This course was designed to prepare students for careers in the field of Medical Assisting through the integration and development of core academic content. Students will also learn the professional norms, skills, and competencies related to a career in Medical Assisting. The course is based on currently accepted academic and career and technical education standards. Students will learn and practice the many skills required of medical assistants, including ability to prepare patients for examination and treatment, ability to perform various laboratory tests, and management of patient records. Emphasis is placed the relationship between patient health and biological processes. This course includes work-based learning with internships and job shadowing in medical offices/clinics. Other opportunities for industry partners to invite our students into the medical field, as well as medical guests into our classrooms to further bridge the medical field to our classrooms will also be offered.

The purpose of this course is to prepare students for careers in Medical Assisting. Additionally, it is the hope of Career Technical Education (CTE) that students will be encouraged to explore additional educational opportunities which lead to careers in the health care field. This course has been structured with the intent of engaging students through the use of socially relevant instructional content and delivery. It is also the intent of CTE to encourage students to play an active role in community health.

MEDICAL ASSISTANT-GENERIC MEDICAL TECHNICIAN

COURSE GOALS

The students will...

1. Describe the contributions of individual organs, tissues, and cells to the overall body system.

2. Explain how medical asepsis and infection control are crucial in preventing the spread of disease.

3. Identify the basics of pharmacology, including the classification and use of drugs.

4. Demonstrate how the act of taking vital signs is utilized to evaluate and assess the health status of patients by use of the manikin Nurse Kelly and the SimPlus pad and monitor.

5. Demonstrate the ability to collect and format information by using facility protocols and regulatory guidelines.

Prerequisites: Biology (Required) Human Anatomy and Physiology (Recommended) Elementary Algebra (Recommended) Co-requisites: None Course content:

Assessments are done daily in both formal and informal fashion. The following strategies are used daily and are incorporated in each unit of instruction.

Informal Assessments:

Daily Opening Activity: addresses previously covered topics to establish a connection with material to be covered for the day. Daily Closing Activity: topics form the day are reviewed. Classroom Discussion Small Group Discussion Teacher led inquiry Socratic Seminar of upcoming events Educational games

Formal Assessments:

Unit vocabulary quizzes: used to encourage reading comprehension

Chapter quizzes: covering major themes in text chapters

Chapter review questions: used to assess comprehension of subject matter. Questions typically fall within levels 1-3 in Bloom's Taxonomy.

Unit examinations: short answer examinations focused on critical thinking skills and connecting concepts Medical scenario documentation: collaboration, writing skills, analysis, and reasoning

Mock clinic: demonstrate: (a) comprehension and collaboration, (b) speaking and listening skills, (c) appropriate use of terminology, and (d) subject matter understanding through the ability to integrate major themes covered throughout the course

Performance Assessments

Hands-on skills Documentation of data Daily journal entries Oral presentations Case studies

Research projects

Students describe and locate respiratory structures on models/charts, and trace the movement of air through the system. Students write a 2-3 page report detailing the process in MLA format.

4-5 page research paper on selected cardiovascular diseases. Must be in MLA format and include at least 3 peer reviewed resources and include the following information:

-Description of Disease

-Causes of Disease

-Symptoms present in the disease

-Treatment for the disease, prevention, diets and exercise

Research, write, and present 4-5 page paper on a disease or injury of the spinal cord using MLA formatting and at least three peer reviewed resources.

Using the CDC website, students will research three blood borne pathogens and the diseases they may cause. Students will write a 2-3 page paper in MLA format and report findings to class.

Write and present a summary of a current news article that involves HIPAA regulations.

Prepare a fictitious medical records chart.

Key Assignments

Professional Communication. One of the most important skills that a medical assistant can possess is the ability to communicate. Clinical and administrative medical assisting require a constant exchange of oral, written and non-verbal information. Business Communications. The medical assistant must be prepared to effectively deal with a variety of telephone and electronic messages each day. Communication and good listening skills are necessary to provide good customer service to the patients. Grammar, computer and writing skills are fundamental. Medical terminology, verbal and non-verbal communication skills are an essential part of business communications.

Students will compose and generate 3 letters in the appropriate business format, physician to patient, physician's office to supplier, and physician to physician. Letters will be evaluated by teacher for grammar, formatting, and sentence structure using a rubric.

Pharmacology Fundamentals: Students will research six diseases for which the CDC has issued immunization guidelines for healthcare workers and write a 2 page informational essay explaining the importance of healthcare worker immunizations. Students will identify safety guidelines for the proper administration of medications. Students will describe how to use the PDR to correctly identify drugs, describe adverse reactions, appropriate medication references, indications and usage, contraindications, dosage, administration and how the drug is supplied.

Drugs and Alcohol: Group Research. Following a lecture, video, and class discussion on the short and long term effects of drugs and alcohol on the human body, students will work in small groups to research current local cases involving alcohol or drug related deaths. They will create a multimedia presentation summarizing the case, its connection to alcohol or drug consumption, and its impact on society. They will present their findings to the class.

Students will research the principles of good body mechanics and ergonomics and describe how to make the home safer for people using mobility devices and the importance of patient rehabilitation following injury or surgery. Students will prepare a 2 page informative essay and present it orally to the class.

Chapter Review Questions

Unit Vocabulary

Course Outline:

Unit 1: Orientation and Introduction Medical Assisting Foundations

In this first unit, the students will review: school and classroom policies, course content, and course objectives. This foundational unit will also introduce students to basic concepts in medical assisting. Students will explore the skills and responsibilities of the medical assistant, examine behaviors necessary to be successful in the health care industry and discuss the necessary training and opportunities for credentialing in the field. This unit also includes the history of medicine and the technological and pharmaceutical advances in the industry. Students will research legal and ethical issues and the importance of cultural diversity and sensitivity in health care. Professional communication skills and medical terminology will be introduced in this unit of study.

Resources: Medical Assisting Administrative and Clinical Competencies, Blesi, Wise, Kelley-Arney: Chapters 1-8. Introduction to Medical Terminology, Ehrlich, Schroeder, entirety. Guest speaker: Medical professional to discuss education and training requirements for entry level position in profession, description of job duties, and personal experiences. Articles, Case Studies, Videos, Handouts, and Electronic Resources.

A. Orientation

Know and understand course objectives Know and understand course content Know and understand teacher expectations Know and understand school and class policies Know and understand industry standards and career opportunities

B. Introduction

Understand the definition and scope of practice of a medical assistant. Understand and discuss the history and development of the health care field. List and describe the significance of key events and important figures in the history of medicine. Identify members of the health care team and explain their responsibilities. Discuss the roles, responsibilities, education and licensure requirements. Describe the professional, safety and health organizations related to medical assisting. Examine the many legal and ethical issues that arise in the medical field. Research and discuss the importance of cultural diversity in health care. Professional communication skills, to include oral and written communications.

10. Introduction of medical terminology.

Unit 2: Structure and Function of the Human Body

This unit of instruction will introduce students to medical terminology, pronunciation and definitions. Using word building skills, students will identify and properly arrange roots, prefixes, and suffixes to create commonly used in terms used medicine. Students will learn basic human body structure and function in relationship to specific care between prevention, diagnosis, pathology, and treatment. They will identify and describe the significance of basic stages of growth and development. Students will learn about common diseases and disorders of the human body and identify signs and symptoms of each disease. Students will work in small groups to research the

prevention, diagnosis, treatment, and rehabilitation of a disease. They will create an informative multimedia presentation to present their findings to the class. Students will examine genetic susceptibility to disease. Disease rates in the population and public health arenas will also be examined through the lenses of gender, race, ethnicity, and socio-economic status.

Resources: Medical Assisting Administrative and Clinical Competencies, Chapter 23-35. Blesi, Wise, Kelley-Arney: Anatomy and Physiology Excerpts from Chapters 1through 15. Videos, Case Studies, Handouts, and Electronic Resources.

C. Anatomic Descriptors and Fundamental Body Structure Describe the anatomical positions.
Apply appropriate terminology to anatomical directional references on the human body.
Locate the eight body cavities.
Name the major organs located within the body cavity
Identify regions of the abdomen.
Explain the condition of hemostasis.
Describe the four main types of body tissue.
Name the systems of the body.
Identify characteristics of genetic conditions.

D. The Nervous System

Name the two major divisions of the nervous system.

Identify the two types of peripheral nerves and explain the function of the spinal nerves. Simple and complex reflex action.

The Brain and its function.

Diseases, tests, disorders, and treatments of the nervous system.

E. The Senses

Name the senses of the human body, identify the corresponding organs responsible for perception. Identify on an anatomical illustration the structures of the eye, ear, nose, tongue, and skin. Describe the diseases or disorders of the eye, ear, nose, mouth and tongue. Age related changes to the senses.

F. The Integumentary System
Five functions of the skin.
Temperature regulation.
Three layers of the skin and the characteristic structures of each layer.
Skin cancer.
Blushing, birthmarks, moles, and albinism.
Diseases, disorders, and treatments of the skin.

G. The Skeletal System
Divisions of the skeletal system.
Structure of the long bones.
Elements of bone tissue.
Functions of the skeletal system.
Joints.
Diseases, disorders, treatments of the skeletal system.
Correlation between age and fractures.

H. The Muscular System

Skeletal muscles. Muscle Tone. Structure and function of tendons and ligaments. Muscles of respiration and breathing. Peristalsis

Diseases, disorders, and treatments of the muscle system.

I. The Respiratory System

Importance of oxygen.

Structure and function of the nose, pharynx, epiglottis, larynx, trachea, bronchus, bronchiole and alveolus. Five normal occurrences that alter breathing.

Diseases, disorders test and treatments of the Respiratory system.

J. The Circulatory System Four main parts of the Circulatory System. Anatomy of the heart. Pulmonary, systemic and portal circulation. Clotting process. Components of blood. Rh factors. Diseases, disorders, test, and treatments of the Circulatory System.

K. The Immune System

Three main lines of defense against antigens. Function of the immune system. Inflammatory response. Immunizations and vaccines. Diseases, disorders, tests, and treatments of the Immune System.

L. The Digestive System
Four phases of the Digestive System
Describe the structure and function of the digestive system.
List the functions of the liver, including the portal circulation connection.
Describe the roles of the gallbladder and pancreas.
Diseases, disorders, tests, and treatments of the Digestive system.

M. The Urinary System

- 1. Three main functions of the urinary system.
- 2. Identify the organs of the urinary system and their physical characteristics.
- 3. How the urinary system functions with other systems.
- 4. Diseases, disorders, tests, and treatments of the Urinary System.

N. The Endocrine System

Differentiate between endocrine and exocrine glands.

Body functions affected by hormones.

Functions of pituitary, thyroid, parathyroid, adrenal, pancreas, and thymus gland. Diseases, disorders, tests, and treatments of the Endocrine System.

O. The Reproductive system

- 1. Sexual and asexual reproduction.
- 2. Fertilization
- 3. Location and function of male sex organs.
- 4. Male secondary sex characteristics.
- 5. Diseases, disorders, tests, and treatments of the Male Reproductive System.
- 6. Location and function of the female sex organs.
- 7. Female secondary sex characteristics.
- 8. Purpose and phases of the menstrual cycle.
- 9. Pregnancy and fetal development.
- 10. Diseases, disorders, tests, and treatments of the Female Reproductive System.

Unit 3: Clinical Procedures

In this unit of instruction, students will begin preparing for clinical activities by reviewing foundational subjects such as: principles in infection control, laboratory procedures, general and specialized examination procedures, and suture/staple removal. Students will demonstrate the knowledge and delivery of specific skills and procedures as outlined within the scope of practice appropriate for patient care in the prevention, diagnosis, and treatment of illness and disease. Students will use informational interviewing and note taking skills to conduct patient intake assessments. Students will collect, synthesize, and document information and/or data. Students

will use appropriate medical terminology to document signs (witnessed by students/care provider) and symptoms (reported by patient). Students will use appropriate communication strategies to respond to patient questions/concerns and to provide effective post-visit and post-operative instruction. Students will note respiration rate while taking a blood pressure and use the pulse oximeter to determine the oxygen saturation and pulse. Students will learn to differentiate between normal and abnormal values. Students will examine the significance of ECG/EKC testing and become proficient in 12-lead EKG hook-ups and troubleshooting. Students will learn to differentiate between normal and abnormal EKGs and will learn to recognize the most commonly occurring major arrhythmias. They will also perform a pulmonary function test, urinalysis, and learn how to assist with minor surgeries. Students will learn how to analyze diagrams, charts, graphs, and tables to interpret health care results.

Resources: Medical Assisting Administrative and Clinical Competencies, Chapter 36-50. Blesi, Wise, Kelley-Arney: Videos, Case Studies, Handouts, and Electronic Resources.

P. Infection Control and Medical Asepsis
Transmission, incubation time, symptoms, and treatment for a given communicable disease.
Infection control cycle.
Direct and indirect contact.
Universal and standard precautions.
Disposal of biohazardous material.
Medical asepsis.
Personal protective equipment.
Sanitization, disinfection, and sterilization.

- Q. Medical History and Patient Screening Patient screening. Triage.
 Characteristics of chief complaints. Health history.
 Documentation.
- R. Body Measurements and Vital Signs
 Five types of mensurations.
 Vital signs and body functions they measure.
 Normal ranges for vital signs.
 Conversion rates.
 Factors that affect vital signs.
 Documentation.

S. Preparing for Examination
 Examination room equipment and supplies.
 Examination positions and purpose of each.
 Techniques and purpose of draping the patient for examination.

T. Physical Exam, Specialty Exam and Procedures
The role of the medical assistant in the examination process.
Patient education.
Six examination techniques used by the physician.
Examination format.
Specialty procedures.

U. OB/GYN Examinations
Compare and contrast Gynecology and Obstetrics
Patient preparation.
Breast exam.
Role of the medical assistant in the examination process.
Naegele's rule.

V. Pediatric Examinations
AAP's recommendations for preventive pediatric healthcare.
Developmental stages.
Growth charts.
Well-child vs. sick-child visits.
Neglect vs. abuse.
Immunization schedules.
Pediatric vision and hearing screening.
Roles and responsibilities of the medical assistant.

W. Laboratory Procedures

Capillary blood collection. CLIA. Describe the POL. Universal and standard precautions. Hemoglobin and hematocrit. Glucose testing. Allergy testing. Testing outside the POL. Specimen preparation.

- 10. Collecting and testing urine specimens.
- 11. Occult blood.
- 12. Cultures.

X. Cardiology and Radiology Procedures
 ECG
 Holter Monitor
 Stress test
 Patient instructions and patient preparation.

Y. Minor Surgical Procedures Surgical asepsis.
Preparing/maintaining treatment areas.
Patient preparation and assisting the physician.
Processing specimens.
Function of instruments.
Consent forms.
Follow up forms.
Sterile technique.
Wound care.

10. Suture and staple removal.

Unit 4: Medication Administration Procedures

This unit of instruction focuses on pharmacology and the administration of medication. It is an introduction to the principles of pharmacology, focusing on the knowledge and skills required for safe and effective drug therapy. Students will research the relationship of drug therapy and pathophysiologic conditions and the importance of patient education regarding medications. Emphasis will be placed on the following pharmacologic information: sources of drugs, sources of drug information, drug legislation and standards, classification of drugs, drug action, factors that affect drug action, adverse effects of drugs, administration of drugs, record keeping, abbreviations and symbols, and drug calculation. Students will use the Physician's Desk Reference to research this pertinent drug information. Students will define the Medical Assistant's scope of practice as it relates to drug therapy. Specific drugs and the procedures for administering drugs will be discussed and practiced where applicable within this unit of instruction. Students will use mathematical formulas to calculate drug dosages and to convert measurements between metric and standard systems. As in previous units, students will acquire and accurately use medically related terminology and will demonstrate appropriate use and accurate pronunciation. At this point students should begin to demonstrate independence in gathering vocabulary knowledge when considering a word or phrase which is important to comprehension or the expression of ideas. Students will also learn the meanings of symbols and other charting notation and apply this knowledge in the completion of documentation exercises.

Resources: Medical Assisting Administrative and Clinical Competencies, Chapter 51-54. Blesi, Wise, Kelley-Arney: Videos, Case Studies, Handouts, and Electronic Resources.

Z. Pharmacology Fundamentals FDA and DEA

Commonly used prescription and non-prescriptions medications. Common drug forms. Medical, legal, and ethical concerns. Controlled substances. Referenced sources. Proper storage and disposal.

AA. Measurement Systems, Basic Mathematics and Dosage calculations
Measurement systems.
Basic units of measurement and equivalents in metric, apothecary, and household systems.
Basic math computations.
Abbreviations and symbols used in calculating medication dosages.

- BB. Administering Oral, injectable and non-injectable medication
 Elements that constitute a complete and accurate prescription.
 Routes of medication administration.
 Legal aspects.
 Seven Rights of medication administration.
 Medication errors.
 Documentation.
 Syringes.
 Angles of injections and injection sites.
 Patient education and documentation.
- 10. Immunizations.

Unit 5: Emergency Procedures

Based upon knowledge of anatomical and physiological function, homeostasis, and disease, acquired in previous units, students will learn how to apply observation techniques to detect changes in the health status of patients. Students will use observation and assessment techniques to differentiate between normal and abnormal patient health status. Students will demonstrate the steps involved in first aid and cardiopulmonary resuscitation, and will earn AHA CPR and First Aid certifications.

Resources: Medical Assisting Administrative and Clinical Competencies, Chapter 55-56. Blesi, Wise, Kelley-Arney: American Heart Association BLS/HCP training manual 2012, Videos, Case Studies, Handouts, and Electronic Resources.

CC. Emergencies in the Medical OfficeOffice policy manual and documentation.Emergency supplies and equipment.Responding to an emergency.Documentation.CPR and AED procedures and certification.

DD. First Aid for Accidents and Injuries American Heart Association first aid training and certification.

Unit 6: Rehabilitation and Healthy Living

In this unit of instruction, students will learn about ergonomic principles as they apply to both patient and health care provider. Related skills will be learned and practiced. Students will demonstrate the principles of body mechanics as they apply to the positioning, transferring, and transporting of patients. Students will determine appropriate equipment for transportation and transfer, including the modification of equipment and techniques to accommodate the health status of the patient. Students will demonstrate proper body mechanics, technique, ergonomics, and use of safety equipment in patient transport and transfer methods to accommodate the health of patients. Explore consequences of not utilizing available wellness services and behaviors that prevent injury and illness. Students will also explore alternative and holistic care options available to patients.

Resources: Medical Assisting Administrative and Clinical Competencies, Chapter 57-58. Blesi, Wise, Kelley-Arney: Videos, Case Studies, Handouts, and Electronic Resources.

EE. Rehabilitation Principles of body mechanics and ergonomics. Home safety. Patient education.

FF.Nutrition, Exercise, and Healthy Living

Guidelines for good health. Nutrition. Vitamins and minerals. Nutrition facts labels. Dietary supplements. Cultural influence on diet. Health concerns in adolescents. Exercise. Healthy spirit.

10. Sleep.

Unit 5: General Workplace Skills

The skills described in this unit are introduced, integrated, reinforced, and assessed throughout the course as applicable. The objective of this unit is to learn and demonstrate appropriate workplace behaviors, including teamwork, participation, etiquette, and flexibility. The knowledge gained from this unit will allow the student to identify appropriate procedures to obtain and retain employment in the field of Medical Assisting. These same behaviors, once learned, will also assist the student in achieving their educational goals. Evaluation of a culminating student portfolio will be used to assess mastery of the skills taught in this course. Throughout the

course, students will collect samples of their work to include in their portfolios. Additionally, students will prepare the items needed for job search for inclusion in the portfolio assignment.

Unit Resources: Informative handouts, Rubrics, Portfolio exemplars.

Understand how interpersonal skills developed in the classroom are applicable in the workplace.

- a) Maintain record of good attendance and punctuality
- b) Demonstrate understanding of classroom policy
- c) Define, explain and practice business ethics and social responsibilities in the workplace
- d) Discuss laws that apply to sexual harassment and tactics for handling harassment

e) Discuss the importance of the following personal skills in the workplace: sociability, self-esteem, integrity and honesty, self-management, and working independently

- f) Identify and exhibit acceptable business attire and personal hygiene
- g) Prioritize tasks and meet deadlines

Identify, organize, plan, and demonstrate proper use of : time, materials, and facilities

Demonstrate interpersonal skills: working well with others, leadership, willingness to assist team members, cultural sensitivity, and a willingness to work with others from diverse backgrounds

Acquire and use information in texts, computers, and specialized references, acquire information through listening, observing, and reading. Interpret and communicate information and use computers to process information

Work with a variety of technologies (computers, printer, pulse oximeter, ECG machine, centrifuge,online services, and office equipment). Identify the best technology suited to complete given tasks.

Understand the importance of basic skills such as math, reading comprehension, writing, speaking and listening Use of critical thinking skills: extracting and interpreting information from graphic organizers to make judgments and draw conclusions

Practice occupational safety: use of appropriate clothing, personal protective equipment, and safety equipment

Develop job search skills including: job search strategies, interviewing, resume preparation, completion of application for employment, and demonstration of interviewing skills

This course is delivered through the OPD method requiring the student to Observe, Participate, and Demonstrate understanding of subject matter. The following instructional methods and strategies are used to facilitate this process.

Demonstrations and Hands-on Activities Lecture PowerPoint Vocabulary Quizzes Peer Evaluation Chapter Review Questions: Short answer questions Case Studies: Research and report on medical office case studies and exercise critical thinking skills to determine the role of the Medical Assistant ethically, legally and medically. Online medical documentaries Internet research Current events from peer reviewed journals and online resources Oral and written debate and class discussion

Guest Speakers Instructional video Video excerpts from Medical Shows (Boston Medical, New York Medical): Depicts real-life medical emergencies, and the professionals who provide patient care Student prepared PowerPoint presentations Student led Mock Clinics Student Internships

Labs

Lab assignments in this course comprise 40% of total class time. Lab assignments in this course incorporate inquiry, observation, and analysis. Students will maintain a lab journal in which they will record their findings, including detailed sketches (following a teacher prescribed format) and response to teacher prompts.

All lab assignments are evaluated using a rubric

Unit 2

Sheep Brain Dissection

Following teacher led lecture, discussion, and questions from class, teacher will lead student dissection of a sheep's brain. The instructor will demonstrate each step via document camera. Students will identify the structures of the brain through the dissection activity. Students will sketch each structure as it is separated through the dissection process.

Cow Heart Dissection

Following teacher led lecture, discussion, and questions from class, teacher will lead student dissection of a cow's heart. The instructor will demonstrate each step via document camera. Students will dissect a cow heart and will sketch and identify the structures. Students will be asked to label the heart in accordance with the flow of blood.

Cow Eye Dissection

Following teacher led lecture, discussion, and questions from class, teacher will lead student dissection of a cow's eye. The instructor will demonstrate each step via document camera. Students will dissect a cow eye and sketch and identify the structures of a mammalian eye.

Unit 3

Body Measurements and Vital Signs:

Following teacher led lecture, demonstration, and questions, students will identify the equipment utilized to perform vital signs and body measurements, including adult and infant scale, tape measure, blood pressure, pulse, temperature, respiration, and pulse oximetry.

Following teacher led lecture, demonstration, instructional video and questions, students will perform body measurements and vital signs on 20 other students and record the results. They will also practice taking a wide range of blood pressures on blood pressure arm. They will identify the differences in the results obtained and speculate on the cause of the differences. They will record vital signs on a rotating basis over a period of two weeks to determine the effects of exercise, medications, time of day and nutrition on the results and produce a graph showing the change in values. They will also take vital signs on the Nurse Kelly manikin.

Mock Clinic: Following teacher led lecture, demonstration, and questions, students will participate in this mock clinic role play exercise using Nurse Kelly and the SIMpad and each other. They will rotate roles of patient and medical assistant and participate in clinical scenarios. The medical assistant role will be to obtain Ht, Wt, TPR and B/P and record all values in various clinical formats. Chief complaints, both object and subjective will be obtained and accurately recorded using appropriate medical terminology and abbreviations. (Reinforcing medical terminology, grammar, and listening skills).

Assisting with Exam and Specialty Exams: The medical assistant has many responsibilities in preparing for examinations, including setting up the room and supplies as well as preparing the patient for exam.

Following teacher led lecture, demonstration, and questions, students will be presented with a variety of equipment representing the various equipment used in specialty exams. Students will be given a scenarios card with a specific exam. Students will determine what equipment is to be used to facilitate the exam. They will be required to set up the clinical room for the exam, prepare the patient and explain the procedure to the patient. Students will be evaluated using the textbook generated rubric.

Skin Puncture: Following teacher led lecture, demonstration, and questions, students will follow the procedure for skin puncture. They will puncture skin with a sterile lancet to obtain a few drops of capillary blood for screening tests. Students will follow textbook generated rubric, all safety guides lines for OSHA and CLIA must be maintained for student safety. Procedure must be documented in fictitious patient chart.

Finger Stick: Following teacher led lecture, demonstration, and questions, students will perform finger stick procedure using a sterile lancet and obtain a sample in a micro-hematocrit tube then seal the tube with clay. Specimen will be placed in a centrifuge, spun and the results read and recorded in the fictitious patient chart. Students will determine if the results fall within the normal or abnormal range for age and gender. Students will write a one page description describing their findings and explaining their conclusions.

Blood Specimen: Following teacher led lecture, demonstration, and questions, students will obtain a capillary blood specimen and will perform glucose testing on the sample. Various Glucometers will be used. Results will be documented in the fictitious patient chart and vales will be analyzed to determine if the results fall within the normal blood sugar range. Students will write a one page description describing their findings and explaining their conclusions

Urinalysis Testing: After teacher led lecture and discussion and questions from class, teacher will demonstrate urine testing with reagent strips. Lab: Types of urine collection will be discussed and demonstrated with use of

manikins (Pediatric, first morning, clean catch mid-stream, 24 hour and catheterization Urine). Students will be instructed on Physical urinalysis- color, clarity, volume, odor, and specific gravity. Students will be given 4 urine specimens and they will perform a chemical urinalysis on each using the text book generated lab slip. Results will be recorded and then entered on fictitious patient chart. Normal and abnormal results will be evaluated. Students will write a one page description describing their findings and explaining their conclusions.

Throat Culture: Throat cultures are obtained to isolate disease-causing organisms to determine effective treatment of the patient. Following teacher led lecture and video to accompany the text book, students will observe and then return demonstration on the proper collection and handling of throat culture specimens.

Wound Culture: Obtaining a wound culture from a patient, using sterile technique that protects the integrity of the specimen. After teacher led lecture and discussion, students will watch a video and then teacher will demonstrate the correct procedure for obtaining and documentation of specimen collection. Students will return the demonstration and document the collection in the fictitious patient chart.

ECG: Students will receive a demonstration on obtaining the necessary information for preforming an ECG, patient preparation, lead placement, and documentation of procedure. Students will discuss all parts of a 12 lead ECG including standardization and artifacts. Holter Monitor and Stress Test procedures will be discussed and examples of testing viewed in video to accompany text book. Stations will be set up and students will pair off and perform ECGs on each other. Students will document procedure in fictitious patient chart.

Instrumentation: Following teacher led lecture, demonstration, and questions, students will identify common instruments and supplies and set up instruments used in minor surgical procedures and the various forms used in documentation of procedures.

Sterile Field: Following teacher led lecture, demonstration, instructional video, and questions students will demonstrate the ability to maintain a sterile field with any procedure. (Rubric)

Suture Removal: Following teacher led lecture, demonstration, instructional video, and questions, students will demonstrate the proper procedure for removing sutures and staples from a ficticious wound on a pigs foot to simulate human tissue. (Rubric)

Surgical Prep: Following teacher led lecture, demonstration, and questions, students will discuss the necessary steps in preparing a patient for a surgical procedure including verifying necessary paperwork/consent forms and the proper documentation required: correctly identify, spell, and pronounce key terms. Students will write one page informative essay describing the rationale behind each step in the procedure.

Unit 4

Measurements Systems and Drug Calculations:

Following teacher led lecture, demonstration, practice, and questions, students will define basic units of measurements and equivalents in metric, apothecary, and household systems. Basic mathematical systems will be reviewed, including, addition, subtraction, multiplication and division, fractions, proportions, conversions and ratios. Students will also need to be able to recognize relative terminology, correctly interpret chart notation, and think critically to solve purposefully inserted contraindicative information and/or orders.

In a mock clinical setting, students will calculate and prepare correct dosages per doctor's orders of various mock medications in oral, Sublingual, Buccal, Transdermal, Nasal, Ophthalmic, Otic, Topical, Rectal, Vaginal and Inhalation forms.

Following teacher led lecture, demonstration, instructional video, and questions, students will identify and examine the parts of syringes and the various types. Under direct supervision of the instructor, students will draw up mock injectable medication and administer injections to clinical models.

Students will administer a minimum of 10 each, intradermal, sub cutaneous, and intramuscular injections. Student & instructor will maintain a log of the number of injections given by student.

Unit 5

Following Certified BLS Instructor led lecture, instructional video, demonstration, and questions, students will complete the necessary requirements for American Heart Association Basic Life Support CPR and First Aid in order to obtain certification.

Skills practice in CPR, Choking victim and First Aid medical emergencies. Written and skills testing

Course Materials

Textbooks

Title		Author	Publisher	Edition	Web	osite	Primary
Medical A Yes	ssisting Administra	ative and Clinica	l Competencies Michelle Blesi and Ba	irbara A. Wis	se 7	Cengage	Learning
Essentials No	of Human Anaton	ny and Physiolog	gy Elaine N. Marieb Pearson	Education		10	[empty]
Medical T No	erminology for He	alth Professions	Anne Ehrlich and Carol Schroder	Delmar Lear	ning	7	[empty]
Anatomy No	and Physiology Co	loring Workboo	k: A Complete Study Guide Elaine N.	Marieb Pea	arson	10	[empty]
Supplem	ental Materials						
Title	Content						

Supplemental Materials

Online Resources American Association of Medical Assistants: www.aama-ntl.org American Medical Technologist: www.amt1.com American Medical Association: www.ama-assn.org American Board of Medical Specialties: www.abms.org National Institutes of Health: www.nih.gov

MedTerms Medical Dictionary:

www.medterms.com U.S. department of Health and Human Services, HIPAA Information: www.hhs.gov/ocr/privacy Occupational Health and Safety Administration: www.osha.gov/ Drug Enforcement Administration: www.justice.gov/dea/index.htm Center for Disease Control and Prevention: www.cdc.gov Disease Conditions in A-Z Topic List: www.emedicinehealth.com

WebMD:

www.webmd.com Centers for Disease Control and Prevention: www.cdc.gov National Heart, Lung and Blood Institute: www.nhlbi.nih.gov CDC, Sexually Transmitted Diseases: www.cdc.gov/std LifeClinic: www.lifeclinic.com American Cancer Society: www.cancer.org American Academy of Pediatrics: www.aap.org

Clinical Laboratory Standards Institute:

www.clsi.org

Common Laboratory Values:

www.globalrph.com/labs.htm American Heart Association: www.heart.org

U.S. National Library of medicine: www.nlm.nih.gov Food and Drug Administration: www.fda.gov

RxList (online drug information resource):

www.RxList.com

PDR online:

www.pdr.net CDC Vaccine Information: www.cdc.gov/vaccines/about/terms/vacc-abbrev.htm American Academy of Emergency Medicine: www.aaem.org American Red Cross: www.redcross.org

Department of Health and Human Services Office of Disease Prevention and Health Promotion:

www.health.gov/dietaryguidelines CareerBuilder.com: www.careerbuilder.com Job Interview helper: www.jobinterviewhelper.com Videos and Video Excerpts Medical Assisting Administrative and Clinical Competencies Skills Instructional Video.

Handouts

Medical Assisting graphic organizer worksheet Instructional video viewing guides Informative handouts Rubrics Skills sheets

Demonstrative Materials/ Models

Various Demonstration Models

Microscope

Various Medical equipment (ECG, thermometers, B/P Cuffs, Stethoscopes, etc.)

Syringes