



## **Certified Clinical Medical Assistant (CCMA)**

Course Name	Certified Cli	nical Medical Assistant (CCMA)	Course = 1 Carnegie Unit Credit
Course Description	Certified Clinical Medical Assistant (CCMA) course provides preparation for the National Healthcareer Association (NHA) CCMA certification exam. The course also instills the knowledge and standards needed for excellence in Clinical Medical Assistant practice. The NHA CCMA certification is an approved certification found on the Career Development Incentive Program (CDIP) approved programs list.		
Note:	<ul> <li>This is a suggested scope and sequence for the course content. The content will work with any textbook or instructional resource. If locally adapted, make sure all competencies are covered.</li> <li>Please contact your local community college partner for credit options available.</li> <li>This course can only be run by instructors that can provide occupational experience in the field of Clinical Medical Assistant or similar careers. If instructors provide proof that they have taken and passed the NHA CCMA certification exam then they will be approved to run this course as part of their program.</li> <li>Students can sit for the exam up to 12 months before they graduate from high school.</li> <li>Provisional Certifications are offered for students that pass the CCMA exam in the 12 month window before graduation.</li> <li>Once students graduate instructors can complete an affidavit to show proof of graduation and NHA will upgrade your student's Provisional Certification to a Standard Certification at no fee.</li> </ul>		
Schedule:	Schedule calculation based on 60 contact hours. 60% of instruction time should be geared in meeting the course competencies in the scope and sequence. The remaining 40% of the instructional time allows for guest speakers, student presentations, field trips, remediation, or other content topics.		
All courses taught in an approved CTE program must include Essential Skills embedded into the course content. The  Essential Skills Framework for this course can be found at <a href="https://www.cde.state.co.us/standardsandinstruction/essentialskill">https://www.cde.state.co.us/standardsandinstruction/essentialskill</a>			
Instructional Unit Topic	Suggested Length of Instruction	CTE or Academic Standard Alignment (NHSS)	Competency / Outcomes
Foundational Knowledge and Basic Science		NHSS 3.1.4, 4.2.1,	Health care systems and settings     a. Role and responsibilities of the MA, other healthcare providers, and allied health personnel     b. Scope of practice     c. Titles and credentials     d. Licensing and certification





	<ul> <li>e. Healthcare delivery models (HMOs, PPOs, POS, PCMH, accountable care organizations/payment for performance [ACOs], hospice, collaborative care model)</li> <li>f. General versus specialties and services offered g. Ancillary services; alternative therapies</li> <li>h. Insurance fundamentals</li> </ul>
NHSS 1.1.1, 2.2	Medical terminology     a. Common abbreviations, acronyms, and symbols     b. Conditions, procedures, and instruments     c. Medical word building (prefixes, suffixes, plurals)     d. Positional and directional terminology
NHSS 1.3	<ul> <li>3. Basic pharmacology <ul> <li>a. Commonly prescribed medications and common approved abbreviations</li> <li>b. Drug classifications and drug schedules</li> <li>c. Side effects, adverse effects, indications, and contra-indications Measurement (for both metric and household systems), mathematical conversions, and dosage calculations</li> <li>d. Forms of medication (for example, pill, capsule, ointment)</li> <li>e. Look alike/sound alike medications</li> <li>f. Routes of administration</li> <li>g. Pharmacokinetics (absorption, distribution, metabolism, excretion)</li> <li>h. Rights of drugs/medication administration</li> <li>i. Physicians' Desk Reference and online resources</li> <li>jPrinciples of storage and disposal</li> </ul> </li> </ul>
NHSS 9.1	<ul> <li>4. Nutrition</li> <li>a. Dietary nutrients</li> <li>b. Dietary needs and patient education (general, and related to diseases and conditions)</li> <li>c. Vitamins and supplements</li> <li>d. Eating disorders</li> <li>e. Food labels</li> </ul>
NHSS 2.1.6, 9.2.1	<ul><li>5. Psychology</li><li>a. Developmental stages</li><li>b. End-of-life and stages of grief</li></ul>





		<ul> <li>c. Psychology of the physically disabled, developmentally delayed, and those with diseases</li> <li>d. Environmental and socio-economic stressors</li> <li>e. Mental health screening</li> <li>f. Defense mechanisms</li> </ul>
Anatomy and Physiology	NHSS 1.1,	Body structures and organ systems     a. Anatomical structures, locations, and positions     b. Structure and function of major body systems, including organs and their locations     c. Interactions between organ systems, homeostasis
	NHSS 1.2	<ul> <li>2. Pathophysiology and disease processes</li> <li>a. Signs, symptoms, and etiology of common diseases, conditions, and injuries</li> <li>b. Diagnostic measures and treatment modalities</li> <li>c. Incidence, prevalence, and risk factors</li> <li>d. Risk factors leading to high mortality and morbidity (for example, complications, accompanying diseases)</li> <li>e. Epidemics and pandemics</li> </ul>
	NHSS 7.1.1	<ul> <li>3. Microbiology</li> <li>a. Cell structure (for example, nucleus, cell wall, cell membrane, cytoplasm, ribosomes, mitochondria, lysosomes, nucleolus)</li> <li>b. Common pathogens and non-pathogens</li> <li>c. Organisms and microorganisms</li> <li>d. Infectious agents; chain of infection; conditions for growth</li> </ul>
Clinical Patient Care	NHSS 5.2.3, 6.2.2, 7.2.2, 8.2.4, 10.1	1. General Patient Care:  a. Identify patient b. Prepare examination/procedure room c. Ensure patient safety within the clinical setting d. Complete a comprehensive clinical intake process, including the purpose of the visit e. Measure vital signs f. Obtain anthropometric measurements g. Identify/document/report abnormal signs and symptoms h. Assist provider with general physical examination i. Assist provider with specialty examinations j. Prepare patient for procedures





	k. Prepare and administer medications and/or injectables using non-parenteral and parenteral routes (excluding IV) (for example, oral, buccal, sublingual, intramuscular, intradermal, subcutaneous, topical, transdermal, and inhalation)  I. Perform staple and suture removal m. Administer eye, ear, and topical medications n. Perform ear and eye irrigation o. Administer first aid and basic wound care p. Identify and respond to emergency/priority situations q. Perform CPR r. Assist provider with patients presenting with minor and traumatic injury s. Assist with surgical interventions (for example, sebaceous cyst removal, toenail removal, colposcopy, cryosurgery) t. Review provider's discharge instructions/plan of care with patients u. Follow guidelines for sending orders for prescriptions and refills by telephone, fax, or email v. Document relevant aspects of patient care inpatient record w. Operate basic functions of an EHR/EMR system x. Enter orders into CPOE
NHS	2. Infection control  a. Adhere to regulations and guidelines related to infection control Adhere to guidelines regarding hand hygiene  b. Perform disinfection/sanitization  c. Perform sterilization of medical equipment  d. Perform appropriate aseptic techniques for various clinical situations  e. Dispose of biohazardous materials as dictated by OSHA (for example, sharps containers, red bags)
NHS	





	NHSS 10.1	<ul> <li>e. Perform spirometry/pulmonary function tests (electronic or manual)</li> <li>f. Recognize, document, and report normal and abnormal laboratory and test values</li> <li>g. Match and label specimen to patient and completed requisition</li> <li>h. Process, handle, and transport collected specimens</li> <li>4. Phlebotomy <ul> <li>a. Verify order details</li> <li>b. Select appropriate supplies for test(s) ordered</li> <li>c. Determine venipuncture site accessibility based on patient age and condition</li> <li>d. Prepare site for venipuncture</li> <li>e. Perform venipuncture</li> <li>f. Perform capillary puncture</li> <li>g. Perform post-procedural care</li> <li>h. Handle blood samples as required for diagnostic purposes</li> </ul> </li> </ul>
		<ul> <li>i. Process blood specimens for laboratory</li> <li>j. Match and label specimen to the patient and completed requisition</li> <li>k. Recognize and respond to abnormal test results</li> <li>l. Prepare samples for transportation to a reference (outside) laboratory</li> <li>m. Follow guidelines in distributing laboratory results to</li> </ul>
	NHSS 10.1	ordering providers after matching patients to provider  5. EKG and Cardiovascular Testing  a. Prepare patients for procedure  b. Perform cardiac monitoring (EKG, ECG) tests  c. Ensure proper functioning of EKG equipment  d. Recognize abnormal or emergent EKG results (for example, dysrhythmia, arrhythmia, versus artifact)  e. Assist provider with non-invasive cardiovascular profiling (for example, stress test, Holter monitoring, event monitoring)  f. Transmit results or report to patient's EMR or paper chart, and provider
Patient Care Coordination and Education	NHSS 2.1, 2.2, 2.3, 11.1	Review patient record prior to visiting to ensure health care is comprehensively addressed





<ol> <li>Collaborate with healthcare providers and community-based organizations</li> <li>Assist providers in coordinating care with community agencies for clinical and non-clinical services</li> <li>Facilitate patient compliance (for example, continuity of care, follow up, medication compliance) to optimize health outcomes</li> <li>Participate in transition of care for patients</li> <li>Participate in team-based patient care (for example, patient-centered medical home [PCMH], Accountable Care Organization [ACO])</li> </ol>