

Dakota County Technical College

MDAS 1223: Laboratory Skills II

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 builds on the basic skills learned in Laboratory Skills I and covers the basic laboratory testing done in many clinic labs. The student will participate in waived and moderately complex testing in the areas of chemistry, immunology, microbiology, hematology, coagulation, and urinalysis. The course will also cover electro cardiology as practiced in the clinic. The end of the course will simulate the operation of a clinic laboratory from specimen collection to result.

B. COURSE EFFECTIVE DATES: 03/29/2010 - Present

C. OUTLINE OF MAJOR CONTENT AREAS

D. LEARNING OUTCOMES (General)

1. Recall the parts required on a lab order and report
2. Report patient test results
3. Analyze tables in the interpretation of lab results
4. Maintain lab test results using flow sheets
5. Interpret laboratory test orders
6. Complete patient test report
7. Utilize a patient test order to collect the proper specimen
8. Identify infectious agents 111.C 1
9. List bacterial control and destruction techniques
10. Obtain throat swab for microbiological testing I.P 11e
11. Identify QC issues related to microbiological specimens
12. Perform Group A strep screening
13. Describe antibiotic susceptibility test
14. List bacterial growth conditions 111.C 4
15. Describe viral structure
16. Explain bacterial Identification techniques
17. Set up throat and urine culture plates
18. Associate microbiology results with common diseases I.C 10
19. Describe antigen-antibody reactions
20. Define serology/immunology terms
21. Perform HCG screening test I.P 11
22. Perform and interpret blood typing
23. Perform infectious mono testing
24. Associate immunology test results with diseases I.C 10
25. Perform blood glucose testing using capillary puncture I.P11b/1.P 2c
26. Analyze glucose results as reported on glow sheets I.C 6/ 11.P 3
27. Perform lipid testing
28. Recognize common chemistry tests
29. Associate abnormal chemistry results with common diseases I.C 10
30. Perform chemistry quality control
31. Maintain glucose test results using flow sheets 11.P 3
32. Recognize and categorize urine sediment components
33. perform automated urine strip analysis I.P 11c
34. Perform QC on auto urinalysis instrument I.P 10
35. Describe principles of urinalysis testing
36. perform manual urine strip analysis
37. perform microscopic urinalysis
38. perform urine confirmatory testing
39. Associate abnormal urinalysis results with common diseases I.C 10
40. describe coagulation tests
41. explain urine collection techniques
42. perform physical urine examination
43. recall urinary tract anatomy
44. describe the function of the formed elements of the blood

45. evaluate hemoglobin results
46. 25. name the formed elements of the blood
47. Maintain INR test results on a flow sheet II.P 3
48. perform hemoglobins I.P 11a
49. perform microhermatocrits LP 11a
50. recognize normal values for the hematology testing
51. perform erythrocyte sedimentation rate I.P 11a
52. evaluate microhematocrit results
53. prepare blood smears
54. recognize RBC indices
55. prepare blood smears
56. Associate abnormal hematology results with common diseases I.C 10
57. describe cardiac cycle
58. 47. describe holter monitor need
59. display patient empathy
60. display sensitivity for patient modesty during ECG
61. perform ECG I.P 2a
62. recognize ECG artifacts/interference
63. Prepare lab for testing including quality control
64. Collect appropriate specimens basted on orders
65. Process and test specimens collected
66. Document test results in lab logs and patient record
67. Differentiate between normal and abnormal test results II.P 2
68. Shut down and clean lab per procedure
69. Display professional conduct

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

None

F. LEARNER OUTCOMES ASSESSMENT

As noted on course syllabus

G. SPECIAL INFORMATION

None noted