



COURSE SYLLABUS

Course Title: Medical and Clinical Assisting Theory,
Medical and Clinical Assisting Lab
Course Number: MED103, MED 104
Course Hours: 798
Course Length: 34 Weeks

Course Description

In this course students receive the theory and lab instruction for the medical assistant. The curriculum includes health science fundamentals, anatomy and physiology, medical terminology, legal and ethical responsibilities, medical office management and procedures, administrative and clinical duties, safety and security procedures, emergency preparedness, records management, informatics, basic math skills, fundamentals of medical insurance billing, preparing patients for physical examinations, pharmacology principles for the medical assistant, communication in healthcare, and interpersonal and employability skills. This course provides students with the hands-on experience required for performing the various skills and procedures that are part of the medical assistant role.

Attendance

Students are expected to attend scheduled classes and laboratory sessions on time. The student is solely responsible for all information, materials, handouts, reading assignments, test, lab sessions, clinical externships and instructions given during the lecture. The Healthcare Institute has no obligation to provide outlines, notes, testing information, make-up lectures or sign-in sheets. Regardless of the amount of time a student misses, he or she must complete all requirements of the program to graduate. A student is not allowed to miss more than 20% of the course hours in their program. Students with an absence rate exceeding 20% will be subject to dismissal from their program.

Any missed clinical hours must be completed entirely to graduate. No exceptions will be made.

Tardiness is defined as showing up more than 15 minutes late. Having three separate incidents of tardiness will be considered as one unexcused absence.

Class Hours

Monday thru Thursday 9-3:30 pm (24 hours) weekly

Methods of Instruction

The instructor will develop practical integrated student-centered lessons, organized under the basic principles of adult learning and motivation. During this course, the student will be motivated to learn medical office procedures, injections and vital signs, medical terminology, Electrocardiography and human diseases. The interactive activities developed in class will be supported with lecture, discussion, videos, and computer software, along with sample questions.

Job-Related Health, Safety, and Fire-Prevention

Job-related health, safety, and fire-prevention related to this course are reviewed the first day of class by the instructor.

Methods of Delivery

This course will consist of several teaching methods in campus, to facilitate student learning and strategies. This course will be taught by making use of the following methods:

- Classroom lectures
- Textbook
- Group discussion activities
- Presentations
- Assignment reading
- Exams
- Lecture-discussion
- Video
- PowerPoints, and study guides

Theory and Skills

The theoretical knowledge and related skills are measured to evaluate the achievement of this course based on the following data science skills: design, data, algorithm, tools and communication.

Assessment Methods

The assessment method for this course demonstrates the skills learned and is based on the following three elements: multiple choice tests for the theory; and skills demonstration activities for ability to perform duties as per each competency requires.

Course Textbooks and Materials

Kinn's The Medical Assistant 13th Edition; Deborah B. Proctor; Alexandra P. Adams

Kinn's The Medical Assistant 13th Edition Study Guide

Kinn's The Medical Assistant 13th Edition/ Procedure Checklists annual

Meriam-Webster Dictionary

Mosby: Mastering Healthcare Terminology – Get There, 3rd Ed., Shiland, 2010

Grading Scale

	POINTS	GRADE
90-100%	4	A
80-89%	3	B
70-79%	2	C
69% and below	0	F- Unsatisfactory (must repeat)

I: Incomplete

Students must achieve a 75% score in order to pass each course. Students falling behind are advised and encouraged to attend additional classes and /or tutoring.

Day 1-9-----

Introduction to the Medical Assisting Profession, Professional and Ethical Behavior in the Workplace, Understanding Human Behavior, Effective Communication and Interpersonal Skills, Ethical and Legal Considerations in Medical Assisting

Competency 1- Competency-Based Education and The Medical Assistant Student

By the end of this section of the course, the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Discuss competency-based education and adult learners. Summarize the importance of student portfolios in providing academic success and skill competency. Examine your learning preferences and interpret how your learning style affects your success as a student. Differentiate between adaptive and nonadaptive coping mechanisms. Apply time management strategies to make the most of your learning opportunities. Integrate effective study skills into your daily activities. Design test-taking strategies that help you take charge of your success. Analyze healthcare results as reported in graphs and tables. Apply problem-solving techniques to manage conflict and overcome barriers to success. Relate assertiveness, aggressiveness, and passive behaviors to professional communication and discuss the role of assertiveness in effective communication.

Textbook Reference: Chapter 1

Class Activities: Review summary of Learning Objectives as per book
Chapter Vocabulary review

Competency 2: The Medical Assistant and The Healthcare Team

By the end of this section of the course, the student will be able to define, spell, and pronounce the terms listed in the vocabulary. Summarize the history of medicine and its significance to the medical assisting profession. Identify national departments and agencies that focus on health. List professional medical assisting organizations. Summarize the various types of medical specialties and healthcare facilities. Define a patient-centered medical home (PCMH) and discuss its five care functions and attributes. Differentiate between scope of practice and standards of care for

medical assistants and compare and contrast provider and medical assistant roles in terms of standard of care.

Textbook Reference: Chapter 2

Class Activities: Review summary of Learning Objectives as per book
Chapter Vocabulary review
Procedure 2-1
MA Workbook. Pg. 15-31

Competency 3: Professional Behavior in The Workplace

By the end of this section of the course, the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Explain the reasons professionalism is important in the medical field, and describe work ethics. Discuss the attributes of professional medical assistants, and project a professional image in the ambulatory care setting. Identify obstructions to professional behaviors. Define the principles of self-boundaries. Describe the dynamics of the healthcare team. Apply time management strategies to prioritize the medical assistant's responsibilities as a member of the healthcare team. Summarize the role of professional medical assistant organizations.

Textbook Reference: Chapter 3

Class activities: Review summary of learning objectives
Chapter Vocabulary review
MA Workbook. Pg. -39

Weekly Assessment

Test 1 -

Textbook reference: pgs. 3-13

Multiple Choice 50 questions

Value: 2 points towards final course grades

Timing 60 minutes

Competency 4: Therapeutic Communication

By the end of this section of the course, the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Discuss first impression and patient-centered care. Identify types and styles of verbal communication. Identify types of nonverbal communication. Recognize and respond to verbal and nonverbal communication. Recognize communication barriers. Explain the factors that should be considered when communicating diverse patients populations. Identify techniques for overcoming communication barriers. Apply the sender-receiver process to recognize the elements of oral communication. Apply feedback techniques such as reflection, restatement, and clarification to obtain information. Discuss important factors about therapeutic communication across the life span. Explain Maslow's hierarchy of needs.

Textbook Reference: Chapter 4

Class activities: review summary of learning objectives
Chapter Vocabulary review
Procedures 4-1, 4-2
MA Workbook. Pg. 40-52

Competency 5: Medicine and Law

By the end of this section of the course, the student will be able to: define, spell, and pronounce the terms listed in the vocabulary; discuss the legal scope of practice for medical assistants; distinguish among an act, a statute, and an ordinance; compare criminal and civil law as they apply to the practicing medical assistant; explain the three basic categories of criminal law; distinguish which type of civil law deals with medical professional liability; provide an example of tort law as it would apply to a medical assistant; describe liability, professional and personal injury, and third-party insurance; explain the four essential elements of a valid contract; distinguish between interrogatories and depositions; list three things to remember when testifying in court; discuss the advantages of arbitration; differentiate among malfeasance, misfeasance, and nonfeasance; explain the “four Ds” of negligence; define the types of damages; compare and contrast physician and medical assistant roles in terms of standard of care; explain the importance of informed consent; list several legal disclosures the physician must make; identify where to report illegal and/or unsafe activities and behaviors that affect the health, safety, and welfare of others; explain how the medical assistant’s practice is affected by negligence, malpractice, statutes of limitation, Good Samaritan laws, the Uniform Anatomical Gift Act, Living Wills/Advanced Directives, and the Medical Durable Power of Attorney; summarize the Patient’s Bill of Rights; describe the implications of the Health Insurance Portability and Accountability Act (HIPAA) for the medical assistant in various medical settings; describe personal protective equipment; discuss requirements for responding to hazardous materials disposal; distinguish between the OSHA and CLIA; indicate which one is an actual agency; identify how the Americans with Disabilities Act (ADAA) applies to the medical assisting profession. Summarize the primary features of the Affordable Care Act (ACA).

Textbook Reference: Chapter 5

Class activities: review summary of learning objectives
Chapter Vocabulary review
Procedures 5-1, 5-2
MA Workbook. Pg. 53-75

Competency 6: Medicine and Ethics

By the end of this section of the course, the student will be able to: define, spell, and pronounce the terms listed in the vocabulary; differentiate between legal, ethical, and moral issues affecting healthcare; compare personal, professional, and organizational ethics; identify the effect personal ethics may have on professional performance; recognize the role of patient advocacy in the practice of medical assisting; explain rights and duties as related to ethics; list and define the four types of ethical problems; discuss the process used to make an ethical decision; detail the impact of the decisions made by healthcare professionals; discuss several of the CEIA’s opinions and how they might differ from the views of the class as a whole; explore the role of confidentiality as it applies to the medical assistant; discuss the role of cultural, social, and ethnic diversity in ethical performance of medical assisting practice.

Textbook reference: Chapter 6

Class Activities: review summary of learning objectives as per textbook
Procedures 6-1 through 6-2

Mod 101 Assessment

Test # 2 - Health Information

Textbook reference: pgs. 18-67

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

MA 102 – Administrative Medical Assisting

Day 10-21-----

In this module, students will become familiar with the administrative functions of the medical office. Topics covered will include introduction to computers and their function in the medical office, use of office equipment including printers, copiers, credit card processors, scanners and other types of office equipment as the medical office needs dictate. Keyboarding skills will be emphasized as well as professional telephone techniques, appointment scheduling, and patient reception and processing. The office environment and daily medical office operations will be discussed as will written communication skills and mail processing.

Competency 7: Technology and Written Communication

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary; list several ways the computer can be effective in a medical office. Differentiate between: 1. System software and application software, 2. Electronic Medical Record (EMR) and a practice management system. Know the difference between input and output hardware for personal computers. Identify internal computer components, secondary storage devices. Explain and give examples of peripheral devices; list and discuss several types of file formats; explain the concept of computer networking. Explain how to maintain computer hardware; discuss the importance of computer security. Discuss the importance of data backup. Recognize the elements of fundamental writing skills/ Describe each component of a professional business letter including capitalization, punctuation, enumeration in business letters.

Textbook reference: Chapter 7

Class Activities: review summary of learning objectives as per textbook

Procedures 7-1 through 7-2

Chapter Vocabulary review

MA wkbook pg 87-112

Competency 8: Telephone Techniques

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Discuss the telephone equipment needed by a healthcare facility; summarize listening skills as well as demonstrate effective and professional telephone techniques; consider the importance of tone of voice and enunciation. Describe the importance of thinking ahead when managing telephone calls and describe the correct way to answer the telephone in the

office. Detail the steps to follow when taking a message. Know what questions to ask when answering emergency calls. Explain why knowledge of time zones and long-distance calling is necessary. Discuss various types of incoming calls and how to deal with each. Discuss how answering services and automatic call routing systems are used in a healthcare facility.

Textbook reference: Chapter 8

Class Activities: review summary of learning objectives as per textbook

Procedures 8-1 through 8-2

Chapter Vocabulary review

MA Workbook pages 113-130

Competency 9: Scheduling Appointments and Patient Processing

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary; determine and discuss the source of incoming and outgoing calls to a physician's office; describe how to develop a pleasing telephone voice; demonstrate the correct way to hold a telephone handset; explain why courtesy is so important when speaking on the telephone; demonstrate the correct way to answer the telephone in the office; discuss different ways to handle callers who want to speak to the physician; list the seven elements of a correctly handled telephone message; demonstrate the correct way to record a message accurately and take a request for action; demonstrate the most efficient way to call in a prescription or a prescription refill to a pharmacy; discuss how the medical assistant should handle callers who have a complaint; explain how angry callers might be handled; list several questions to ask when handling an emergency call; discuss several useful sections of the introductory pages of the phone directory.

Textbook reference: Chapter 9

Class Activities: review summary of learning objectives as per textbook

Procedures 9-1 through 9-5

Chapter Vocabulary review

MA Workbook pages 131-160

Competency 10: Daily Operations in the Ambulatory Care Setting

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Describe the administrative and clinical opening duties performed by the medical assistant. Discuss the administrative and clinical closing duties performed by the medical assistant, as well as daily and monthly duties. Explain safety and security procedures important in the healthcare facility. Describe the elements of an equipment inventory list; explain the purpose of routine maintenance of administrative and clinical equipment. Describe the medical assistant's role in ordering equipment. Discuss the elements in a supply inventory list. List the steps involved in completing an inventory. Perform an inventory with documentation. Prepare a supply order. Describe how the healthcare facility utilizes USPS and other delivery agencies. Describe proper body mechanics.

Textbook reference: Chapter 10

Class Activities: review summary of learning objectives as per textbook

Procedures 10-1 through 10-4

Mod 102 Assessment

Test 3 A/B - Administrative Medical Assisting

Textbook reference: pages 91-177

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

MA 103 -Health Information in the Medical Office

Day 22-33 -----

This module will present the patient medical record in both paper and electronic form. Proper use and release of health information will be covered. Legal and ethical considerations regarding patient health information is presented. Creating and maintaining medical records, filing skills, various filing systems, proper documentation skills and error correcting is also discussed.

Competency 11: The Health Record

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Name and discuss the two types of patient records and explain why accurate healthcare records are important. Differentiate between subjective and objective information when creating a patient's health record. Explain the difference between an electronic health record (EHR) and an electronic medical record (EMR). Explain the American Recovery and Reinvestment Act (ARRA) applies to the healthcare industry. Define "meaningful use" and how it relates to the healthcare industry. List the three main components of "meaningful use" legislation. Explore advantages, disadvantages, and capabilities of an EHR system. Discuss the importance of nonverbal communication with patients when EHR is used. Discuss backup systems for the EHR, as well as, transfer, destruction and retention of health records. Discuss health information exchanges (HIEs). Identify the two methods of organizing a patient's paper medical record. Discuss how to document information in an EHR and paper health record, and how to make corrections/alterations to health records. Discuss transfer, destruction and retention of medical records as related to paper records. Describe indexing rules. Discuss the pros and cons of various filing methods as well as how to file patient health records.

Textbook reference: Chapter 11

Class Activities: Review summary of learning objectives as per textbook

Procedures 11-1 through 11-4

Chapter vocabulary review

MA Workbook pages 181- 210

MA 104 – Billing and Coding Procedures

Day 34-45 ----- -----

In this module, students will learn the proper use of ICD-9 and CPT coding, why coding systems are used and how to properly code based on documentation in the medical record. Various classifications of insurance and payment systems are discussed. Paper claims and electronic billing are also addressed. Billing and collection procedures are introduced. Proper documentation and follow up is also presented. An introduction to establishing professional fees is also discussed.

Competency 12: Basics of Diagnostic Coding

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Describe the historical use of the International Classification of Disease (ICD) in the U.S. Describe the transition from ICD-9-CM diagnostic coding to ICD-10-CM diagnostic coding. Explain how to use a Tabular List to select main terms, essential modifiers and appropriate codes and code ranges. Summarize coding conventions as defined in the ICD-10-CM in the coding manual. Review coding guidelines to assign the most accurate ICD-10-CM diagnostic code. Explain how to abstract the diagnostic statement from a patient's health record. Describe how to use the most current diagnostic codes and perform diagnostic coding. Identify how encoder software can help the coder assign the most accurate diagnostic codes. Explain the importance of coding guidelines for accuracy and discuss special rules and considerations that apply to the code selection process. Use tactful communication skills with medical providers to ensure accurate code selection. Review medical coding ethical standards.

Textbook reference: Chapter 12

Class Activities review summary of learning objectives as per textbook

Procedures 12-1

MA Workbook pages 211- 235

Competency 13: Basics of Procedural Coding

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Describe the organization of Current Procedural Terminology (CPT). Report the history of procedural coding. Distinguish between the Tabular Index and the Alphabetic Index in the CPT code set. Classify the six different sections of the CPT code set. Discuss special reports and explain the importance of modifiers in assigning CPT codes. Review various conventions in the CPT code set. Identify the required medical documentation for accurate procedural coding. Describe how to use the most current procedural coding system and perform procedural coding for surgery. Discuss how to use Alphabetic Index. Identify common CPT coding guidelines for evaluation and management (E/M) procedures, anesthesia and surgical procedures. Discuss coding factors for the integumentary and muscular system, and for maternity care and delivery. Identify CPT coding guidelines for the Radiology, Pathology, and Laboratory

and Medicine sections. Identify procedures and services that require HCPCS codes. Describe how to use the most current HCPCS level II coding system. Perform procedural coding of an office visit and an immunization. Summarize common HCPCS coding guidelines.

Textbook reference: Chapter 13

Class Activities: review summary of learning objectives as per textbook

Procedures 13-1 through 13-2

Chapter vocabulary review

MA Workbook pages 236-260

Weekly Assessment

Test 4 A/B - Billing and Coding Procedures

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

Competency 14: Basics of Health Insurance

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Discuss the purpose of health insurance and explain the health insurance contract between the patient and the health plan. Identify types of third-party plans. Discuss the Affordable Care Act's effect on patient healthcare access. Summarize the different health insurance benefits available and interpret information on a health insurance identification (ID) card. Explain the importance of verifying eligibility and be able to verify eligibility services, including documentation. Explain the insurance contract between the healthcare provider and the health insurance company. Explain how insurance reimbursements are determined and discuss the effect health insurance has on provider reimbursement. Summarize private sponsored health insurance plans. Differentiate among the different types of managed care models. Outline managed care requirements for patient referral and obtain a referral with documentation. Describe the process for preauthorization and how to obtain preauthorization including documentation. List and discuss various government-sponsored plans. Review employer-established self-funded plans.

Textbook reference: Chapter 14

Class Activities: review summary of learning objectives

Procedure: 14-1 through 14-4

Chapter vocabulary review

MA Workbook pages 261-279

Competency 15: Medical Billing and Reimbursement

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Identify steps for filing a third-party claim. Identify the types of information contained in the patient's billing record. Apply managed care policies and procedures, describe processes for pre-certification, and obtain pre-certification, including documentation. Explain how to submit health insurance claims, including electronic claims, to various third-party

payers. Review the guidelines for completing the CMS-1500 Health Insurance Claim Form and complete an insurance claim form. Differentiate between fraud and abuse. Discuss the effects of upcoding and down coding. Discuss the methods of preventing the rejection of claims and display tactful behavior when speaking with medical providers about third-party requirements. Describe ways of checking a claim's status. Review and read an Explanation of Benefits. Discuss reasons for denied claims. Define "medical necessity", as it applies to diagnostic and procedural coding, also apply medical necessity guidelines. Explain a patient's financial obligations for services rendered and inform a patient of these obligations. Show sensitivity when speaking with patients about third-party requirements.

Textbook reference: Chapter 15

Class Activities: Review summary of learning objectives

Procedure: 15-1 through 15-5

Chapter vocabulary review

MA Workbook pages 280-303

Day 46-53

This module addresses the management of the medical office. Financial skills will be presented to include budget creation, accounting reports, banking and statement reconciliation, requirements of a negotiable instrument, precautions in accepting checks, collection of money owed and follow up on returned checks. Human resource functions, the importance of good customer service, locating potential employees and the employee selection process are also presented. Staff meetings and their function are discussed as well as inter and intra office communication. Marketing of the medical practice is also addressed

Competency 16: Patient Accounts, Collections, and Practices

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Define bookkeeping and all the transactions recorded in patient accounts. Do the following related to patient account records: 1. List the necessary data elements in patient account records. 2. Discuss pegboard system. 3. Explain when transactions are recorded in the patient account. 4. Perform accounts receivable procedures for patient accounts, including charges, payments and adjustments. Describe special bookkeeping procedures for patient account records, including credit balances, third-party payments, and refunds; explain how to interact professionally with representatives. Discuss payment at the time of service and give an example of displaying sensitivity when requesting payment for services rendered. Describe the impact of Truth in Lending Act on collection policies for patient accounts. Discuss the ways to obtain credit information and explain patient billing and payment options. Review policies and procedures for collecting outstanding balances on patient accounts. Describe successful collection techniques for patient accounts. Discuss strategies for collecting outstanding balances through personal finance interviews. Describe types of adjustments made to patient accounts, including non-sufficient funds (NSF) checks and collection agency transactions. Define "accounts receivable", "accounts payable". Discuss ethical and legal issues related to patient accounts, collections, and practice management.

Textbook reference: Chapter 16

Class Activities: Review summary of learning objectives
Procedure: 16-1, 16-2
Chapter vocabulary review
MA Workbook pages 304-325

Competency 17: Banking Services and Procedures

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Explain the purpose of the Federal Reserve Bank and the types of banks it manages. Identify common types of bank accounts. Discuss the importance of signature cards. Explain how online banking has made standard banking processes more efficient. Review the benefits of customer-oriented banking. Do the following related to checks: 1. Compare different types of negotiable instruments. 2. Identify precautions when accepting checks from patients. 3. Explain how checks are processed from one account to another. 4. Review the procedure followed when the healthcare facility receives a non-sufficient funds (NSF) check. Identify precautions in accepting cash. Discuss the use of debit cards and credit cards; their advantages and disadvantages. Do the following related to banking procedures in the ambulatory care setting: 1. Describe banking procedures as related to the ambulatory care setting. 2. Explain the importance of depositing checks daily. 3. Prepare a bank deposit. 4. Compare types of check endorsements. Review check writing procedures used to pay the operational expenses of a healthcare facility. Understand the purpose of a bank account reconciliation for auditing purposes. Discuss patient education, as well as legal and ethical issues related to banking services and procedures.

Textbook Reference: Chapter 17
Class activities: Review summary of learning objectives
Procedure 17-1
Chapter vocabulary review
MA Workbook. Pg. 326-342

Competency 18: Supervision and Human Resource Management

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary; identify three purposes of the most current diagnostic coding system; describe how to use the most current diagnostic coding system; explain and apply the basic coding rules in the use of the ICD-9-CM; explain where diagnostic information can be found and demonstrate how to abstract the diagnostic statement from the medical record; demonstrate the use of the Alphabetic Index in the selection of main and modifying terms and the appropriate code (or codes) or code ranges; explain the importance of the Tabular Index; correctly use instructional terms and symbols as defined in the ICD-9-CM; explain the use of V and E codes; perform diagnostic coding.

Textbook reference: Chapter 18
Class Activities: Review summary of learning objectives
Procedure: 18-1
Chapter vocabulary review
MA Workbook pages 343-361

Competency 19: Medical Practice Marketing and Customer Service

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Explain the need for marketing a healthcare facility. Identify the target market. Discuss why a SWOT analysis is important to identify target the market. Do the following related to marketing tools: 1. Review ways a healthcare practice or facility can promote their practice through community involvement. 2. Define and discuss automated call distribution. 3. Explain how newsletters and blogs can be effective marketing tools, as well as marketing through magazine and newspaper ads. 4. Determine the value of internet marketing for a healthcare practice or facility. Distinguish between advertising and public relations. Develop website content, organization, and design to attract new patients; also review strategies to increase website traffic. Explain how to successfully deliver high-quality customer service, including how to identify with patients, and the value of patient surveys. Identify strategies to manage problem patients. Review the importance of new patient information packet and develop a current list of community resources related to patients' healthcare needs. In the role of patient navigator, facilitate referrals to community resources. Define a patient-centered medical home (PCMH).

Textbook reference: Chapter 19

Class Activities: review summary of learning objectives

Procedure: 19-1

Chapter vocabulary review

MA Workbook pages 362-377

Mod 105 Assessment

Test 6 – Financial and Practice Management

(Ch.16-19) Pgs.308-375

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

MA 201 – Clinical Medical Assisting

Day 54-62 -----

In this module, students will learn infection control techniques, how to identify potentially hazardous situations on the job, how to prevent the spread of infection and how to protect themselves from potential infection. Students will also learn to collect the patient history, assist in patient assessments, participate in patient education, proper nutrition and health promotion, obtaining patient vital signs and assisting with the patient examination.

Competency 20: Infection Control

Define, spell, and pronounce the terms listed in the vocabulary. Describe the characteristics of pathogenic microorganisms. Do the following related to the chain of infection: Apply the chain of infection process to healthcare practice. Compare viral and bacterial cell invasion. Differentiate between humoral and cell-mediated immunity. Summarize the impact of the inflammatory response on the body's ability to defend itself against infection. Analyze the differences among

acute, chronic, latent, and opportunistic infections. Do the following related to OSHA Standards for the healthcare setting: Specify potentially infectious body fluids. Integrate OSHA's requirement for a site-based Exposure Control Plan into facility management procedures. Explain the major areas included in the OSHA Compliance Guidelines. Discuss protocols for disposal of biologic chemical materials.

Remove contaminated gloves while following Standard Precautions principles. Perform an eye wash procedure to remove contaminated material. Summarize the management of postexposure evaluation and follow-up and participate in blood-borne pathogen training and a mock exposure event. Identify the regulations established by the Centers for Disease Control and Prevention (CDC) that affect healthcare workers. Apply the concepts of medical and surgical asepsis to the healthcare setting. Discuss proper hand washing and demonstrate the proper handwashing technique for medical asepsis. Differentiate among sanitization, disinfection, and sterilization procedures, and select barrier/personal protective equipment while demonstrating the correct procedure for sanitizing contaminated instruments. Discuss the role of the medical assistant in asepsis. Apply patient education concepts to infection control. Discuss legal and ethical concerns regarding medical asepsis and infection control and perform compliance reporting based on public health statutes covering reportable communicable diseases.

Textbook reference: Chapter 20

Class Activities: review summary of learning objectives

Procedure: 20-1 through 21-3

Chapter vocabulary review

MA Workbook pages 402-429

Competency 21: Patient Assessment

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Employ the concept of holistic care in the patient assessment process. Describe the components of the patient's medical history and how to collect the history information. Discuss how to successfully understand and communicate with patients and display sensitivity to diverse populations. Demonstrate therapeutic communication feedback techniques to obtain information when gathering a patient history. Respond to nonverbal communication when interacting with patients. Identify barriers to communication and their impact on patient assessment; also, compare open-ended and close-ended questions. Discuss the patient interview. Identify barriers to communication and their impact on the patient assessment. Detect a patient's use of defensive mechanisms and the resultant barriers to therapeutic communication. Demonstrate professional patient interviewing techniques. Discuss the use of therapeutic communication techniques across the lifespan. Compare and contrast signs and symptoms. Document patient care accurately in the patient medical record. Identify and define medical terms and abbreviations related to body systems; also use medical terminology correctly and accurately to communicate information to providers and patients. Differentiate the documentation systems used in ambulatory care practices. Explain "meaningful use" as it applies to the electronic health record (EHR). Describe the role of patient education, in addition to legal and ethical issues, in the patient assessment process.

Textbook reference: Chapter 21

Class Activities: review summary of learning objectives

Procedure: 21-1 through 21-3

Competency 22: Patient Education

Discuss the holistic model of patient education related to health and illness; also instruct patients according to their needs to promote health maintenance and disease prevention. Summarize the stages of grief and suggest therapeutic interactions for grieving patients. List at least five guidelines for patient education that can affect the patient's overall wellness. Do the following related to patient factors that affect learning: 1. Define six patient factors that have an impact in learning. 2. Display respect for individual diversity. 3. Summarize educational approaches for patients with language barriers. Do the following related to the teaching plan: 1. Determine possible barriers to patient learning. 2. Assess the patient's needs. 3. Determine the teaching priorities. 4. Decide the appropriate teaching materials. 5. Develop a list of community resources related to patients' healthcare needs and facilitate referrals to community resources in the role of patient navigator. 6. Decide on the appropriate teaching methods. 7. Implement the teaching plan. 8. Demonstrate the ability to develop an appropriate and effective patient teaching plan. Describe the role of the medical assistant in patient education. Integrate the legal and ethical elements of patient teaching into the ambulatory care setting; also discuss applications of the Health Insurance Portability and Accountability Act (HIPAA).

Textbook reference: Chapter 22

Class Activities: review summary of learning objectives

Procedure: 22-1 through 22-2

Chapter vocabulary review

MA Workbook pages 430-443

Competency 23: Nutrition and Health Promotion

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Analyze the relationship between poor nutrition and lifestyle factors and the risk of developing diet related diseases. Recognize the reasons for people's food choices and the effects of cultural eating patterns. Describe the digestion and classify the types and functions of dietary nutrients. Describe the role of various nutrient components, including carbohydrates, fats, and proteins in the daily diet. Explain the functions of appropriate amounts of vitamins, minerals and water in the diet. Apply the Dietary Guidelines for Americans using the Choose My Plate website developed by the US Department of Agriculture (USDA). Implement nutritional assessment techniques by measuring a patient's body fat and correlating a patient's calculated body mass index (BMI) with the risk of diet related diseases. Do the following related to therapeutic nutrition: 1. Compare concepts of therapeutic nutrition. 2. Instruct the patient according to his/her dietary needs; coach a patient with diabetes about the Glycemic Index of foods. Interpret food labels and their application to a healthy diet and demonstrate the patient how to understand nutrition labels on food products. Discuss food-borne diseases and food contaminants. Summarize the causes of eating disorders obesity and their impact on a patient's health. Define the concept of health promotion.

Textbook reference: Chapter 23

Class Activities: Review summary of learning objectives
Procedure: 23-1 through 23-2
Chapter vocabulary review
MA Workbook. Pg. 444-473

Competency 24: Vital Signs

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Do the following relating to temperature: 1. Cite the average body temperature for various group ages. 2. Describe emotional and physical factors that can cause body temperature to rise and fall. 3. Convert temperature readings between Fahrenheit and Celsius scales. 4. Obtain and record an accurate patient temperature using three different types of thermometers. Do the following related to pulse: 1. Cite the average pulse rate for various group ages. 2. Describe pulse rate, volume and rhythm. 3. Locate and report pulse at multiple sites. Do the following related to respiration: 1. Cite the average respiratory rates for various age groups. 2. Demonstrate the best way to obtain an accurate respiratory count. Do the following related to blood pressure: 1. Cite the approximate blood pressure range for various age groups. 2. Specify physiologic factors that affect blood pressure. 3. Differentiate between essential and secondary hypertension. 4. Interpret current hypertension guidelines and treatment. 5. Describe how to determine the correct cuff size for individual patients. 6. Identify the different Korotkoff phases. 7. Accurately measure and document blood pressure. Accurately measure and document height and weight. Convert kilograms to pounds and pounds to kilograms. Identify patient education opportunities when measuring vital signs. Determine the medical assistant's legal and ethical responsibilities in obtaining vital signs.

Textbook reference: Chapter 24
Class Activities: Review summary of learning objectives
Procedure: 24-1 through 24-8
Chapter vocabulary review
MA Workbook pages 474-503

Competency 25: Assisting with the Primary Physical Examination

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Describe the structural organization of the human body and the body cavities. Identify the functions of the body systems and the major organs and structures of each system. Discuss the concept of a primary care provider and the role of a medical assistant in a primary care practice. Outline the medical assistant's role in preparing for the physical examination. Summarize the instruments and equipment the provider typically uses during a physical examination. Identify the principles of body mechanics and demonstrate proper body mechanics. Outline the basic principles of gowning, positioning and draping a patient for examination; also position and drape a patient in six different examining positions while remaining mindful of the patient's privacy and comfort. Describe the methods of examination and give an example of each. Outline the sequence of a routine physical examination. Prepare for, and, assist in the physical examination of a patient, correctly completing each step of the procedure in the proper sequence. Discuss the role of patient education during the physical examination, in addition to the legal and ethical implications and Health Insurance Portability and Accountability Act (HIPAA).

Textbook reference: Chapter 25

Class Activities: Review summary of learning objectives
Procedures: 25-1 through 25-8
Chapter vocabulary review
MA Workbook pages 504-528

Mod 201 Assessments

Test 7 - Fundamentals

Textbook reference: (Ch.21-25) Pgs. 404-527

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

Midterm Ch.1-25

MA 202 – Assisting with Medications

Day 63-70 -----

Competency 26: Principles of Pharmacology

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Distinguish among the government agencies that regulate drugs in the U.S. Cite the areas covered in the regulations established by the Drug Enforcement Agency (DEA) for the management of controlled or regulated substances. List the DEA regulations for prescription drugs for each of the five schedules of the Controlled Substance Act. Explain the medical assistant's role in preventing drug abuse. Differentiate between a drug's chemical, generic and trade names. Describe the use of drug reference materials and explain the five pregnancy risk categories for drugs. Discuss tips for studying pharmacology and define the five medical terms used to describe the clinical use of drugs. Cite Safety measures for the use of OTC drugs. Diagram the parts of a prescription. Demonstrate the ability to transcribe a prescription accurately. Describe e-prescription methods. Relate the principles of pharmacokinetics to drug use. Describe factors that affect the action of a drug, including the physiologic changes associated with aging. Identify the classifications of drug actions. Differentiate among commonly used herbal remedies and alternative therapies. Examine the role of the medical assistant in drug therapy education. Identify the medical assistant's legal responsibilities in medication management in an ambulatory care setting.

Textbook reference: Chapter 26

Class Activities: review summary of learning objectives

Procedure: 26-1

Chapter vocabulary review

MA Workbook pages 529-558

Competency 27: Pharmacology Math

By the end of this course section the student will be able to: define, spell, and pronounce the terms listed in the vocabulary. Know the important parts of a drug label. Demonstrate knowledge of basic math computations. Define basic units of measurement in the metric and household system. When calculating drug dosages for administration: 1. Demonstrate knowledge of basic math computations by calculating the correct dose amount. 2. Calculate proper dosages of medication

for administration while using mathematical computations. Determine accurate pediatric doses of medication. Summarize how to reconstitute powdered injectable medications. Specify the legal and ethical responsibilities of a medical assistant in calculating drug dosages.

Textbook reference: Chapter 27

Class Activities: review summary of learning objectives

Procedure: 27-1 to 27-3

Chapter vocabulary review

MA Workbook pages 559-573

Competency 28: Administering Medications

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Follow safety precautions in the management of medication administration in the ambulatory healthcare setting. Analyze safety guidelines for specific patient populations. Document the administration of a medication accurately in the health record. Summarize patient assessment factors that can affect medication administration. Identify various drug forms and their administration guidelines and administer oral medications. Specify parenteral administration equipment, including details about needles and syringes. Follow OSHA guidelines in the management of parenteral administration. Describe and demonstrate the types and locations of parenteral administrations with proper use of sharp containers. Recognize the medical assistant's role in coaching patients about the administration of drugs. Assess legal and ethical issues in drug administration in the ambulatory care setting and complete an incident report related to an error in medication administration.

Textbook reference: Chapter 28

Class Activities: review summary of learning objectives

Chapter vocabulary review

Procedures 28-1 to 28-11

MA Workbook. Pg. 574-614

Mod 202 Assessment

Test 8 – Assisting with Medications

Textbook reference (Ch.26-28) Pgs. 530-606

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

MA 203 – Assisting with Medical Specialties

Day 71-86 -----

In this module, students will learn to assist with various medical specialties. Students will learn anatomy and physiology of the various body systems, common diseases affecting each system, signs and symptoms of those diseases, diagnostic procedures in diagnosing diseases, common treatments and any special precautions required during diagnostic or treatment procedures. Students will learn the medical terminology pertaining to the various body systems, signs and

symptoms, diagnostic procedures and treatments. Emergency procedures will be presented, and students will participate in CPR and Basic First Aid classes.

Competency 29: Safety and Emergency Practices

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe patient safety factors in the medical office environment. Interpret and comply with safety signs, labels, and symbols and evaluate the work environment to identify safe and unsafe working conditions for the employee. Do the following when it comes to environmental safety in the healthcare setting: Identify environmental safety issues in the healthcare setting. Discuss fire safety issues in a healthcare environment. Demonstrate the proper use of a fire extinguisher. Describe the fundamental principles for evacuation of a healthcare facility and role-play a mock environmental exposure event and evacuation of a provider's office. Discuss the requirements for proper disposal of hazardous materials. Identify critical elements of an emergency plan for response to a natural disaster or other emergency. Maintain an up-to-date list of community resources for emergency preparedness. Describe the medical assistant's role in emergency response.

Summarize typical emergency supplies and equipment. Demonstrate the use of an automated external defibrillator. Summarize the general rules for managing emergencies. Demonstrate telephone screening techniques and documentation guidelines for ambulatory care emergencies. Recognize and respond to life-threatening emergencies in an ambulatory care practice. Describe how to handle an unresponsive patient and perform provider/professional-level CPR. Discuss cardiac emergencies and administer oxygen through a nasal cannula to a patient in respiratory distress. Identify and assist a patient with an obstructed airway.

Discuss cerebrovascular accidents and assist a patient who is in shock.

Determine the appropriate action and documentation procedures for common office emergencies, such as fainting, poisoning, animal bites, insect bites and stings, and asthma attacks. Discuss seizures and perform first aid procedures for a patient having a seizure. Discuss abdominal pain, sprains and strains, and fractures, and perform first aid procedures for a patient with a fracture of the wrist. Discuss burns and tissue injuries, and control of a hemorrhagic wound. Discuss nosebleeds, head injuries, foreign bodies in the eye, heat and cold injuries, dehydration, and diabetic emergencies; also, perform first aid procedures for a patient with a diabetic emergency. Apply patient education concepts to medical emergencies. Discuss the legal and ethical concerns arising from medical emergencies.

Textbook reference: Chapter 29

Class Activities: review summary of learning objectives

Chapter vocabulary review

Procedures 29-1 to 29-11

MA Workbook. Pg. 574-614

Competency 30: Assisting in Ophthalmology and Otolaryngology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Explain the differences among an ophthalmologist, an optometrist, and an optician. Identify the anatomic structures of the eye. Describe the process of vision. Differentiate among the major types of refractive errors. Summarize typical disorders of the eye and eyeball other than refractive errors. Do the following related to diagnostic procedures for the eye: Define the various diagnostic procedures for the eye. Perform a visual acuity test using the Snellen chart. Assess color acuity using the Ishihara test. Explain the purpose of and the proper procedure for eye irrigation and the instillation of eye medications. Identify the structures and explain the functions of the external ear, middle ear, and inner ear. Describe the conditions that can lead to hearing loss, including conductive and sensorineural impairments. Define other major disorders of the ear, including otitis, impacted cerumen, and Ménière's disease. Do the following related to diagnostic procedures for the ear: Explain diagnostic procedures for the ear. Use an audiometer to measure a patient's hearing acuity accurately. Identify the purpose of ear irrigations and instillation of ear medications.

Demonstrate the procedure for performing ear irrigations. Accurately instill medicated ear drops. Summarize the nose and throat examination and perform a throat culture. Describe the effect of sensory loss on patient education. Discuss legal and ethical issues that might arise when caring for a patient with a vision or hearing deficit, in addition to requirements established by HIPAA and the Americans with Disabilities Act Amendments (ADAA).

Textbook reference: Chapter 30

Class Activities: Review summary of learning objectives
Chapter vocabulary review
MA Workbook pages 978-1007

Competency 31: Assisting in Dermatology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Explain the major functions of the skin. Describe the anatomic structures of the skin. Compare various skin lesions and give examples of each. Describe typical integumentary system infections and infestations. Differentiate among various inflammatory and autoimmune integumentary disorders. Recognize thermal and cold injuries to the skin. Compare the characteristics of benign and malignant neoplasms. Do the following relating to benign and malignant neoplasms: Explain the grading and staging of malignant tumors. Conduct patient education on the warning signs of cancer. Describe skin malignancies and their treatment. Define the ABCDE rule for identifying a malignant melanoma. Do the following relating to dermatologic procedures: Discuss how to assist with a dermatologic examination. Summarize allergy testing procedures. Describe the diagnosis and treatment of allergies. Explain dermatologic procedures performed in the ambulatory care setting. Discuss the medical assistant's role in patient education, in addition to legal and ethical issues that would apply to a dermatology practice.

Textbook reference: Chapter 31

Class Activities: Review summary of learning objectives
Chapter vocabulary review
MA Workbook pages 978-1007

Competency 32: Assisting in Gastroenterology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe the primary functions of the GI system. Identify the anatomic structures that make up the GI system and describe the physiology of each.

Differentiate among the abdominal quadrants and regions

Summarize the typical symptoms and characteristics of GI complaints and perform telephone screen in for patients with GI complaints. Distinguish among cancers of the GI tract.

List common esophageal and gastric disorders; also, describe the signs and symptoms, diagnostic tests, and treatments of each. List intestinal disorders; also, describe the signs and symptoms, diagnostic tests, and treatments of each. Do the following related to diseases of the liver and gallbladder:

Summarize the medical assistant's role in the GI examination on the following when it comes to assisting with gastroenterology diagnostic procedures. Explain the common diagnostic procedures for the GI system. Demonstrate the procedure for assisting with an endoscopic colon examination.

Perform the procedural steps for assisting with the collection of a fecal specimen. Describe the medical assistant's role in the proctologic examination. Describe patient education, in addition to legal and ethical issues, related to assisting in gastroenterology.

Textbook reference: Chapter 32

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 33: Assisting in Urology and Male Reproduction

By the end of this course section the student will be able to:, Define, spell, and pronounce the terms listed in the vocabulary. Describe the anatomy and physiology of the urinary system.

Do the following related to disorders of the urinary system. Explain the susceptibility of the urinary system to diseases and disorders. Identify the primary signs and symptoms of urinary problems. Detail common diagnostic procedures of the urinary system.

Discuss the causative factors of urinary incontinence, in addition to the various treatments and medication used to treat it. Compare and contrast infections and inflammations of the urinary tract.

Describe urinary tract disorders and cancers. Summarize the causes of renal failure and how it is treated.

Summarize the typical pediatric urologic disorders. Describe the anatomy and physiology of the male reproductive system. Determine the causes and effects of prostate disorders. Outline common types of genital pathologic conditions in men and perform patient education fortesticular self-

examination. Analyze the effects of sexually transmitted infections in men and summarize the characteristics of HIV infection, including diagnostic criteria and treatment protocols.

Describe the medical assistant's role in urologic and male reproductive examinations. Discuss patient education, legal and ethical issues, and HIPAA applications in the urology practice.

Textbook reference: Chapter 33

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 34: Assisting in Obstetrics and Gynecology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Explain the anatomy and physiology of the female reproductive system. Trace the ovum through the three phases of menstruation. Compare and contrast current contraceptive methods. Summarize menstrual disorders and conditions. Distinguish among different types of gynecologic infections. Do the following related to benign and malignant tumors of the female reproductive system: Differentiate between benign and malignant neoplasms of the female reproductive system. Prepare for and assist with the female examination, including obtaining a Papanicolaou (Pap) test. Demonstrate patient preparation for a loop electrosurgical excision procedure (LEEP). Teach the patient the technique for a breast self-examination. Compare the positional disorders of the pelvic region. Pregnancy Complications, Menopause, and Assisting in Female Examinations Summarize the process of pregnancy and parturition. Describe the common complications of pregnancy. Specify the signs, symptoms, and treatments of conditions related to menopause. Outline the medical assistant's role in gynecologic and reproductive examinations and demonstrate how to assist with a prenatal examination. Distinguish among diagnostic tests that may be done to evaluate the female reproductive system. Summarize patient education guidelines for obstetric patients, in addition to legal and ethical implications in a gynecology practice.

Textbook reference: Chapter 34

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 35: Assisting in Pediatrics

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe childhood growth patterns.

Summarize the important features of the Denver II Developmental Screening Test. Discuss developmental patterns and therapeutic approaches for pediatric patients. Identify four different growth and development theories. Consider the implications of postpartum depression.

Explain common pediatric gastrointestinal disorders, in addition to failure to thrive and obesity. Describe disorders of the respiratory system in children. Distinguish among pediatric infectious

diseases. Recognize the etiologic factors and signs and symptoms of the two primary pediatric inherited disorders.

Documenting Immunizations and Assisting in the Pediatric Examination

Summarize the immunizations recommended for children by the Centers for Disease Control and Prevention (CDC). Demonstrate how to document immunizations and maintain accurate immunization records. Compare a well-child examination with a sick-child examination. Outline the medical assistant's role in pediatric procedures. Measure the circumference of an infant's head. Obtain accurate length and weight measurements, and plot pediatric growth patterns. Accurately measure pediatric vital signs and perform vision screening. Correctly apply a pediatric urine collection device.

Describe the characteristics and needs of the adolescent patient.

Specify child safety guidelines for injury prevention, and explain the management of suspected child abuse, neglect, or exploitation. Summarize patient education guidelines for pediatric patients.

Discuss the legal and ethical implications in a pediatric practice.

Textbook reference: Chapter 35

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 36: Assisting in Orthopedic Medicine

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary.

Describe the principal anatomic structures of the musculoskeletal system and their functions.

Differentiate among tendons, bursae, and ligaments. Summarize the major muscular disorders. Identify and describe the common types of fractures. Explain the difference between osteomalacia and osteoporosis. Classify typical spinal column disorders. Differentiate among the various joint disorders.

Summarize the medical assistant's role in assisting with orthopedic procedures. Explain the common diagnostic procedures used in orthopedics. Discuss therapeutic modalities used in orthopedic medicine.

Apply cold therapy to an injury. Discuss various heat treatments and assist with hot moist heat application to an orthopedic injury. Discuss therapeutic ultrasonography, massage, exercise, and electrical muscle stimulation. Explain the use of common ambulatory devices, properly fit a patient with crutches, and coach a patient in the correct mechanics of crutch walking. Explain the use of common ambulatory devices, properly fit a patient with crutches, and coach a patient in the correct mechanics of crutch walking.

Textbook reference: Chapter 36

Class Activities: Review summary of learning objectives

Competency 37: Assisting in Neurology and Mental Health

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Summarize the anatomy and physiology of the nervous system. Differentiate between the central and peripheral nervous systems.

Distinguish among common nervous system diseases and conditions and identify the typical symptom associated with neurologic disorders. Describe the pathology of cerebrovascular diseases.

Identify the various types of epilepsy. Compare and contrast encephalitis and meningitis. Explain the dynamics of brain and spinal cord injuries. Summarize common central nervous system (CNS) and peripheral nervous system (PNS) diseases. Differentiate among common mental health disorders.

Analyze the medical assistant's role in the neurologic examination. Explain the common diagnostic procedures for the nervous system. Outline the steps needed to prepare a patient for an electroencephalogram (EEG).

Describe the steps for preparing a patient for and assisting with a lumbar puncture. Discuss the implications of patient education in a neurologic and mental health practice. Explain the legal issues and Health Insurance Portability and Accountability Act (HIPAA) applications associated with neurology and mental health.

Textbook reference: Chapter 37

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 37: Assisting in Endocrinology

Define, spell, and pronounce the terms listed in the vocabulary. Summarize the anatomy and physiology of the endocrine system. Explain the mechanism of hormone action. Differentiate among the diseases and disorders of the endocrine system. Describe the diagnostic criteria for diabetes mellitus. Do the following with regard to diabetes mellitus: Compare and contrast prediabetes, diabetes type 1, diabetes type 2, and gestational diabetes.

Outline the treatment plan and management of the different types of diabetes mellitus. Perform blood glucose screening with a glucometer. Identify the characteristics of hypoglycemia and hyperglycemia.

Describe acute and chronic complications associated with diabetes mellitus. Discuss follow-up for patients with diabetes and summarize patient education approaches to diabetes. Discuss legal and ethical issues to consider when caring for patients with endocrine system disorders.

Textbook reference: Chapter 37

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 38: Assisting in Endocrinology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe the organs of the respiratory system and their functions. Explain the process of ventilation. Discuss respiratory system defenses and use correct respiratory system terminology when documenting in the health record. Describe upper respiratory infections (e.g., the common cold, sinusitis, and allergic rhinitis) in addition to lower respiratory infections (e.g., pneumonia).

Explain the diagnosis and treatment of tuberculosis. Do the following related to chronic obstructive pulmonary disease. Summarize the disorders associated with chronic obstructive pulmonary disease and their treatments.

Teach a patient how to use a peak flow meter. Administer a nebulizer treatment. Detail patient teaching for the use of a metered-dose inhaler. Discuss obstructive sleep apnea, including causes, risk factors, complications, and treatment. Describe the cancers associated with the pulmonary system. Summarize the medical assistant's role in assisting with pulmonary procedures. Distinguish among common diagnostic procedures for the respiratory system; perform a volume capacity spirometry test and pulse oximeter procedure; and collect a sputum sample for culture. Discuss patient education, in addition to legal and ethical issues associated with pulmonary medicine.

Textbook reference: Chapter 43

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 39: Assisting in Pulmonary Medicine

Define, spell, and pronounce the terms listed in the vocabulary. Describe the organs of the respiratory system and their functions. Explain the process of ventilation.

Discuss respiratory system defenses and use correct respiratory system terminology when documenting the health record. Describe upper respiratory infections (e.g., the common cold, sinusitis, and allergic rhinitis) in addition to lower respiratory infections (e.g., pneumonia). Explain the diagnosis and treatment of tuberculosis.

By the end of this course section the student will be able to: Do the following related to chronic obstructive pulmonary disease: Summarize the disorders associated with chronic obstructive pulmonary disease and the treatments. Teach a patient how to use a peak flow meter.

Administer a nebulizer treatment. Detail patient teaching for the use of a metered-dose inhaler. Discuss obstructive sleep apnea, including causes, risk factors, complications, and treatment. Describe the cancers associated with the pulmonary system. Summarize the medical assistant's role in assisting with pulmonary procedures. Distinguish among common diagnostic procedures for the respiratory system; perform a volume capacity spirometry test and pulse oximeter procedure; and collect a sputum sample for culture.

Discuss patient education, in addition to legal and ethical issues associated with pulmonary medicine.

Textbook reference: Chapter 39

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 40: Assisting in Cardiology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Explain the anatomy and physiology of the heart and its significant structures. Summarize risk factors for the development of heart disease.

Do the following related to coronary artery disease and myocardial infarction: Describe the signs, symptoms, and medical procedures used in the diagnosis and treatment of coronary artery disease and myocardial infarction. Summarize metabolic syndrome and associated risk factors. Explain the signs and symptoms of myocardial infarction in women. Compare and contrast the treatment protocols for hypertension. Outline the causes and results of congestive heart failure. Summarize the effects of inflammation and valve disorders on cardiac function. Describe the anatomy and physiology of the vascular system. Differentiate among the various types of shock.

Summarize the characteristics of common vascular disorders. Discuss arterial disorders, including causes, risk factors, and common treatments. Outline typical cardiovascular diagnostic procedures. Describe patient education topics, and legal and ethical issues, for cardiovascular patients.

Textbook reference: Chapter 40

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 41: Assisting in Geriatrics

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Do the following related to the aging process:

Discuss the impact of a growing aging population on society. Identify the stereotypes and myths associated with aging. Role-play the effect of sensorimotor changes of aging. Do the following related to the cardiovascular, endocrine, gastrointestinal, integumentary, and musculoskeletal body systems: Explain the changes in the anatomy and physiology caused by aging. Summarize the major related diseases and disorders faced by older patients. Do the following related to the

nervous system, pulmonary system, sensory organs, urinary system, and reproductive systems: Explain the changes in the anatomy and physiology caused by aging.

Summarize the major related diseases and disorders faced by older patients. Describe various screening tools for dementia, depression, and malnutrition in aging adults. Explain the effect of aging on sleep.

Differentiate among independent, assisted, and skilled nursing facilities. Summarize the role of the medical assistant in caring for aging patients. Determine the principles of effective communication with older adults.

Discuss patient education, as well as legal and ethical issues, associated with aging patients.

Textbook reference: Chapter 41

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Mod 203 Assessment

Test 8 – Assisting with Medical Specialties

Textbook reference (Ch.26-28) Pgs. 530-606

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

MA 301 – Assisting with Diagnostic Procedures/Phlebotomy

Day 87-98 -----

This module will prepare the student to perform, participate in and/or prepare the patient for various diagnostic procedures. Students will be prepared to take the Phlebotomy Certification examination as well as learn to perform various diagnostic and laboratory testing procedures. Students will also learn to educate patients regarding reasons for performing and preparation procedures before, during and after performance of these diagnostic procedures. Instruction will include obtaining, preparing, storing, handling and transporting specimens in addition to performing diagnostic testing on select samples.

Competency 42: Principles of Electrocardiography

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Illustrate the electrical conduction system through the heart and discuss the cardiac cycle. Explain the concepts of cardiac polarization, depolarization, and repolarization. Identify the PQRST complex on an electrocardiographic tracing. Summarize the properties of the electrocardiograph and discuss the features of electrocardiograph paper. Describe the electrical views of the heart recorded by the 12-lead electrocardiograph. Discuss the process of recording an

electrocardiogram and perform an accurate reading of the electrical activity of the heart. Compare and contrast electrocardiographic artifacts and the probable cause of each. Interpret a typical electrocardiograph tracing. Describe common electrocardiographic arrhythmias. Summarize cardiac diagnostic tests and fit a patient with a Holter monitor. Discuss patient education and the legal and ethical issues involved when performing ECGs.

Textbook reference: Chapter 42

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 43: Assisting with Diagnostic Imaging

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Discuss basic principles of radiography and the types of x-rays. Identify the principal components of radiographic equipment. Discuss the four prime factors of x-ray exposure. Distinguish among the three body planes and use these terms correctly when discussing radiographic positions. Differentiate between anteroposterior (AP) and posteroanterior (PA) projections and describe the lateral and oblique radiographic positions. Discuss fluoroscopy and contrast media. Discuss cardiovascular and interventional radiography, computed tomography, magnetic resonance imaging, sonography and nuclear medicine. Explain the patient preparation guidelines for typical diagnostic imaging examinations. Outline the general procedure for scheduling and sequencing diagnostic imaging procedures. Apply patient education principles when providing instructions for preparing for diagnostic procedures. Describe health risks associated with low doses of x-ray exposure, such as those used in radiography. Describe precautions for ensuring the safety of equipment operators and staff members during x-ray procedures. Summarize the steps to ensure that patients receive the least possible exposure during x-ray procedures.

Textbook reference: Chapter 43

Class Activities: Review summary of learning objectives

Chapter vocabulary review

MA Workbook pages 978-1007

Competency 44: Assisting in the Clinical Laboratory

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Discuss the role of the clinical laboratory personnel in patient care and the medical assistant's role in coordinating laboratory tests and results. Describe the divisions of the clinical laboratory and give an example of a test performed in each division. Explain the three regulatory categories established by the Clinical Laboratory Improvement Amendments (CLIA) and identify CLIA-waived tests associated with common diseases. Describe the essential elements of a laboratory requisition. Discuss specimen collection, including the importance of sensitivity to patients' rights and feelings when collecting specimen, also discuss the 8 steps in collecting specimens and informing patients of their results. Explain the chain of custody and why is

important. Identify the Fahrenheit and Celsius temperature of common pieces of laboratory equipment. Name the metric units used for measuring volume, distance and mass. Name the parts of a microscope and describe their functions, also demonstrate proper use and maintenance of a microscope. Summarize selected microscopy tests that may be performed in the ambulatory care setting. Describe the safe use of a centrifuge. Discuss the use of an incubator.

Textbook reference: Chapter 44

Class Activities: Review summary of learning objectives

Procedure: 44-1, 44-2

Chapter vocabulary review

MA Workbook paged 1008-1031

Competency 45: Assisting in the Analysis of Urine

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe the anatomy and physiology of the urinary tract and discuss the formation and elimination of urine by describing the process of filtration, reabsorption, secretion, and elimination. Educate patient on how to collect a urine specimen with sterilized collection container. Examine and report physical aspects of urine. Test and record the chemical aspects of urine using CLIA-waived methods. Prepare a urine specimen for microscopic evaluation, and understand the significance of casts, cells, crystals, and miscellaneous findings in the report. Explain or perform: 1. Glucose testing using the Clinic test method. 2. Urine pregnancy test. 3. Fertility and menopause tests. 4. Urine toxicology and drug testing. List the means by which urine could be adulterated before drug testing.

Textbook reference: Chapter 45

Class Activities: Review summary of learning objectives

Procedure: 45-1 through 45-10

Chapter vocabulary review

MA Workbook pages 1032-1065

Competency 46: Assisting in Blood Collection

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. List the equipment needed for venipuncture. Explain the purpose of a tourniquet, how to apply it, and the consequences of improper tourniquet application. Explain why the stopper colors on vacuum tubes differ, and state the correct order of drawing samples for various types of tests. Describe the types of safety needles used in phlebotomy. Explain why a syringe rather than an evacuated tube would be chosen for blood collection. Discuss the use of safety-engineered needles and collection devices required for injury protection. Summarize postexposure management of accidental needlesticks.

Do the following related to routine venipuncture. Detail patient preparation for venipuncture that shows sensitivity to the patient's rights and feelings. Describe and name the veins that may be used for blood collection. List in order the steps of a routine venipuncture. Perform a venipuncture using the evacuated tube method. Perform a venipuncture using the syringe method. Do the

following related to problems associated with venipuncture and specimen re-collection. Discuss various problems associated with venipuncture. Discuss possible solutions to venipuncture complications.

Discuss why a specimen may have to be re-collected. Describe the major causes of hemolysis during collection. Do the following related to capillary puncture. Explain why a winged infusion set (butterfly needle) would be chosen over a vacuum tube or syringe needle. Perform a venipuncture using a winged infusion set (butterfly needle). List situations in which capillary puncture would be preferred over venipuncture. Discuss proper dermal puncture sites.

Describe containers that may be used to collect capillary blood. Explain why the first drop of blood is wiped away when a capillary puncture is performed.

Perform a capillary puncture. Discuss pediatric phlebotomy, including typical childhood behavior and parental involvement during phlebotomy and general guidelines for pediatric venipuncture. Describe handling and transport methods for blood after collection. Explain chain of custody procedures when blood samples are drawn. Discuss patient education, in addition to legal and ethical issues, related to assisting in blood collection.

Textbook reference: Chapter 46

Class Activities: Review summary of learning objectives

Procedure: 46 -1 through 47-6

Chapter vocabulary review

MA Workbook pages 1098-1129

Competency 47: Assisting in the Analysis of Blood

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Name the main functions of blood. Describe the appearance and function of: 1. Erythrocytes, 2. Granular and Agranular Leukocytes, 3. Thrombocytes (explain the process of clot formation and plasma). Identify the anticoagulant of choice for hematology testing. Explain the purpose of the microhematocrit test/perform a microhematocrit test/perform maintenance of a microhematocrit centrifuge. Explain the role of hemoglobin in the body as well as perform a hemoglobin test. Cite the reasons

FOR PERFORMING AN ERYTHROCYTE SEDIMENTATION RATE (ESR) TEST, ALSO DESCRIBE THE SOURCES OF ERROR FOR THE ESR TEST. USE A WESTERGREN METHOD TO PERFORM AN ESR TEST. EXPLAIN HOW TO DETERMINE PROTHROMBIN TIME (PT). OBTAIN A SPECIMEN AND PERFORM A CLIA-waived PT/INR TEST. IDENTIFY THE TESTS INCLUDED IN A COMPLETE BLOOD COUNT (CBC) AND THEIR REFERENCE RANGES AND DIFFERENTIATE BETWEEN NORMAL AND ABNORMAL TEST RESULTS. DESCRIBE THE RED BLOOD CELL (RBC) INDICES AND HOW THEY ARE CALCULATED. EXPLAIN THE REASON FOR PERFORMING A WHITE BLOOD CELL (WBC) COUNT AND DIFFERENTIAL. DISCUSS THE IDENTIFICATION OF NORMAL BLOOD CELLS AND DESCRIBE THE BASIC APPEARANCE OF THE FIVE DIFFERENT TYPES OF LEUKOCYTES SEEN IN A NORMAL WRIGHT-STAINED DIFFERENTIAL. DISCUSS RED BLOOD CELL MORPHOLOGY. DIFFERENTIATE BETWEEN THE ABO AND RH BLOOD GROUPINGS. EXPLAIN THE REASONS FOR TESTING BLOOD GLUCOSE, HEMOGLOBIN A, CHOLESTEROL, LIVER ENZYMES, AND THYROID

HORMONES. OBTAIN A SPECIMEN AND PERFORM A BLOOD GLUCOSE, HEMOGLOBIN A, AND CHOLESTEROL TEST USING CLIA-WAIVED TEST METHODS APPROVED BY THE U.S. FOOD AND DRUG ADMINISTRATION (FDA).

Textbook reference: Chapter 47

Class Activities: Review summary of learning objectives

Procedure: 47-1 through 47-6

Chapter vocabulary review

MA Workbook pages 1098-1129

Competency 48: Assisting in Microbiology and Immunology

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe various bacteria staining characteristics and explain the characteristics of common diseases caused by bacteria. Describe the unusual characteristics of Chlamydia, Mycoplasma, and Rickettsia organisms. Compare bacteria with fungi, protozoa and parasites as well as identify the characteristics of common diseases caused by them. Educate the patient on the collection of a stool specimen. Compare bacteria with viruses and describe the characteristics of common viral diseases. Explain how pinworm testing is done and when it is recommended. Describe and perform CLIA-waived microbiology tests: 1. Describe three CLIA-waived microbiology tests that use a rapid identification technique. 2. Obtain a specimen and perform the CLIA-waived rapid Streptococcus test. Discuss the purpose of indirect immunology testing. Describe the three CLIA-waived immunology tests that could be done in the physician office laboratory. Obtain a specimen and perform a CLIA-waived mononucleosis strep test. Detail the equipment needed in a microbiology reference laboratory and discuss identification of pathogens in the microbiology laboratory by describing various staining techniques. Explain the method used for culture and sensitivity testing. Discuss legal and ethical issues involved in laboratory testing.

Textbook reference: Chapter 48

Class Activities: review summary of learning objectives

Procedure: 48-1 through 48-3

Chapter vocabulary review

MA Workbook pages 1130-1157

Mod 301 Assessment

Test 9 - Diagnostic Procedures

Textbook reference: Pgs. 985-1154

Multiple Choice 50 questions, Rubric A

Value: 2 points towards final course grades

Timing 60 minutes

MA 401 – Assisting with Surgeries

Day 99--106 -----

This module will prepare the student to assist with surgical procedures. Topics include identification, proper use and care and maintenance of surgical instruments, preparation of the patient, supplies, equipment and surgical suite for surgical procedures, disposal, care and maintenance of equipment and supplies post procedure, patient education and obtaining informed consent prior to procedures and patient education and care before, during and after procedures.

Competency 49: Surgical Supplies and Instruments

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Describe typical solutions and medications used in minor surgical procedures. Summarize methods for identifying surgical instruments used in minor office surgery. Outline the general classifications of surgical instruments along with their care and handling. Identify drapes and different types of sutures and surgical needles. Explain the medical assistant's responsibility to help ease patients' concerns about procedures.

Textbook reference: Chapter 49

Class Activities: Review summary of learning objectives

Procedure: 49-1

Chapter vocabulary review

MA Workbook pages 1158-1177

Competency 50: Surgical Asepsis and Assisting with Surgical Procedures

By the end of this course section the student will be able to: Define, spell, and pronounce the terms listed in the vocabulary. Define the concepts of aseptic technique. Know the difference between sanitization, disinfection, and sterilization. Learn and implement tips for improving autoclave techniques, as well as, the correct methods of loading, operating and unloading an autoclave. Discuss how to wrap materials and discuss the types and uses of sterilization indicators. Explain the most common minor surgical procedures, and how to perform skin prep for surgery as well as how to perform a surgical hand scrub. Explain how to: 1. Open a sterile pack and create a sterile field. 2. Transfer sterile instruments and pour solutions in a sterile field. 3. Demonstrate how to apply sterile gloves without contaminating them. Discuss how to assist the physician during surgery, minor surgical procedures and suturing. Summarize post-operative instructions and how to remove sutures and surgical staples. Explain the process of wound healing, including applying dressings and bandages to surgical sites.

Textbook reference: Chapter 50

Class Activities: Review summary of learning objectives

Chapter vocabulary review

Procedure 50-1 through 50-13

MA Workbook pages 1175-1213

Mod 401 Assessment

Test 10 - Assisting with Surgeries
Textbook reference pages 1159-1207

Multiple Choice 50 questions, Rubric A
Value: 2 points towards final course grades
Timing 60 minutes

MA 501 – Career Development

Day 107-113 ----- -----

Topics covered in this module include student preparation for finding, obtaining and keeping gainful employment. Students will learn the importance of professional behavior and appearance. Specific instruction to be presented includes locating a job, preparing a resume, completing an application, obtaining an interview, interview skills, qualities employers seek, behavior in the workplace, behavior to avoid in interviews and on the job, resigning from a position and the concept of lifelong learning and continuous skill development..

Competency 51: Career Development and Life Skills

Define, spell, and pronounce the terms listed in the vocabulary. Describe the four personality traits that are most important to employers. Explain the three areas that need to be examined to determine one's strength and skills. Discuss and explain different job search methods, how to improve job finding opportunities, and the importance of being organized in your job search. Describe how to prepare a resume (CV), and a cover letter as well as how to complete an online portfolio and job application. List the four phases of the interview process, and also discuss the legal and illegal interview questions. Practice interview skills for a mock interview. Discuss the probationary period for a new employee, as well as how to be a good employee and how to deal with supervisors.

Textbook reference: Chapter 51
Class Activities: Review summary of learning objectives
Procedure: 51-1 to 51-6
Chapter vocabulary review
MA Workbook pages 1214-1242

Mod 501 Assessment

Test 11 - Career Development and Life Skills
Textbook reference (CH. 51) - pages 1215-1240
Multiple Choice 50 questions, Rubric A
Value: 2 points towards final course grades
Timing 60 minutes

Final Exam

Final Examination Theory

Multiple Choice, 100 questions, Rubric A

Value: 35% towards final course grade
Timing: 60 minutes

Final Examination Practical

Practical Assessment, Demonstration of skills, Rubric B
Value: 35 % towards final course grade
Timing: 60 minute

Rubric – Multiple Choice Tests

Multiple choice test prepared with questions that evaluate the student understanding of the concepts presented for the competencies being evaluated. The grading is based as exactly explained in the first section of this syllabus:

% of Questions Answered Correctly	Points Awarded	Grade Awarded
90-100 %	4	A
80-89 %	3	B
70-79 %	2	C
69 % and below	0	F-Unsatisfactory

Rubric – Practical Assessments

Skills demonstration based on evaluation sheet prepared for each competency. The evaluating instructor will grade on a Pass or Fail basis. For a student to pass, he/she will need to demonstrate his/her able to perform the required activity as an employer will expect.

P – Pass – 100% - A
F – Fail – 0% - F

Final **Grade** **Assignment**

The final grade for this course is determined as per the following table:

Test 1 – Introduction to Medical Assisting	5 %
Test 2 – Health Information	5 %
Test 3 – Administrative Medical Assisting	5 %
Test 4 – Billing and Coding Procedures	5 %
Test 5 – Health Records	5 %
Test 6 – Financial and Practice Management	5 %
Test 7 – Fundamentals	5 %
Test 8 – Assisting with Medications	5 %
Test 9 – Diagnostic Procedures	5 %
Test 10 – Assisting with Surgeries	5 %
Test 11 – Career Development and Life Skills	5 %
Midterm -	15%
Final Exam – Theory Assessment	15 %
Final Exam – Practical Assessment	<u>20 %</u>
Total	100%

