

SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

ACADEMIC AFFAIRS

Course Number: MED 107 & 107L Class/Lect. per 150 mins 2 hrs
Hours: wk Hours: wk Credits: 3 & 1 Dept.: Medical Assisting
Course Title: MEDICAL ASSISTING TECHNIQUES 2 Semester: Spring Year: 2018

Course Description, Prerequisite, Corequisite:

This course is a continuation of advanced theory and skills in medical assisting techniques. Selected laboratory procedures will include minor surgery, cardio-pulmonary resuscitation, emergencies, electrocardiography, injections and the modalities used in physical therapy.

Corequisite(s): MED 107L

OBJECTIVES/COMPETENCIES

Course Objectives	Competencies
<p>Minor Office Surgery</p> <ol style="list-style-type: none"> 1. Define the following as practiced within within an ambulatory care setting: Surgical Asepsis. 2. State the characteristics of a minor surgical procedure. 3. Identify procedures that require the use of surgical asepsis. 4. Describe the MA’s responsibilities during a minor surgical procedure. 5. Define personal protective euipement for all body fluids, secretions, excretions and blood. 6. List the guidelines to follow to maintain surgical asepsis’s during a sterile procedure. 7. Identify and explain the use and care of instruments commonly used in minor office surgery. 8. Dicuss protocols for disposal of biological chemical materials 9. Explain the differences between a closed and an open wound, and give examples. 10. List and explain the three phases of the healing process. 11. List and describe the different types of wound drainage. 12. List the functions of a dressing. 13. Explain the method used to measure the diameter of suturing material. 14. Describe the two types of sutures (absorbable and non-absorbable) and give examples of their uses. 15. Categorize suturing needle according to type of point and shape. 16. Explain the purpose of and procedure for each of the following minor surgical operations: sebaceous cyst removal, incision and drainage of a localized infection, mole removal, needle biopsy and ingrown toenail removal. 17. Explain the principles underlying each step in the minor office 	<p>Minor Office Surgery</p> <ol style="list-style-type: none"> 1. Select appropriate barrier/personal equipment (PPE). 2. Apply sterile gloves and remove contaminated gloves. 3. Prepare and cover a sterile field without contamination. 4. Properly open wrapped and commercially prepared sterile items without contamination. 5. Add sterile items to a sterile field. 6. Perform within a sterile field. 7. Pour a sterile solution. 8. Perform wound care. 9. Remove sutures. 10. Perform dressing change; Remove and Apply a dry sterile dressing. 11. Instruct and prepare a patient for a procedure or treatment 12. Demonstrate proper disposal of biohazardous material: Sharps and regulated waste. 13. Demonstrate proper use of Sharps disposal container 14. Coach a patient regarding a treatment plan. 15. Show awawrenes of a patient’s concerns related to the procedure being performed. 16. Recognize the implications for failure to comply with Center for Disease (CDC) regulations in healthcare.

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<p>surgery procedures.</p> <p>18. State the function of a bandage and list the guidelines for applying a bandage.</p> <p>19. Identify the common types of bandages used in the medical office.</p> <p>Cardiopulmonary Procedures</p> <ol style="list-style-type: none"> 1. State the purpose of electrocardiography. 2. Identify each of the following components of the ECG cycle, P wave, QRS complex T wave, PR segment, PR interval, QT interval, baseline following the T wave. 3. State the purpose of the standardization mark. 4. State the functions of the electrodes, amplifier, and galvanometer. 5. List the 12 leads that are included in an ECG. 6. Describe the function served by each of the following: Three channel recording, Interpretive electrocardiography, Electronic Medical Record connectivity, Tele transmission. 7. Identify each of the following types of artifact, and state its cause: Muscle (Somatic Tremor), Wandering baseline, 60 cycle Interference, Interrupted baseline. 8. List the reasons for applying a Holter monitor. 9. List the three categories of cardiac dysrhythmias. 10. State examples of cardiac dysrhythmias. 11. List the different pulmonary function tests. 12. List indications for performing spirometry testing. 13. Describe patient preparation for spirometry. 14. Explain the purpose of post bronchodilator spirometry. 15. Identify the symptoms of an asthma attack. 16. List examples of asthma drugs. 17. Explain the difference between long-term control and quick-relief asthma medications. 18. Describe the purpose of a peak flow meter. 19. Explain why oxygen is needed by the body. 20. Describe what occurs when the body cannot maintain an adequate blood oxygen level. 	<p>Cardiopulmonary Procedures</p> <ol style="list-style-type: none"> 1. Perform Electrocardiography. 2. Perform Pulmonary Function Testing. 3. Instruct and prepare patient for a procedure and treatment.

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<p>21. Identify the conditions that may require home oxygen delivery systems.</p> <p>22. List and describe the three common types of oxygen delivery systems.</p> <p>23. List and describe the two types of devices used to administer home oxygen therapy.</p> <p>24. Describe oxygen administration safety guidelines.</p> <p>Emergency Medical Procedures and First Aid</p> <ol style="list-style-type: none"> 1. State the purpose of first aid 2. Explain the purpose of the emergency medical services EMS (system). 3. List the OSHA standard for administering first aid. 4. List the Guidelines that should be followed when providing emergency care. 5. List and describe conditions that cause respiratory distress. 6. List the symptoms of a heart attack and a stroke. 7. Explain the causes of each of the following types of shock: cardiogenic, neurogenic, anaphylactic, and psychogenic. 8. Identify and describe the three classifications of external bleeding. 9. Explain the difference between an open wound and a closed wound. 10. Describe the characteristics of each of the following fractures: impacted, greenstick, transverse, oblique, comminuted and spiral. 11. Identify the characteristics of each of the following burns: superficial, partial-thickness, and full-thickness. 12. Explain the difference between a partial seizure and a generalized seizure. 13. List examples of each of the following types of poisoning: ingested, inhaled, absorbed, and injected. 14. Identify factors that place an individual at higher risk for developing heat-related and cold-related injuries. 15. Describe the differences between type 1 and type 2 diabetes 	<p>Emergency Medical Procedures and First Aid</p> <ol style="list-style-type: none"> 1. Take and pass Provider/professional level CPR and provide up to date documentation. 2. Perform first aid procedures for; bleeding, diabetic coma or insulin shock, fractures, seizures, shock, and syncope. 3. Demonstrate bandaging.

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<p>mellitus.</p> <p>16. Explain the causes of insulin shock and diabetic coma.</p> <p>17. Identify the symptoms and describe emergency care for each of the following conditions: respiratory distress, heart attack, stroke, shock, syncope, bleeding, wounds, musculoskeletal injuries, burns, seizures, poisoning, heat and cold exposure, and diabetic emergencies.</p> <p>18. List the principles and steps of professional/provider CPR.</p> <p>19. Describe basic principles of first aid as they pertain to the ambulatory healthcare setting.</p> <p>Physical Agents to Promote Tissue Healing</p> <ol style="list-style-type: none"> 1. State examples of moist and dry applications of heat and cold. 2. State the factors to consider when applying heat and cold. 3. List the effects of local application of heat, and state reasons for applying heat. 4. List the effects of local application of cold, and state reasons for applying cold. 5. List factors that are taken into consideration when ambulatory aids are prescribed. 6. Explain the difference between an axillary crutch and a forearm crutch. 7. State conditions that may result when axillary crutches are not fitted properly. 8. List the guidelines that should be followed by the patient to ensure safe use of crutches. 9. State the use of each of the following crutch gaits: four-point gait, two-point gait, three-point gait, swing-to gait, and swing through gait. 10. List and describe the three types of canes. 11. Identify the patient conditions that warrant the use of a cane or walker. 	<p>Physical Agents to Promote Tissue Healing</p> <ol style="list-style-type: none"> 1. Demonstrate types of crutch gaits: four-point gait, two-point gait, three-point gait, swing-to gait, and swing through gait.

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<p>Wheel Chair Transfer</p> <ol style="list-style-type: none"> 1. Explain the purpose of a wheelchair. 2. Explain the safety precautions when using a wheelchair. 3. Describe the purpose of a transfer belt. <p>Administration of Parenteral Medication and Intravenous Therapy</p> <ol style="list-style-type: none"> 1. Explain the difference among administering, prescribing and dispensing medications. 2. State the common routes for administering medications. 3. Explain the purpose of a medication record. 4. Describe the factors that affect the action of drugs in the body. 5. List the guidelines for preparing and administering medication 6. State the advantages and disadvantages of the parenteral route of administration. 7. Identify the parts of a needle and syringe and explain their functions. 8. State the ranges of gauge and length of needles for each of the following injections: intradermal, subcutaneous, and intramuscular. 9. State the purpose of safety-engineered syringes. 10. Describe the dispensing units available for injectable medications. 11. State which tissue layers of the body are used for intradermal, subcutaneous, and intramuscular injections. 12. List the medications commonly administered through each of the following routes: intradermal, subcutaneous, and intramuscular. 13. Explain the reason for administering medication with the Z-track method. 14. Explain the difference between active and latent tuberculosis. 15. Explain the purpose of tuberculin skin testing. 16. Identify the categories of individuals who should have a 	<p>Wheel Chair Transfer</p> <ol style="list-style-type: none"> 1. Assisting a Patient to stand with and without a gait belt. 2. Properly and safely transfer patient from wheelchair to table and from table to wheelchair. 3. Demonstrate wheelchair safety. 4. Use of proper body mechanics. <p>Administration of Parenteral Medication and Intravenous Therapy</p> <ol style="list-style-type: none"> 1. Verify the rules of medication administration: <ol style="list-style-type: none"> a. right patient b. right medication c. right dose d. right route e. right time f. right documentation 2. Prepare parenteral medication 3. Select proper sites for administering parenteral medications. 4. Administer a parenteral medication (IM). 5. Administer an intradermal injection. 6. Administer a subcutaneous injection.

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<p>tuberculin test.</p> <ol style="list-style-type: none"> 17. Explain the significance of a positive reaction to a tuberculin test. 18. List the diagnostic procedures that might be performed following a positive tuberculin test. 19. State the guidelines that should be followed when administering and reading a Mantoux tuberculin skin test. 20. State the advantages of the tuberculosis blood test. 21. Define an allergy, and name common allergens. 22. Explain what occurs during an allergic reaction. 23. List the guidelines for direct skin allergy testing. 24. State the purpose of each of the following types of allergy tests: patch testing, skin-prick testing, intradermal skin testing, and in vitro blood testing. 25. Explain the advantages of outpatient intravenous (IV) therapy. 26. Identify the role of the entry-level medical assistant in IV therapy. 27. State the indications for outpatient IV therapy. 	