

Medical Assistant II

8346 36 weeks / 280 hours

Table of Contents

Acknowledgments.....	2
Course Description.....	3
Task Essentials Table.....	3
Curriculum Framework.....	5
Communicating in the Workplace	5
Demonstrating Knowledge and Use of Safety Practices.....	8
Maintaining Medical and Surgical Asepsis	10
Assisting Physician with Examination.....	12
Assisting with Minor Surgical Procedures.....	18
Providing First Aid and Emergency Care	22
Assisting in the Administration of Selected Treatments.....	24
Performing Office Functions	27
Managing Medical and Financial Records.....	28
Demonstrating Responsibility for Professional Development.....	30
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Describing the Opioid Crisis.....	32
Examining the Key Factors of Drug Addiction	35
Understanding Pain Management Protocols	39
Working with Patients and Caregivers.....	47
SOL Correlation by Task	49
Entrepreneurship Infusion Units	51
Opioid Abuse Prevention Education.....	51
Appendix: Credentials, Course Sequences, and Career Cluster Information	53

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Course Description

Suggested Grade Level: 12

Prerequisites: 8345

Students apply and implement medical-assisting skills and techniques learned in Medical Assistant I. They also learn management of health records; cardiopulmonary resuscitation; care and use of equipment; collection and analysis of laboratory specimens; special diagnostic testing related to basic diseases and disorders, treatment, and medication; and job preparedness skills. Advanced on-the-job clinical experience in a healthcare facility is a part of the course. Successful completion of the program may lead to employment in a healthcare setting and an industry credential.

NOTE: This course has specific state laws and regulations from a governing medical board or agency. Please contact the Virginia Department of Education, Office of Career and Technical Education prior to implementing this course. All inquiries may be sent to cte@doe.virginia.gov.

Task Essentials Table

- Tasks/competencies designated by plus icons (⊕) in the left-hand column(s) are essential
- Tasks/competencies designated by empty-circle icons (○) are optional
- Tasks/competencies designated by minus icons (⊖) are omitted
- Tasks marked with an asterisk (*) are sensitive.

8346	Tasks/Competencies
	Communicating in the Workplace
⊕	Maintain professional relationship with patient, caregivers, and colleagues.
⊕	Demonstrate respect for diverse individuals.
⊕	Apply medical ethics in a clinical setting.
	Demonstrating Knowledge and Use of Safety Practices
⊕	Follow office protocol for emergency procedures.
⊕	Evaluate the work environment to identify unsafe work conditions.

8346	Tasks/Competencies
<input type="radio"/>	Explain radiographic safety.
Maintaining Medical and Surgical Asepsis	
<input checked="" type="radio"/>	Implement standard precautions.
<input checked="" type="radio"/>	Apply and remove sterile and disposable gloves and disposable PPE.
<input checked="" type="radio"/>	Clean equipment.
Assisting Physician with Examination	
<input checked="" type="radio"/>	Distinguish basic signs and symptoms of common disorders for each body system.
<input checked="" type="radio"/>	Describe dietary considerations for common disorders.
<input checked="" type="radio"/>	Provide containers or slides for specimen collection.
<input checked="" type="radio"/>	Collect basic specimens for analysis in a clinical setting.
<input checked="" type="radio"/>	Perform and/or assist with diagnostic tests.
<input checked="" type="radio"/>	Assist patients with dressing in a medical setting.
<input checked="" type="radio"/>	Provide medical supplies and patient education, as indicated by the healthcare provider.
<input checked="" type="radio"/>	Direct patient to the site of any further testing, if indicated by the physician.
Assisting with Minor Surgical Procedures	
<input checked="" type="radio"/>	Describe surgical procedures commonly performed in an ambulatory-care center.
<input checked="" type="radio"/>	Prepare a sterile field.
<input checked="" type="radio"/>	Prepare surgical instruments.
<input checked="" type="radio"/>	Assist healthcare provider in minor surgery, maintaining sterile techniques throughout.
<input checked="" type="radio"/>	Differentiate among types of anesthesia.
Providing First Aid and Emergency Care	
<input checked="" type="radio"/>	Assist in providing emergency aid as directed by supervisor.
<input checked="" type="radio"/>	Demonstrate cardiopulmonary resuscitation (CPR), and using an automated external defibrillator (AED).
Assisting in the Administration of Selected Treatments	
<input checked="" type="radio"/>	Apply and change dressings or bandages in a clinical setting.
<input checked="" type="radio"/>	Identify the parameters of parenteral medications administration.
<input type="radio"/>	Use drug resources.
<input checked="" type="radio"/>	Administer therapeutic modalities, under supervision of a supervisor or instructor.
Performing Office Functions	
<input type="radio"/>	Schedule patients in a clinical setting.
<input checked="" type="radio"/>	Register patients in a clinical setting.
Managing Medical and Financial Records	
<input checked="" type="radio"/>	File documents.
<input type="radio"/>	Access patient records.
<input type="radio"/>	Demonstrate completion and submittal of insurance forms.
Demonstrating Responsibility for Professional Development	
<input checked="" type="radio"/>	Identify credentialing options for medical assistants.
<input checked="" type="radio"/>	Prepare a career portfolio with résumé.

8346	Tasks/Competencies
Describing the Opioid Crisis	
+	Describe the history and current state of the opioid crisis in the United States.
+	Describe the history and current state of the opioid crisis in Virginia.
+	Define the pharmacological components and common uses of opioids.
Examining the Key Factors of Drug Addiction	
+	Examine the science of addiction.
+	Explain prevention and early intervention strategies.
+	Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).
+	Describe the treatment models of addiction therapy.
+	Describe the medication management antidote used to prevent fatal opioid overdoses.
Understanding Pain Management Protocols	
+	Explain the science of physiological and mental pain.
+	Describe the diagnostic tools used in developing pain management plans.
+	Describe pain treatment options available to various populations of patients.
+	Describe the effects of opioid dependency on the human body systems.
+	Explain the mechanism and physical effects of opioids on the human body.
+	Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.
+	Describe the withdrawal and tapering side effects of opioid use.
+	Describe storage and disposal options for opioids.
+	Explain community resources for education about opioid use.
Working with Patients and Caregivers	
+	Describe key communication topics involving opioids for patients.
+	Describe communication topics for caregivers and family members.

Legend: + Essential ○ Non-essential ⊖ Omitted

Curriculum Framework

Communicating in the Workplace

Task Number 39

Maintain professional relationship with patient, caregivers, and colleagues.

Definition

Maintaining a professional relationship with patient, caregivers, and colleagues should include

- providing exemplary customer service
- exhibiting positive and professional verbal and nonverbal communication skills
- acting as a responsible team member
- adhering to legal and ethical principles at all times.

Process/Skill Questions

- What is the role of nonverbal communication in maintaining professionalism?
- How does the professionalism of the medical assistant influence patient care?

Task Number 40

Demonstrate respect for diverse individuals.

Definition

Demonstration should include respect for diverse

- genders
- races
- religions
- ages
- economic statuses
- languages.

Providing culture- and age-sensitive care to patients should include adapting medical interventions and interaction strategies as appropriate.

Process/Skill Questions

- Why is it necessary for the medical assistant to recognize and respect cultural diversity in the workplace?
- What age-sensitive situations may arise with patients in a healthcare setting?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Human Growth and Development
- Knowledge Test: Medical Law and Ethics

Recognition

- Health Care Issues Exam
-

Task Number 41

Apply medical ethics in a clinical setting.

Definition

Applying medical ethics should include behaviors such as

- ensuring patients' rights
- maintaining confidentiality
- exhibiting honesty in all transactions
- ensuring that medical procedures are carried out to the best of one's ability (e.g., medical asepsis, testing, and medical record-keeping)
- developing a plan for separation of personal and professional ethics.

Following the professional code of conduct for medical assistants should include careful attention to stay within the scope of practice as a member of the medical team. It should also include identifying the legality and/or ethics surrounding medical issues involved in current controversies.

Process/Skill Questions

- What is the difference between law and ethics?
- What is the purpose of a code of professional ethics? What ethical principles are medical assistants expected to uphold?
- What should a medical assistant do if he or she believes that a patient's rights have been violated?
- Can a medical assistant be sued for malpractice? Explain.

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Medical Law and Ethics

Teamwork Events

- Biomedical Debate
- Creative Problem Solving

Demonstrating Knowledge and Use of Safety Practices

Task Number 42

Follow office protocol for emergency procedures.

Definition

Following office protocol should include

- explaining the concept and the rationale of protocols
- adhering to procedures/guidelines to assure the healthcare safety of clients and employees in cases of emergencies.

Process/Skill Questions

- How important is it to have an office protocol regarding emergencies? Why?
- What role does the medical assistant play in ensuring the safety of the patients?

HOSA Competitive Events (High School)

Health Science Events

- Dental Terminology
- Medical Spelling
- Knowledge Test: Pathophysiology

Health Professions Events

- Medical Assisting

Teamwork Events

- HOSA Bowl
-

Task Number 43

Evaluate the work environment to identify unsafe work conditions.

Definition

Evaluation should include

- describing fundamental principles for evacuation of a healthcare setting
- identifying critical elements of an emergency plan for response to a natural disaster or other emergency
- describing the purpose of Safety Data Sheets (SDS) in a healthcare setting.

See [National Institute for Occupational Safety and Health \(NIOSH\)](#).

Process/Skill Questions

- How does one begin the evacuation of a healthcare facility?
- What are the purposes of SDSs in a healthcare setting?

Task Number 44

Explain radiographic safety.

Definition

Explanation should include adherence to radiographic guidelines as specified by the Virginia Department of Health and the Radiation Safety Commission.

See [Dental Assisting National Board Inc. \(DANB\) Radiation Health Safety exam blueprint](#).

Process/Skill Questions

- Why are all radiographic rooms lead-lined?
- How do radiation badges protect workers?
- How are patients protected from radiation exposure?

HOSA Competitive Events (High School)

Health Professions Events

- Clinical Specialty

Teamwork Events

- HOSA Bowl

Maintaining Medical and Surgical Asepsis

Task Number 45

Implement standard precautions.

Definition

Implementation of standard precautions should include

- using personal protective equipment (PPE)
- handling of sharps
- performing hand hygiene
- using eye wash equipment
- using alcohol-based hand hygiene
- handling and disposing of biohazard materials
- identifying Occupational Safety and Health Administration (OSHA) blood-borne standards (including exposure-control plan and exposure incident management).

Process/Skill Questions

- What is the scientific basis of standard precautions?
- Why should all medical facilities have a biohazard exposure control plan and exposure incident management strategies?
- What are the implications for staff and patients if standard precautions are improperly carried out?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Medical Assisting
-

Task Number 46

Apply and remove sterile and disposable gloves and disposable PPE.

Definition

Application and removal of PPE should include the use of industry standard techniques when putting on and taking off

- gloves
- gown
- mask
- eye protection.

From the CDC, [CDC: Radiation Guidelines.](#)

Process/Skill Questions

- In what medical situations would various types of PPE be necessary?
- Why must all PPE be applied and removed according to a prescribed technique?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 47

Clean equipment.

Definition

Cleaning equipment, in addition to disinfecting it, should include the following:

- Sanitizing contaminated instruments

- Performing chemical disinfection
- Wrapping instruments for autoclaving
- Sterilizing articles in an autoclave

in accordance with policy and procedure, according to manufacturer's instructions.

Process/Skill Questions

- Which commonly-used medical instruments require chemical disinfection? How is this accomplished?
- What is the difference between medical and surgical asepsis? Under what circumstances is each used? Why?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting

Assisting Physician with Examination

Task Number 48

Distinguish basic signs and symptoms of common disorders for each body system.

Definition

Distinction should include listing basic signs and symptoms and diagnostic procedures of pathological conditions for each of the following systems:

- Integumentary
- Musculoskeletal
- Cardiovascular
- Respiratory
- Nervous
- Urinary
- Reproductive
- Circulatory

- Lymphatic and immune
- Digestive
- Endocrine
- Sensory

Process/Skill Questions

- Why is it important for a medical assistant to be able to recognize basic signs and symptoms of common medical disorders? How do medical professionals assess for common medical disorders?
- What diagnostic procedures are used to treat these disorders?

HOSA Competitive Events (High School)

Teamwork Events

- HOSA Bowl
-

Task Number 49

Describe dietary considerations for common disorders.

Definition

Descriptions should include dietary considerations for disorders such as

- weight control
- diabetes
- cardiovascular disease
- hypertension
- cancer
- lactose sensitivity
- gluten-free
- food allergies.

Process/Skill Questions

- What is diabetes?
 - What is hypertension?
 - How is hypertension controlled?
-

Task Number 50

Provide containers or slides for specimen collection.

Definition

Provision should include

- proper identification on containers or slides
- correct labeling of containers or slides
- use of industry standard aseptic technique.

Process/Skill Questions

- Why must the medical assistant be familiar with various specimen collection materials and methods?
- How does this knowledge affect examination process?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 51

Collect basic specimens for analysis in a clinical setting.

Definition

Collection should include

- urine
- stool
- sputum
- blood specimens.

Collection and analysis must be performed under the supervision of a clinical supervisor and/or an instructor.

See [Venous Blood Collection Order of Draw.](#)

See [Sites for Venipuncture.](#)

Process/Skill Questions

- How does the collected data aid in diagnosing a patient's illness?
- How does the collected data affect a patient's care?
- What are the legal implications when collecting specimens?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Biomedical Laboratory Science
 - Medical Assisting
-

Task Number 52

Perform and/or assist with diagnostic tests.

Definition

Performing and/or assisting with basic and body-system-specific diagnostic tests in a clinical setting should include the following:

- Electrocardiogram (EKG)
- Vision test
- Hearing screening
- Spirometry
- Pregnancy test
- Stress test
- Stool test
- Throat culture
- Allergy test
- Human papillomavirus (Pap) smear
- Glucose test
- Nasal swab
- Drug screen
- Urinalysis
- Vital signs

Process/Skill Questions

- What is the difference between basic and body-system-specific diagnostic tests?
- Why is it important for the medical assistant to understand the reasons for the collection of common specimens?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Biomedical Laboratory Science
 - Medical Assisting
-

Task Number 53

Assist patients with dressing in a medical setting.

Definition

Assistance should include the elderly, the disabled, or young children.

Process/Skill Questions

- What age-related privacy issues must be considered with assisting a patient with dressing?
- What culture-related privacy issues must be considered with assisting a patient with dressing?
- How may body mechanics play a role in assisting a patient with dressing?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 54

Provide medical supplies and patient education, as indicated by the healthcare provider.

Definition

Provision should include

- condition-specific supplies
- distribution of brochures
- patient instruction sheets
- medication education
- directions for follow-up care
- directions for specimen collection.

Process/Skill Questions

- Who is considered to be a healthcare provider?
- What communication skills are necessary when educating a patient?
- What factors should be considered when communicating with a patient who is not adhering to care instructions?
- What are the responsibilities of the healthcare provider in patient education and follow-up care/instructions? What are the responsibilities of the medical assistant?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 55

Direct patient to the site of any further testing, if indicated by the physician.

Definition

Directing patient to the site of further testing should include

- oral directions

- electronic directions
- written instructions
- assessing needs of patients who are/have
 - non-English speaking
 - vision-impaired
 - communication barriers.

Process/Skill Questions

- What communication skills are necessary for the medical assistant when giving directions to the patient?
- Why is it important to provide both oral and written directions?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting

Assisting with Minor Surgical Procedures

Task Number 56

Describe surgical procedures commonly performed in an ambulatory-care center.

Definition

Description should include procedures such as

- cyst removal
- laceration repair
- skin lesion removal
- abscess and incision drainage
- suture removal
- staple removal
- minor surgical office procedures

Also, consent for a procedure should be received before the procedure is performed.

Process/Skill Questions

- What is the medical assistant's role in assisting with cyst removal, laceration repair, and abscess and incision drainage?
- What are the considerations when deciding where a surgical procedure should be performed?
- What instruments are commonly used during minor surgical procedures?
- What types of anesthesia might be administered during a minor surgical procedure?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Medical Assisting

Teamwork Events

- HOSA Bowl
-

Task Number 57

Prepare a sterile field.

Definition

Preparation should include setting up the sterile field with

- instruments
- solutions
- supplies.

Maintaining a sterile field should include

- preparing a patient (e.g., sterile drape)
- identifying surgical asepsis techniques (e.g., donning surgical PPE)
- demonstrating surgical asepsis techniques.
- preparing a room for a surgical procedure.

Process/Skill Questions

- What are common ways that a sterile field can be contaminated?
- What can result if a sterile field becomes contaminated during minor surgical procedures?
- What is the next step should the sterile field be contaminated?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 58

Prepare surgical instruments.

Definition

Preparation should include surgical instruments such as

- forceps
- clamps
- needle holders
- scalpels
- scissors.

Process/Skill Questions

- What are the most common surgical instruments used in minor surgical procedures?
What is the function of each instrument?
- What precautions must be taken when handling surgical instruments?
- How should surgical instruments be cared for?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting

Teamwork Events

- HOSA Bowl

Task Number 59

Assist healthcare provider in minor surgery, maintaining sterile techniques throughout.

Definition

Assistance should include the following:

- Providing equipment and supplies as needed
- Handing instruments to physician as directed
- Caring for and labeling specimens
- Cleaning the surgical room
- Obtaining and explaining informed consent
- Verifying discharge instruction
- Checking surgical time-out

Process/Skill Questions

- What organizational skills are important when assisting a healthcare provider in minor surgery?
- What is the importance of obtaining informed consent prior to surgery?
- What are the different types of consent?
- What is *chain of custody* and its purpose?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting

Emergency Preparedness Events

- Epidemiology

Task Number 60

Differentiate among types of anesthesia.

Definition

Differentiation should include a description of

- topical anesthesia
- local anesthesia
- general anesthesia.

Process/Skill Questions

- Why is anesthesia important in many minor surgical procedures?
- What is the purpose of a topical anesthetic, a local anesthetic, and a general anesthetic? In what types of surgery might each anesthetic be used?
- What are the potential risks of various common anesthetics?
- What precautions must be taken when applying anesthetics?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting

Teamwork Events

- HOSA Bowl

Providing First Aid and Emergency Care

Task Number 61

Assist in providing emergency aid as directed by supervisor.

Definition

Assistance should include following procedures in providing first aid for conditions such as

- fainting
- bleeding
- shock
- anaphylactic shock

- diabetic emergency
- heat stroke
- heart attack
- environmental emergency
- opioid overdoses.

Assistance should also include determining when, how, and what type of additional help should be summoned.

Process/Skill Questions

- What should a medical assistant do when a medical emergency occurs in the healthcare provider's facility?
- How is patient care affected if a medical assistant has an understanding of emergency procedures?

HOSA Competitive Events (High School)

Emergency Preparedness Events

- CPR/First Aid

Task Number 62

Demonstrate cardiopulmonary resuscitation (CPR), and using an automated external defibrillator (AED).

Definition

Demonstration of CPR and using an AED, should include those situations involving

- adult patient
- child patient
- infant patient
- one- and two-person CPR
- obstructed airway.

Student must be certified in Basic Life Support for Healthcare Providers (BLS) prior to administering CPR.

Process/Skill Questions

- What is meant by the compression airway breathing (CAB) of CPR? Why is each important?
- What is the BLS chain of survival for adults? What is the BLS pediatric chain of survival?
- Why must a person be certified in BLS prior to administering CPR?

HOSA Competitive Events (High School)

Emergency Preparedness Events

- CPR/First Aid

Assisting in the Administration of Selected Treatments

Task Number 63

Apply and change dressings or bandages in a clinical setting.

Definition

Applying and changing may include

- sterile dressings
- burn dressings
- bandaging and splinting with an elastic wrap
- pressure bandaging.

Process/Skill Questions

- What is the difference between a dressing and a bandage? When is a dressing appropriate and when is a bandage appropriate?
- Why is maintaining sterility when doing a sterile dressing change so important to the patient's healing?
- What damage can occur when an elastic wrap is not applied properly?
- What is appropriate dressing for vascular access? What are appropriate dress materials?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Medical Assisting
-

Task Number 64

Identify the parameters of parenteral medications administration.

Definition

Identification should include

- correct dosage calculation
- administration of prescribed medication in a variety of forms (e.g., injected, intravenous, topical, or oral), as directed
- supervision by a supervisor or instructor throughout the process.

Process/Skill Questions

- What are the rights to safe medication administration?
- What are some common drug contraindications?
- What are some common adverse reactions?
- Why are medications administered in a variety of formats, within regard to medication administration?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Medical Assisting

Task Number 65

Use drug resources.

Definition

Use of drug resources should include locating appropriate drug information in the appropriate drug reference (e.g., *Physicians' Desk Reference* [PDR] or *United States Pharmacopeia* [USP]).

Process/Skill Questions

- What specific information about a medication can be obtained in the PDR?
- What is the difference between the information found in the PDR and that found in the USP?
- What resources are available to check use of herbal, homeopathic, naturopathic remedies/treatments?
- What are the risks of using unauthenticated websites to locate prescription drug information?
- Under what circumstances might a medical assistant need to research a prescription drug?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Medical Assisting

Task Number 66

Administer therapeutic modalities, under supervision of a supervisor or instructor.

Definition

Administration should include procedures such as

- applying ice/heat packs
- applying cold compresses
- applying moist compresses
- performing range-of-motion joint exercises.

Process/Skill Questions

- What damage can occur to a patient's skin if an ice/heat pack is not applied in the correct manner?
- What is the underlying principle of a moist compress? When is it appropriate to apply a moist compress to a patient?
- What medical conditions benefit from range-of-motion joint exercises?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Medical Assisting

Performing Office Functions

Task Number 67

Schedule patients in a clinical setting.

Definition

Scheduling patients in a clinical setting may include

- using an electronic appointment scheduling system
- maintaining an appointment book
- keying in and reviewing a daily schedule
- reviewing schedule with healthcare provider
- arranging and scheduling patients for admission, surgery, or diagnostic testing
- rescheduling missed appointments.

Process/Skill Questions

- What is the difference between electronic scheduling and paper appointment-book scheduling? In what circumstances might one be preferable to the other?
- What are the roles of effective communication in scheduling and rescheduling patients?
- Why is it sometimes necessary to review the schedule with the physician?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 68

Register patients in a clinical setting.

Definition

Registration should include

- providing appropriate forms for completion
- verifying insurance information
- procuring chart.

Process/Skill Questions

- What information would the receptionist need to register a patient for services?
- Why is verification of insurance information so important?
- How has Health Insurance Portability and Accountability Act (HIPAA) affected patient registration?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Managing Medical and Financial Records

Task Number 69

File documents.

Definition

Filing of diagnostic documents should include the correct and timely placement of laboratory, radiology, electrocardiograms, and other reports, according to the filing system used at the specific medical facility.

Process/Skill Questions

- Who is responsible for communicating diagnostic results to the healthcare provider?
- Why is it so important to file diagnostic documents correctly and in a timely manner?
- What methods are used to convert paper files to electronic files?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting

Task Number 70

Access patient records.

Definition

Accessing patient records for re-filing should include locating records and replacing them as appropriate.

Process/Skill Questions

- What are the basic features of filing systems commonly used in a clinical setting? What are the advantages and disadvantages of each?
- Why is it so important to pull and re-file patient records in a timely manner?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Task Number 71

Demonstrate completion and submittal of insurance forms.

Definition

Demonstration should reflect a knowledge of various types of forms (e.g., Medicare, Medicaid, and private insurance) and should include appropriate coding for each.

Process/Skill Questions

- How is insurance coverage provided by Medicare, Medicaid, and private insurance companies similar and different?
- How are different types of insurance forms submitted for reimbursement to medical offices?
- Why is it important for the medical assistant to keep up-to-date with changes in the way various insurance claims are handled? How can this continuing education be accomplished?

HOSA Competitive Events (High School)

Health Professions Events

- Medical Assisting
-

Demonstrating Responsibility for Professional Development

Task Number 72

Identify credentialing options for medical assistants.

Definition

Identification should include registration and certification.

See Medical Assistant II Industry Certifications.

Process/Skill Questions

- What is the difference between registration and certification as credentialing options for medical assistants?
- How can a medical assistant obtain certification and registration?

HOSA Competitive Events (High School)

Teamwork Events

- Health Career Display
-

Task Number 73

Prepare a career portfolio with résumé.

Definition

Preparation of a career portfolio should include developing a résumé containing information such as

- medical assistant (MA) certification
- CPR/AED certification
- ECG certification
- awards and recognitions
- volunteer and community service
- membership in a healthcare professional organization
- other healthcare related experience
- courses such as [Health Occupations Students of America \(HOSA\)](#), and [National Technical Honor Society \(NTHS\)](#)
- other related school activities.

Preparation should also include samples of the student's work, as appropriate, as well as cover and thank-you letters related to the job application process. See [2016-2017 Occupational Outlook Handbook](#).

Process/Skill Questions

- What pertinent information should be included in a résumé?
- What are the benefits of joining a professional organization?

HOSA Competitive Events (High School)

Leadership Events

- Job-Seeking Skills

Teamwork Events

- Health Career Display

Describing the Opioid Crisis

Task Number 74

Describe the history and current state of the opioid crisis in the United States.

Definition

Description should include

- the relationship between opioid prescribing and illicit opioid use to overall opioid overdose deaths
- the prevalence of co-occurring mental health disorders
- the shift in attitudes in the 1990s toward pain management and use of opioids, including the role of pharmaceutical marketing
- the stigma associated with addiction and the changing view of addiction from a moral failing to a chronic, relapsing disease
- statistics, trends, and demographics surrounding the crisis
- population health and other public health aspects of the crisis, including its effects on family and neonates, as well as overall health costs.

Process/Skill Questions

- How are opioids created?
- Can opioids be safely prescribed to patients taking psychotropic drugs?
- How does society stereotype individuals with a history of drug addiction?

- What are the current trends that have contributed to the nationwide opioid crisis?
- How has the opioid epidemic affected emergency rooms and the first responder system?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
- HOSA Bowl
- Public Service Announcement

Task Number 75

Describe the history and current state of the opioid crisis in Virginia.

Definition

Description should include

- the relationship between opioid prescribing and illicit opioid use to overall opioid overdose deaths
- the prevalence of co-occurring mental health disorders
- the shift in attitudes in the 1990s toward pain management and use of opioids, including the role of pharmaceutical marketing
- the stigma associated with addiction and the changing view of addiction from a moral failing to a chronic, relapsing disease
- statistics, trends, and demographics surrounding the crisis
- population health and other public health aspects of the crisis, including its effects on family and neonates, as well as overall health costs
- the Virginia Department of Health's [Declaration of a Public Health Emergency](#) on November 21, 2016
- proposed legislation to address the crisis in Virginia (i.e., [House Bill 2161](#) and [Senate Bill 1179](#), which require the secretary of health and human resources to convene a workgroup to establish educational guidelines for training healthcare providers in the safe prescribing and appropriate use of opioids)
- the development of curricula and educational standards regarding opioid addiction.

Resource: [The Opioid Crisis Among Virginia Medicaid Beneficiaries](#)

Process/Skill Questions

- What agencies participated in the governor’s task meeting on the opioid crisis?
- What educational organizations will be tasked with providing opioid training to their students?
- What is the benefit of educating future medical professionals about opioid addiction?
- What is the current attitude in society about opioid use and addiction?
- How is the local community affected by the opioid epidemic?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
- HOSA Bowl
- Public Service Announcement

Task Number 76

Define the pharmacological components and common uses of opioids.

Definition

Definition should include

- plant-based opioids (e.g., opium from poppy seeds)
- names of legal and illegal opioids
- [heroin](#)
- names of the most common opioids
- [fentanyl](#)
- medical diagnoses and injuries associated with opioid prescriptions
- [commonly used terms](#).

Resource: [Prescription Pain Medications](#), National Institute on Drug Abuse for Teens

Process/Skill Questions

- For what illnesses are opioids commonly prescribed?
- What is the current medical protocol when opioids are prescribed?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing

Examining the Key Factors of Drug Addiction

Task Number 77

Examine the science of addiction.

Definition

Examination should include

- biopsychosocial aspects of addiction
- the role of endorphins and dopamine
- the role of religious beliefs
- behavioral aspects of addiction
- life cycle of addiction
- misuse of opioids.

Process/Skill Questions

- How will understanding the physiological absorption of opioids in the body provide a holistic assessment?

- What spiritual characteristics might be observed in the science of addiction?
- What are some genetic explanations for some family members being more prone to addiction?

Task Number 78

Explain prevention and early intervention strategies.

Definition

Explanation should include

- risk and protective factors in opioid addiction
- specific populations at risk of addiction
- motivational interviewing and other communication strategies
- naloxone co-prescribing
- roles of family and social institutions in prevention and early intervention.

Resources:

- [Prevention Tip Card](#), Office of the Attorney General of Virginia
- [Prescription Opioids: Even When Prescribed by a Doctor](#) (video), Centers for Disease Control and Prevention (CDC)

Process/Skill Questions

- What are the physiological characteristics of opioid addiction?
- What demographic is most affected by the opioid epidemic? What are some explanations for this?
- How can provision of naloxone and training in its use be sustained financially?
- What obligations do families and society as a whole have in preventing and providing early intervention related to drug addiction?

Task Number 79

Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).

Definition

Identification should include

- DSM-5 Criteria for Substance Use Disorders
- American Society of Addiction Medicine (ASAM) Criteria (i.e., The Six Dimensions of Multidimensional Assessment)
- CONTINUUM, The ASAM Criteria Decision Engine
- clinical and behavioral aspects of addiction
- practice-appropriate screening tools, including co-morbidity screening.

Process/Skill Questions

- What are DSM-5 and ASAM and what information do they provide to healthcare professionals?
- What are clinical and behavioral elements of addiction that should be recognized by healthcare professionals?
- Who is responsible for providing the necessary screening tools and training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Behavioral Health

Health Professions Events

- Clinical Nursing

Task Number 80

Describe the treatment models of addiction therapy.

Definition

Description should include

- a recognition that addiction is a chronic disease
- evidence-based treatment models for addiction in general and opioid addiction in particular
- medication-assisted treatment
- the continuum of care in opioid addiction treatment
- how and when to make a referral for treatment
- the roles in an interdisciplinary addiction team
- the role of peers in the treatment of addiction

- the difference between a drug culture and recovery culture
- the management of patients in recovery, including factors contributing to relapse.

Process/Skill Questions

- How many treatment models exist for addiction therapy? Why is one model better than the other?
- What are the advantages of evidence-based treatments and models?
- What medication-assisted treatment programs are available? Who provides them?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology
- Knowledge Test: Behavioral Health

Health Professions Events

- Clinical Nursing

Task Number 81

Describe the medication management antidote used to prevent fatal opioid overdoses.

Definition

Description should include

- availability and use of naloxone
- naloxone training (e.g., [REVIVE!](#))
- naloxone training agencies
- monitoring of concurrent prescriptions.

Resources:

- [Frequently Asked Questions about Naloxone](#), Virginia Department of Health
- [How to administer Narcan nasal spray](#), Adapt Pharma
- [How to prepare naloxone for administration](#), Virginia Department of Behavioral Health and Developmental Services

Process/Skill Questions

- What is naloxone?
- How much does naloxone cost with health insurance? How much does naloxone cost without health insurance?
- Who should receive naloxone training?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Understanding Pain Management Protocols

Task Number 82

Explain the science of physiological and mental pain.

Definition

Explanation should include

- definition of pain from the International Association for the Study of Pain (IASP)
- neurobiological basis of pain
- biopsychosocial model of pain
- types of pain (e.g., neuropathic)
- acute, sub-acute, and chronic pain, including pain generation
- spinal and brain modulation, behavioral adaptation and maladaptation, and the continuum from acute to chronic disabling pain
- the underlying science of pain relief.

Process/Skill Questions

- What is the IASP definition of pain?
- How can a medical professional get a patient to describe physiological pain?
- What assessment tools can be used to help patients describe physiological pain? How do tools differ for describing mental pain?
- How are pain and levels of pain categorized?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
- Creative Problem Solving
- HOSA Bowl

Task Number 83

Describe the diagnostic tools used in developing pain management plans.

Definition

Description should include

- pain-related health history and examination
- understanding the role of family in supporting individuals in need of pain management
- practice-appropriate screening tools that include aspects such as mood and function
- the use and limitations of pain scales
- differential diagnosis of pain and its placement on the pain continuum.

Resource: [Promoting Safer and More Effective Pain Management](#), CDC

Process/Skill Questions

- What are the Wong-Baker, LEGO, and Hospice assessment tools?
- How do pain assessment tools vary across the life span?
- When completing an assessment, is pain considered subjective or objective?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
 - Creative Problem Solving
 - HOSA Bowl
-

Task Number 84

Describe pain treatment options available to various populations of patients.

Definition

Description should include

- special populations in pain management, such as palliative/end-of-life care patients, patients with cancer, pediatric patients, and geriatric populations
- non-pharmacologic treatment of pain, including active care and self-care, evidence- and non-evidence-based approaches, and multimodal pain management
- non-opioid pharmacologic management of pain
- the challenges in discussing the psychological aspects of pain and the role of the central nervous system
- adverse drug event prevention for all pain medications
- the roles in an interdisciplinary pain management team
- the significance of issues such as anxiety, depression, and sleep deprivation in pain management
- the placebo effect
- goals and expectations in the treatment of pain, based on diagnosis and pain continuum
- when to make a pain referral and to whom.

Resources:

- [CDC Fact Sheet for Prescribing Opioids for Chronic Pain](#)
- [CDC Guidelines for Prescribing Opioids for Chronic Pain](#)

Process/Skill Questions

- What pain management resources are available for special populations?
- What are alternative forms of pain management?
- What role does the mind play in pain management?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Nutrition
- Knowledge Test: Transcultural Health Care

Teamwork Events

- Community Awareness
 - Creative Problem Solving
 - HOSA Bowl
-

Task Number 85

Describe the effects of opioid dependency on the human body systems.

Definition

Description should include the short- and long-term effects of opioids on the following:

- Nervous system
- Respiratory system
- Circulatory system
- Digestive system
- Skeletal system

Resource: [Drugs and Your Body](#), Scholastic

Process/Skill Questions

- How does the misuse of opioids affect nutrition and weight loss?
- How might opioid misuse be evident in a person's vital signs?
- How do opioids affect the brain as the control center for homeostasis?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 86

Explain the mechanism and physical effects of opioids on the human body.

Definition

Explanation should include the following:

- Mechanism of action and metabolism of opioids
- Development of tolerance, dependence, and addiction
- Health consequences of drug misuse
 - HIV, hepatitis, and other infectious diseases
 - Cancer
 - Cardiovascular effects
 - Respiratory effects
 - Gastrointestinal effects
 - Musculoskeletal effects
 - Kidney damage
 - Liver damage
 - Neurological effects
 - Hormonal effects
 - Prenatal effects
 - Other health effects
 - Mental health effects
 - Death
- Withdrawal
 - Causes
 - Timeframe (i.e., peaks of withdrawal symptoms)
 - Physical signs (e.g., nausea, diarrhea, vomiting, cold flashes)

Process/Skill Questions

- What are the short- and long-term effects of withdrawal dependence symptoms?
- How long can the human body function while exhibiting the symptoms of withdrawal?
- What are other medical conditions that may arise because of the symptoms of physical dependence?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- HOSA Bowl
-

Task Number 87

Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.

Definition

Explanation should include

- appropriate use of different opioids in various practice settings
- the interactions, risks, and intolerance of prescription opioids
- the role and effectiveness of opioids in acute, sub-acute, and chronic pain
- a reassessment of opioid use based on stage of pain
- contemporary treatment guidelines, best practices, health policies, and government regulations related to opioid use
- use of opioids in pain management of patients with substance abuse disorders, in recovery, and in palliative/end-of-life care.

Process/Skill Questions

- When should risk factors regarding opioids be reviewed with the patient?
- What are the options when treating patients with a history of substance abuse?
- What government regulations and policies are in place to improve the safe administration of opioids?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Teamwork Events

- Creative Problem Solving
 - HOSA Bowl
-

Task Number 88

Describe the withdrawal and tapering side effects of opioid use.

Definition

Description should include

- characteristics of acute and protracted withdrawal from opioid dependence or addiction
- tapering
- pain contracts or agreements.

Process/Skill Questions

- What are the stages of withdrawal in opioid abuse transition?
- What medications might be needed in the withdrawal stage?
- What information should be included in the pain management contract?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing
-

Task Number 89

Describe storage and disposal options for opioids.

Definition

Description should include

- medicine take-back options (e.g., [National Drug Take Back Day](#))
- disposal in the household trash and flushing certain potentially dangerous medicines down the toilet.

Resources:

- [Disposal of Unused Medicines: What You Should Know](#), Food and Drug Administration (FDA)
- [Prescription Drug Abuse and Tips for Proper Disposal](#), Office of the Attorney General of Virginia

Process/Skill Questions

- How should medications be stored in the house?
- What is National Prescription Drug Take Back Initiative?
- What is the *black box*?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing

Task Number 90

Explain community resources for education about opioid use.

Definition

Explanation should include key components of and resources for patient education in the use of opioids, including

- risks
- benefits
- side effects

- tolerance
- signs of sedation or overdose
- naloxone, including its storage and disposal.

Process/Skill Questions

- What resources for opioid education are available locally, statewide, and nationally?
- Where should the patient first be informed about the resources available?
- How does social media aid in patient education on opioid addiction?

HOSA Competitive Events (High School)

Health Science Events

- Knowledge Test: Pharmacology

Health Professions Events

- Clinical Nursing

Working with Patients and Caregivers

Task Number 91

Describe key communication topics involving opioids for patients.

Definition

Description should include

- benefits and risks of opioids
- opioid risk screening (i.e., taking a social, medical, and financial history)
- risk mitigation (e.g., naloxone, safe storage, pain contracts)
- medication tapers and/or discontinuation of therapy.

Process/Skill Questions

- What are the benefits of using opioids in medicine?

- What is the relationship between demographics and risk of opioid addiction?
- How does culture influence risk factors in opioid abuse?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Nursing

Task Number 92

Describe communication topics for caregivers and family members.

Definition

Description should include

- basic knowledge about opioids
- signs of addiction
- treatment options for addiction
- naloxone training for caregivers
- legal issues related to misuse.

Process/Skill Questions

- What rights do caregivers have in regard to medical information of the abuser?
- What legal steps might the caregiver or family have to take for treatment?
- Where can the caregiver or family members receive naloxone training? Are children of opioid abusers eligible for training?

HOSA Competitive Events (High School)

Health Science Events

- Medical Spelling
- Medical Terminology

Health Professions Events

- Clinical Nursing

SOL Correlation by Task

Maintain professional relationship with patient, caregivers, and colleagues.	History and Social Science: GOVT.16
Demonstrate respect for diverse individuals.	History and Social Science: GOVT.16
Apply medical ethics in a clinical setting.	English: 12.5 History and Social Science: GOVT.1, GOVT.11, VUS.1
Follow office protocol for emergency procedures.	
Evaluate the work environment to identify unsafe work conditions.	English: 12.5, 12.8 Science: BIO.1, CH.1
Explain radiographic safety.	English: 12.5, 12.8
Implement standard precautions.	History and Social Science: GOVT.14
Apply and remove sterile and disposable gloves and disposable PPE.	
Clean equipment.	
Distinguish basic signs and symptoms of common disorders for each body system.	English: 12.5 Science: BIO.4
Describe dietary considerations for common disorders.	
Provide containers or slides for specimen collection.	Science: BIO.1
Collect basic specimens for analysis in a clinical setting.	
Perform and/or assist with diagnostic tests.	English: 12.5
Assist patients with dressing in a medical setting.	
Provide medical supplies and patient education, as indicated by the healthcare provider.	
Direct patient to the site of any further testing, if indicated by the physician.	English: 12.5, 12.6
Describe surgical procedures commonly performed in an ambulatory-care center.	English: 12.5
Prepare a sterile field.	
Prepare surgical instruments.	
Assist healthcare provider in minor surgery, maintaining sterile techniques throughout.	

Differentiate among types of anesthesia.	
Assist in providing emergency aid as directed by supervisor.	
Demonstrate cardiopulmonary resuscitation (CPR), and using an automated external defibrillator (AED).	
Apply and change dressings or bandages in a clinical setting.	
Identify the parameters of parenteral medications administration.	English: 12.5
Use drug resources.	English: 12.5
Administer therapeutic modalities, under supervision of a supervisor or instructor.	
Schedule patients in a clinical setting.	English: 12.2, 12.5
Register patients in a clinical setting.	English: 12.5
File documents.	
Access patient records.	
Demonstrate completion and submittal of insurance forms.	
Identify credentialing options for medical assistants.	English: 12.5, 12.8
Prepare a career portfolio with résumé.	English: 12.6, 12.7, 12.8 History and Social Science: GOVT.1, GOVT.16
Describe the history and current state of the opioid crisis in the United States.	English: 12.5
Describe the history and current state of the opioid crisis in Virginia.	English: 12.5, 12.8
Define the pharmacological components and common uses of opioids.	English: 12.3, 12.8
Examine the science of addiction.	English: 12.5
Explain prevention and early intervention strategies.	English: 12.5, 12.8
Identify addiction and its behavioral elements, as defined by the Diagnostic and Statistical Manual of Mental Disorders (DSM-5).	English: 12.5
Describe the treatment models of addiction therapy.	English: 12.5
Describe the medication management antidote used to prevent fatal opioid overdoses.	English: 12.5, 12.8
Explain the science of physiological and mental pain.	English: 12.3, 12.5
Describe the diagnostic tools used in developing pain management plans.	English: 12.5
Describe pain treatment options available to various populations of patients.	English: 12.5, 12.8
Describe the effects of opioid dependency on the human body systems.	English: 12.5
Explain the mechanism and physical effects of opioids on the human body.	English: 12.5
Explain the use of opioids in practice settings, the role of opioids in pain management, and risk factors associated with the use of the medication.	English: 12.5
Describe the withdrawal and tapering side effects of opioid use.	English: 12.5

Describe storage and disposal options for opioids.	English: 12.5, 12.8
Explain community resources for education about opioid use.	English: 12.5
Describe key communication topics involving opioids for patients.	English: 12.5
Describe communication topics for caregivers and family members.	English: 12.5

Entrepreneurship Infusion Units

Entrepreneurship Infusion Units may be used to help students achieve additional, focused competencies and enhance the validated tasks/competencies related to identifying and starting a new business venture. Because the unit is a complement to certain designated courses and is not mandatory, all tasks/competencies are marked “optional.”

Opioid Abuse Prevention Education

This [Opioid Abuse Prevention](#) document includes resources for opioid abuse prevention education from kindergarten to 12th grade.

Other Opioid Resources

Virginia Department of Behavioral Health and Developmental Services. Revive! Opioid Overdose and Naloxone Education for Virginia. [Naloxone Fact Sheet](#) (PDF).

Virginia Department of Behavioral Health and Developmental Services. [Revive! Opioid Overdose and Naloxone Education for Virginia](#) (Website).

Office of National Drug Control Policy, White House. [Fentanyl: Safety Recommendations for First Responders](#) (PDF).

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Alcohol](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Bath Salts](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Cocaine](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: E-Cigarette](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Heroin](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Marijuana](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: MDMA](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Meth](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Pain Medicine](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Spice \(K2\)](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Tobacco and Nicotine](#) (Website; PDF available)

National Institute on Drug Abuse, National Institutes of Health. [Easy to Read Drug Facts: Other Drugs People Use and Misuse](#) (Website; PDF available)

Appendix: Credentials, Course Sequences, and Career Cluster Information

Industry Credentials: Only apply to 36-week courses

- Certified Clinical Medical Assistant (CCMA) Examination
- Certified EKG Technician (CET) Examination (AAH)
- Certified EKG Technician (CET) Examination (NHA)
- Certified Medical Administrative Assistant (CMAA) Examination
- Certified Phlebotomy Technician (CPT) Examination (AAH)
- Certified Phlebotomy Technician (CPT) Examination (NHA)
- Clinical Medical Assistant Certification (CMAC) Examination
- College and Work Readiness Assessment (CWRA+)
- Medical Administration Assistant Certification (MAAC) Examination
- Medical Assistant Certification (MAC) Examination
- Medical Assisting Assessment
- Mental Health Technician Certification (MHTC) Examination
- National Career Readiness Certificate Assessment
- National Certified Medical Assistant (NCMA) Examination
- National Certified Phlebotomy Technician (NCPT) Examination
- Nationally Registered Certified EKG Technician (NRCEKGT) Examination
- Nationally Registered Certified Medical Assistant (NRCMA) Examination
- Nationally Registered Certified Phlebotomy Technician (NRCPT) Examination
- Phlebotomy Technician Certification (PTC) Examination
- Registered Medical Assistant (RMA) Examination
- Workplace Readiness Skills for the Commonwealth Examination

Concentration sequences: *A combination of this course and those below, equivalent to two 36-week courses, is a concentration sequence. Students wishing to complete a specialization may take additional courses based on their career pathways. A program completer is a student who has met the requirements for a CTE concentration sequence and all other requirements for high school graduation or an approved alternative education program.*

- Medical Assistant I (8345/36 weeks, 280 hours)

Career Clusters Health Science	
Pathway	Occupations
Biotechnology Research and Development	Medical, Clinical Laboratory Technician Research Assistant
Diagnostics Services	Medical, Clinical Laboratory Technician Nuclear Medicine Technologist Phlebotomist Radiologic Technologist, Radiographer
Health Informatics	Admitting Clerk Bioinformatics Technician Health Educator Medical Assistant Medical Biller, Patient Financial Services Medical Information Technologist Medical, Health Services Manager
Support Services	Administrative Assistant Front Office Assistant Materials Manager Medical Transcriptionist Medical, Clinical Laboratory Technologist Records Processing Assistant
Therapeutic Services	Certified Nurse Aide Home Health Aide Licensed Practical Nurse Medical Assistant Surgical Technologist