# MARTIN COMMUNITY COLLEGE COURSE SYLLABUS

Semester/Year: Spring 2011

COURSE NUMBER: MED 150 (5H1) INSTRUCTOR: Marty Flynn

**COURSE TITLE:** Laboratory Procedures I **OFFICE NO:** Building 3, Office 33

CREDIT HOURS: 5 OFFICE/VIRTUAL HOURS:

Monday 1:00 pm-3:00 pm

**CONTACT HRS/WK:** 7 (3 class, 4 lab) Available other times upon request of the student.

**PREREQUISITES:** ENG 090, MAT 070, RED 090 - **PHONE NO:** 252-789-0292

Enrollment in the MA Program

**FAX:** 252-792-0826

**COREQUISITES:** None

**E-MAIL:** mflynn@martincc.edu

**COURSE DESCRIPTION:** This course provides instruction in basic lab techniques used by the medical assistant. Topics include lab safety, quality control, collecting and processing specimens, performing selective tests, phlebotomy, screening and follow-up of test results, and OSHA/CLIA regulations. Upon completion, students should be able to perform basic laboratory tests/skills on course topics.

#### PROGRAM LEARNING OUTCOMES:

- 1. Identify and apply medical terminology in the clinical setting.
- 2. Demonstrate administering patient care and assisting the physician.
- 3. Convey and teach health related information for patient education in the clinical setting.

#### **COURSE LEARNING OUTCOMES:**

- 1. Demonstrate specimen collection.
- 2. Perform diagnostic testing.
- 3. Demonstrate standard precautions and quality control.

#### OTHER OBJECTIVES:

At the completion of this course, students should be able to:

- 1. Site the general laboratory safety rules, disposal of biohazard materials, practice standard precautions control and quality control.
- 2. Demonstrate the aseptic hand washing technique.
- 3. Discuss the organization, function, and qualifications of the laboratory and its personnel.
- 4. Discuss the chemical, physical, and biological hazards within the laboratory.
- 5. Identify and use laboratory glassware safely and correctly.
- 6. Demonstrate proficient use of the compound and teaching microscope.
- 8. Identify proper urine collection and preservation methods. Perform urinalysis including collect, handle, and describe the physical, chemical, and microscopic characteristics of urine.
- 9. Perform capillary punctures and perform tests for microhematocrit and hemoglobin.
- 10. Perform blood dilutions using blood diluting pipettes and unipipettes.
- 11. Fill and us hemacytometer correctly. Perform a manual RBC and WBC count and calculate the results.

- 12. Make and stain a blood smear and identify blood cells from a stained smear.
- 13. Perform a venipuncture by syringe and vacuum tube blood system.
- 14. Perform erythrocyte sedimentation rate test, ABO slide typing, Rh slide typing, pregnancy test, mononucleosis test, throat culture, wound culture, coagulations and bleeding times (prothrombin times and methods).
- 15. Identify basic bacterial shapes and how to collect, transfer, culture, and prepare a bacterial smear.
- 16. Perform clinical procedures such as a glucose and cholesterol.
- 17. Prepare lab reagents correctly.
- 18. Collect and process parasitic specimens and hemocults for examinations. Identify microscopic methods for intestinal parasites. Prepare and stain smears for blood parasites.
- 19. Identify basic detection of sexually transmitted diseases.
- 20. Identify instrumentation for small clinical labs.
- 21. Perform Rh slide typing.
- 22. Perform hematology, immumology, and chemistry testing.
- 23. Screen test results. Distinguish between normal and abnormal test results.
- 24. Maintain laboratory test results using flow sheets.
- 25. Select appropriate barrier/ personal protective equipment for potentially infectious situations.
- 26. Obtain specimens for microbiological testing.
- 27. Perform CLIA waived microbiology testing.
- 28. Display sensitivity to patient rights and feelings in collecting specimens.
- 29. Explain rationale for performance of a procedure to the patient.
- 30. Show awareness of patient's concerns regarding their perceptions related to the procedure being performed.
- 31. Describe Standard Precautions, including:
  - a. Transmission based precautions
  - b. Purpose
  - c. Activities regulated
- 32. Discuss the application of Standard Precautions with regard to:
  - a. All body fluids, secretions and excretions
  - b. Blood
  - c. Non intact skin
  - d. Mucous membranes
- 33. Identify the role of the Center for Disease Control (CDC) regulations in healthcare settings.
- 35. Participate in training on Standard Precautions.
- 36. Practice standard precautions.
- 37. Select appropriate barrier PPE for potentially infectious situations.
- 38. Discuss quality control issues related to handling microbiological specimens.

Identify disease processes that are indications for CLIA waived tests.

#### REQUIRED TEXTBOOKS

Lindh, W., Pooler, M., Tamparo, C., & Dahl, B. (2010). Comprehensive medical assisting (4th ed.). New York: Thomson Delmar Learning.

Lindh, W., Pooler, M., Tamparo, C., & Dahl, B. (2010). Workbook to accompany comprehensive medical assisting (4th ed.). New York: Thomson Delmar Learning.

Lindh, W., Pooler, M., Tamparo, C., & Dahl, B. (2010). Comprehensive medical assisting blackboard web tutor (4th ed.). New York: Thomson Delmar Learning.

Bundle ISBN number 9781111120412. Lindh, W., Pooler, M., Tamparo, C., & Dahl, B. (2010). Comprehensive medical assisting (4th ed.). New York: Thomson Delmar Learning.

Synapse HER 1.1: An Electronic Charting Simulation-CD

**SUPPLEMENTAL RESOURCES:** White lab coat required.

**LEARNING/TEACHING METHODS**: Lecture, Powerpoint, Group Discussions, Reading Assignments, Outside Reading Assignments, Lab Demonstrations, and Return Demonstration NOTE (QEP): Outside Reading Assignments will include medical articles from medical magazines or medical journals. NOTE (QEP): Outside reading assignments may include researching a topic using books other than the textbook, medical journals, magazines, or NC Live resources. The student will be given a topic to research and will then present collected material to the class.

#### ASSESMENTS/METHODS OF EVALUATION:

1.	Unit Exams	60%
2.	Outside Reading Assignment, Assignments, Quizzes,	15%
	Lab Procedures, Homework	
3.	Final Exam	25%

#### **GRADING POLICY:**

- 1. Through written unit exams, the student will be able to score at least a 77% or better in this course in theory by correctly relating knowledge of basic laboratory procedures in each unit as outlined in the Instructional Outline and discussed in class.
- 2. Through classroom participation, teamwork, and return demonstrations, the student will complete all work assignments and return demonstrations correctly in the lab. These procedures may or may not be announced. All lab evaluations will be based on time frame, completeness, not breaking techniques, and according to the specific outline in the textbook after each procedure and Student Evaluation Form.
- 3. The student will actively participate in classroom assignments, group discussions, review sessions, and other class work as done on a daily basis within the classroom. The student will present a verbal presentation to the class on a topic assigned to them. This will require outside research and reading from books, medical journals, magazines, or NC Live resources.

**Grading Scale** 

A (93-100)

B (85-92)

C (77-84)

D (70-76)

F Below 70

#### **COURSE OUTLINE:**

Week 1-3 Chapter 22
Infection Control, Medical Asepsis, and Sterilization
Week 4-5 Chapter 38 and 39
Safety and Regulatory Guidelines

Introduction to the Medical Laboratory

Week 6-8 Chapter 40

Phlebotomy, Venipuncture, and Capillary Puncture

Week 9-10 Chapter 41

Hematology

Week 11-12 Chapter 42 and 43

Urinalysis

**Basic Microbiology** 

Week 13-15 Chapter 44

**Specialty Laboratory Tests** 

Week 16 Review for Exam

#### STUDENT ATTENDANCE POLICY:

The attendance policy for all medical assisting classes is 90%. Attendance will be taken in the classroom. Therefore, you may only miss 11 hours of class. This means that you can only miss 3 classes for the whole semester! If you miss 4 classes then you will be administratively withdrawn. The instructor will evaluate extenuating circumstances such as death of an immediate family member and hospitalization. Evaluation and decisions will be made by the instructor not the student! Habitual tardiness and or early departure would include the student leaving early or arriving after the class begins. Three tardies or early departures constitutes one absence. If you are tardy 10 times you will also be administratively withdrawn. Students must be present the first ten percent (10%) of this course in order to be considered enrolled in the class. If a student has not attended at least one class by the ten percent census date, the student will be administratively withdrawn from the class. Students administratively withdrawn will receive a "WF" which is equivalent to an "F" when calculated into the student's GPA. Students may remove a "WF" by submitting appropriate paperwork for an official withdrawal by the last day to officially withdraw without receiving an "F." There are no justifiable absences for this class once you exceed the 10% attendance requirement you will be administratively withdrawn! The last day to officially withdraw without receiving an "F" is March 24, 2011.

No make—up tests or assignments will be allowed in this course. If you are absent and miss a test, quiz, or assignment a 0 will be given. Also if you fail to turn in assignments in class or on Blackboard by the due date you will be given a 0.

## REQUEST FOR EXCUSED ABSENCES FOR RELIGIOUS OBSERVANCES\*

\*In compliance with G.S. 115D-5, MCC policy permits a student to be excused, with the opportunity to make-up any test or other missed work, a minimum of two excused absences per academic year for religious observances required by the student's faith. The policy limits the excused absences to a maximum of two days per academic year.

Students who wish to be excused for a Religious Observance required by their faith must complete and submit a request form to the instructor(s) prior to the census date of each class. The *Request for Excused Absences for Religious Observances* form can be picked up from Student Services. This does not supersede the college-wide attendance policy as outlined in the college catalog or syllabus, with the exception of a reasonable accommodation for the make-up of missed course work.

#### **COURSE POLICIES:**

Academic Integrity Policy:

Students admitted to or applying for admission to allied health field programs at Martin Community College are expected to exhibit the highest personal integrity in all academic work and behavior. Lying, cheating and

plagiarism are forms of academic dishonesty that violate the integrity of any academic process and will not be tolerated.

## **Testing Policies**

It is the responsibility of the student to be present for all announced unit exams. No make-up exams or assignments will be granted! Missed work will result in a 0! Pop tests may be given at any time.

No section on testing policies and procedures can be complete without a brief discussion on cheating and the Honor System. Cheating will not be tolerated! The Medical Assisting Program runs on the Honor System as will also be the practice in any health care facility. That simply means that it is your responsibility not to engage in cheating yourself and to report any manner of cheating to your instructor or the MA Program Director. The best example of an employment cheating situation would be with drugs within your medical facility. If, as an employee, you know that someone is taking the drugs ordered for patients, it is clearly your responsibility to report the abuse. Likewise, in the classroom you will be expected to report any cheating abuse. Therefore, anyone caught cheating will be dismissed from the Medical Assisting Program immediately and will not be allowed to apply for readmission.

### Plagiarism

Webster's New World Dictionary defines the word "plagiarize" as "to take (ideas, writings, etc.) from (another) and pass them off as one's own". Plagiarism is fraud, and under US law it is theft. Almost all forms of expression are covered by some form of legal protection, as intellectual property of the originator. Using another's words or thoughts and not giving them credit appropriately will result in an "F" for the assignment for a first offense, and an "F" for the class for the second offense. You will receive detailed instructions describing how to footnote and cite information for scientific purposes before being asked to turn in written material. Failing to consult that information, and properly cite the work you have used as a reference will result in consequences.

Keep in mind that as your instructors are often asked to provide your references, Academic Integrity Violations and/or violations of the Student Governance and Conduct Code may affect your ability to get a job in the future. As future professionals in fields that require high standards of personal integrity in their practitioners, you should cultivate a professional attitude and professional conduct and behavior now. Unprofessional habits are hard to break later on!

If you cannot reach your instructor, you may contact Dr. Phyllis Broughton, Dean of Academic Affairs and Student Services at (252)789-0246 or (252)789-0247 by phone, <a href="mailto:pbroughton@martincc.edu">pbroughton@martincc.edu</a> by e-mail, or in person at her office in Building 2, Room 33.

To access the Martin Community College Career Catalog for policies and curriculum requirements, please go online to www.martincc.edu.

If you have a need for a disability-related accommodation, please notify the Student Services counselor at (252) 789-0293.