# Medical Assisting Program of Study and Complementary Course Standards



This document was prepared by:

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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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# **Table of Contents**

Acknowledgements / Standards Development Members / Business and Industry Validationvii		
Introduction	ix	
Program Information		
Content Standard 1.0	Integrate Career and Technical Student Organizations (CTSOs)2	
Content Standard 2.0	Understanding the Medical Assisting Profession3	
Content Standard 3.0	Describe General Operations in the Medical Environment4	
Content Standard 4.0	Understanding Administrative Procedures6	
Content Standard 5.0	Understanding Clinical Procedures7	
Content Standard 6.0	Prepare for Medical Office Emergencies9	
Complementary Courses		
Pharmacy Practice		
Health Information Management		

# Acknowledgements

The development of Nevada career and technical education (CTE) standards and assessments is a collaborative effort sponsored by the Nevada Department of Education (NDE) Office of Career Readiness, Adult Learning, and Education Options. The Nevada Department of Education relies on educators and industry representatives who have the technical expertise and teaching experience to develop standards and performance indicators that truly measure student skill attainment. More importantly, the NDE would like to recognize the time and commitment by the writing team members in developing the career and technical standards for Medical Assisting.

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# **Standards Development Members**

# **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 Medical Assisting 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 Medical Assisting 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 Medical Assisting 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, MA is the Standards Reference Code for Medical Assisting. For Content Standard 2, Performance Standard 3, and Performance Indicator 4, the Standards Reference Code would be MA.2.3.4.

# **Medical Assisting**

# **Program Information**

Program of Study:	Medical Assisting
Standards Reference Code:	MA
Career Cluster:	Health Science
Career Pathway(s):	Therapeutic 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 Medical Assisting course.

Required/ Complementary	Course Title	Abbreviated Name
R	Principles of Health Science	PRN HEALTH SCI
R	Medical Assisting MEDICAL ASST	
С	Medical Assisting Lab	MEDICAL ASST L

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

# 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)
- 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)

# **CONTENT STANDARD 2.0: UNDERSTANDING THE MEDICAL ASSISTING PROFESSION**

#### Performance Standard 2.1: Define Medical Terminology

- 2.1.1 Define three-word elements used in medical terms (22)
- 2.1.2 Define vocabulary for each body system, procedures, and processes (22)
- 2.1.3 Describe accepted abbreviations used in healthcare (22)
- 2.1.4 Write using correct medical terminology and abbreviations (22)

#### Performance Standard 2.2: Demonstrate Knowledge of Human Anatomy and Physiology

- 2.2.1 Describe all major body systems (22)
- 2.2.2 Explain the structures and functions of body systems (22)
- 2.2.3 Discuss the impact of disease processes on each body system (22)

#### Performance Standard 2.3: Describe the Medical Assisting Profession

- 2.3.1 Describe the duties and responsibilities of a medical assistant (22)
- 2.3.2 Explain the personal and professional attributes of a medical assistant (22)
- 2.3.3 Describe the educational processes for becoming a medical assistant in Nevada (22)
- 2.3.4 Describe the elements for certification and registration in Nevada (22)
- 2.3.5 Explain the professional organizations associated with medical assisting (22)
- 2.3.6 Analyze employment opportunities for a medical assistant (22)

# **CONTENT STANDARD 3.0: DESCRIBE GENERAL OPERATIONS IN THE MEDICAL ENVIRONMENT**

#### Performance Standard 3.1: Implement Effective Medical Assistant Communication

- 3.1.1 Describe types of nonverbal and verbal communication (22)
- 3.1.2 Define effective nonverbal and verbal communication (22)
- 3.1.3 Analyze and identify the elements of the communication loop (22)
- 3.1.4 Describe ways to promote effective and safe transmission of data (22)
- 3.1.5 Identify barriers and solutions to effective and safe communication (22)
- 3.1.6 Demonstrate effective and safe communication skills (22)

#### Performance Standard 3.2: Identify the Healthcare Team

- 3.2.1 Define the health care team (22)
- 3.2.2 Identify the members of the healthcare team (22)
- 3.2.3 Summarize the duties and responsibilities of the health care team (22)
- 3.2.4 Demonstrate an effective healthcare team (22)
- 3.2.5 Describe the medical assistant role in the healthcare team (22)

#### Performance Standard 3.3: Discuss Legal and Ethical Considerations

- 3.3.1 Define federal, state (Nevada Administrative Code and Nevada Revised Statutes), and local laws and regulations governing health care as it pertains to the scope of practice of a medical assistant (NRS 630.0129) (22)
- 3.3.2 Explain standards for Health Insurance Portability and Accountability Act (HIPAA) regulations (22)
- 3.3.3 Explore ethical considerations as applied to the medical assistant (22)
- 3.3.4 Outline standards for harassment, labor, and employment laws in Nevada (22)

#### Performance Standard 3.4: Maintain Medical Office Safety and Compliance

- 3.4.1 Apply professional standards for the use of Personal Protective Equipment (PPE) and standard precautions (22)
- 3.4.2 Describe Occupational Safety and Health Administration (OSHA) regulations as they apply to healthcare (22)
- 3.4.3 Describe how to comply with quality assurance (22)

#### Performance Standard 3.5: Explore Diverse Patient Populations and Sensitivity

- 3.5.1 Define sensitivity to social and cultural differences to obtain competency (22)
- 3.5.2 Define diverse patient populations (22)
- 3.5.3 Describe how to recognize and respect diverse patient populations (22)
- 3.5.4 Demonstrate understanding and display sensitivity to the needs of diverse patient populations (22)
- 3.5.5 Integrate cultural diversity and sensitivity amongst the healthcare team (22)

# Performance Standard 3.6: Explore Special Needs of the Patients

- 3.6.1 Identify patients with physical, mental, cognitive, and social or other needs as it impacts the delivery of healthcare (22)
- 3.6.2 Describe accommodations for patients with special needs (22)
- 3.6.3 Describe safety issues related to patients with special needs (22)
- 3.6.4 Demonstrate understanding and display sensitivity to patients with special needs (22)

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# **CONTENT STANDARD 4.0: UNDERSTAND ADMINISTRATIVE PROCEDURES**

#### Performance Standard 4.1: Implement Communication Methods

- 4.1.1 Identify other allied healthcare professionals associated with patient care (22)
- 4.1.2 Discuss the role of a medical assistant as a liaison between healthcare provider and patient and other healthcare providers (22)
- 4.1.3 Demonstrate professional telephone techniques and interpersonal skills (22)
- 4.1.4 Demonstrate an appointment scheduling system (22)
- 4.1.5 Discuss the role of a medical assistant as a patient advocate (22)
- 4.1.6 Determine available local community and public health resources (22)

#### Performance Standard 4.2: Identify Uses of Technology

- 4.2.1 Identify and operate basic office equipment (e.g., copy machine, computers, fax machine) (22)
- 4.2.2 Research and troubleshoot the most common issues with basic office equipment (22)
- 4.2.3 Discuss Health Insurance Portability and Accountability Act (HIPAA) in regard to file storage, communication, and security measures (22)
- 4.2.4 Identify inappropriate use of social media in the medical field (22)
- 4.2.5 Discuss workplace operations and security (22)
- 4.2.6 Discuss both physical and electronic medical record organization and storage (22)
- 4.2.7 Describe operations and use of equipment to be used by medical assistants (22)
- 4.2.8 Demonstrate competency of electronic medical records (EMR) program systems (22)

#### Performance Standard 4.3: Understanding the Medical Insurance Process

- 4.3.1 Identify different types of healthcare insurance coverage (22)
- 4.3.2 Define common insurance terminology (22)
- 4.3.3 Summarize billing, claims, processing, and fee schedules (22)
- 4.3.4 Describe patient co-pays and deductibles (22)
- 4.3.5 Prepare and process posting patient charges, super bill, encounter form, and claim form (22)
- 4.3.6 Define International Classification of Diseases (ICD) and Current Procedural Terminology (CPT) codes (22)

#### Performance Standard 4.4: Understanding Accounting Practices

- 4.4.1 Describe collection laws (22)
- 4.4.2 Calculate and process balance sheets, day sheets, and ledger sheets (22)
- 4.4.3 Calculate and process deposits, payroll, accounts receivable, accounts payable, and adjustments (22)

#### **CONTENT STANDARD 5.0: UNDERSTANDING CLINICAL PROCEDURES**

#### Performance Standard 5.1: Implement Aseptic and Infection Control Procedures

- 5.1.1 Describe and understand the chain of infection (22)
- 5.1.2 Apply aseptic and infection control measures (22)
- 5.1.3 Differentiate between surgical and medical aseptic procedures (22)
- 5.1.4 Define standard precautions (22)
- 5.1.5 Demonstrate standard precautions procedures (22)
- 5.1.6 Identify the regulations of the Centers for Disease Control and Prevention (CDC) including Bloodborne Pathogen Standards (22)
- 5.1.7 Outline procedures for biohazard and waste disposal (22)

#### Performance Standard 5.2: Explain the Patient History and Documentation Process

- 5.2.1 Identify components of a comprehensive medical history (22)
- 5.2.2 Utilize and demonstrate appropriate patient interviewing skills (22)
- 5.2.3 Obtain a comprehensive medical history (22)
- 5.2.4 Differentiate between charting methods used in the healthcare field (22)
- 5.2.5 Apply accurate documentation on medical records (22)
- 5.2.6 Recognize and implement legal documentation guidelines of medical records (22)
- 5.2.7 Report and document changes in patient status (22)

#### Performance Standard 5.3: Understand and Measure Vital Signs

- 5.3.1 Define vital signs (22)
- 5.3.2 Explain why vital signs are measured (22)
- 5.3.3 Summarize the normal ranges and characteristics of each vital sign (22)
- 5.3.4 Describe factors influencing vital signs (22)
- 5.3.5 Describe procedures for measuring vital signs (22)
- 5.3.6 Practice vital sign measurements (22)
- 5.3.7 Report and document vital signs (22)
- 5.3.8 Compute conversions between different measurement systems (22)

#### Performance Standard 5.4: Assisting with the Physical Examination Process

- 5.4.1 Identify the purpose and components of a physical examination (22)
- 5.4.2 Prepare the patient and room for the examination (22)
- 5.4.3 Follow procedures for patient safety and privacy during examination (22)
- 5.4.4 Identify the necessary equipment for each examination (22)
- 5.4.5 Describe the role of the medical assistant during examination (22)
- 5.4.6 Outline post-examination procedures (22)

# Performance Standard 5.5: Assisting with Specialty Examinations and Procedures

- 5.5.1 Describe the role of the medical assistant in specialty examinations (22)
- 5.5.2 Describe the role of the medical assistant in office surgical procedures (22)
- 5.5.3 Describe the role of the medical assistant in specimen collections and office laboratory procedures (22)
- 5.5.4 Describe the role of the medical assistant in treatment procedures (22)
- 5.5.5 Outline federal, state, and local laboratory regulations and safety procedure (22)

#### Performance Standard 5.6: Understanding Basic Pharmacology

- 5.6.1 Identify the medical assistant role in medication and pharmacology (22)
- 5.6.2 State the purpose of the "Rights" of drug administration (22)
- 5.6.3 Identify classifications, actions, and use of medications (22)
- 5.6.4 Calculate medication dosages using various systems of measurement (22)
- 5.6.5 Identify different routes of medication administrations and delivery systems (22)
- 5.6.6 Identify and report adverse reactions to medications (22)
- 5.6.7 Identify the parts of a prescription and prescription writing (22)
- 5.6.8 Describe prescription refill procedures (22)
- 5.6.9 Outline duties and responsibilities associated with dispensing and administering medications (22)
- 5.6.10 Participate in patient education (22)
- 5.6.11 Identify and report medication administration errors (22)

# Performance Standard 5.7: Explore Complementary and Alternative Medicine

- 5.7.1 Research the role of nutrition in patient care (22)
- 5.7.2 Define complementary and alternative medicine (22)
- 5.7.3 Outline different types of complementary and alternative medicine (22)
- 5.7.4 Demonstrate patient education and use of complementary and alternative medicine within the scope of a medical assistant (22)

# **CONTENT STANDARD 6.0: PREPARE FOR MEDICAL OFFICE EMERGENCIES**

#### Performance Standard 6.1: Responding to Patient Emergencies

- 6.1.1 Summarize patient medical emergencies (22)
- 6.1.2 Discuss patient psychological and behavioral emergencies (22)
- 6.1.3 Demonstrate medical emergency management as it relates to the medical assistant (22)
- 6.1.4 Discuss intervention techniques for psychological and behavioral emergencies (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.

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

# **Complementary Course Standards Contributing Members**

# **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 Pharmacy Practice and Health Information Management complementary standards for Medical Assisting program of study were validated through active participation of business and industry representatives on the development team.

# Complementary Course Information for Medical Assisting

# **Program Information**

Qualifying Program of Study:	Medical Assisting
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.

Required/ Complementary	Course Title	Abbreviated Name
С	Pharmacy Practice for Medical Assisting	PHARMACY MED ASST
С	Health Information Management for Medical Assisting	HLTH INFO MED ASST
С	Medical Assisting Advanced Studies	MEDICAL ASST AS
С	Industry-Recognized Credential – Medical Assisting	IRC MEDICAL ASST
С	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
- 3.2.3 Describe the prescription refill process
- 3.2.4 Assist with identifying the patient's needs for medical counseling
- 3.2.5 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 products

# 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 carious 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: Explore Careers

- 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: Understand Working Infrastructure

- 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: IDENTIFYAND 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