This is a SouthArk Master Syllabus. The course syllabus distributed by the instructor may include additional requirements, must be followed by the student in the given term, and is considered to supersede the Master Syllabus.

Course Number
MLSC 1014/L

Course Title
Phlebotomy

Course Description
Co-requisite: BSTD 0603 or make an appropriate score on the placement test. This course centers on the study of phlebotomy, professionalism, patient relations, basic medical terminology, types of specimens, specimen collection procedures, complications of venipuncture, adaptations for special limits and special types of patients, and actual collection of laboratory specimens. Individuals who successfully complete this course and provide proof of successful collection of an additional 100 venipuncture specimens will be qualified to sit for the American Society of Phlebotomy technicians (ASPT) national phlebotomy certification examination. Two hours lecture and two hours laboratory.

College Mission
South Arkansas Community College promotes excellence in learning, teaching, and service; provides lifelong educational opportunities; and serves as a cultural, intellectual, and economic resource for the community.

College Wide Student Learner Outcomes
☒ Critical thinking ☒ Responsibility ☒ Communication

ACTS Course ☐ Program Course ☒ ACTS Outcomes ☐

Program Outcomes
1. Perform phlebotomy skills necessary to provide competent care for patients following federally mandated medical safety guidelines and according to professional standards.
2. Describe and appropriately respond to a patient’s emotional, psychosocial, economic, cultural, and relational reaction to treatment, injury, or intervention.
3. Integrate the concepts of science to the applicable practice of the phlebotomy.
4. Communicate clearly, effectively, and collaborate harmoniously with supervisors, peers, patients, significant others, and all members of a patient’s health team.
5. Collect and handle samples from patients and transport specimens to appropriate locations within the clinical laboratory.

Course Learner Outcomes

<table>
<thead>
<tr>
<th>CLO #</th>
<th>Course Learner Outcomes</th>
<th>Unit Outcomes/Competencies</th>
<th>ACTS Outcome</th>
<th>Program Outcomes</th>
<th>Critical Thinking</th>
<th>Communication</th>
<th>Responsibility</th>
<th>Assessment</th>
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<tr>
<td>CLO 1</td>
<td>Demonstrate proper sample collection techniques.</td>
<td>3,65,74,75,76,83,85,86,87,88,89,90,91,92,93,94,95,98,102,103,104,105,107,123,124,130</td>
<td>1, 4, 5</td>
<td>C3</td>
<td>Psychomotor Evaluation</td>
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<tr>
<td>CLO</td>
<td>Describe Ethics and Professionalism, Patient Rights, Legal Issues, and Public Relations</td>
<td>8,21,22</td>
<td>1, 2</td>
<td>R1</td>
<td>Phlebotomy Affective Evaluation Form: Attitude 2</td>
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<td>CLO</td>
<td>Identify the title and role of each part of phlebotomy personnel according to CLIA 88 and OSHA</td>
<td>5,6,17,20,31,33,37,115,117</td>
<td>3</td>
<td>R1</td>
<td></td>
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<tr>
<td>CLO</td>
<td>Explain Phlebotomy in the Healthcare Settings</td>
<td>2,7,9,10,12,14,24,99,100,101,102,103,104,105,106,108,109,110,111,112,113,114,116,118,119,120,121,122,125,131,132,133</td>
<td>1</td>
<td>C2</td>
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<td>CLO</td>
<td>Briefly explain the Main Body Systems system and how they relate to phlebotomy.</td>
<td>11,13,23,25,26,43,44,45,46,47,48,49,50,51,52,53,54,55,56,57,58,59,60,61,62,63,64,126,127,128</td>
<td>3</td>
<td>CT1</td>
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<tr>
<td>CLO</td>
<td>Describe the importance of following federally mandated laboratory safety guidelines.</td>
<td>15,16,19,27,28,29,30,32,34,35,36,38,39,40,41,66,67,68,69,77,78,79,80,81,82,84,96,97</td>
<td>1</td>
<td>R1</td>
<td>Phlebotomy Affective Evaluation Form: Responsibility 5</td>
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</table>

**Unit Outcomes/ Competencies/ Objectives**

Upon completion of the lecture series, the student will be able to:

**Chapter One**
1. Define Phlebotomy.
2. Discuss the history of Phlebotomy.
3. Name two ways to draw blood.
4. Discuss the responsibilities of a phlebotomist.
5. Name four certification agencies.
6. Discuss the importance of National board Certifications.
7. Discuss factors that contribute to Phlebotomists professional image.
8. Discuss the roll of HIPAA.
9. Analyze the different types of communication.
10. Compare the two different types of healthcare settings.
11. List and discuss the different medical specialties.
12. List the different areas of the clinical laboratory.
13. Discuss the three complexities of laboratory testing.
14. Discuss the five levels of laboratory personal.

**Chapter Two**
15. Define Quality Control.
17. List the National Standard and Regulatory Agencies.
18. List five good laboratory practices to list on patient’s specimen.
19. Define “Delta Checks”.
21. Define “Tort”.
22. Discuss the three ways for “Patient Consent”.

Chapter Three
23. Discuss the term “Infection Control”.
24. Discuss different types of Infections.
25. Define “Chain of Infection”.
26. Discuss the ways to break the chain of infection.
27. Discuss how OSHA relates to employee health screening.
28. Discuss “Hand Hygiene”.
29. List the different types of infection control methods.
30. Discuss the order of putting on and removing protective clothing.
31. Define “Isolation”.
32. List the three Transmission-Based precautions.
33. Define OSHA.
34. Define Biosafety.
35. List the General Laboratory Safety Rules.
36. Discuss the term “Blood Borne Pathogens”.
37. Discuss “Surface Decontamination”.
38. Discuss Electrical Shock, Fire, and Radiation Safety.
39. Define RACE.
40. Define PASS.
41. Explain SDS Sheets in the workplace.

Chapter Four
42. Define Word Root, Prefix and Suffix as used in Medical Terminology.

Chapter Five
43. Define Anatomy and Physiology.
44. List the three body positions.
45. List the three body planes.
46. Compare Proximal and Distal.
47. List the major body cavities.
48. Define “Homeostasis”.
49. Compare Catabolism to Anabolism.
50. Discuss the major body systems.

Chapter Six
51. Discuss the anatomy of the circulatory system.
52. Discuss the functions of the circulatory system.
53. List the different parts of the heart.
54. List the different parts of the vascular system.
55. Discuss the Phlebotomy related to the vascular anatomy.
56. List the veins of the anterior forearm, wrist, and hand.
57. Discuss the functions of blood.
58. Discuss the different types of cells.
59. Define coagulation and thrombocytes.
60. Describe the difference between Extrinsic and Intrinsic.
61. List the major blood types.
62. Discuss the Rh blood group.
63. Discuss compatibility test/cross match.
64. Define Vasoconstriction and the lymphatic system.

Chapter Seven
65. List the three blood collection methods.
66. Define “Disinfectant”.
67. Discuss the use of Sharps Containers and biohazard bags.
68. List the parts of a blood draw needle.
69. List the different gauges of needles.
70. Define additive tubes and describe their uses.
71. List the different types of collection equipment.
72. List the order of draw.

Chapter Eight
73. Define venipuncture.
74. List the steps in performing a venipuncture.
75. List the different ways a laboratory test is requested.
76. Discuss the phlebotomy procedure.

Chapter Nine
77. Define Pre-analytical phase and discuss its importance.
78. Discuss the physiological variables relating to phlebotomy.
79. Discuss what to do if a patient faints.
80. Discuss the prevention of hematomas.
81. Discuss the prevention of nerve damage.
82. Define and analyze the difference between hemoconcentration and hemolysis.
83. Analyze the importance of correctly filling collection tubes.
84. Discuss contamination prevention.

Chapter Ten
85. Discuss the proper use of a lancet.
86. Discuss the proper use of microhematocrit tubes.
87. Analyze the difference between capillary blood and venous blood.
88. Analyze the different techniques of capillary draws compared to the age of the patient.
89. List the tests that cannot be obtained by capillary draws.
90. List the order of draw with a capillary puncture.
91. Analyze the capillary puncture of patients over 1 year and under 1 year of age.
92. List the steps in a capillary puncture.
93. Discuss the Newborn/Neonatal screening.
94. Discuss what a blood smear is used for.

Chapter Eleven
95. Discuss the Point-of-Care testing.
96. List the extra precautions taken for Blood Bank specimens.
97. Discuss blood donor collections.
98. List the extra steps used when drawing blood cultures.
99. List the precautions taken when drawing a coagulation specimen.
100. Discuss the steps taken in running a Glucose Tolerance Test.
101. List the different types of glucose testing.
102. Discuss the difference between hyperglycemia and hypoglycemia.
103. Discuss the precautions and guidelines used when drawing a blood sample for therapeutic drug level.
104. Define therapeutic phlebotomy.
105. Discuss blood alcohol and drug screen testing regarding the chain of custody.
106. List the ratio of blood to anticoagulant when drawing PT/INR and PTT.
107. Discuss the procedure and use of a bleeding time.
108. List the common electrolytes.
109. List the common cardiac markers.
110. List the common tests used to monitor diabetes.
111. Define Hemoglobin and Hematocrit.
112. Discuss the use of occult blood.
Chapter Twelve
113. Define the use of accession numbers and bar codes.
114. Discuss the proper handling of blood specimens.
115. Discuss CLSI and OSHA guidelines on transporting specimens and delivery time limits.
116. Discuss the use of a body temperature specimen versus a chilled specimen.
117. Discuss OSHA regulations of wearing personal protective equipment while processing specimens.
118. Discuss the use of a centrifuge.
119. Discuss OSHA regulations in the aliquot preparation of specimens.

Chapter Thirteen
120. Discuss the handling of non-blood specimens.
121. Discuss urine as a non-blood body fluid.
122. Discuss the different types of testing on urine.
123. Explain a 24-hour collection procedure.
124. List the different collection methods in collecting a urine.
125. List the tests run on non-blood specimens.

Chapter Fourteen
126. Analyze the difference between venous and arterial blood.
127. List the test performed on Arterial blood gases.
128. List the appropriate sites to collect arterial blood.
129. Demonstrate the "Allen’s Test" and list its uses.
130. List the steps in performing ABG venipuncture.
131. Discuss the transportation and handling of a blood gas specimen.
132. Discuss the complications of an arterial puncture.
133. Explain what causes erroneous results on a blood gas.

Assessment Description(s)
There are 4 section tests, with 100 questions each, as indicated above and each test is worth 100 points. The comprehensive final exam is 100 multiple-choice questions and is worth 200 points. There will be NO exemptions from the final exam. If scheduled tests are missed, whether excused or unexcused, the test has to be made up or a zero will be given. This is the student's responsibility. There are 4 Workbook assignments worth 25 points each and 4 Key Term assignments worth 25 points each.

There are 4 lab tests worth 50 points each, lab attendance worth 10 points per lab (may not be made up if missed), and a lab final exam worth 100 points. The lab final exam consists of lab skills performance check-offs.

Grades are averaged as following: 40% Class Test, 20% Lab, 20% Workbook assignments, and 20% Key Terms. Blood Donations and Extra Credit Paper are worth 20 points each and this is added to your lowest test grade.

Grading Scale: A final course average below 70% is considered as not passing, which prevents the student from being eligible to sit for the certification exam.

90 – 100 A
80 – 89  B
70 – 79  C
60 - 69  D (Not passing)
Below 60 = F (Not passing)

Materials and Technological Requirements

Class Attendance Policy
Students are expected to attend all classes in which they are enrolled. If a student is absent from a class session, it is the student’s responsibility to make arrangements to complete or make up any work missed. No make-up work for missed classes will be allowed without the approval of the instructor. Students who enroll late must assume all responsibility for work missed. Classes not attended as a result of late enrollment may be counted toward excessive absences. Students not attending the entire class period may be counted absent for that period. An instructor may drop students with a grade of “WE” if students have been absent for an excessive number of days. Warning letters will be sent to the students advising them of the consequences of nonattendance and urging them to contact their instructors immediately. Excessive absences are defined as follows:

Regular Semester
- Courses which meet once a week .......................................................... 2 absences
- Courses that meet twice per week .......................................................... 3 absences
- Courses that meet four times per week .................................................. 5 absences

Summer Session
- Courses that meet four times per week in a five week session .................. 3 absences
- Courses which meet two evenings per week in a 10 week session .............. 3 absences

Students enrolled in special programs or individualized instruction should contact their program director/instructor regarding specific attendance requirements for the program/course. Some of the selective-admission, health-science programs have specific criteria regarding attendance. Students are encouraged to refer to program policies in these matters.

Jury Duty/Military/Official School Function
Scheduled absences are those that occur due to college-related activities or as a result of summons to jury duty or military duty. Classes missed as a result of scheduled absences will not be counted as excessive absences if the instructor is notified and provided documentation prior to the absence(s). Make-up work for scheduled absences will be at the discretion of the instructor.

In all instances, documentation must be provided to the instructor within 24 hours of receipt. Documentation should come from an appropriate party on letterhead or other official stationery with a signature and contact information. Documentation should list the corresponding dates of the leave.

Medical leave
For medical-related absences, documentation must include written notice from the treating medical professional documenting time needed off related to medical reasons and time student may resume classes. The medical reason does not need to be listed on the documentation; the documentation must include only that there is a medical reason, the amount of time the student needs to be absent, and the time the student should be able to return to classes. Students who elect to work at home while on excused leave must meet with their instructors to make arrangements to do so. Working on coursework while on medical leave is not a requirement but can be requested by students. If students request that they be allowed to work at home while on an excused leave, the instructor will make every reasonable effort to ensure that the student is able to do so.

For students who have a medical condition necessitating time off or accommodation:
1) They may work at home on assignments if they choose to if on medical leave approved by a medical professional
2) Receive appropriate accommodations related to coursework (i.e., excused from labs with potentially harmful chemicals, have a larger desk, etc.)
3) Resume their studies where they left off once they return to classes
4) Be allowed to make up any missed work related to medical leave
5) Receive incompletes on their transcripts until coursework is completed, according to the incomplete grade contract.
6) Be given a reasonable time frame in which to complete missed coursework

Academic Honesty Policy
Students enrolled at South Arkansas Community College are expected at all times to uphold standards of integrity. Students are expected to perform honestly and to work in every way possible to eliminate academic dishonesty. Academic dishonesty includes cheating and plagiarism, which are defined as follows:
• Cheating is an attempt to deceive the instructor in his/her effort to evaluate fairly an academic exercise. Cheating includes copying another student’s homework, class work, or required project (in whole or in part) and/or presenting another’s work as the student’s own. Cheating also includes giving, receiving, offering, and/or soliciting information on a quiz, test, or examination.

• Plagiarism is the copying of any published work such as books, magazines, audiovisual programs, electronic media, and films or copying the theme or manuscript of another student. It is plagiarism when one uses direct quotations without proper credit or when one uses the ideas of another without giving proper credit. When three or more consecutive words are borrowed, the borrowing should be recognized by the use of quotation marks and proper parenthetical and bibliographic notations.

If, upon investigation, the instructor determines that the student is guilty of cheating or plagiarism, the following penalties will apply:

• The student will receive a penalty of no less than a zero on the work in question.
• The instructor will submit a Student Academic Misconduct Form, written report of the incident, to the appropriate dean.
• The dean will submit form to Vice President for Learning to determine disciplinary action.
• The Vice President for Learning will determine whether further disciplinary action will be taken.
• All decisions may be appealed for review through the college’s academic appeals procedure.

Equal Opportunity-Affirmative Action Statement
South Arkansas Community College does not discriminate on the basis of age, race, color, creed, gender, religion, marital status, veteran’s status, national origin, disability, or sexual orientation in making decisions regarding employment, student admission, or other functions, operations, or activities.

Library Services
Library Homepage: http://southark.libguides.com/homepage Library Contact: LibraryStaff@southark.edu or 870.864.7115

Procedures to Accommodate Students with Disabilities:
If you need reasonable accommodations because of a disability, please report this to the Vice President of Student Services with proper documentation. VPSS Contact: 870.875.7262

The Early Alert System
In an effort to ensure student retention and success, South Arkansas Community College employs an Early Alert System to identify and support at-risk students as soon as possible in a given semester. The intent of Early Alert is to provide this assistance while there is still time to address behaviors or issues that have the potential of preventing students from completing their courses and degree plans. Students referred through the Early Alert System will be required to work on a corrective action plan with their student advising coach and to include attendance accountability and mandatory academic tutoring either in the academic division or in the Testing and Learning Center (TLC).

Once the Student Advising Coach has met with the referred student, and again when the student has met the prescribed corrective actions, the coach will update the Early Alert System so that the instructor is kept informed of the progress in resolving issues.

Behavioral Review Team
At South Arkansas Community College (SouthArk), we are committed to proactive leadership in student wellbeing and campus safety. By focusing on prevention and early intervention with campus situations that involve any person experiencing distress or engaging in harmful or disruptive behaviors, the BRT will serve as the coordinating hub of existing resources to develop intervention and support strategies and offer case management. Students, faculty, staff, and campus guests are encouraged to report any person on campus who is a concern. BRT Contact: 870.875.7262 BRT@southark.edu

Date of Revision: 08/29/2018