Clinical Lab Procedures I

TECL - 1040 301

Course Description

Provides phlebotomy theory and skill performance, understanding of basic concepts, safety and procedures of clinical lab. Learn proper handling and performance of CLIA waived hematology/serology labs and proper specimen handling and performance of microbiology and urinalysis testing.

Semester(s) taught: All

Course Student Learning Outcomes

- Define anatomy of venous structures related to venipuncture.
- Successfully perform technically correct and safe venipuncture using vacutainer, butterfly, syringe techniques and correctly process the specimen.
- Define and demonstrate basic concepts of clinical lab procedures, safety and proper use of the microscope.
- Define and demonstrate CLIA waived testing in hematology and serology.
- Define and demonstrate laboratory testing in microbiology and urinalysis.

Course Prerequisites

None

Transfer/Certification/Licensure/Employment Information

A Certificate is earned after successfully completing courses and/or programs. This type of certificate provides evidence to employers that a level of competence has been achieved in a course/program. The Certificates require that a student successfully complete all of the core courses in addition to a set number of hours of elective courses if part of the training program.

Additionally, students may take the tests for industry standard certificates - Medical Laboratory Assistant (CMLA) through the American Medical Technologists - when completing specific courses which are intended to prepare students for those certificates.

Keys for Success (how to succeed in the course)

Communication:

Instructors are open and available to help you in the classroom for face-to-face interaction, through college email or Canvas comments and messaging, Zoom, and telephone as posted within the syllabus and the 'Home Page' in Canvas including the 'Communications Statement' (with the exception of holidays and campus closures e.g. semester breaks). Feel free to reach out to us!

Clothing/Lab Dress Code:

Scrubs may be worn in the classroom, and are required in the lab area and for externship (some externship facilities have specific requirements eg. U of U Red, Black, or Navy Blue scrubs only). Closed-toe shoes are also required in the laboratory/clinical setting areas when practicing skills.

Food and Drinks:

There will be no food or drinks allowed in the computer or lab area of the classroom. A 'Break Room' with a microwave and refrigerator is available for student use.

Cellular Phone Usage:

Cellular phones will be turned to silent mode, or if they do not have a silent option, they will be turned off while in the classroom. Any phone conversation must be made outside the classroom to avoid disrupting others. Phones are not allowed at the testing stations.

Classroom Safety:

An emergency guideline and evacuation route are posted in the classroom. As you progress through the program, you will learn OSHA safety standards in a medical setting. There is a binder with Material Safety Data Sheets located in the classroom to use as a reference for an incident involving hazardous materials. Please be aware of the location of these safety guidelines.

Student Responsibilities:

All students are accountable for the following:

- 1. Stay engaged and on task (read, watch videos, listen, take notes, ask questions, complete assignments, schedule, and complete skills)
- 2. Log into the LMS (Canvas the College's learning management system) for course materials, presentations, and examinations.
- 3. Follow the instructor's directions AT ALL TIMES.
- 4. Ask the instructor for assistance after FIRST having attempted to resolve the problem themselves.
- 5. Complete **12-24 hours** of coursework each week for on-time course completion (based on part-time vs full-time enrollment status).

Required Text or Materials

Title: Kinn's The Medical Assistant

ISBN: 9780323871167

Authors: Brigitte Niedzwiecki, Julie Pepper

Publisher: Elsevier Health Sciences

Publication Date: 2022-11-20

Edition: 15th









Title: Study Guide and Procedure Checklist Manual for Kinn's

The Clinical Medical Assistant

ISBN: 9780323874243

Authors: Brigitte Niedzwiecki, Julie Pepper

Publisher: Elsevier Health Sciences

Publication Date: 2022-09-06

Edition: 15th



Title: Simchart for the Medical Office: Learning the Medical

Office Workflow

ISBN: 9780443348839 **Authors:** Elsevier Inc.

Publisher: Elsevier

Publication Date: 2024-12-02

Edition: 2025 or earlier edition is acceptable

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Additional Materials

Clothing Requirements (in addition to SLCC Student policies):

- Closed toe shoes.
- Scrubs

Optional Equipment for Skills/Externship:

- Watch with second hand.
- Stethoscope
- Blood Pressure Cuff / Sphygmomanometer

Brief Description of Assignments/Exams

- Module 1-Phlebotomy Part 1
- Module 2-Phlebotomy Part 2
- Summative Assessment 1
- Module 3-Clinical Lab Basics
- Module 4-Hematology / Serology
- Module 5-Microbiology / Immunology
- Module 6-Urinalysis
- Summative Assessment 2

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Phlebotomy Practice Quiz	Quiz	0
	Phlebotomy Spelling Test	Quiz	100
	CBC and CMP Written Assignment (II.P.2)	Assignment	18
	Clinical Lab Basics Performance Assessment	Assignment	5

Due Date	Assignment Name	Assignment Type	Points
	Clinical Laboratory SpellingTest	Quiz	100
	Collection, Transport, and Processing of Specimens	Quiz	100
	Complete Laboratory Requisitions	Assignment	40
	Critical Thinking Assignment Submission	Assignment	40
	Final Summative Program Assessment: Clinical Lab Assistant- Requires Respondus LockDown Browser	Quiz	100
	Forward-Mode Pipette Technique Practice CV% Results	Assignment	10
	<u>Hazard Labels</u> (CAAHEP XII.P.1.a,b,c)	Assignment	100
	Hematology/Serology Performance Assessment	Assignment	18
	<u>Hematology/Serology</u> <u>Spelling Test</u>	Quiz	100
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Kinn's Chapter 46 Practice Quiz	Quiz	0
	Kinn's Chapter 46 Practice Quiz	Quiz	0
	Kinn's Chapter 48 Practice Quiz	Quiz	0
	Kinn's Chapter 48. Practice Quiz	Quiz	0
	Kinn's Chapter 49 Practice Quiz	Quiz	0
	Microbiology/Immunology Performance Assessment	Assignment	12
	Newborn Screening	Assignment	100
	Order of Tube Draw	Assignment	25
	Patient Screening - Urinalysis (CAAHEP II.P.2)	Assignment	100
	Perform a Culture With an Agar Plate	Assignment	100
	Phlebotomy Summative Performance Assessment	Assignment	12
	Practice Quiz: Final Program Assessment	Quiz	0
	Prepare a Direct Smear and Gram Stain	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
	Procedure 45.1: Perform a Quality Control Measure on a Glucomenter, Procedure 48.6 Perform Blood Glucose Testing, and Document Results (CAAHEP I.P.10; I.P.11.b; II.P.3; II.C.6.a,b)	Assignment	6
	Procedure 46.1: Instruct a Patient in the Collection of a 24- Hour Urine Specimen (CAAHEP I.P.11.c)	Assignment	2
	Procedure 46.2: Instruct Patient Clean Catch Urine (CAAHEP I.P.11.c)	Assignment	2
	Procedure 46.3: Assess Urine for Color and Turbidity: Physical test (CAAHEP I.P.11.c)	Assignment	2
	Procedure 46.4: Use the Microscope and Perform Routine Maintenance on Clinical Equipment (Microscope) (CAAHEP VI.P.8)	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
	Procedure 46.5: Test Urine with Chemical Reagent Strips: Chemical test (CAAHEP I.P.11.c; II.P.2)	Assignment	2
	Procedure 46.6: Prepare a Urine Specimen for Microscopic Examination	Assignment	2
	Procedure 46.8: Perform a CLIA- Waived Urinalysis: Perform a Pregnancy Test (HCG) (CAAHEP I.P.11.c)	Assignment	2
	Procedure 48.1: Collect Venous Blood Sample - Vacuum Tube Double plus Processing Doc Submission (CAAHEP X.P.3)	Assignment	100
	Procedure 48.1: Collect Venous Blood Sample - Vacuum Tube Single Doc Submission (CAAHEP X.P.3)	Assignment	100
	Procedure 48.2: Collect Venous Blood Sample - Syringe Doc Submission (CAAHEP X.P.3)	Assignment	100

Due Date	Assignment Name	Assignment Type	Points
	Procedure 48.2: Perform Microhematocrit (CAAHEP I.P.11.a)	Assignment	2
	Procedure 48.3: Collect Venous Blood Sample - Winged Butterfly Needle Doc Submission (CAAHEP X.P.3)	Assignment	100
	Procedure 48.3: Perform Hemoglobin Test (CAAHEP I.P.10; I.P.11.a)	Assignment	2
	Procedure 48.4: Erythroctye Sedimentation Rate (Westergren ESR) (CAAHEP I.P.11.b)	Assignment	2
	Procedure 49.1: Fecal Ova and Parasite (O&P) (CAAHEP I.P.11.e)	Assignment	2
	Procedure 49.3: Perform a CLIA- Waived Microbiology Test: Perform a Rapid Strep Test (CAAHEP I.P.10,11.d,e; II.P.2,3; III.P.2; III.P.10.b)	Assignment	2

Due Date	Assignment Name	Assignment Type	Points
	Procedure 49.4: Perform a CLIA- Waived Immunlogy Test: Perform the Infectious Mononucleosis Test (CAAHEP I.P.2.c; I.P.11.d; II.P.2; II.P.3; III.P.2; III.P.10.a; III.P.10.b; XII.P.2.c)	Assignment	2
	Reverse-Mode Pipette Technique Practice CV% Results	Assignment	5
	Safety Data Sheets	Assignment	100
	Summative Objective Assessment 1A- Requires Respondus LockDown Browser	Quiz	100
	Summative Objective Assessment 2A- Requires Respondus LockDown Browser	Quiz	100
	Testing for Influenza	Assignment	100
	Urinalysis Performance Assessment	Assignment	18
	<u>Urinalysis Spelling</u> <u>Test</u>	Quiz	100

Grading Scale

SLTC Grading System

A = 100-90% → Excellent / Mastery

Consistently exceeds expectations, very few errors.

B = 89-78% → Satisfactory / Competent

Meets expectations; minor errors but overall skill is demonstrated.

E = Below 78% → Emerging / Needs Improvement

Does not yet meet expectations; needs more practice before reassessment

Mastery of competency in this competency-based program is demonstrated when you successfully complete the learning objectives and competencies within the coursework as defined. All components of the course must be mastered before moving forward. It is expected that each course be completed within the published course hours. At the end of your coursework, you will be rated according to the grading scale noted above based on your demonstrated ability of the course's established competencies. Additionally, you can earn credit for a course through Curriculum Exceptions or Credit for Prior Learning (CPL) by showing proof of previously completed course work.

Academic Integrity

PLAGIARISM: Students are expected to reference all sources of information. Any plagiarism will result

in failure of the assignment and possible failure of the course. The information must not be copied from

other student's work, textbook or internet sources.

Please refer to the SLCC Intuitional Syllabus for additional college information

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the <u>Institutional Syllabus</u> page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the <u>Institutional Syllabus</u> page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the <u>Institutional Syllabus</u> page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

SLCC Student Academic Calendar