

# McLennan C O M M U N I T Y C O L L E G E

WACO, TEXAS

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## **COURSE SYLLABUS AND INSTRUCTOR PLAN**

**Interpretation of Lab Results**

**HPRS 1209**

**Alisa J. Petree, MHSM, MLS(ASCP)<sup>cm</sup>**

**NOTE: This is an 8-week course.**

### **COVID 19 Notice:**

McLennan Community College is committed to providing you with every resource you need to reach your academic goals including your safety. We will continue to monitor the evolving situation with COVID 19 and adjust our safety guidelines to make sure we offer a safe environment for you and our faculty. Please make sure to consult your faculty and the MCC website at <https://www.mclennan.edu/crisis-management/coronavirus-updates/index.html> on any changes to these guidelines.

AN EQUAL OPPORTUNITY INSTITUTION

Spring 2023

## Interpretation of Laboratory Results

HPRS 1209.01

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### **Course Description:**

An introduction to interpretation of commonly ordered laboratory test results.

### **Prerequisites and/or Corequisites:**

Prerequisite: None. Semester hours: 2 semester hours credit

This course is part of the medical laboratory assistant certificate.

This course provides opportunities to learn about commonly ordered lab tests, expected ranges, panic values and specimen processing. Safety, quality control, specimen integrity, test results and interpersonal communication will be stressed.

D2L/Brightspace will be used to communicate important information about the course as well as assignments and exams for the course.

- Use your textbook for assignments and to prepare for your medical laboratory assistant certification exam
- Check your student email regularly
- Use a computer with reliable Internet access
- Have your textbook by the first day of class
- Estimated study time outside of class: 4-6 hours per week

Please note:

It is MCC's policy to assign all students, upon registration, an official e-mail address, which may remain in effect up to twelve months after students are no longer enrolled at MCC. MCC student e-mail addresses will be the only e-mail authorized to communicate official college information or business. A student's failure to receive or read official communications sent to the student's assigned e-mail address in a timely manner does not absolve the student from knowing and complying with the content of the official communication.

Students must have access to a computer with reliable Internet access to participate in this class. Students should also download Adobe Reader to open any PDF files in the course (free download). If the computer you are using does not have a copy of Microsoft Office for Word, Power Point, Excel Spreadsheets, etc. If you do not have Microsoft Word, you can obtain it for free using your MCC email address at the [Office 365 for Education](#) website.

**Instructor Information:**

Instructor Name: Alisa J. Petree, MHSM, MLS(ASCP)<sup>cm</sup>

Program Director/Professor MLT/Phlebotomy Program

MCC E-mail: [apetree@mclennan.edu](mailto:apetree@mclennan.edu)

Office Phone Number: 254-299-8406

Office Location: S 320 (3rd floor of the science building)

Office/Teacher Conference Hours: Monday/Wednesday 9:30 AM – 11:30 AM.

Tuesday/Thursday 9:00 AM to 10:00 AM. Other times available by request.

**Required Text & Materials:**

Title: Linne and Ringsrud's Clinical Laboratory Science

Author: Turgeon

Edition: 8<sup>th</sup>

Publisher: Elsevier-Health Sciences Division

ISBN: 9780323530828



**MCC Bookstore Website:** <http://www.mclennan.edu/bookstore/>

**Methods of Teaching and Learning:**

Students will be taught using various learning methods and activities including lectures, demonstrations, practice sessions, case studies, projects, worksheets, Internet exercises, quizzes, exams, streaming video, and recordings. Course materials will be available on *Brightspace* for student access during the course. Resources are also available in the MLT student laboratory and campus library.

**Course Objectives and/or Competencies:**

Upon satisfactory completion of this course, the student will be able to:

1. Describe a general listing of departments that make up the clinical laboratory including specimen processing, hematology, coagulation, chemistry, serology/immunology, blood bank, urinalysis and microbiology.

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2. Describe general usage of laboratory data, validity of data, sources of error, reference ranges, critical values, and ordering terminology.
3. Describe and analyze the clinical significance of commonly ordered laboratory tests in the core laboratory to include hematology/coagulation, chemistry/urinalysis and specimen sendouts.
4. Describe and analyze the clinical significance of commonly ordered laboratory tests in microbiology/parasitology, mycology and molecular.
5. Describe and analyze the clinical significance of commonly ordered laboratory tests in blood bank and serology testing.
6. Perform routine testing utilizing the student laboratory for hematology/chemistry and routine ABO typing.
7. Perform point of care testing for glucose and other rapid tests available in the student laboratory.
8. Identify normal ranges for commonly ordered laboratory tests and interpret the results.

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## Course Outline or Schedule:

Learning Unit	Dates	Reading Assignment	Brightspace Quiz (Due- Sunday 11:30 PM)	Medtraining Assignment (Due- Sunday 11:30 PM)	Lab/Competency Assessment*  In class testing	Animations from Evolve	Exams
LU 1	1/10 1/15	CH 4  CH 6 p. 151-153  Phlebotomy  Specimen processing  Centrifugation	LU 1 Quiz- syllabus and reading assignment	Biosafety  Orientation to Patient Safety	Balancing Centrifuge(s)  Venipuncture demo  Review Order of draw	Vascular System Overview	
LU 2	1/15- 1/22	CH 11  CH 12  Hematology/Hemostasis	LU 2 Quiz  Reading assignment	Venipuncture  Specimen Processing	CBC instrument normal ranges and panic values  PT and PTT normal results and panic values  Sed rates	Differential cell count and the role of neutrophils.  Hemostasis.  Sickle Cell  Red Blood Cell formation  Blood Cell Formation  Blood Cell Types	
LU 3	1/22- 1/29	Chapter 16  Chapter 17  Immunology/Serology and Immunohematology	LU 3 Quiz  Reading assignment	Specimen transport  Skin puncture	Mono spot  ABO testing	Lymphatic System Overview  Lymph Nodes, Lymphatic Pump and	Exam 1 – Chapters 4,6,11,12

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					Transfusion RXN	Lymphatic Circulation	
						Antibodies and Antigens	
<b>LU 4</b>	1/29-2/5	Chapter 15  Microbiology	LU 4 Quiz  Reading assignment	Blood culture  Patient Complications	Rapid strep testing  COVID-19 testing		
<b>LU 5</b>	2/5-2/12	Chapter 10  Chemistry	LU 5 Quiz  Reading assignment	Cardiac Markers	Glucose testing  Hgb A <sub>1</sub> C  Lipid testing	Overview of the Endocrine System	Exam 2  Chapters 16,17,15
<b>LU 6</b>	2/12-2/19	Chapter 10 (con't)  Chemistry	LU 6  Reading assignment	Cerebral Spinal Fluid	Drugs of Abuse  Therapeutic Drug monitoring	Creatinine and Renal Function	
<b>LU 7</b>	2/19-2/26	Chapter 13  Urinalysis and Body Fluids  Last class day		Urinalysis	Urine dipstick  Specific Gravity	Urine Formation  Urine flow  Renal filtration	Exam 3- Chapters 10,13
<b>LU 8</b>	2/26-2/28	Final Exam Tuesday  February 28th	Grades due  March 1st	Comprehensive final			

### **Subject to Change Disclaimer:**

The policies, regulations, procedures, and fees associated with this program are subject to change without prior notice, if necessary, to keep College and program policies in compliance with State and Federal laws and/or with rules related to the program's accrediting agency. The College and the program reserve the right to change curricula, rules, fees, and other requirements, of whatever kind, affecting students in any way. The provisions of this document do not constitute a contract, express or implied, between any applicant, student, faculty or staff member and McLennan Community College or this program.

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**Course Grading Information:****Grading Policy**

Grade	Percentage Points
A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	59% and below

	Breakdown
Assignments	60%
Examinations	30%
Final Exam	10%
<b>Total Course Points</b>	100%

Grades will be posted on *Brightspace*.

**Assignments**

Your assignment grade may include work such as quizzes, projects, discussion boards, worksheets, and/or homework.

**Examinations**

There are three major examinations which may be comprehensive. If you miss an exam, your final exam grade will be substituted for the major exam grade that you missed. No student will be allowed to make up more than one examination.

**All tests will be taken in class or proctored.**

**Final Exam**

The Final Exam will be comprehensive, testing your knowledge of the material for the entire course.

**Late Work, Attendance, and Make Up Work Policies:**

Students will be permitted to makeup class work and assignments missed due to excused absences caused by (1) authorized participation in official College functions, (2) personal illness, (3) an illness or a death in the immediate family, or (4) the observance of a religious holy day.

*It is the student's responsibility to provide the proper documentation for an excused absence by the next class period.*

The instructor has the prerogative of determining whether or not a student may submit work missed due to an unexcused absence (the grade recorded will be no higher than a 75).

This is an 8 week course. Attendance is vital to your knowledge and success. Students who miss 2 class periods will be sent a warning and missing 3 class periods will result in the student being dropped from the course.

**Student Behavioral Expectations or Conduct Policy:**

Students are expected to maintain classroom decorum that includes respect for other students and the instructor, prompt and regular attendance, and an attitude that seeks to take full advantage of the education opportunity.

**Dress Code**

The student classroom/laboratory is a level 2 biohazard lab. Therefore, students will be required to wear scrubs (preferably the MLT scrubs) and closed toe shoes to class and lab.

We are representing our profession and our program. Please see the MLT Student Handbook for more information.

**Plagiarism and Cheating**

Any reported incidents of plagiarism or cheating will be investigated and documented with proper disciplinary action taken as necessary including possible dismissal from the program.

Please see [Academic Integrity: A student's responsibility](#) from the McLennan Community College website and the Highlander Student Guide.

"Cheating" includes, but is not limited to: (1) use of any unauthorized assistance in taking quizzes, tests or examinations; (2) dependence upon the aid of sources beyond those authorized by the professor in writing papers, preparing reports, solving problems or carrying out other assignments; or (3) the acquisition, without permission, of tests or other academic material belonging to a member of the MCC faculty or staff.

"Plagiarism" includes, but is not limited to, the use, by paraphrase or direct quotation, of the published or unpublished work of another person without full and clear acknowledgment. It also includes the unacknowledged use of materials prepared by another person or agency engaged in the selling of term papers or other academic materials.

**Cellular Telephones, Personal Telephone Calls, and Electronic Devices**

Students may use laptop computers during lectures as directed by the instructor. **Cell phones** must be silenced during class and lab. Cell phones may not be brought into testing areas.

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Cell phones are a convenience to us all, and most of us have one in case we need to be contacted regarding emergencies with family, children, day cares, etc.

**[Click Here for the MCC Attendance/Absences Policy](https://www.mclennan.edu/highlander-guide/policies.html)**

**(<https://www.mclennan.edu/highlander-guide/policies.html>)**

Click on the link above for the college policies on attendance and absences. Your instructor may have additional guidelines specific to this course.

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Updated 11/04/2022

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## **ACADEMIC RESOURCES/POLICIES**

### **Accommodations/ADA Statement:**

Any student who is a qualified individual with a disability may request reasonable accommodations to assist with providing equal access to educational opportunities. Students should contact the Accommodations Coordinator as soon as possible to provide documentation and make necessary arrangements. Once that process is completed, appropriate verification will be provided to the student and instructor. Please note that instructors are not required to provide classroom accommodations to students until appropriate verification has been provided by the Accommodations Coordinator. For additional information, please visit [www.mclennan.edu/disability](http://www.mclennan.edu/disability).

Students with questions or who require assistance with disabilities involving physical, classroom, or testing accommodations should contact:

[disabilities@mclennan.edu](mailto:disabilities@mclennan.edu) 254-299-  
8122  
Room 319, Student Services Center

### **Title IX:**

We care about your safety, and value an environment where students and instructors can successfully teach and learn together. If you or someone you know experiences unwelcomed behavior, we are here to help. Individuals who would like to report an incident of sexual misconduct are encouraged to immediately contact the acting Title IX Coordinator at [titleix@mclennan.edu](mailto:titleix@mclennan.edu) or by calling, Dr. Claudette Jackson, (Diversity, Equity & Inclusion/Title IX) at (254) 299-8465. MCC employees are mandatory reporters and must report incidents immediately to the Title IX Coordinator. Individuals may also contact the MCC Police Department at (254) 299-8911 or the MCC Student Counseling Center at (254) 299-8210. The MCC Student Counseling Center is a confidential resource for students. Any student or employee may report sexual harassment anonymously by visiting <http://www.lighthouse-services.com/mclennan/>.

Go to McLennan's Title IX webpage at [www.mclennan.edu/titleix/](http://www.mclennan.edu/titleix/). It contains more information about definitions, reporting, confidentiality, resources, and what to do if you or someone you know is a victim of sexual misconduct, gender-based violence or the

crimes of rape, acquaintance rape, sexual assault, sexual harassment, stalking, dating violence, or domestic violence.

**Student Support/Resources:**

MCC provides a variety of services to support student success in the classroom and in your academic pursuits to include counseling, tutors, technology help desk, advising, financial aid, etc. A listing of these and the many other services available to our students is available at <http://www.mclennan.edu/campus-resource-guide/>

Academic Support and Tutoring is here to help students with all their course-related needs. Specializing in one-on-one tutoring, developing study skills, and effectively writing essays. Academic Support and Tutoring can be found in the Library and main floor of the Learning Commons. This service is available to students in person or through Zoom from 7:30 am - 6:00 pm Monday through Thursday and 7:30 am - 5:00 pm on Friday. You can contact the Academic Support and Tutoring team via Zoom (<https://mclennan.zoom.us/j/2542998500>) or email ([ast@mclennan.edu](mailto:ast@mclennan.edu)) during the above mentioned times.

College personnel recognize that food, housing, and transportation are essential for student success. If you are having trouble securing these resources or want to explore strategies for balancing life and school, we encourage you to contact either MCC CREW – Campus Resources Education Web by calling (254) 299-8561 or by emailing [crew@mclennan.edu](mailto:crew@mclennan.edu) or a Success Coach by calling (254) 299-8226 or emailing [SuccessCoach@mclennan.edu](mailto:SuccessCoach@mclennan.edu). Both are located in the Completion Center located on the second floor of the Student Services Center (SSC) which is open Monday-Friday from 8 a.m.-5 p.m.

Paulanne's Pantry (MCC's food pantry) provides free food by appointment to students, faculty and staff. To schedule an appointment, go to [https://mclennan.co1.qualtrics.com/jfe/form/SV\\_07byXd7eB8iTqJg](https://mclennan.co1.qualtrics.com/jfe/form/SV_07byXd7eB8iTqJg). Both the Completion Center and Paulanne's Pantry are located on the second floor of the Student Services Center (SSC).

**MCC Foundation Emergency Grant Fund:**

Unanticipated expenses, such as car repairs, medical bills, housing, or job loss can affect us all. Should an unexpected expense arise, the MCC Foundation has an emergency grant fund that may be able to assist you. Please go to <https://www.mclennan.edu/foundation/scholarships-and-resources/emergencygrant.html> to find out more about the emergency grant. The application can be found at [https://www.mclennan.edu/foundation/docs/Emergency\\_Grant\\_Application.pdf](https://www.mclennan.edu/foundation/docs/Emergency_Grant_Application.pdf).

**MCC Academic Integrity Statement:**

Go to [www.mclennan.edu/academic-integrity](http://www.mclennan.edu/academic-integrity) for information about academic integrity, dishonesty, and cheating.

**Minimum System Requirements to Utilize MCC's D2L|Brightspace:**

Go to <https://www.mclennan.edu/center-for-teaching-and-learning/Faculty-andStaffCommons/requirements.html> for information on the minimum system requirements needed to reliably access your courses in MCC's D2L|Brightspace learning management system.

**Minimum Technical Skills:**

Students should have basic computer skills, knowledge of word processing software, and a basic understanding of how to use search engines and common web browsers.

**Backup Plan for Technology:**

In the event MCC's technology systems are down, you will be notified via your MCC student email address. Please note that all assignments and activities will be due on the date specified in the Instructor Plan, unless otherwise noted by the instructor.

**Email Policy:**

McLennan Community College would like to remind you of the policy (<http://www.mclennan.edu/employees/policy-manual/docs/E-XXXI-B.pdf>) regarding college email. All students, faculty, and staff are encouraged to use their McLennan email addresses when conducting college business.

A student's McLennan email address is the preferred email address that college employees should use for official college information or business. Students are expected to read and, if needed, respond in a timely manner to college emails. For more information about your student email account, go to [www.mclennan.edu/studentemail](http://www.mclennan.edu/studentemail).

**Instructional Uses of Email:**

Faculty members can determine classroom use of email or electronic communications. Faculty should expect and encourage students to check the college email on a regular basis. Faculty should inform students in the course syllabus if another communication method is to be used and of any special or unusual expectations for electronic communications.

If a faculty member prefers not to communicate by email with their students, it should be reflected in the course syllabus and information should be provided for the preferred form of communication.

**Email on Mobile Devices:**

The College recommends that you set up your mobile device to receive McLennan emails. If you need assistance with set-up, you may email [Helpdesk@mclennan.edu](mailto:Helpdesk@mclennan.edu) for help.

You can find help on the McLennan website about connecting your McLennan email account to your mobile device:

- [Email Setup for iPhones and iPads](#)
- [Email Setup for Androids](#)

**Forwarding Emails:**

You may forward emails that come to your McLennan address to alternate email addresses; however, the College will not be held responsible for emails forwarded to an alternate address that may be lost or placed in junk or spam filters.

For more helpful information about technology at MCC, go to [MCC's Tech Support Cheat Sheet](#) or email [helpdesk@mclennan.edu](mailto:helpdesk@mclennan.edu).

**Disclaimer:**

The resources and policies listed above are merely for informational purposes and are subject to change without notice or obligation. The College reserves the right to change policies and other requirements in compliance with State and Federal laws. The provisions of this document do not constitute a contract.