

Community Health Science Program of Study and Complementary Course Standards



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Vision

All Nevada students are equipped and feel empowered to attain their vision of success

Mission

To improve student achievement and educator effectiveness by ensuring opportunities, facilitating learning, and promoting excellence



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Standards Development Members

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Business and Industry Validation

All CTE standards developed through the Nevada Department of Education are validated by business and industry through one or more of the following processes: (1) the standards are developed by a team consisting of business and industry representatives, or (2) a separate review panel is coordinated with industry experts to ensure the standards include the proper content, or (3) nationally recognized standards currently endorsed by business and industry.

The Community Health Science standards were validated through active participation of business and industry representatives on the development team.

Introduction

The standards in this document are designed to clearly state what the student should know and be able to do upon completion of a high school Community Health Science program of study. These standards are designed for a two-credit course sequence that prepares the student for a technical assessment directly aligned to the standards.

These exit-level standards are designed for the student to complete all standards through their completion of a program of study. These standards are intended to guide curriculum objectives for a program of study.

The standards are organized as follows:

- **Content Standards** are general statements that identify major areas of knowledge, understanding, and the skills students are expected to learn in key subject and career areas by the end of the program.
- **Performance Standards** follow each content standard. Performance standards identify the more specific components of each content standard and define the expected abilities of students within each content standard.
- **Performance Indicators** are very specific criteria statements for determining whether a student meets the performance standard. Performance indicators may also be used as learning outcomes, which teachers can identify as they plan their program learning objectives. The indicators are followed by designations that reflect the course sequence (e.g., 12 for the first-year course of a two-year program and 22 for the second-year course, C is to designate the indicators to be taught in the complementary courses) as referenced in the Core Course Sequence table.

The crosswalks and alignments are located in the Program Supplemental Program Resources document. These will show where the performance indicators support the Nevada Academic Content Standards. For individual course descriptions, please reference the Supplemental Program Resource or the Nevada CTE Catalog.

All students are encouraged to participate in the career and technical student organization (CTSO) that relates to the Community Health Science program. CTSOs are co-curricular national organizations that directly reinforce learning in the CTE classroom through curriculum resources, competitive events, and leadership development. CTSOs provide students the ability to apply academic and technical knowledge, develop communication and teamwork skills, and cultivate leadership skills to ensure college and career readiness.

The Employability Skills for Career Readiness identify the skills needed to be successful in all careers and must be taught as an integrated component of all CTE course sequences. These standards are available in a separate document.

The **Standards Reference Code** is only used to identify or align performance indicators listed in the standards to daily lesson plans, curriculum documents, or national standards. The Standards Reference Code is an abbreviated name for the program, and the content standard, performance standard and performance indicator are referenced in the program standards. This abbreviated code for identifying standards uses each of these items. For example, CHS is the Standards Reference Code for Community Health Science. For Content Standard 2, Performance Standard 3 and Performance Indicator 4 the Standards Reference Code would be CHS.2.3.4.

Community Health Science

Program Information

Program of Study: Community Health Science

Standards Reference Code: PRN HEALTH SCI/ CHS

Career Cluster: Health Science

Career Pathway(s): Support Services

Program Length: 2-year, completed sequentially

CTSO: HOSA: Future Health Professionals

Program Structure Required Program of Study Courses

The core course sequencing is provided in the following table. Complementary Courses are available and provided later in this document. The following courses provide a completed program of study. The Lab is a complementary course available concurrently with the Community Health Science course.

Core Course Sequence (R) with Lab Course(s) (C)

Required/ Complementary	Course Title	Abbreviated Name
R	Principles of Health Science	PRN HEALTH SCI
R	Community Health Science	CMTY HEALTH SCI

CONTENT STANDARD 1.0: INTEGRATE CAREER AND TECHNICAL STUDENT ORGANIZATIONS (CTSOs)***Performance Standard 1.1: Explore the History and Organization of CTSOs**

- 1.1.1 Discuss the requirements of CTSO participation/involvement as described in Carl D. Perkins Law (22, C)
- 1.1.2 Research nationally recognized CTSOs (22, C)
- 1.1.3 Investigate the impact of federal and state government regarding the progression and operation of CTSOs (e.g., Federal Statutes and Regulations, Nevada Administrative Code [NAC], Nevada Revised Statutes [NRS]) (22, C)

Performance Standard 1.2: Develop Leadership Skills

- 1.2.1 Discuss the purpose of parliamentary procedure (22, C)
- 1.2.2 Demonstrate the proper use of parliamentary procedure (22, C)
- 1.2.3 Differentiate between an office and a committee (22, C)
- 1.2.4 Discuss the importance of participation in local, regional, state, and national conferences, events, and competitions (22, C)
- 1.2.5 Participate in local, regional, state, or national conferences, events, or competitions (22, C)
- 1.2.6 Describe the importance of a constitution and bylaws to the operation of a CTSO chapter (22, C)

Performance Standard 1.3: Participate in Community Service

- 1.3.1 Explore opportunities in community service-related work-based learning (WBL) (22, C)
- 1.3.2 Participate in a service learning (program related) and/or community service project or activity (22, C)
- 1.3.3 Engage with business and industry partners for community service (22, C)

Performance Standard 1.4: Develop Professional and Career Skills

- 1.4.1 Demonstrate college and career readiness (e.g., applications, resumes, interview skills, presentation skills) (22, C)
- 1.4.2 Describe the appropriate professional/workplace attire and its importance (22, C)
- 1.4.3 Investigate industry-standard credentials/certifications available within this Career Cluster™ (22, C)
- 1.4.4 Participate in authentic contextualized instructional activities (22, C)
- 1.4.5 Demonstrate technical skills in various student organization activities/events (22, C)

Performance Standard 1.5: Understand the Relevance of Career and Technical Education (CTE)

- 1.5.1 Make a connection between program standards to career pathway(s) (22, C)
- 1.5.2 Explain the importance of participation and completion of a program of study (22, C)
- 1.5.3 Promote community awareness of local student organizations associated with CTE programs (22, C)

*Refer to the program of study Curriculum Framework for appropriate CTSO(s).

CONTENT STANDARD 2.0: DEVELOP PERSONAL HEALTH AND WELLNESS**Performance Standard 2.1: Categorize Dimensions of Wellness**

- 2.1.1 Describe how individual health depends upon a complex interplay of physiological, emotional, social, financial, intellectual, and environmental factors (22)
- 2.1.2 Identify specific examples of each of the six dimensions of wellness (22)

Performance Standard 2.2: Apply concepts of Personal Health—Assessment, Professionalism, and Self-Care

- 2.2.1 Evaluate personal risk factors for disease prevention and health promotion (22)
- 2.2.2 Develop a plan to improve personal health that includes goals, activities, and expected outcomes (22)
- 2.2.3 Classify different types of stress (22)
- 2.2.4 Evaluate stress management techniques to improve coping skills (22)
- 2.2.5 Formulate personal and professional boundaries to promote wellness (22)
- 2.2.6 Define a healthy work and life balance as it relates to an individual's profession (22)

CONTENT STANDARD 3.0: RESEARCH PUBLIC HEALTH BIOLOGY**Performance Standard 3.1: Apply Biological Principles and Pathophysiology**

- 3.1.1 Identify common diseases and disorders of the human body related to public health (22)
- 3.1.2 Distinguish between pathogenic and nonpathogenic diseases (22)
- 3.1.3 Analyze the risk factors and etiology of pathogenic and nonpathogenic diseases of public health importance (22)

Performance Standard 3.2: Assess the Public Health Burden

- 3.2.1 Describe the public health burden of common pathogenic and nonpathogenic diseases (22)

Performance Standard 3.3: Evaluate Biological Basis of Disease Prevention

- 3.3.1 Identify areas of public health where biological research is of particular importance (22)
- 3.3.2 Apply biological principles to the development and implementation of disease prevention, control, or management programs (22)
- 3.3.3 Describe screenings and therapies for diseases of public health importance (22)
- 3.3.4 Explain how vaccinations prevent pathogenic diseases at both individual and population levels (herd immunity) (22)

CONTENT STANDARD 4.0: IDENTIFY PATTERNS OF SOCIAL AND BEHAVIORAL HEALTH**Performance Standard 4.1: Understand the Physical, Emotional, and Developmental Stages of the Life Cycle**

- 4.1.1 Define the stages of life (22)
- 4.1.2 Explain the importance of maternal and child health as a global indicator of society's health (22)
- 4.1.3 Define prenatal care and its effects (22)
- 4.1.4 Refute several common myths about life stage populations (22)

Performance Standard 4.2: Outline Health Profiles for Age Groups—Infant, Children, Adolescents, Adults, and the Elderly

- 4.2.1 List the major causes of morbidity, and risk factors for each group (22)
- 4.2.2 Explain the importance of being aware of different health concerns of the various age groups in the United States (22)
- 4.2.3 Outline populations most at risk for abuse and neglect in the United States (22)
- 4.2.4 Demonstrate the process surrounding mandated reporting of child and elder abuse (22)

Performance Standard 4.3: Understand Mental Health and Mental Disorders

- 4.3.1 Research the history of mental healthcare and treatment (22)
- 4.3.2 Analyze the variety of mental health disorders (i.e., schizophrenia, depression, attention deficit disorder, bipolar disorder) (22)
- 4.3.3 Outline current treatment methods utilized for various mental health disorders (22)
- 4.3.4 Discuss and dispel stigmas attached to mental health disorders (22)

Performance Standard 4.4: Examine Alcohol, Tobacco, and Other Drugs of Misuse (Addiction)

- 4.4.1 Recognize legal and illegal substances of misuse (22)
- 4.4.2 Identify the physical and psychological effects of substance misuse (22)
- 4.4.3 Research available treatments, interventions, and other local, state, and national resources (22)
- 4.4.4 Analyze the financial and social impact of substance misuse on the community (22)

CONTENT STANDARD 5.0: EXPLORE ENVIRONMENTAL HEALTH**Performance Standard 5.1: Understand Environmental Health and Justice**

- 5.1.1 Describe methods used in epidemiology and toxicology to assess environmental exposures and hazards (22)
- 5.1.2 Discuss ethical issues of environmental health and environmental justice that address the issues of poverty, racial/ethnic diversity (22)
- 5.1.3 Investigate ways that society addresses environmental injustice and identify best practice intervention strategies at local, state, national, and global levels (22)
- 5.1.4 Interpret the relationship among population growth, the environment and human health (22)
- 5.1.5 Discuss community sensitivity to issues of environmental justice and equity (22)
- 5.1.6 Research the impact of climate change on human health (22)

Performance Standard 5.2: Classify Air Quality, Water, Sanitation, and Hygiene

- 5.2.1 List the sources and types of indoor and outdoor air pollutants, and explain the difference between primary and secondary pollutants (22)
- 5.2.2 Describe interventions, policies, and best practices to address indoor and outdoor air pollution (22)
- 5.2.3 Investigate the risk factors associated with water, sanitation, and hygiene that affect human health (22)
- 5.2.4 Describe interventions, policies, and best practices to address water, sanitation, and hygiene (22)

CONTENT STANDARD 6.0: APPLY CONCEPTS OF EPIDEMIOLOGY**Performance Standard 6.1: Classify and Describe Epidemiological Terms**

- 6.1.1 Describe the basic epidemiological concepts of rates and public health surveillance (22)
- 6.1.2 Define the terms outbreak, epidemic, endemic, and pandemic (22)
- 6.1.3 Describe the importance of having a case definition, and the factors to consider in developing a case definition (22)
- 6.1.4 Define the primary difference between descriptive studies and analytical studies (22)
- 6.1.5 Describe the historical roots of epidemiological thinking and its contribution to the evolution of the scientific method (22)
- 6.1.6 Distinguish between correlation and causation (22)

Performance Standard 6.2: Investigate Disease Outbreaks

- 6.2.1 List the steps, per Centers for Disease Control (CDC) definition, in the investigation of an outbreak (22)
- 6.2.2 Given initial information of a possible disease outbreak, apply outbreak investigation techniques to determine whether an outbreak exists (22)
- 6.2.3 Generate hypothesis of patterns of disease and injuries regarding person, place, and time (22)

Performance Standard 6.3: Calculate, Analyze, and Interpret Epidemiological Data

- 6.3.1 Define the primary difference between descriptive studies and analytical studies (22)
- 6.3.2 Create a "line listing" using a spreadsheet (22)
- 6.3.3 Calculate prevalence and incidence (22)
- 6.3.4 Calculate a) mortality rate, b) morbidity rate, c) attack rate, and d) case-fatality rate.
- 6.3.5 Identify the following types of epidemic curves: a) point source epidemic, b) continuous source epidemic, and c) propagated source epidemic (22)
- 6.3.6 Distinguish between cross-sectional, cohort studies, and case-control studies (22)

CONTENT STANDARD 7.0: EXPLORE BIOSTATISTICS**Performance Standard 7.1: Define and Demonstrate Measurement Scales and Errors**

- 7.1.1 Distinguish between categorical and ordinal variables (22)
- 7.1.2 Demonstrate the differences between imprecision and bias (22)
- 7.1.3 Compare and contrast qualitative and quantitative data (22)

Performance Standard 7.2: Discuss and Apply Study Design Concepts

- 7.2.1 Distinguish between surveys and comparative studies (experimental and non-experimental studies) (22)
- 7.2.2 Define the terms explanatory (independent) and response (dependent) variables (22)
- 7.2.3 Explain the concepts of random assignment and blinding (22)

CONTENT STANDARD 8.0: UNDERSTAND THE PRINCIPLES OF ADMINISTRATION AND POLICY**Performance Standard 8.1: Recognize Ethical Responsibilities**

- 8.1.1 Identify ethical dilemmas in the fields of public health and healthcare (22)
- 8.1.2 Analyze ethical case studies in public health using theories and principles (22)
- 8.1.3 Evaluate how diverse populations influence ethical analysis and decision making (22)
- 8.1.4 Research underserved rural and urban communities (22)

Performance Standard 8.2: Demonstrate and Understand Program Planning, Implementation, and Evaluation

- 8.2.1 Describe the basic elements of program planning in public health: needs assessment, goals, objectives, activities, timeline, budget, and evaluation (22)
- 8.2.2 Identify barriers to successful implementation of program plans (22)
- 8.2.3 Identify methods for overcoming barriers to program implementation (22)
- 8.2.4 Describe methods for process, effect, and impact evaluation of public health programs (22)
- 8.2.5 Demonstrate the ability to plan, implement, and constructively evaluate public health programs (22)

Performance Standard 8.3: Investigate Policy and Healthcare Systems

- 8.3.1 Outline the different kinds of healthcare, including population-based public health practice, preventative care, medical practice, long-term practice, and end-of-life practice (22)
- 8.3.2 Describe how federal, state, and local health policy is created with engaged interest groups (22)
- 8.3.3 Explore policy decisions which supersede individual rights for public good (i.e., quarantine, immunizations, Clean Air Act) (22)
- 8.3.4 Critique healthcare systems, health policies, and healthcare financing in the U.S. and other selected countries (22)
- 8.3.5 Explain the relationship between the cost of health services and quality of care (22)
- 8.3.6 Describe the key principles of U.S. healthcare reform for individuals and the population (22)
- 8.3.7 Research policies that includes community assessment, policy development, advocacy/lobbying, legislation, and policy analysis (22)

CONTENT STANDARD 9.0: EXPLORE SOCIAL JUSTICE**Performance Standard 9.1: Recognize Diversity and Culture**

- 9.1.1 Define social justice and equity (22)
- 9.1.2 Describe how the distribution of wealth and social privilege impacts community health (22)
- 9.1.3 Recognize the Culturally and Linguistically Appropriate Services (CLAS) Standards (22)
- 9.1.4 Evaluate how cultural generalizations and stereotyping impact community health (22)

Performance Standard 9.2: Understand Disparities

- 9.2.1 Differentiate between health disparities and incidence of disease (22)
- 9.2.2 Identify causes of health disparities (22)
- 9.2.3 Synthesize how historical realities create and impact health disparities (22)
- 9.2.4 Demonstrate understanding of key data points of racial and ethnic disparities that impact healthcare (22)
- 9.2.5 Explain the relevance of health disparities and social determinants within community health (22)
- 9.2.6 Research various laws, regulations, and agencies that impact equity and inclusion (22)

Performance Standard 9.3: Identify Risk, Protective Factors, and Determinants

- 9.3.1 Outline various models that examine risk and protective factors (22)
- 9.3.2 Discuss interventions for a specific population (22)
- 9.3.3 Describe how the social determinants of health impact the overall health status of underserved communities (22)

Performance Standard 9.4: Evaluate Self-Sufficiency and Advocacy

- 9.4.1 Define advocacy (22)
- 9.4.2 Research state or local resources that would promote individual and group self-sufficiency (22)

Performance Standard 9.5: Explore Community Mobilization

- 9.5.1 Define community mobilization (22)
- 9.5.2 Evaluate examples of community mobilization and discuss the impact (22)
- 9.5.3 Identify current local, regional, or state community mobilization efforts (22)

CONTENT STANDARD 10.0: CHARACTERIZE COMMUNITIES**Performance Standard 10.1: Recognize Underserved Populations**

- 10.1.1 Identify characteristics of an underserved population (22)
- 10.1.2 Compare and contrast barriers which impact access to care and community health in rural, urban, immigrant, refugee, and other populations (i.e., food, medicine, healthcare) (22)

Performance Standard 10.2: Identify Resources

- 10.2.1 Research a community needs evaluation (22)
- 10.2.2 Demonstrate the ability to identify local community health resources (22)
- 10.2.3 Recognize the various barriers that prevent individuals from accessing locally available resources (22)
- 10.2.4 Research local partnerships available to students and other members of the community (22)

CONTENT STANDARD 11.0: RECOGNIZE THE IMPORTANCE OF COMMUNICATIONS AND PROFESSIONALISM**Performance Standard 11.1: Develop Health Literacy Skills**

- 11.1.1 Define health literacy (22)
- 11.1.2 Identify reasons health literacy is a serious and costly issue in the United States (22)
- 11.1.3 Describe ways to communicate health information (22)

Performance Standard 11.2: Examine Community Engagement

- 11.2.1 Identify traditional and nontraditional methods of communication to engage the target population (22)
- 11.2.2 Recognize the importance of establishing collaborations and partnerships when addressing individual and community needs (22)
- 11.2.3 Determine routes for developing partnerships in local communities (22)

CONTENT STANDARD 12.0: EXPLORE CAREER DEVELOPMENT**Performance Standard 12.1: Investigate Career Choices and Opportunities**

- 12.1.1 Critique the roles and responsibilities of various community health professions (22)

Performance Standard 12.2: Determine Workforce Needs and Pathways

- 12.2.1 Compare and contrast vocational training and educational requirements (22)
- 12.2.2 Research the scope of career opportunities available, and the requirements for education, training, certification, and licensure (22)
- 12.2.3 Explore various financial opportunities to support career pathways (22)

Performance Standard 12.3: Implement Career Enhancements

- 12.3.1 Create a resume or portfolio that is tailored to a specific health career pathway (22)
- 12.3.2 Recognize the role and function of professional organizations, industry associations, and organized labor (22)

Complementary Courses

State Complementary Skill Standards

State complementary skill standards are designed to clearly state what the student should know and be able to do upon completion of a **one-year** complementary course related to their career and technical education (CTE) program of study. **Completion of the qualifying Program of Study is required prior to enrollment in a complementary course.**

Employability Skills for Career Readiness Standards

Students have completed all program content standards and will pursue advanced study through investigation and in-depth research.

Complementary Course Standards Contributing Members

Course Contribution(s)	Name	Occupation/Title	Stakeholder Affiliation	School/Organization
Pharmacy Practice	Vivian Ho, PharmD	Pharmacist	Business and Industry Representative	Optum Infusion Pharmacy
Pharmacy Practice	Mark Brunton, CPhT	Dean of Education	Postsecondary	Northwest Career College
Pharmacy Practice	Mason Myers, Pharm D	Pharmacist	Business and Industry Representative	Oregon Health & Science University
Pharmacy Practice	Alexandra Forshee	Instructor	Secondary Educator	Southeast Career and Technical Academy, Clark County School District
Pharmacy Practice	Maria Manta Keller	Instructor	Secondary Educator	East Career and Technical Academy, Clark County School District
Health Information Management	Leonard Hamer, MBA CMPE	CEO	Business and Industry	Physician Select Management, LLC

Business and Industry Validation

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The Pharmacy Practice and Health Information Management complementary standards for Community Health Science program of study were validated through active participation of business and industry representatives on the development team.

Complementary Course Information for Community Health Science

Program Information

Qualifying Program of Study: Community Health Science

Career Cluster: Health Science

Career Pathway(s): Therapeutic Services

CTSO: HOSA: Future Health Professionals

Grade Level: 11-12

Program Structure for Complementary Courses

The complementary courses are provided in the following table. **The qualifying program of study must be completed prior to enrolling in the complementary courses** (except labs that are done concurrently with the second-year course). A program does not have to utilize the complementary courses for students to complete their program of study.

Complementary Courses

Required/ Complementary	Course Title	Abbreviated Name
C	Pharmacy Practice for Community Health Science	PHARM CHS
C	Health Information Management for Community Health Science	HLTH INFO CHS
C	Community Health Science Advanced Studies	CMTY HEALTH SCI AS
C	CTE Work Experience – Health Science	WORK EXPER HEALTH

Complementary Course Standards

Pharmacy Practice

CONTENT STANDARD 1.0: IDENTIFY THE ROLE OF THE PHARMACY PROFESSION IN HEALTH CARE

Performance Standard 1.1: Roles and Services

- 1.1.1 Explain the role of the pharmacist
- 1.1.2 Explain the role of the pharmacy technician
- 1.1.3 Identify the role of the different prescribers (i.e., primary prescriber, nurse prescriber, dentists, etc.)
- 1.1.4 Explain the prescription processing operations
- 1.1.5 Compare pharmacy settings and the services they provide

CONTENT STANDARD 2.0: UNDERSTAND THE LEGAL AND ETHICAL RESPONSIBILITIES WITHIN THE PHARMACY PRACTICE

Performance Standard 2.1: Perform Duties According to Regulations, Policies, and Laws

- 2.1.1 Understand Nevada Administrative Code (NAC), and pharmacy record keeping in relation to pharmacy technicians
- 2.1.2 Understand pertinent federal laws in regard to pharmacy practice
- 2.1.3 Describe licensure, certification, registration of pharmacy technicians
- 2.1.4 Compare the legislative scope of practice of pharmacy professionals
- 2.1.5 Understand United States Pharmacopeia (USP) Guidelines 795, 797, 800
- 2.1.6 Practice Health Information Portability Accountability Act (HIPPA)
- 2.1.7 Recognize Drug Enforcement Administration (DEA) Code of Federal Regulations (number validation)
- 2.1.8 Understand the role of the Food and Drug Administration (FDA)
- 2.1.9 Understand the related guidelines of the Occupational Safety and Health Administration (OSHA) and safety data sheets (SDS)
- 2.1.10 Distinguish between accrediting bodies
- 2.1.11 Demonstrate knowledge of continuing education and training

Performance Standard 2.2: Professional Standards and Interpersonal Skills

- 2.2.1 Practice customer service
- 2.2.2 Model professional standards of pharmacy workers as they apply to hygiene, dress, language, confidentiality, civil behavior, substance use and abuse
- 2.2.3 Understand various cultural differences and beliefs and how they impact pharmacy practice
- 2.2.4 Understand the implications of social media in professional liability

Performance Standard 2.3: Apply Critical Thinking Skills

- 2.3.1 Evaluate case studies related to pharmacy

CONTENT STANDARD 3.0: PROCESSING AND HANDLING OF MEDICATION AND MEDICATION ORDERS/PRESCRIPTIONS**Performance Standard 3.1: Analyzing Prescriptions**

- 3.1.1 Differentiate between a prescription and medication order
- 3.1.2 Understand pharmacy terminology and abbreviations
- 3.1.3 Interpret the prescription/medication order

Performance Standard 3.2: Assisting the Pharmacist

- 3.2.1 Collect relevant patient information
- 3.2.2 Utilize technology to input pharmacy data
- 3.2.4 Describe the prescription refill process
- 3.2.5 Assist with identifying the patient's needs for medical counseling
- 3.2.6 Demonstrate reconstitution of antibiotics prescriptions

Performance Standard 3.3: Assist Pharmacist in Special Handling and Documentation

- 3.3.1 Explain immunization and wellness programs
- 3.3.2 Demonstrate hazardous drug compounding (USP 800 Guidelines)
- 3.3.3 Understand Total Parenteral Nutrition (TPN)
- 3.3.4 Identify controlled substances and their documentation or dispensing processes
- 3.3.5 Identify controlled substances and their storage and handling
- 3.3.6 Identify drugs categorized as Risk Evaluation Mitigation Strategies (REMS)

Performance Standard 3.4: Review Medication Therapy Programs

- 3.4.1 Understand medication therapy management

CONTENT STANDARD 4.0: STERILE AND NON-STERILE COMPOUNDING**Performance Standard 4.1: Compounding Sterile Products**

- 4.1.1 Follow universal precautions and aseptic technique for sterile compounding
- 4.1.2 Research the scope of USP 797 Guidelines
- 4.1.3 Understand how to read a label
- 4.1.4 Identify the equipment and technology used in sterile compounding
- 4.1.5 Determine the correct amounts of ingredients needed to compound a product
- 4.1.6 Demonstrate compounding of sterile products

Performance Standard 4.2: Compounding Non-Sterile Products

- 4.2.1 Follow universal precautions for non-sterile compounding
- 4.2.2 Research the scope of USP 795 Guidelines
- 4.2.3 Understand how to read a prescription for compounding
- 4.2.4 Identify the equipment, apparatus, and technology used in non-sterile compounding
- 4.2.5 Determine the correct amounts of ingredients
- 4.2.6 Demonstrate proficiency in the compounding of non-sterile product

CONTENT STANDARD 5.0: SUMMARIZE PROCUREMENT, BILLING, REIMBURSEMENT, AND INVENTORY MANAGEMENT**Performance Standard 5.1: Assist in the Adjudication of Billing**

- 5.1.1 Identify third party plans
- 5.1.2 Resolve a third party rejection

Performance Standard 5.2: Apply Accepted Procedures in Purchasing Pharmaceuticals

- 5.2.1 Describe various procedures in purchasing pharmaceuticals
- 5.2.2 Explain controlled substance ordering systems (DEA Form 222)

Performance Standard 5.3: Apply Accepted Procedures in Inventory Control

- 5.3.1 Differentiate inventory control systems for various drug classifications
- 5.3.2 Explain legal aspects of drug returns from patients
- 5.3.3 Describe reasons for recalled drugs
- 5.3.4 Explain standard procedures for reviewing and removing outdated drug products
- 5.3.5 Explain the procedures for returning filled prescriptions to inventory stock
- 5.3.6 Understand formularies in the pharmacy

Performance Standard 5.4: Processing Payment Options for Medical Products and Services

- 5.4.1 Practice on a Point of Sale (POS) system and collect payments
- 5.4.2 Verify patient information to assure proper dispensing
- 5.4.3 Understand required forms of identification for drug transactions and signature requirements
- 5.4.4 Understand age limits and purchase limits in dispensing certain pharmaceuticals

CONTENT STANDARD 6.0: UNDERSTAND SAFETY**Performance Standard 6.1: Practice Patient Safety**

- 6.1.1 Practice effective infection control procedures
- 6.1.2 Define and recognize a possible Drug Utilization Review (DUR)
- 6.1.3 Describe the role of Institute for Safe Medical Practices (ISMP), Medical Error Reporting Program (MERP), The Joint Commission (TJC)
- 6.1.4 Explain the “5 Rights” of medication use
- 6.1.5 Explain the “5 Whys” of “root cause analysis”

Performance Standard 6.2: Practice Medication Safety

- 6.2.1 Identify sound-alike/look-alike drugs
- 6.2.3 Identify high alert/high risk medications
- 6.2.4 Identify common safety strategies in regard to medication handling

CONTENT STANDARD 7.0: UNDERSTAND TECHNOLOGY AND INFORMATICS**Performance Standard 7.1: Use Proper Pharmaceutical Dispensing**

- 7.1.1 Identify National Association Boards of Pharmacy (NABP) requirements in labeling prescriptions
- 7.1.2 Understand the different types of pharmacy software

CONTENT STANDARD 8.0: DESCRIBE PHARMACOLOGY**Performance Standard 8.1: Understanding Pharmacokinetics**

- 8.1.1 Understand absorption, distribution, metabolism, excretion (ADME) and the related organs

Performance Standard 8.2: Understanding Pharmacodynamics

- 8.2.1 Understand drug classifications
- 8.2.2 Recognize names of common medications
- 8.2.3 Identify drug interactions/side effects
- 8.2.4 Explain strengths/dosage, dosage forms
- 8.2.5 Differentiate routes of administration

Performance Standard 8.3: Recognizing Over-the-Counter and Alternative Therapies

- 8.3.1 Recognize over-the-counter (OTC) products
- 8.3.2 Understand vitamin and minerals
- 8.3.3 Understand herbal supplements
- 8.3.4 Understand and contrast dietary/nutritional supplements
- 8.3.5 Identify devices and durable medical equipment (DME), like testing devices, first aid, and wound care

CONTENT STANDARD 9.0: APPLICATION OF PHARMACEUTICAL MATHEMATICS**Performance Standard 9.1: Apply Mathematics in Pharmaceutical Practice**

- 9.1.1 Demonstrate knowledge of Measurement Systems (apothecary, English, and metric)
- 9.1.2 Demonstrate ratios and proportions (dimensional analysis)
- 9.1.3 Understand drug strengths in percentages
- 9.1.4 Demonstrate dosage calculations (weight, body surface area, and IV rates)
- 9.1.5 Calculate “Days Supply”
- 9.1.6 Calculate “Quantity to Dispense”
- 9.1.7 Understand “Allegations”

CONTENT STANDARD 10.0: RECOGNIZE AND IMPLEMENT QUALITY ASSURANCE**Performance Standard 10.1: Application of Assurance Practices**

- 10.1.1 Understand National Drug Code (NDC)
- 10.1.2 Differentiate reporting agencies (MedWatch, Poison Control, pharmaceutical manufacturer, FDA Hotline)
- 10.1.3 Recognize fraudulent prescriptions
- 10.1.4 Understand pharmacy diversion
- 10.1.5 Explain a pharmacy board audit

Complementary Course Standards Health Information Management

CONTENT STANDARD 1.0: IDENTIFY CAREERS IN HEALTH INFORMATION MANAGEMENT

Performance Standard 1.1: Examine the History of Health Information Management

- 1.1.1 Explain the relationship between healthcare and information management
- 1.1.2 Describe the evolution of health information management

Performance Standard 1.2: Roles and Services

- 1.2.1 Identify career pathways in health information management
- 1.2.2 Differentiate between different healthcare environments
- 1.2.3 Define roles and responsibilities in healthcare

Performance Standard 1.3: Roles and Services

- 1.3.1 Describe the relationship between health information management and external/internal customers
- 1.3.2 Practice excellent customer service
- 1.3.3 Define Continuum of Care
- 1.3.4 Describe regulatory agencies and professional standards

CONTENT STANDARD 2.0: DEMONSTRATE COMMUNICATION SKILLS

Performance Standard 2.1: Apply Effective Communication Skills

- 2.1.1 Demonstrate effective communication in verbal and written forms
- 2.1.2 Distinguish between formal and informal communication
- 2.1.3 Recognize the need to adapt and apply effective communication skills to various audiences and circumstances
- 2.1.4 Develop and apply effective teamwork skills

CONTENT STANDARD 3.0: IDENTIFY AND UTILIZE DATA MANAGEMENT

Performance Standard 3.1: Demonstrate Computer Skills: Hardware, Software, and Data

- 3.1.1 Analyze and apply effective hardware integration skills
- 3.1.2 Create and utilize word processing and spreadsheets
- 3.1.3 Utilize a scheduling application
- 3.1.4 Perform a query in a database and format a query report

Performance Standard 3.2: Perform Data Integration

- 3.2.1 Acquire and apply the proper process for scanning and digital information conversion
- 3.2.2 Apply formatting and indexing to existing information
- 3.2.3 Aggregate existing and new data into a database

CONTENT STANDARD 4.0: APPLY CLINICAL TERMINOLOGY**Performance Standard 4.1: Relate Clinical Terminology to the Principles of Anatomy and Physiology**

- 4.1.1 Understand and apply proper medical terminology
- 4.1.2 Describe the need for compliant clinical documentation
- 4.1.3 Describe the use and importance of International Classification of Diseases 10th revision (ICD-10) and Current Procedural Terminology (CPT) coding systems

Performance Standard 4.2: Examine Pathophysiology

- 4.2.1 Define and explain pathophysiology and its physiological processes
- 4.2.2 Identify the most common chronic diseases

Performance Standard 4.3: Examine Pharmacology

- 4.3.1 Define pharmacology
- 4.3.2 Identify and describe the top five lab tests in a clinical setting

CONTENT STANDARD 5.0: EXPLORE HIPAA/ETHICS**Performance Standard 5.1: Research Legislation**

- 5.1.1 Summarize the Health Insurance Portability and Accountability Act (HIPAA)
- 5.1.2 Define medical ethics
- 5.1.3 Discuss patient's rights

Performance Standard 5.2: Evaluate Privacy

- 5.2.1 Define protected health information
- 5.2.2 Define confidentiality and release of information as it relates to protected health information
- 5.2.3 Define "who needs to know"
- 5.2.4 Explain use, disclosure, and proper destruction of protected health information

Performance Standard 5.3: Understand Security and Access

- 5.3.1 Describe a security user access agreement form
- 5.3.2 Recognize components of risk identification and mitigation
- 5.3.3 Investigate the impact of cybersecurity

Performance Standard 5.4: Research Regulations and Compliance

- 5.4.1 Define and describe the role of the Office for Civil Rights
- 5.4.2 Research and explain Nevada Revised Statutes in relation to health information management
- 5.4.3 Describe the purpose of auditing and compliance
- 5.4.4 Describe the process of reporting violations

CONTENT STANDARD 6.0: RECOGNIZE AND MANAGE PATIENT RECORDS**Performance Standard 6.1: Examine Patient Records**

- 6.1.1 Identify components of patient records in different healthcare environments
- 6.1.2 Compare and contrast paper records versus electronic records
- 6.1.3 Identify who is permitted to document in patient records
- 6.1.4 Assess the patient record for documentation integrity
- 6.1.5 Research and compare state and federal laws regarding record retention and destruction

Performance Standard 6.2: Demonstrate Workflow Process

- 6.2.1 Use health record data collection tools (such as input screens, document templates, digital conversion)
- 6.2.2 Verify accurate collection of proper patient demographic and insurance information
- 6.2.3 Demonstrate the process for successfully scheduling an appointment, registering/admitting a patient into a clinic or healthcare facility, and discharging a patient from a clinic visit/facility admission
- 6.2.4 Demonstrate the process for successfully fulfilling a “release of information” request
- 6.2.5 Demonstrate the process for reporting and developing a mitigation plan for a breach of electronic protected health information (PHI)

CONTENT STANDARD 7.0: UNDERSTAND HEALTH INFORMATICS**Performance Standard 7.1: Explore Health Informatics**

- 7.1.1 Examine the history of health informatics
- 7.1.2 Understand the purpose and requirements of “meaningful use”
- 7.1.3 Define and discuss the benefits and challenges to interoperability
- 7.1.4 Examine the value of a health information exchange, electronic health records, and electronic medical records
- 7.1.5 Explore future trends of health informatics (e.g., telehealth)

Performance Standard 7.2: Explore Consumer Informatics

- 7.2.1 Define consumer health informatics
- 7.2.2 Explain patient-centered care
- 7.2.3 Explain the benefits of patient portals

CONTENT STANDARD 8.0: UNDERSTAND THE REVENUE CYCLE**Performance Standard 8.1: Understanding Revenue**

- 8.1.1 Define revenue and the revenue drivers in healthcare
- 8.1.2 Outline the revenue cycle in healthcare
- 8.1.3 Explain revenue sources within healthcare (Medicaid, Medicare, private insurance, etc.)

Performance Standard 8.2: Understanding Billing and Reimbursement

- 8.2.1 Discuss the impact of coding
- 8.2.2 Outline the billing process
- 8.2.3 Discuss principles of reimbursement