicate body systems, diseases, and disorders. Students will identify how key systems affect services performed and quality of care. The course instructs technical skills for measuring and recording vital signs.

#### **Standards and Benchmarks**

- 1.0 Demonstrate methods of delivering and obtaining information, while communicating effectively. The student will be able to:
  - 1.1. Model verbal and nonverbal therapeutic communication with active listening, silence, summarizing, and reflecting;
  - 1.2. Identify common barriers to communications including physical disabilities (aphasia, hearing loss, impaired vision, developmental level) and psychological barriers (attitudes, bias, prejudice, stereotyping);
  - 1.3. Interpret elements of communication using sender-message-receiver feedback model;
  - 1.4. Modify communication to meet the needs of the patient/client and be appropriate to the situation;
  - 1.5. Describe appropriate interactions with patients throughout various stages of psychosocial development; and
  - 1.6. Interpret common medical abbreviations to communicate information specific to course content.

## 2.0 Differentiate between wellness and disease. Promote disease prevention and model healthy behaviors. The student will be able to:

- 2.1. Promote behaviors of health and wellness through exercise, nutrition, relationships, sleep habits, stress management, and weight control;
- 2.2. Examine various aspects of behavioral health including but not limited to anxiety, depression, substance abuse, and suicide;
- 2.3. Describe strategies for prevention of disease through community health education, immunizations, medical screenings, routine physical exams, and stress management;

- 2.4. Investigate complementary and alternative health practices as they relate to wellness and disease prevention, including but not limited to acupuncture, Eastern medicine, holistic medicine, homeopathy, manipulative therapies, and natural therapies; and
- 2.5. Recognize the steps in the grieving process.

## 3.0 Identify how key healthcare systems affect services performed and quality of care. The student will be able to:

- 3.1. Describe the different types of practice settings to include but not limited to acute care, ambulatory care, behavioral and mental health services, home care, long-term care, medical, and dental practices;
- 3.2. Identify specialty medical and dental practices to include but not limited to cosmetic surgery, pulmonology, surgical, and orthodontics;
- 3.3. Summarize what government agencies impact the quality of care within a society. Agencies include, but are not limited to, CDC, OSHA, Veterans Administrations (VA), Food and Drug Administration (FDA), and Public Health Service (PHS);
- 3.4. Investigate related health organizations include, but not limited to, American Cancer Society, American Heart Association (AHA), American Red Cross (ARC), March of Dimes, and World Health Organization (WHO); and
- 3.5. Analyze the impact of emerging issues on healthcare delivery systems, including but not limited to addictions, bioethics, epidemiology, socioeconomics, and technology.

## 4.0 Recognize and respond to emergency situations. The student will be able to:

- 4.1. Record and monitor vital signs;
- 4.2. Describe legal parameters relating to the administration of emergency care;
- 4.3. Obtain and maintain training or certification on CPR, automated external defibrillator (AED), foreign body airway obstruction (FBAO), and first aid; and
- 4.4. Recognize adverse drug related emergencies and take appropriate first aid action.

# 5.0 Understand the introduction to human anatomy, physiology, common diseases and disorders, and medical math principles. The student will be able to:

- 5.1. Describe the organization of the human body and directional terms;
- 5.2. Demonstrate anatomical positions;
- 5.3. Identify body planes, including sagittal, midsagittal, coronal/frontal, transverse/horizontal; and

5.4. Use directional terms accurately, including anterior/posterior, medial/lateral, proximal/distal, superficial/deep, superior/inferior, ventral/dorsal.

# 6.0 Demonstrate methods of delivering and obtaining information, while communicating effectively using an introduction to medical terminology. The student will be able to:

- 6.1. Use common roots, prefixes, and suffixes to communicate information regarding body systems, diseases, and disorders; and
- 6.2. Interpret common medical abbreviations.

## 7.0 Understand math principles integral to medical applications. The student will be able to:

- 7.1. Demonstrate competency using basic math skills and mathematical conversions as they relate to healthcare using the metric system;
- 7.2. Utilize mathematical operations in healthcare application;
- 7.3. Perform basic conversions to provide patient care;
- 7.4. Demonstrate the ability to analyze diagrams, charts, graphs, and tables to interpret healthcare results; and
- 7.5. Demonstrate use of the 24-hour clock/military time.

## 8.0 Demonstrate an understanding of employability skills related to healthcare professionals. The student will be able to:

- 8.1. Identify personal traits and attitudes desirable in a career ready member of a health team. Include discussion and consideration of the following: acceptance of criticism, competence, dependability, discretion, empathy, enthusiasm, honesty, initiative, integrity, patience, positive attitude, responsibility, self-motivation, tact, team player, and willingness to learn;
- 8.2. Summarize professional standards as they apply to hygiene, dress, language, confidentiality, and behavior;
- 8.3. Apply employability skills in healthcare in the following scenarios: chain of command, communication skills, decision-making, flexibility, organization, problem-solving, scope of practice, time management, work ethic;
- 8.4. Research levels of education, credentialing requirements and employment trends in health professions to include but not limited to: Biotechnology research and development, diagnostic services, health informatics, support services, therapeutic services; and
- 8.5. Identify strategies for pursuing employment including but not limited to social media, personal networking, employer websites, and internships.

## 9.0 Apply and demonstrate technical skills and knowledge common to health career specialties. The student will be able to:

- 9.1. Demonstrate procedures for measuring and recording vital signs including the normal ranges:
  - 9.1.1. Blood pressure;
  - 9.1.2. Oxygen saturation;
  - 9.1.3. Pain;
  - 9.1.4. Pulse;
  - 9.1.5. Respirations; and
  - 9.1.6. Temperature.

# Course 3: Health Science Anatomy & Physiology Student Standards

Course Title: Health Science Anatomy & Physiology

Course Credit: 1

#### **Course Description**

This course is a study of the human body, both structurally and functionally with emphasis on the pathophysiology and transmission of disease. Medical terminology is an integral part of the course.

Laboratory investigations that include scientific inquiry, research, measurement, problem solving, emerging technologies, tools, and equipment, as well as experimental quality, and safety procedures will be an integral part of this course. Students will interact with materials and primary sources of data or with secondary sources of data to observe and understand the natural world. Students will develop an understanding of measurement error, and develop the skills to aggregate, interpret, and present the data and resulting conclusions. Equipment and supplies will be provided to enhance these hands-on experiences for students. A minimum of 20% of classroom time will be dedicated to laboratory experiences.

#### **Standards and Benchmarks**

- 1.0 Analyze and interpret an overview of the human body, including organization and chemical process. The student will be able to:
  - Evaluate interrelationships of the basic structural and functional organization of the human body including chemical, cellular, tissue, and organ systems;
  - 1.2. Describe the basic molecular structures and primary functions of the four major categories of biological macromolecules;
  - 1.3. Examine medical implications of body planes, directional terms, cavities, abdominal regions, and quadrants; and
  - 1.4. Discuss the chemical processes that maintain life, including: homeostasis, cellular respiration, role of enzymes as catalysts, and basic concepts of metabolism.

## 2.0 Apply correct medical terminology relating to body structure and function within a real-world application. The student will be able to:

- 2.1. Evaluate and apply anatomical terminology to describe location of parts or areas of the body and describe the relation of one part to another;
- 2.2. Interpret correct medical terminology including roots, prefixes, and suffixes to indicate anatomical structures and function; and
- 2.3. Extend medical terminology to real-world applications.

## 3.0 Evaluate cells and tissues microscopically and macroscopically and relate their specialized functions. The student will be able to:

- 3.1. Discuss and describe cell structure and function in healthy tissue;
- 3.2. Discuss and describe cell structure and function in diseased tissue including how damage to one tissue may impact the function of another;
- 3.3. Compare and contrast the four main types of tissue, including the interrelationships of tissues; and
- 3.4. Discuss the location and function of tissues as it relates to homeostasis.

## 4.0 Analyze the integumentary system in relation to health and disease. The student will be able to:

- 4.1. Apply medical terminology as related to the integumentary system;
- 4.2. Discuss and describe the structure and function of the integumentary system across the lifespan;
- 4.3. Demonstrate knowledge of cells and tissues in the integumentary system;
- 4.4. Identify and analyze common diseases and disorders of the integumentary system including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;
- 4.5. Discuss or research health careers related to the integumentary system; and
- 4.6. Demonstrate knowledge of skills related to the integumentary system,, which may include infection control and hand washing skills.

## 5.0 Analyze the skeletal system in relation to health and disease. The student will be able to:

- 5.1. Apply medical terminology as related to the skeletal system;
- 5.2. Discuss and describe the structure and function of the skeletal system across the lifespan;
- 5.3. Identify and explain major bone markings and their implications;
- 5.4. Identify and explain joints and their implications;
- 5.5. Discuss the interrelationship between calcium, hormones, and the skeletal system;
- 5.6. Apply knowledge of cells and tissues in the skeletal system;

- 5.7. Identify and analyze common diseases and disorders of the skeletal system, including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;
- 5.8. Discuss or research health careers related to the skeletal system; and
- 5.9. Demonstrate knowledge of skills related to the skeletal system, which may include range of motion.

## 6.0 Analyze the muscular system in relation to health and disease. The student will be able to:

- 6.1. Apply medical terminology as related to the muscular system;
- 6.2. Discuss and describe the structure and function of the muscular system across the lifespan;
- 6.3. Identify and explain the three main types of muscles and their implications;
- 6.4. Interpret muscle function by examining attachment to bone;
- 6.5. Discuss the interrelationship between calcium, ions, and the muscular system;
- 6.6. Apply knowledge of cells and tissues in the muscular system;
- 6.7. List the steps involved in the sliding filament of muscle contraction;
- 6.8. Describe signal transmission across a myoneural/neuromuscular junction;
- 6.9. Identify and analyze common diseases and disorders of the muscular system, including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;
- 6.10. Discuss or research health careers related to the muscular system; and
- 6.11. Demonstrate knowledge of skills related to the muscular system, which may include isometric and isotonic contractions.

## 7.0 Analyze the nervous system in relation to health and disease. The student will be able to:

- 7.1. Apply medical terminology as related to the nervous system;
- 7.2. Discuss and describe the structure and function of the nervous system across the lifespan;
- 7.3. Identify and explain the interrelatedness of the Central Nervous System (CNS) and Peripheral Nervous System (PNS);
- 7.4. Compare and contrast the divisions of the Autonomic Nervous System (ANS);
- 7.5. Apply knowledge of cells and tissues in the nervous system;
- 7.6. Explain how neurotransmitters help propagate electrical impulses;
- 7.7. Describe reflex pathways and their importance;
- 7.8. Identify and analyze common diseases and disorders of the nervous system, including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;

- 7.9. Discuss or research health careers related to the nervous system; and
- 7.10. Demonstrate knowledge of skills related to the nervous system, which may include recognizing signs and symptoms of a stroke.

## 8.0 Analyze the endocrine system in relation to health and disease. The student will be able to:

- 8.1. Apply medical terminology as related to the endocrine system;
- 8.2. Discuss and describe the structure and function of the endocrine system across the lifespan;
- 8.3. Compare and contrast endocrine and exocrine glands;
- 8.4. Compare and contrast negative and positive feedback loops;
- 8.5. Evaluate the relationship between the endocrine system and homeostasis in health and disease:
- 8.6. Apply knowledge of cells and tissues in the endocrine system;
- 8.7. Identify and analyze common diseases and disorders of the endocrine system including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation:
- 8.8. Discuss or research health careers related to the endocrine system; and
- 8.9. Demonstrate knowledge of skills related to the endocrine system, which may include recognizing the signs and symptoms of low blood sugar.

## 9.0 Analyze the cardiovascular/circulatory system in relation to health and disease. The student will be able to:

- 9.1. Apply medical terminology as related to the cardiovascular system;
- 9.2. Discuss and describe the structure and function of the cardiovascular system across the lifespan;
- 9.3. Demonstrate knowledge of major blood vessels;
- 9.4. Compare and contrast the structure and function of arteries, veins, and capillaries;
- 9.5. Analyze the interdependence between systemic and pulmonary circulation;
- 9.6. Design a map or flow chart depicting the normal pathway of blood flow through the heart;
- 9.7. Design a map or flow chart depicting the normal electrical pathway through the heart;
- 9.8. Apply knowledge of cells and tissues in the cardiovascular system;
- 9.9. Demonstrate knowledge of the composition of blood to include formed elements and plasma;
- 9.10. Evaluate ABO blood types and Rh factor;
- 9.11. Predict potential blood donors for a transfusion through the analysis of blood types with ABO and/or Rh compatibility;

- 9.12. Identify and analyze common diseases and disorders of the cardiovascular system, including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;
- 9.13. Discuss or research health careers related to the cardiovascular system;
- 9.14. Demonstrate knowledge of skills related to the cardiovascular system, which might include assessing pulse.

## 10.0 Analyze the lymphatic and immune systems in relation to health and disease. The student will be able to:

- 10.1. Apply medical terminology as related to the lymphatic and immune systems;
- 10.2. Discuss and describe the structure and function of the lymphatic and immune systems across the lifespan;
- 10.3. Validate the importance of the accessory organs (thymus, tonsils, spleen, appendix, Peyer's patch) promoting the effectiveness of the lymphatic and immune system;
- 10.4. Compare and contrast passive and active immunity;
- 10.5. Discuss the impact of B cells and T cells on diseases of the immune system;
- 10.6. Evaluate and discuss the body's defense mechanisms in relation to common communicable diseases;
- 10.7. Apply knowledge of cells and tissues in the lymphatic and immune systems;
- 10.8. Identify and analyze common diseases and disorders of the lymphatic and immune system including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation:
- 10.9. Discuss or research health careers related to the lymphatic and immune systems; and
- 10.10. Demonstrate knowledge of skills related to the lymphatic and immune systems.

## 11.0 Analyze the respiratory system in relation to health and disease. The student will be able to:

- 11.1. Apply medical terminology as related to the respiratory system;
- 11.2. Discuss and describe the structure and function of the respiratory system across the lifespan;
- 11.3. Evaluate the interrelatedness of the cardiovascular and respiratory systems;
- 11.4. Apply knowledge of cells and tissues in the respiratory system;

- 11.5. Identify and analyze common diseases and disorders of the respiratory system, including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;
- 11.6. Discuss or research health careers related to the respiratory system; and
- 11.7. Demonstrate knowledge of skills related to the respiratory system, which might include monitoring respirations.

## 12.0 Analyze the digestive system in relation to health and disease. The student will be able to:

- 12.1. Apply medical terminology as related to the digestive system;
- 12.2. Discuss and describe the structure and function of the digestive system across the lifespan;
- 12.3. Apply knowledge of cells and tissues in the digestive system;
- 12.4. Identify and analyze common diseases and disorders of the digestive system, including etiology, prevention, pathology, diagnosis and treatment/rehabilitation:
- 12.5. Discuss or research health careers related to the digestive system; and
- 12.6. Demonstrate knowledge of skills related to the digestive system, which might include a nutritional self-assessment.

## 13.0 Analyze the urinary system in relation to health and disease. The student will be able to:

- 13.1. Apply medical terminology as related to the urinary system;
- 13.2. Discuss and describe the structure and function of the urinary system across the lifespan;
- 13.3. Justify the interrelatedness of the urinary and cardiovascular system in promoting homeostasis;
- 13.4. Apply knowledge of cells and tissues in the urinary system;
- 13.5. Identify and analyze common diseases and disorders of the urinary system, including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation:
- 13.6. Discuss or research health careers related to the urinary system; and
- 13.7. Demonstrate knowledge of skills related to the urinary system, which may include measuring Intake and Output.

## 14.0 Analyze both the male and female reproductive systems in relation to health and disease. The student will be able to:

- 14.1. Apply medical terminology as related to each of the male and female reproductive systems;
- 14.2. Discuss and describe the structure and function of both reproductive systems across the lifespan;

- 14.3. Apply knowledge of cells and tissues of both reproductive systems;
- 14.4. Identify and analyze common diseases and disorders of both reproductive systems including etiology, prevention, pathology, diagnosis, and treatment/rehabilitation;
- 14.5. Discuss or research health careers related to both reproductive systems; and
- 14.6. Demonstrate knowledge of skills related to the reproductive system, which may include measuring fetal development and relating it to possible complications.

## 15.0 Identify and explain factors relating to genetics and disease. The student will be able to:

- 15.1. Analyze DNA and its role in human heredity;
- 15.2. Describe the role of human genetics in relation to genetic diseases;
- 15.3. Discuss or research current issues related to genetic research;
- 15.4. Explore the relationship between mutation, cell cycle and uncontrolled cell growth that can result in cancer; and
- 15.5. Explore how environmental factors contribute to an individual's overall wellness and quality of life.

## 16.0 Evaluate and apply the principles of disease transmission and control to real-world scenarios. The student will be able to:

- 16.1. Discuss and explain the direct and indirect transmission of disease;
- 16.2. Discuss and apply the principles of the chain of infection to real-world scenarios;
- 16.3. Categorize the common microorganisms affecting the human body; and
- 16.4. Identify and analyze common diseases caused by microorganisms.

# Course 4: Nursing Assistant with CNA and Clinicals Student Standards

Course Title: Nursing Assistant with CNA and Clinicals

**Course Credit: 1** 

#### **Course Description**

This course is designed to prepare the student to provide/assist with all aspects of activities of daily living for the adult patient in both hospital and nursing home settings. The course, which is taught by a registered nurse, includes didactic instruction, skills practice in the laboratory and clinical experience. Emphasis is also placed on the development of communication, interpersonal, problem solving, and critical thinking skills. Upon successful completion, the student is eligible to apply to sit for the Certified Nursing Assistant exam, which qualifies as industry certification.

#### **Standards and Benchmarks**

- 1.0 Use verbal and written communications specific to nurse assisting. The student will be able to:
  - 1.1. Obtain specified data from patient and family;
  - 1.2. Utilize verbal and written information to assist with the patient's plan of care; and
  - 1.3. Demonstrate use of the communication system.

## 2.0 Demonstrate legal and ethical responsibilities specific to the nurse assistant. The student will be able to:

- 2.1. Demonstrate legal and ethical behavior within the role and scope of nursing assistant responsibilities;
- 2.2. Describe the purpose of the chain of communication (e.g., to resolve patient or employee problems);
- 2.3. Follow policies and procedures affecting the health, safety, and well-being of patients;
- 2.4. Recognize and report signs of substance abuse;
- 2.5. Demonstrate the understanding of vulnerable population abuse and reporting procedures per agency;
- 2.6. Follow legal guidelines in documentation;
- 2.7. Demonstrate methods regarding risk management including prevention and quality of care;
- 2.8. Exhibit behavior supporting and promoting patients' and/or residents' rights;

- 2.9. Recognize that a CNA must self-report any crimes they've been involved in within 30 days of the offense;
- 2.10. Discuss local certified nursing assistant rules including role limitations;
- 2.11. Recognize potential for and prevention of medical errors; and
- 2.12. Discuss proper procedures to follow regarding medical errors.

## 3.0 Perform physical comfort and safety functions specific to nurse assisting. The student will be able to:

- 3.1. Implement appropriate regulatory and accrediting agency patient safety guidelines;
- 3.2. Maintain safe patient units, equipment, and a comfortable environment;
- 3.3. Maintain service areas on the units including supplies and equipment;
- 3.4. Observe, report, and record changes in the patient's behavior as needed, including mental awareness;
- 3.5. Demonstrate adjustment of bed and side-rails according to facility policy;
- 3.6. Demonstrate and assist patient to dangle;
- 3.7. Demonstrate lifting, supporting, and transferring patients from bed to chair, bed to bed, and bed to stretcher, including the use of the various assistive devices and equipment while utilizing proper body mechanics and patient safety measures;
- 3.8. Demonstrate the proper use of a gait/transfer belt in both transfer and ambulation;
- 3.9. Assist patient in ambulation, including the use of crutch, cane, or walker;
- 3.10. Demonstrate the proper wheelchair safety techniques and assist patient as needed with use;
- 3.11. Apply supportive devices as directed (e.g., footboard, over-bed cradle, alternating pressure mattress);
- 3.12. Assist patient with care and use of prosthetic/orthotic devices; and
- 3.13. Describe emergency procedures utilized in the clinical area(s) and the role of the nursing assistant in these procedures.

#### 4.0 Provide personal patient care. The student will be able to:

- 4.1. Perform bed bath; observe and report changes in a patient including skin and level of consciousness;
- 4.2. Assist with shower or tub bath, including the use of specialty tubs or prepackaged disposable-bagged bath;
- 4.3. Administer back rub with bath and as needed;
- 4.4. Assist patient with hair care utilizing sink, tub, shower, bed or shower cap;
- 4.5. Demonstrate the use of a safety and/or electric razor to shave the patient;
- 4.6. Demonstrate how to groom patient, including hair, skin, foot, hand and nail care;

- 4.7. Assist with and/or administer oral hygiene including denture care;
- 4.8. Assist patient to dress;
- 4.9. Assist patient with toileting using various types of restorative and rehabilitative equipment;
- 4.10. Assist patient with use of bedpan (standard and fracture);
- 4.11. Assist with bowel and bladder training;
- 4.12. Assist and/ or provide perineal care;
- 4.13. Empty, measure, and record urinary output and/or drainage;
- 4.14. Demonstrate application and use of a leg bag, leg strap, and dignity bag;
- 4.15. Monitor and assist with the drainage of urostomy bags and colostomy bags;
- 4.16. Assist patient with both donning and doffing prosthesis and brace;
- 4.17. Assist patient with meals;
- 4.18. Describe the relationships of body systems when providing patient care; and
- 4.19. Recognize abnormal signs and symptoms of common diseases and conditions when providing patient care.

#### 5.0 Perform patient care procedures. The student will be able to:

- 5.1. Demonstrate ability to accurately measure, record, and report vital signs;
- 5.2. Assist with the admission of a patient and/or resident;
- 5.3. Assist with the admission, transfer, and discharge of a patient and/or resident;
- 5.4. Maintain patient-belongings list;
- 5.5. Make an unoccupied/occupied bed;
- 5.6. Provide passive range-of-motion exercises:
- 5.7. Apply anti-embolic hose and sequential compression devices;
- 5.8. Understand and demonstrate proper collection of routine, timed urine and clean catch urine specimens;
- 5.9. Record fluid intake and output (I&O);
- 5.10. Observe, record, and report a patient's emesis;
- 5.11. Monitor and provide urinary catheter care and drainage systems;
- 5.12. Assist with ostomy care including emptying or changing ostomy bags that do not adhere to the skin;
- 5.13. Collect stool specimens;
- 5.14. Assist with the collection of a sputum specimen;
- 5.15. Assist the nurse with care of the patient with complex medical needs;
- 5.16. Assist patient to apply binders;
- 5.17. Care for patient in skin and skeletal traction;
- 5.18. Assist with pre-operative and post-operative patient care;
- 5.19. Reinforce dressings under the supervision of the RN/LPN;
- 5.20. Obtain and record an apical pulse;

- 5.21. Provide cast care and/or pin care; and
- 5.22. Provide care for eyeglasses, artificial eyes, and contact lens.

#### 6.0 Apply principles of nutrition. The student will be able to:

- 6.1. Identify nutrients and food groups;
- 6.2. Develop a basic food plan;
- 6.3. Describe special diets;
- 6.4. Check the patient's diet tray for accuracy;
- 6.5. Monitor and document nutritional intake:
- 6.6. Identify and implement regional, cultural, and religious food guidelines/ preferences;
- 6.7. Demonstrate knowledge of the need for thickened liquids and fluid consistency; and
- 6.8. Identify methods of maintaining fluid balance, including encouraging and restricting fluids.

#### 7.0 Provide care for geriatric patients. The student will be able to:

- 7.1. Identify and assist with methods and procedures to prevent pressure ulcers:
- 7.2. Identify and assist with methods to prevent falls in the elderly;
- 7.3. Identify and assist with safety principles as related to the elderly;
- 7.4. Describe general characteristics, particular needs, and age-related changes of the elderly;
- 7.5. Identify attitudes and living habits that promote positive mental and physical health for the elderly;
- 7.6. Distinguish between fact and fallacy about the aging process;
- 7.7. Apply reality orientation techniques and validation therapy unless it is contraindicated by the patient diagnosis;
- 7.8. Recognize and respond appropriately to symptoms of common diseases, including dementia, depression/suicide and Alzheimer's;
- 7.9. Provide and involve patients in diversional activities;
- 7.10. Identify common alterations in elderly patient behavior;
- 7.11. Provide care for patients with special needs (e.g., impaired hearing, impaired vision, immobility, impaired body functions, cognitively impaired (dementia)):
- 7.12. Demonstrate awareness of common behaviors in drug use and abuse in the elderly;
- 7.13. Report concerns to the nurse and appropriate authorities related to drug use and abuse in the elderly patient;
- 7.14. Identify the need for community resources and services available to the elderly and their caregiver;

- 7.15. Identify components of the grief process; and
- 7.16. Demonstrate an understanding of end of life care, hospice and palliative care.

## 8.0 Apply the principles of infection control specific to nursing assisting. The student will be able to:

- 8.1. Discuss transmission-based precautions;
- 8.2. Identify the chain of infection;
- 8.3. Provide care for patients with infectious diseases and apply the principles of "Standard Precautions" utilized with all patients as well as special procedures required;
- 8.4. Apply the proper use of personal protective equipment (PPE) for all types of isolation including donning and removing PPE appropriately;
- 8.5. Follow the isolation procedure with a food tray, PPE, and other supplies/equipment; and
- 8.6. Collect specimens from patient in isolation.

## 9.0 Provide biological, psychological, and social support. The student will be able to:

- 9.1. Discuss family roles and their significance to health; and
- 9.2. Respond to patient and family emotional needs.

## 10.0 Perform supervised organizational functions, following the patient care plan. The student will be able to:

- 10.1. Organize and prioritize patient-care assignments; and
- 10.2. Complete assignments accurately and in a timely manner.

#### 11.0 Assist with restorative (rehabilitative) activities. The student will be able to:

- 11.1. List the purposes of a restorative (rehabilitation) program;
- 11.2. Assist patient with specified restorative (rehabilitation) needs; and
- 11.3. Assist patients/residents to reach the optimum level of independence.

## **CNMI Nursing Assistant Four-Year Plan**

A four-year plan refers to the outline of courses that a high school student will take to complete the necessary requirements for high school graduation per PSS policy (shown below). The four-year plan allows students to personalize their high school experience, incorporate classes that will lead to their future college major and career, and ensure that they graduate on time. Student schedules include four blocks of instruction per day. Students can earn eight credits per year, earning one credit per block per semester.

A minimum of twenty-eight (28) credits are required for graduation from the 12<sup>th</sup> grade. Required courses constitute twenty-three (23) credits of the minimum credit and are as follows:

Required Courses	Credits
English - Composition I and II - Integrated literature and composition – 9 <sup>th</sup> - Integrated literature and composition – 10 <sup>th</sup> - Technical research/business writing – 11 <sup>th</sup> - American literature – 11 <sup>th</sup> - British literature- 12 <sup>th</sup>	8 credits
Math - Algebra I – 9 <sup>th</sup> - Geometry – 10 <sup>th</sup> - Algebra II – 11 <sup>th</sup>	6 credits
Science - Environmental science – 9 <sup>th</sup> - General biology – 10 <sup>th</sup> - Chemistry – 11 <sup>th</sup>	3 credits
Social Studies - NMI history – 10 <sup>th</sup> - US/World history – 11 <sup>th</sup> - US Government/economics – 12 <sup>th</sup>	3 credits
Physical Education 0.5 credit of physical education must include a health course. (JROTC may be substituted for 1 credit of Physical Education)	2 credits
Language other than English	1 credit

This plan includes the career pathway courses for the Nursing Assistant if a student chooses to take four CTE courses as their electives.

## Commonwealth of Northern Marianas Islands Plan of Study

#### Cluster: <u>Health Sciences</u> Pathway: <u>Nursing Assistant</u>

This Career Pathway Plan of Study can serve as a guide, along with other career planning materials, as learners continue on a career path. Courses listed within this plan are only recommended coursework and should be individualized to meet each learner's educational and career goals. This Plan of Study, used for learners at an educational institution, should be customized with course titles and appropriate high school graduation requirements as well as college entrance requirements.

EDUCATION LEVELS	GRADE	English/ Language Arts credits	Mathematics 6 credits	Science 3 credits	Social Studies 3 credits	Other Required Courses 3 credits	Recommended Career and Technical Courses 4 credits	Electives Student Choice 1 credit
ш			NOTE: Ho	nors, Pre-AP	or AP courses	offered in ma	ny courses.	
Caree	r Ass	essment: Identify			ssment instru nts plan for hi		middle school lev	el used to help
	9	Composition I and Integrated Literature and Composition 9th	Algebra I	Environ- mental Science		PE I & Health	Course 1: Health Science Foundations	Arts: Band, Chorus, Drama, or Dance CTE: Agriculture,
JARY	and Integrate	Composition II and Integrated Literature and Composition 10th	Geometry	General Biology	NMI History	PE II or ROTC	Course 2: Essential Healthcare Practices	Bookkeeping, Digital Video, General Business, Technology, Video Production, or Cooperative
SECONDARY	11	Technical Research/Business Writing And American Literature	Algebra II	Chemistry	US/World History	LOTE Chamorro or Carolinian	Course 3: Health Science Anatomy and Physiology DE BI251 NMC	Education  Any Pre-AP Courses  Additional AP Courses  Additional
	12	British Literature			US Government & Economics		Course 4: Nursing Assistant with CNA and Clinicals	General Education Courses
	High	n school courses in	n the pathway	offered locally	y for college o	credit should	d be coded: DE (D	Oual Enrollment)

				I Learning Oppo	ortunities:		
			_	anization(s):			
List rel	<ul> <li>ist related certifications/credentials offered locally:</li> <li>Nurse Assistant</li> <li>Licensed Practical Nurse (LPN)</li> </ul>		□ DECA	□ FBLA		-	□ FFA.
•			□ FEA	☑ HOSA	☐ SkillsU	JSA	□ TSA
•			STEP UF	•			
•	Registered Nurse (RI Pharmacy Technician	N)		sed Learning:			
•	Medical Technician C			lesearch 🗆 Cooper	rative Educa	tion	$\boxtimes$
•	Hemodialysis Techni		Internship				
	riemodiarysis recimi	cian certification	☑ Job Shad	dowing ⊠ Service	e-Learning P	roject	$\boxtimes$
			Mentorship				
			☐ Student /	Apprenticeship			
		College Entrance Ex	ams such as	ACT & SAT			
	SAMPLE POSTSECONDARY PROGRA			AMS RELATED TO THIS CAREER PATHWAY			
ΡY	☐ Guam Community College (GCC)		☑ Northern Marianas College (NMC)				
AC		□ Northern Marianas	s Technical Institute (NMTI)				
CONI	Pathway	Pathway  Associate Degree, College C		Bachelor's D	egree	•	graduate egree
111			,		_		
STSE		Of Apprenticeship		Northern Mariana	s College:		
OSTSE		Northern Marianas Colle			_	Ma	
POSTSECONDARY	Nursing Program	., ,		NMC: Associate of	of Science		ster's in
POSTSE	Nursing Program	., ,		NMC: Associate of	of Science		ster's in ursing
POSTSE	Nursing Program	Northern Marianas Colle		NMC: Associate of	of Science g Degree in		
POSTSE	Nursing Program	Northern Marianas Colle Nursing	ege:	NMC: Associate of in Nursing UOG: Bachelor's	of Science g Degree in		
POSTSE	Nursing Program	Northern Marianas Colle  Nursing  SAMPLE—Oc	ege:	NMC: Associate of in Nursing UOG: Bachelor's Nursing	of Science g Degree in		
POSTSE	Nursing Program	Northern Marianas Colle Nursing SAMPLE—Oc Relating to Thi	ege: ccupations is Pathway	NMC: Associate of in Nursing UOG: Bachelor's Nursing	of Science g Degree in		
		Northern Marianas Colle  Nursing  SAMPLE—Oc	ege: ecupations is Pathway	NMC: Associate of in Nursing UOG: Bachelor's Nursing	of Science g Degree in	N	ursing

## Knowledge, Skills, and Dispositions

Knowledge	Technical Skills	Employability Skills	Dispositions
<ul> <li>Medical math</li> <li>Human anatomy physiology</li> <li>Diseases and disorders</li> <li>Applied chemistry</li> <li>Medical terminology</li> <li>Safety principles</li> <li>Legal and ethical behaviors</li> <li>Healthcare settings</li> <li>Disease prevention</li> <li>Tools and technologies in the healthcare industry</li> </ul>	<ul> <li>CPR and First-Aid certified</li> <li>Patient and environment safety</li> <li>Proficient in basic skills of patient care</li> <li>Vital signs and patient observation</li> <li>Knowledgeable in medical terminology</li> <li>HIPAA and patient privacy</li> <li>Excellent communication skills</li> <li>Use of proper document Standards</li> </ul>	<ul> <li>Flexibility</li> <li>Interpersonal communication skills</li> <li>Written communication skills</li> <li>Attention to detail</li> <li>Reliability</li> <li>Observation skills</li> <li>Ability to follow set rules and protocol</li> <li>Time management and organizational skills</li> <li>Taking initiative</li> <li>Problem solving and decision making</li> </ul>	<ul> <li>Empathy and compassion</li> <li>Patience</li> <li>Honesty and integrity</li> <li>Dependable</li> <li>Concern for others</li> <li>Cooperative</li> <li>Tolerate stress</li> <li>Self-control</li> </ul>

#### Work-Based Learning

Work-Based Learning (WBL) provides opportunities in which a student completes meaningful tasks in a workplace. Such programs are designed to prepare participants for full-time work and help them acquire the knowledge and skills they need to enter or advance in particular career fields. Work-based learning can be a component of a continuum of lifelong learning and skill development for a range of learners, including K-12 students, young adults, college students, and adult jobseekers.

WBL experiences reinforce the 21<sup>st</sup> Century Skills by allowing students to apply these skills in a real-world business or service-oriented work environment.

#### **Connecting WBL to 21st Century Skills**

#### **Learning Skills:**

- <u>Critical Thinking:</u> Develop a project to meet a community need or solve a community problem.
- <u>Creativity:</u> Publicize/advertise project; solve problems; present findings.
- <u>Collaboration:</u> Work with community members, peers, and mentors.
- Communication: Write and present proposals; make requests and get permissions; publicize and present final project.

#### **Literacy Skills:**

- Information: Access and evaluate information to use to solve problems.
- Media: Understand how and why media messages are constructed in a real-world setting; create media products to communicate a message.
- <u>Technology:</u> Use technology as a tool to research, organize, evaluate, and communicate information.

# 21st Century Skills How today's students can stay competitive in a changing job market Learning Skills Literacy Skills Literacy Skills Literacy Skills Life Skills Life Skills Life Skills

#### Life Skills:

- <u>Flexibility:</u> Adapt to varied roles, job responsibilities, and schedules; incorporate feedback effectively; understand and balance diverse views.
- <u>Leadership:</u> Set and meet goals; prioritize, plan, and manage work to achieve the intended result.
- Initiative: Go beyond completion of assigned tasks to advance responsibility.
- Productivity: Monitor, define, prioritize, and complete tasks.
- <u>Social Skills:</u> Know when it is appropriate to listen and when to speak; conduct oneself in a respectable, professional manner.

#### **Work-Based Learning Framework**

WBL experiences offer students the opportunity to explore career options and develop critical academic and technical skills in collaboration with community and/or industry involvement. As such, students should have access to a series of structured WBL experiences that deepen their knowledge and allow them to apply classroom theories into practice. At an early level/grade, WBL experiences can help students develop a broad understanding and awareness of industries and possible careers that are available to them. Over time, these experiences narrow in focus as students find a good fit, learn what type of postsecondary education is necessary for success, and begin practicing the academic, technical and professional skills necessary to enter their identified careers.

#### **Career Awareness**

Career awareness activities build knowledge of the variety of careers available and the role of postsecondary education to broaden student options. Some examples of career awareness activities are guest speakers, career days or college and career fairs, field trips and workplace tours, videos or presentations about various professions, and opportunities to conduct informational interviews. Career awareness activities ideally lead to WBL experiences where students can deepen their knowledge of career pathways and begin applying skills learned in the classroom.

#### **Career Exploration**

Career exploration experiences encourage students to develop personal career interests, a better understanding of pathways to a chosen career, and the workplace readiness skills needed to make informed decisions regarding secondary and postsecondary education and training. These experiences are typically of shorter duration.

#### **Career Preparation**

Career preparation experiences deepen student knowledge and develop skills necessary for success in employment and postsecondary education. These experiences are recommended for students who have a clear goal of entering the workforce directly after high school or of enrolling in a closely related postsecondary training program. These experiences are structured primarily to give students extensive practice in applying fundamental technical and practical knowledge and skills in their chosen careers.

#### **Career Training**

Career training consists of any activity that allows a student to train for employment and/or postsecondary education in a specific range of occupations.

CNMI Work-Based Learning Opportunities					
Type of Student WBL Experience	Purpose/Learning Outcome	Experience Defined by	WBL Student Experiences		
9th Grade Industry and Career Awareness	Build awareness of the variety of careers available and the role of post-secondary education; broaden student options.  Student can articulate the type of postsecondary education and training required in the career field and its importance to success in that field.	<ul> <li>One-time interaction with partner(s), often for a group of students.</li> <li>Designed primarily by adults to broaden student's awareness of a wide variety of careers and occupations.</li> </ul>	Guest Speakers Career Fair		
10th Grade Career Exploration	Explore career options and postsecondary requirements for the purpose of motivation and to inform decision making in high school and postsecondary education.  Student can give at least two examples of how the student's individual skills and interests relate to the career field and/or occupations.	<ul> <li>One-time interaction with partner(s) for a single student or small group.</li> <li>Personalized to connect to emerging student interests.</li> <li>Student takes an active role in selecting and shaping the experience.</li> <li>Depth in particular career fields.</li> <li>Builds skills necessary for in-depth workbased learning.</li> </ul>	Workplace Industry Tours		

CNMI Work-Based Learning Opportunities					
Type of Student WBL Experience	ent WBL Outcome Experience Defined by		WBL Student Experiences		
11th Grade Career Preparation	Apply learning through practical experience that develops knowledge and skills necessary for success in careers and postsecondary education.  Student works effectively as a member of a team, with respect for diverse perspectives and strengths.	<ul> <li>Direct interaction with partners over time.</li> <li>Application of skills transferable to a variety of careers.</li> <li>Activities have consequences and value beyond success in the classroom.</li> <li>Learning for the student and benefit to the partner are equally valued.</li> </ul>	Job Shadowing		
12th Grade Career Training	Train for employment and/or postsecondary education in a specific range of occupations.  Student demonstrates knowledge and skills specific to employment in a range of occupations in a career field.	<ul> <li>Interaction with partners over extended period of time.</li> <li>Benefit to the partner is primary and learning for student is secondary.</li> <li>Develop mastery of occupation specific skills.</li> <li>Complete certifications or other requirements for a specific range of occupations.</li> </ul>	Clinical Experience Internship Extended Job Shadow		

## Career and Technical Student Organization

Health Occupations Student Organization (HOSA) is a global student-led organization recognized by the U.S. Department of Education, Department of Health and Human Services, and several federal and state agencies. HOSA's mission is to empower HOSA-Future Health Professionals to become leaders in the global health community through education, collaboration, and experience. HOSA actively promotes career opportunities in the health industry and the delivery of quality health care to all people. HOSA's goal is to encourage all health science instructors and students to affiliate and be actively involved in the HSE-HOSA Partnership.

HOSA provides a unique program of leadership development, motivation, and recognition exclusively for secondary, postsecondary, adult, and collegiate students enrolled in health science education and biomedical science programs or have interests in pursuing careers in health professions. Since its inception in 1976, HOSA has grown steadily reaching over 260,000 members through 54 chartered HOSA Associations in the U.S., American Samoa, Canada, China, District of Columbia, and Puerto Rico. To learn more about HOSA, please visit this link: <a href="https://hosa.org/">https://hosa.org/</a>.

Short-term Research Experience for Underrepresented Persons (STEP-UP) provides hands-on research experience for high school and undergraduate students interested in exploring research careers. Students are assigned to a STEP-UP Coordinating Center to help coordinate and monitor their summer research experience, and are paired with experienced research mentors. To learn more about STEP-UP, please visit this link: <a href="http://stepup.niddk.nih.gov">http://stepup.niddk.nih.gov</a>

### **Industry Certification**

Earning a nationally recognized industry certification allows students to demonstrate their technical skills and abilities and provides opportunities for employment. The following exam is aligned with the Nursing Assistant pathway: Certified Nursing Assistant. To learn more about the CNA exam, please visit this link:

https://nmibon.info/certified-nursing-assistants/ or

https://www.registerednursing.org/certified-nursing-assistant/certification/.

## Postsecondary Alignment

Earning college credit in high school helps students learn time management skills, earn scholarships for college, explore specific fields of study in depth, make room for diverse experiences, and save money. Students have an opportunity to earn early college credit with Northern Marianas College in this program of study with the following alignment.

Postsecondary Website: <a href="https://www.marianas.edu/schoolofbusiness">https://www.marianas.edu/schoolofbusiness</a>

CNMI PSS Course	Aligned NMC Course	
College and Career Success 101	BE111 College Success	
Health Science Anatomy & Physiology	BI251 Human Anatomy I	

## Profile of a CNMI PSS Graduate

(Pending completion from Office of Curriculum and Instruction)

## Recruitment & Marketing Action Plan Template

District Office or Program of Study Plan (POS):	POS Site:
Marketing & Recruitment Team Members:	

Goal 1: Pathway Messaging Action Steps	Will this be an effective strategy for the CNMI?	Who will lead this?	Date to begin work	Date to complete work	What help do you need? From whom?
<ul> <li>Ensure consistent messaging to all audiences identified.</li> <li>Create website or recruitment brochure to include:</li> <li>Required course sequence;</li> <li>Eligibility and enrollment requirements;</li> <li>Related college pathways, what to expect in the pathway, and potential careers;</li> <li>Pictures, contact information, certifications; and</li> <li>Application requirements, and deadlines.</li> </ul>					
Solidify program description and course sequence.  Update course descriptions as needed.					
Create a video for your pathway or other visuals to use in webpages, parent meeting presentations, counselor professional development, board presentations, advisory committee meetings, and so forth.					
Update the school and/or district website with pathway information; make branding decisions about centralized design versus pathway-specific creativity.					

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Create a poster of your pathway sequence for your counseling center and classrooms.					
Consider district and/or school branding and communication guidelines.					
Create a presentation for your counseling, teacher, and administrative teams.					
Other:					

Goal 2: Collaboration and Communication With Site and District Stakeholders Action Steps	Will this be an effective strategy for the CNMI?	Who will lead this?	Date to begin work	Date to complete work	What help do you need? From whom?
Set up a meeting to present the pathway to counseling and administrative teams to ensure strong understanding of pathways.					
Address any prerequisites or indicators for pathway recruitment.					
Ensure administrative and counseling teams are aware of any master scheduling needs of the pathway to ensure student participation and completion.					

Goal 2: Collaboration and Communication With Site and District Stakeholders Action Steps	Will this be an effective strategy for the CNMI?	Who will lead this?	Date to begin work	Date to complete work	What help do you need? From whom?
Bring counselors, administrative staff, and board members to tour the pathway facilities or observe the class in action to help them better recruit.					
Review forms that counselors give to students for course selection to ensure pathway courses are correctly identified and listed.					
Raise equity and access concerns with counselors to increase recruiting to special populations. Ensure that the underrepresented population being targeted is intentionally represented in all marketing forums.					
Present at the school board regarding pathway information and recruitment.					
Determine how students can be tagged in your student information system so that pathway-designated students are not inadvertently removed from the pathway course.					
Identify appropriate class caps, and create a plan to address equity when limited seats are available.					
Other:					

Goal 3: Student and Parent Marketing Action Steps	Will this be an effective strategy for the CNMI?	Who will lead this?	Date to begin work	Date to complete work	What help do you need? From whom?
Engage with students for a pathway-related activity or information event.					
Distribute promotional materials (e.g., brochures, videos) to your middle schools and high schools.					
Host a virtual parent night at the high school to relay information about all pathways, give tours of pathway facilities, and highlight student work.					
Bring middle school students to the high school to tour pathway facilities and/or engage in a pathway activity.					
Identify newsletters, e-mails, and social media that go out to your district, schools, parents, and stakeholders, and highlight your program.					
Other:					