Health Science Career Cluster
Medical Assisting
Course Number 25.43800

Course Description:
The goal of this course is to provide fundamental administrative and clinical skills and knowledge that will prepare students for a career in medical assisting. This course provides a strong foundation designed to prepare students (**11th-12th grade**), for entry-level positions in the outpatient setting. Medical assistants play a vital role in the healthcare field by working collaboratively with other members of a health care team in doctor's offices, medical clinics, hospitals, and specialty practices. Pathway completers of the Medical Assisting pathway are highly sought after by hospitals and doctors' offices.

The ultimate goal of the Medical Assisting pathway is to prepare students to continue their education at a post-secondary institution, and/or take an industry recognized certification assessment resulting in entry level job opportunities. Course standards will focus on patient care, venipuncture, electrocardiogram, vital signs, immunizations, medical coding, electronic medical charting, and medical records. This training prepares students to sit for a Medical Assisting certification exam through approved and recognized _credentialing agencies_ for employment. During this course, simulated venipuncture may be performed depending on each school district's guidelines. It is **highly recommended** that a clinical internship be in conjunction with or followed by this course to enhance the mastery of both administrative and clinical skills and meet the _160 hours that may be required for some industry recognized credentials of value._

The prerequisites for this course are Introduction to Healthcare, Essentials of Healthcare, and Allied Health & Medicine.

Course Standard 1

HS-MA-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

Standard: Demonstrate employability skills required by business and industry.
The following elements should be integrated throughout the content of this course.
1.1   Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person Etiquette	Telephone and Email Etiquette	Cell Phone and Internet Etiquette	Communicating At Work	Listening
Interacting with Your Boss	Telephone Conversations	Using Blogs	Improving Communication Skills	Reasons, Benefits, and Barriers
Interacting with Subordinates	Barriers to Phone conversations	Using Social Media	Effective Oral Communication	Listening Strategies
Interacting with Co-workers	Making and Returning Calls		Effective Written Communication	Ways We Filter What We Hear
Interacting with Suppliers	Making Cold Calls		Effective Nonverbal Skills	Developing a Listening Attitude
Interacting with Customers	Handling Conference Calls		Effective Word Use	Show You Are Listening
	Handling Unsolicited Calls		Giving and Receiving Feedback	Asking Questions

			Obtaining Feedback
			Getting Others to Listen

Nonverbal Communication	Written Communication	Speaking	Applications and Effective Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and mixed Messages	Constructive Criticism in Writing	One-on-One Conversations	Writing a Cover Letter
Matching Verbal and Nonverbal communication		Small Group Communication	Things to Include in a Résumé
Improving Nonverbal Indicators		Large Group Communication	Selling Yourself in a Résumé
Nonverbal Feedback		Making Speeches	Terms to Use in a Résumé
Showing Confidence Nonverbally		Involving the Audience	Describing Your Job Strengths
Showing Assertiveness		Answering Questions	Organizing Your Résumé
		Visual and Media Aids	Writing an Electronic Résumé
		Errors in Presentation	Dressing Up Your Résumé

1.2   Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette
Thinking Creatively	Preparation and Participation in Meetings
Taking Risks	Conducting Two-Person or Large Group Meetings
Building Team Communication	Inviting and Introducing Speakers
	Facilitating Discussions and Closing
	Preparing Visual Aids
	Virtual Meetings

1.3   Exhibit critical thinking and problem-solving skills to locate, analyze and apply information in career planning and employment situations.

Problem Solving	Customer Service	The Application Process	Interviewing Skills	Finding the Right Job
Transferable Job Skills	Gaining Trust and Interacting with Customers	Providing Information, Accuracy and Double Checking	Preparing for an Interview	Locating Jobs and Networking
Becoming a Problem Solver	Learning and Giving Customers What They Want	Online Application Process	Questions to Ask in an Interview	Job Shopping Online
Identifying a Problem	Keeping Customers Coming Back	Following Up After Submitting an Application	Things to Include in a Career Portfolio	Job Search Websites
Becoming a Critical Thinker	Seeing the Customer's Point	Effective Résumés:	Traits Employers are Seeking	Participation in Job Fairs
Managing	Selling Yourself and the Company	Matching Your Talents to a Job	Considerations Before Taking a Job	Searching the Classified Ads
	Handling Customer Complaints	When a Résumé Should be Used	Appropriate Attire for job interview	Using Employment Agencies
	Strategies for Customer Service		Virtual and Telephone Interviews	Landing an Internship
				Staying Motivated to Search

1.4 **Model work readiness traits required for success in the workplace including integrity, honesty, accountability, punctuality, time management, and respect for diversity.**

Workplace Ethics	Personal Characteristics	Employer Expectations	Business Etiquette	Communicating at Work
Demonstrating Good Work Ethic	Demonstrating a Good Attitude	Behaviors Employers Expect	Language and Behavior	Handling Anger
Behaving Appropriately	Gaining and Showing Respect	Objectionable Behaviors	Keeping Information Confidential	Dealing with Difficult Coworkers
Maintaining Honesty	Demonstrating Responsibility	Establishing Credibility	Avoiding Gossip	Dealing with a Difficult Boss
Playing Fair	Showing Dependability	Demonstrating Your Skills	Appropriate Work Email	Dealing with Difficult Customers
Using Ethical Language	Being Courteous	Building Work Relationships	Cell Phone Etiquette	Dealing with Conflict
Showing Responsibility	Gaining Coworkers' Trust		Appropriate Work Texting	
Reducing Harassment	Persevering		Understanding Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making Truthfulness a Habit	Showing Professionalism			
Leaving a Job Ethically				

1.5 **Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply teamwork skills.**

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive Criticism	Finding More Time
		Managing Projects
		Prioritizing Personal and Work Life

1.6 **Present a professional image through appearance, behavior, and language.**

On-the-Job Etiquette	Person-to-Person Etiquette	Communication Etiquette	Presenting Yourself
Using Professional Manners	Meeting Business Acquaintances	Creating a Good Impression	Looking Professional
Introducing People	Meeting People for the First Time	Keeping Phone Calls Professional	Dressing for Success
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional Attitude
Business Meal Functions		Proper Use of Cell Phone	Using Good Posture
Behavior at Work Parties		Proper Use in Texting	Presenting Yourself to Associates
Behavior at Conventions			Accepting Criticism
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence

L9-10RST 1-10 and L9-10WHST 1-10:
Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses.

Course Standard 2

HS-MA-2
Explore the credentials, options, and scope of practice of a Medical Assistant in various healthcare facilities.

2.1   Identify and describe current employment options in the medical assisting profession, including the required education, training, salary, and employment outlook for each option.
2.2   Distinguish between the different credentials, licensing and certifications that are required for employment in this field.
2.3   Describe the various roles required in the scope of practice for the medical assistant.
2.4   Differentiate between different healthcare systems and the role of the medical assistant.
2.5   Compare and contrast the roles that are performed in the front and back-office areas.
2.6   Demonstrate an understanding of commonly used medical terminology that is used in the scope of practice.

Course Standard 3

HS-MA-3
Demonstrate an understanding of appropriate professional, ethical and legal behavior.

3.1   Demonstrate techniques for maintaining confidentiality and patient privacy (protected health information) as outlined in HIPAA (Health Insurance Portability and Accountability Act) regulations.
3.2   Acknowledge a personal code of ethics.
3.3   Explain the state ethical standards and the Hippocratic Oath.
3.4   Compare and contrast various legal considerations such as living wills, DNR, DNI, etc.
3.5   Identify the power of attorney (POA) for patients with altered mental status and update appropriately (including DNR, DNI, and/or code status).
3.7   Assist in identifying potential educational needs of the patient and the caregiver.
3.8   Describe proper healthcare etiquette used in hospice environments, including the use of palliative treatment.

Course Standard 4

HS-MA-4
Maintain quality control measures within the medical/lab facility to prevent medical errors and provide appropriate patient care.

4.1   Compare quality assurance and quality control.
4.2   Identify and describe the national regulatory agencies for quality assurance and healthcare, including JC (Joint Commission), CLIA (Clinical Laboratory Improvement Act), CAP (College of American Pathologists), NAACLS (National Accrediting Agency for Clinical Laboratory Sciences), and CLSI (Clinical and Laboratory Standards Institute).
4.3   Describe quality assurance program components and quality control related to medical lab.
4.4   Demonstrate the usage of information management components, including bar code systems and documentation in the electronic health records.
4.5   Demonstrate adhering to regulations regarding confidentiality and appropriate record release.

Course Standard 5

HS-MA-5
Abide by regulations governing workplace safety, infection control, operational standards, and facility protocol.

5.1 Demonstrate adhering to regulations regarding workplace safety [e.g., Occupational Safety and Health Administration (OSHA) and National Institute for Occupational Safety and Health (NIOSH)].

5.2 Demonstrate abiding by regulations regarding operational standards (e.g., Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Clinical and Laboratory Standards Institute (CLSI).

5.3 Demonstrate following exposure control plans in the event of occupational exposure.

5.5 Demonstrate exhibiting appropriate infection control standards and safety equipment, to include biohazards set forth by OSHA and the Communicable Disease Center (CDC).
   a. Practice standard precautions, utilizing appropriate PPE (personal protective equipment).
   b. Demonstrate proper isolation precautions and techniques.
   c. Perform donning of sterile gloves and changing a sterile dressing utilizing appropriate sterile technique.
   d. Describe risk and prevention of cross contamination.
   e. Demonstrate sanitizing, disinfecting, and sterilizing techniques.
   f. Demonstrate effective hand sanitization procedures.
   g. Demonstrate proper use of sharps containers

5.6 Implement infection control procedures to break the chain of infection; transmission via direct and indirect contact, droplets, airborne, and hospital acquired infections.

5.7 Demonstrate first aid and Basic Life Support techniques and initiate when necessary.

5.8 Observe standards of operation and workplace safety regulations for:
   a. needle stick safety and precaution act
   b. blood borne pathogen
   c. safety practices of HIV (Human Immune Deficiency Virus), Hepatitis B & C

5.9 Demonstrate reacting to emergency situations following agency procedures and facility protocol.

Course Standard 6

HS-MA-6
Utilize appropriate laboratory and medical terminology, medical lab equipment, and metric system conversions.

6.1 Demonstrate the appropriate use of clinical lab nomenclature to include medical terminology related to clinical lab testing and requisitions.

6.2 Demonstrate basic manual and digital use and maintenance of the following instruments, including microscope, centrifuge, EKG, and spirometry.

6.3 Demonstrate using appropriate units of measurement.

6.4 Perform math calculations for metric system conversions with temperature, height, weight, simple dilutions, total magnification, and dosage calculations.

Course Standard 7

HS-MA-7
Perform basic administrative skills within medical office services.

7.1 Perform procedures related to administrative office skills, including managing patient accounts, writing receipts, writing checks, and balancing accounts.

7.2 Perform skills that demonstrate completing insurance claims, including diagnostic coding for reimbursement.

7.3 Demonstrate appropriate skills in scheduling appointments, answering phone calls, managing electronic health care records and completing prior authorizations.

7.4 Demonstrate submitting simulated prescriptions via phone, fax, and electronically.

Course Standard 8

HS-MA-8
Perform basic clinical skills within medical office services.
8.1 Demonstrate the procedures for conducting a patient history interview and preparing the patient for an exam.
8.2 Perform basic tasks when assisting with a physical exam including setting up an exam room and measuring weight, height and vital signs of adult, children, and infants.
8.3 Demonstrate how to position and drape a patient in each of the common examination positions.
8.4 Identify, arrange, and prepare instruments and supplies used in a general physical examination.
8.5 Demonstrate correct procedures for ADA patients (extremely obese, cancer patients, geriatric patients, etc.)
8.6 Educate patients on devices commonly prescribed by physicians (inhaler, crutches, glucometer, etc. depending on the setting).
8.7 Demonstrate the correct procedures for administering an injection, including identifying & preparing the injection site, methods of insertion & administration, disposal of the sharps, and follow up with patient reaction.
8.8 Demonstrate the correct procedure for suture and staple removal.
8.9 Describe the special surgical procedures performed in an office setting, including outpatient surgeries, biopsies, etc.
8.10 Identify the instruments used in minor surgery and describe their functions.
8.11 Compare and contrast the procedures for medical and surgical asepsis in minor surgery.
8.12 Describe the types of local anesthetics for minor surgery and the CMA's role in their administration.
8.13 Explain the procedures for screening and diagnosing vision and hearing problems.
8.14 Compare and contrast various treatments for vision and hearing disorders.
8.15 Explain how patients can be educated about preventive ear and eye care.
8.16 Demonstrate how to modify exams for patients with known hearing/vision problems.

Course Standard 9

HS-MA-9
Follow steps and guidelines necessary to prepare patients for blood collection procedures based on school, county, and facility protocol.
9.1 Review scope of practice for a medical assistant in a medical laboratory.
9.2 Review requisition, confirm test requirements (e.g., fasting and medication) and status, and identify patient special considerations such as: • diet restrictions • latex sensitivity • timed / status
9.3 Perform proper patient identification procedures, verification, and discrepancy rectification to ensure accuracy.
9.4 Conduct initial patient observation utilizing appropriate communication techniques, including explanation of procedure to the patient.
9.5 Ensure consent is given by patient, either implied or informed.
9.6 Simulate or perform the process of obtaining blood glucose samples correctly (per county policy) recording and reporting findings to the nurse/ EMR.
9.7 Simulate or perform proper procedure for capillary blood tests.
9.8 Identify and simulate or perform basic techniques for venipuncture procedures.
9.9 Identify equipment used for basic venipuncture and the function of each.
9.10 Identify and explain the three major preferred sites for venipuncture in the antecubital fossa and distinguish the "H" and "M" shaped patterns.
9.11 Demonstrate patient safety throughout the collection process.
9.12 Recognize and react appropriately for common complications for primary collection.
9.13 Perform proper order of draw when drawing multiple samples.
9.14 Identify proper tube based on tube additive for common blood tests.

Course Standard 10

HS-MA-10
Perform advanced technical skills within medical laboratory collections using appropriate equipment based on school, county, and facility protocol.
10.1   Review scope of practice for medical assistants in Clinical Laboratory Services.
10.2   Demonstrate verification of safety of equipment, including sterility, expiration date, and manufacturer defects.
10.3   Demonstrate proper labeling for all specimens.
10.4   Perform quality control and maintain logs as required for CLIA-waived procedures (Clinical Laboratory Improvement Amendments).
10.5   Discuss proper specimen preparation and procedures for storing and/or transporting specimens.
10.6   State proper procedure to give patient directions for non-blood, patient collected specimens.
10.7   Utilize techniques to avoid pre-analytical errors when collecting specimens.
10.8   Demonstrate proper chain of custody procedure when obtaining specimens for law enforcement and court mandated labs (Example- paternity testing, etc.)
10.9   Utilize technology to input and retrieve patient data.
10.10   Report normal and critical results to providers following facility protocol.

Course Standard 11

HS-MA-11
Maintain appropriate reports and patient data, inventory and supplies, and billing procedures for laboratory tests.
11.1   Demonstrate utilizing electronic health records for the reporting and documentation of patient collection data and lab results.
11.2   Identify and explain the components of a complete and final report.
11.3   Demonstrate maintaining inventory levels, orders, and restocking of supplies.

Course Standard 12

HS-MA-12
Demonstrate how to properly place leads and operate a 12-lead EKG (electrocardiogram) unit. The standards related to EKG may be simulated in a lab, however if attempting to be eligible for an EKG assessment exam in a recognized credential, clinical application and other requirements may be necessary.
12.1   Review scope of practice for medical assistants in Cardiology Services.
12.2   Compare and contrast normal sinus, bradycardia, tachycardia, and asystole rhythms by evaluating manual or digital rhythm strips.
12.3   Explain basic EKG interpretations, such as STEMI, v-fib, etc.
12.4   Contrast between EKG and Echocardiogram procedures and the diagnostic capacity of each.
12.5   Demonstrate collecting and documenting patient history, cardiac medication, and information needed for EKG testing.
12.6   Demonstrate correctly positioning a patient for testing and applying EKG leads in the correct position on the patient.
12.7   Demonstrate informing patients about the purpose of procedure and directions for testing, including EKG (Electrocardiogram) monitoring, Holter monitoring, Stress testing, and Telemetry monitoring.
12.8   Differentiate between the care needed for infant, pediatric, adult patients and those with special considerations (e.g., right sided heart, posterior chest, amputations, prosthetics, etc.).

Course Standard 13

HS-MA-13
Demonstrate advanced technical skills in respiratory care.
13.1 Review scope of practice for medical assistants in Respiratory Services.
13.2 Identify normal and abnormal respiratory effort.
13.3 Demonstrate correct placement of cannula and mask for oxygen therapy.
13.4 Demonstrate set up and use of portable oxygen cylinder.
13.5 Correctly apply pulse oximeter for measurement of oxygen saturation and recognize the difference between normal and abnormal readings.
13.6 Observe medical personnel assisting clients with prescribed, self-administered respiratory management devices, including metered dose inhalers and nebulizers adhering to scope of practice and facility protocol.
13.7 Demonstrate techniques to assist patient with incentive spirometers, coughing, and deep-breathing exercises.
13.8 Examine pulse sites for accuracy of pulse oximeter (ex: toe, ear lobe, etc.)

Course Standard 14

HS-MA-14
Demonstrate advanced technical skills in wound care within their scope of practice.
14.1 Review scope of practice for medical assistants in Wound Care Services.
14.2 Describe variations in wounds and methods for reporting.
14.3 Describe pain associated with wounds and techniques for assessing, reporting, and managing pain.
14.4 Utilizing simulation, demonstrate techniques for: • wound care, including reporting observations. • application of sterile dressings, bandages, and binders. • applying hot and cold treatments.
14.5 Adhere to proper disposal of biohazardous materials as required by OSHA, utilizing sharps containers and biohazard red bags.
14.6 Demonstrate use of personal protective equipment.
14.7 Document dressing changes, hot and cold treatments, and observations in the simulated electronic medical record.

Course Standard 15

HS-MA-15
Demonstrate advanced technical skills in nutrition and fluid intake, elimination, and ostomy care.
15.1 Review scope of practice for medical assistants in Urinary Services.
15.2 Demonstrate measurement of fluid intake and output including documentation.
15.3 Perform techniques for collecting urine and stool specimens, including documentation.
15.4 Perform simulated ostomy care procedures and identify reportable signs/symptoms.
15.5 Demonstrate proper sterile and disinfectant routines in collection and storage processes.

Course Standard 16

HS-MA-16
Explore how related student organizations are integral parts of career and technology education courses through leadership development, school, and community service projects, entrepreneurship development, and competitive events.
16.1 Research the history of the state supported healthcare science CTSO (Career Technical Student Organization).
16.2 Discuss the mission, purpose, motto, colors, official dress, and other distinguishing characteristics of the state supported healthcare science CTSO.
16.3 Explain how participation in the state supported healthcare science CTSO can promote lifelong responsibility for community service and professional growth and development.

16.4   Create a personal leadership plan to participate in programs, conferences, community service and competitive events on the local, state, and national level that align with the competencies, skills, and knowledge of this course.