

# Dakota County Technical College

## MDAS 1125: Laboratory Skills I

### A. COURSE DESCRIPTION

Credits: 4

Lecture Hours/Week: 2

Lab Hours/Week: 2

OJT Hours/Week: \*.\*

Prerequisites: None

Corequisites: None

MnTC Goals: None

This course introduces the student to the clinical lab setting found in a physician's office. It includes safety and emergency practices, professionalism, basic math, weights, measurement, quality control and quality assurance. It also covers skill development in the performance of blood collection methods using proper techniques and standard precaution. The student will be trained to perform evacuated tube, syringe, and butterfly needle venipuncture and dermal puncture. Performance will be on adults only; infant and child methods will be simulated.

Emphasis will be placed on infection control, patient identification, proper labeling, and quality assurance. Students will be expected to participate as both a phlebotomist and a patient.

Prerequisites: Acceptance to the Medical Assistant Program, concurrent HEAL 1101

**B. COURSE EFFECTIVE DATES:** 08/27/2012 - Present

**C. OUTLINE OF MAJOR CONTENT AREAS**

**D. LEARNING OUTCOMES (General)**

1. Describe the purpose of SDS in a health care setting XII.C5
2. Interpret hazard from NFPA diamond XII.C 1/P 1
3. Identify and comply with safety sign, symbols, labels XII.C 1/P 1
4. Evaluate work environment for unsafe conditions XII.P 5/C 2
5. Clean up a simulated blood spill using Standard Precautions III.P 10/C 6
6. Demonstrate proper use of eyewash, sharps container, fire extinguisher XII.P 2
7. Discuss fire safety issues in an ambulatory healthcare environment XII.C 3
8. Identify and demonstrate principles of body mechanics and ergonomics XII.C7/P 3
9. Participate in blood borne pathogen training III.P 1
10. Define PPE for all body fluids, non-intact skin, mucous membranes
11. Select appropriate PPE III. P 2
12. Recognize the implications for failure to comply with CDC regulations II.A 1
13. Identify CDC regulations that impact health care procedures II.C 7
14. Discuss protocols for disposal of biological and chemical materials XII.C 6
15. Identify safety techniques that can be used in responding to accidental exposure to blood, body fluids, needle sticks, chemicals XII.C 2
16. Participate in mock exposure with documentation of specific steps XII.P 4
17. Describe the fundamental principles for evacuation of a clinic XII.P 4
18. Identify critical elements of an emergency plan for response to a natural disaster or other emergency XII.C 8
19. Identify personal safety precautions as established by OSHA
20. Recognize the effects of stress in an emergency situation XII.A 1
21. Demonstrate self-awareness in responding to emergency situations XII.A 2
22. Describe lab structure
23. List laboratory records manuals
24. Describe the parts required on a lab order and report
25. Analyze tables in the interpretation of lab results
26. Interpret laboratory test orders
27. Utilize a patient test order to collect the proper specimen
28. Maintain/stock equipment
29. Prepare testing instruments including quality control I.P 11
30. Use and clean a microscope according to written procedure
31. Identify quality assurance practices in healthcare
32. Define quality assurance terms
33. Apply quality assurance to specimen collection and processing
34. Perform accurate measurements
35. Define basic units of measurement
36. Convert within the metric system
37. Convert between metric and English system
38. Solve addition, subtraction, and multiplication, and division problems
39. Calculate a mean
40. Add and subtract fractions
41. Convert ratios and decimals to percent
42. Calculate dilutions
43. Identify laboratory glassware

44. Perform evacuated tube, syringe, and butterfly venipuncture I.P 2b
45. Perform capillary/dermal puncture I.P 2c
46. Obtain a throat swab for microbiological testing I.P 11
47. Identify and choose specimen collection equipment
48. Distinguish between blood collection additives
49. Perform proper patient identification
50. Identify acceptable collection sites
51. Describe adverse reaction procedures
52. Explain pediatric venipuncture procedure
53. Describe pediatric, adolescent, and elderly emotional needs
54. Demonstrate puncture follow-up
55. Demonstrate proper order of draw
56. Explain specimen integrity factors
57. Label all specimens completely
58. Explain urine collection procedures I.P 11
59. Demonstrate routine hand washing III.P 3
60. Obtain throat swab for microbiological testing I.P 11
61. Use language/verbal skills that enable patient understanding
62. Show awareness of patients concerns related to the procedure being performed I.A 3
63. Demonstrate empathy
64. Describe the basic principles of professionalism
65. List and evaluate attributes and behaviors of professionalism
66. Display professional behavior

**E. Minnesota Transfer Curriculum Goal Area(s) and Competencies**

None

**F. LEARNER OUTCOMES ASSESSMENT**

As noted on course syllabus

**G. SPECIAL INFORMATION**

None noted