

### MLAB 2331 Immunohematology HYBRID

Course Syllabus: Fall 2020

"Northeast Texas Community College exists to provide personal, dynamic learning experiences empowering students to succeed."

**Instructor: Chantel Sokol** 

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Office	Monday	Tuesday	Wednesday	Thursday	Friday	Online
Hours	0930-noon	0930-noon	0930-noon	0930-noon	By appt	By appt

## This syllabus serves as the documentation for all course policies and requirements, assignments, and instructor/student responsibilities.

Information relative to the delivery of the content contained in this syllabus is subject to change. Should that happen, the student will be notified.

#### **Course Description:** 3 credit hours.

Lecture/Lab/Clinical: Three hours of online lecture and three hours of lab each week A study of blood antigens and antibodies. Presents quality control, basic laboratory technique and safety. Includes the principles, procedures and clinical significance of test results in genetics, blood group systems, pre-transfusion testing, adverse effects of transfusions, donor selection and components, and hemolytic disease of the newborn.

Prerequisite(s): MLAB 1235 and admission to the MLT program or Department approval

#### **Student Learning Outcomes:**

Describe the structure and function of the immune system as it relates to clinical blood banking. Describe the donor selection process and the preparation and use of blood components. Identify and describe the characteristics and clinical significance of the ABO, Rh and other blood group systems.

Apply the knowledge of basic principles in blood banking to perform routine blood bank procedures used in pretransfusion testing.

Perform intermediate level blood bank testing for the resolution of antibody problems, HDN and transfusion workups.

#### Evaluation/Grading Policy: Lecture 75%; Lab 25%

A >90%

B 80-89%

C 70-79%

D 60-69%

F <60%

Your Lecture Grade will be composed of quizzes and exams

Ouiz average 20%

Exam 1 20%

Exam 2 20%

Exam 3 20%

Exam 4 20%

Your Lab Grade will be composed of homework and labs Homework/Discussion Board average 25% Lab worksheet average 25% Lab Midterm 25% Lab Final 25%

A minimum grade of "C" is required for BOTH the lecture and laboratory components of all Medical Laboratory Technology courses. Failure to meet the minimum passing score in each area will result in a "D" for the course and dismissal from the program

**Required Instructional Materials:** Paula R. Howard. Basic and Applied Concepts of Immunohematology, 4<sup>th</sup> edition, Mosby/Elsevier Publishing, 2017.

**Publisher:** Elsevier **ISBN Number:** 978-0-323-37478-1

Optional Instructional Materials: Powerpoint lectures and additional material on internet

#### **Minimum Technology Requirements:**

Laptop

Most Windows or Mac laptop computers work well for online classes.

Chromebooks use the Chrome operating system which is not a supported operating system for Blackboard. Some areas of Blackboard require Java on your computer, and Chromebooks do not support the use of Java. If you use a Chromebook, please be sure you also have access to a Mac computer or Windows computer so you can fully participant in your Blackboard class. Some things will not work on a Chromebook.

Please do not ONLY rely on a tablet, including an iPad, or a smartphone to use Blackboard. Not all features will work on tablets and smartphones. You may need access to a full computer to be able to do everything in your Blackboard class.

You will need to scan documents and upload them to Blackboard. You can use a scanner attached to a computer, a smartphone app, or your cell phone's camera.

#### Internet Access

While Bb can be accessed with dial-up online service, best results will be obtained when using a broadband Internet service.

#### Iava

Make sure your computer is running the current version of java. It is a free download at www.java.com.

#### Internet Browser

Supported browsers for use with Blackboard include Firefox, Google Chrome, Internet Explorer, and Safari. If you experience any problems in Blackboard we recommend you login to the portal and Blackboard from another browser before seeking assistance from NTCC Technical support.

#### **Required Computer Literacy Skills:**

**Intermediate Internet Skills** 

You should be familiar with how the Internet works including following links and searching for information.

**Intermediate Word Processing Skills** 

You should be familiar with how to enter data (text) on a word processing document, format text, and save documents.

#### **Course Structure and Overview:**

This course will cover Chapters 1-16. This is a Hybrid class which means class meets once a week and all other instruction is done online via the learning management system BLACKBOARD. In class meetings will be reserved for homework review, labs, and exams. Students are expected to complete all the readings of the required book chapters, review PowerPoints, and complete the online chapter activities. You will see that the course is divided into 12 weeks in the Blackboard portion. Each week you will be expected to complete certain online assignments for the chapters found in that week's folder. This course requires daily computer and internet access. You should expect to spend no less than 9 hours a week in this course. Pay close attention to deadlines for all assignments. Technical difficulties are no excuse for late assignments. A due date assignment schedule is posted in the START HERE folder in Blackboard the entire semester! Please check it weekly so that you know what is due and do not miss anything.

Quizzes: Taken on-line, 20-30 multiple-choice questions over topics covered in the Lesson's readings and PowerPoint. 16 quizzes averaged together for 20% of lecture grade; grades reflected immediately in Blackboard

Homework: Various on-line activities. 16 assignments averaged together for 25% of lab grade; if turned in Tuesday will be graded by Wednesday

Exams: 50 multiple choice questions from quizzes; taken on laptop; each is 20% of Lecture grade; grade reflected immediately in Blackboard

Lab Worksheets: completed in-class. 11 labs averaged together for 25% of lab grade; grade posted on Wednesday following lab

#### **Communications:**

EMAIL: E-mail preferred. E-mails will be responded to within 24 hours during the work week (Monday – Thursday 8am-6pm and Friday 8-noon). Please check your NTCC email EVERYDAY. Email is the official form of communication used here at NTCC.

TEXT MESSAGE NOTIFICATIONS: REMIND will be used to get information out to students quickly. This will enable you to receive important class announcements and reminders from me via text message so that you will not miss out on any assignment changes or important updates. Please continue to check your NTCC email daily. If you do not own a cell phone, you can receive these same reminders through your email... the instructions are also in the PDF.

ANNOUNCEMENTS: These can be found in Blackboard under the course link on your Bb homepage. Please make sure you are reading any announcements thoroughly when they are posted there

#### **Institutional/Course Policy:**

ATTENDANCE: This is a hybrid course which means we only meet once a week. You are only allowed 3 unexcused absences... more than three and you automatically fail the course! Attendance is necessary in this class. You must make every effort to be present and on time to every class. An absence will be excused if you can document illness, major catastrophe, and a death in your family, or if you were participating in a NTCC activity. You must inform the instructor BEFORE the scheduled class period if you believe an absence should be excused. The student is responsible for obtaining any classroom assignments or notes given during his/her absence.

CELL PHONES: Please set to silent or vibrate

#### Alternate Operations During Campus Closure and/or Alternate Course Delivery Requirements

In the event of an emergency or announced campus closure due to a natural disaster or pandemic, it may be necessary for Northeast Texas Community College to move to altered operations. During this time, Northeast Texas Community College may opt to continue delivery of instruction through methods that include, but are not limited to, online through the Blackboard Learning Management System, online conferencing, email messaging, and/or an alternate schedule. It is the responsibility of the student to monitor NTCC's website (<a href="http://www.ntcc.edu/">http://www.ntcc.edu/</a>) for instructions about continuing courses remotely, Blackboard for each class for course-specific communication, and NTCC email for important general information.

Additionally, there may be instances where a course may not be able to be continued in the same delivery format as it originates (face-to-face, fully online, live remote, or hybrid). Should this be the case, every effort will be made to continue instruction in an alternative delivery format. Students will be informed of any changes of this nature through email messaging and/or the Blackboard course site.

#### **NTCC Academic Honesty/Ethics Statement:**

NTCC upholds the highest standards of academic integrity. The college expects all students to engage in their academic pursuits in an honest manner that is beyond reproach using their intellect and resources designated as allowable by the course instructor. Students are responsible for addressing questions about allowable resources with the course instructor. Academic dishonesty such as cheating, plagiarism, and collusion is unacceptable and may result in disciplinary action. This course will follow the NTCC Academic Honesty and Academic Ethics policies stated in the Student Handbook. Refer to the student handbook for more information on these subjects.

#### **ADA Statement:**

It is the policy of NTCC to provide reasonable accommodations for qualified individuals who are students with disabilities. This College will adhere to all applicable federal, state, and local laws, regulations, and guidelines with respect to providing reasonable accommodations as required to afford equal educational opportunity. It is the student's responsibility to request accommodations. An appointment can be made with the Academic Advisor/Coordinator of Special Populations located in Student Services and can be reached at 903-434-8264. For more information and to obtain a copy of the Request for Accommodations, please refer to the special populations page on the NTCC website.

#### Family Educational Rights and Privacy Act (FERPA):

The Family Educational Rights and Privacy Act (FERPA) is a federal law that protects the privacy of student education records. The law applies to all schools that receive funds under an applicable program of the U.S. Department of Education. FERPA gives parents certain rights with respect to their children's educational records. These rights transfer to the student when he or she attends a school beyond the high school level. Students to whom the rights have transferred are considered "eligible students." In essence, a parent has no legal right to obtain information concerning the child's college records without the written consent of the student. In compliance with FERPA, information classified as "directory information" may be released to the general public without the written consent of the student unless the student makes a request in writing. Directory information is defined as: the student's name, permanent address and/or local address, telephone listing, dates of attendance, most recent previous education institution attended, other information including major, field of study, degrees, awards received, and participation in officially recognized activities/sports.

# Tentative Course Timeline (\*note\* instructor reserves the right to make adjustments to this timeline at any point in the term): Schedule of Activities/Assignments

Week	Date Date	On-line On-line	Lab
1	August 25	<ul> <li>Read everything in start course here folder</li> <li>Upload signed syllabus agreement</li> <li>Read Ch 1&amp;2 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 1&amp;2</li> <li>Homework: MediaLab Assignment "Current Good Manufacturing Practices for Transfusion Services", watch YouTube video and respond to discussion question</li> <li>All must be complete by 9/1</li> </ul>	QC demonstration
2	September 1	<ul> <li>Read Ch 3&amp;4 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 3&amp;4</li> <li>Homework: Product Reagent Sheet and watch YouTube video and respond to discussion question</li> <li>All must be complete by 9/8</li> </ul>	ABO slide type
3	September 8	<ul> <li>Review Quiz Ch 1-4</li> <li>Must be complete by 9/15</li> </ul>	ABO/Rh tube type
4	September 15	<ul> <li>Read Ch 5&amp;6 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 5&amp;6</li> <li>Homework: MediaLab Assignments "Introduction to the ABO Blood Group System" and "Overview of the Major Antigens in the Rh Blood Group System"</li> <li>All must be complete by 9/22</li> </ul>	Exam 1 (Ch1-4) In-Class on Laptop ABO/Rh gel type
5	September 22	<ul> <li>Read Ch 7 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 7</li> <li>Homework: Watch BB Guy video and respond to discussion question</li> <li>All must be complete by 9/29</li> </ul>	Antigen Typing
6	September 29	<ul> <li>Read Ch8&amp;9 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 8&amp;9</li> <li>Homework: MediaLab Assignment "Antibody Identification" and watch BB Guy video and respond to discussion question</li> <li>All must be complete by 10/6</li> </ul>	Antibody Screen
7	October 6	<ul> <li>Review Quiz Ch 5-9</li> <li>Must be complete by 10/13</li> </ul>	Lab Practical T&S in tube
8	October 13	<ul> <li>Read Ch10&amp;11 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 10&amp;11</li> <li>Homework: MediaLab Assignment "Transfusion Reactions" and prepare Automation post</li> <li>All must be complete by 10/20</li> </ul>	Exam 2 (Ch5-9) In-Class on Laptop XM tube and gel
9	October 20	<ul> <li>Read Ch12 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 12</li> <li>Homework: MediaLab Assignment "HDFN" All must be complete by 10/27</li> </ul>	ABID

10	October 27	<ul> <li>Read Ch13&amp;14 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 13&amp;14</li> <li>Homework: Make blood donor flyer, watch BB Guy video and answer discussion question</li> <li>All must be complete by 11/3</li> <li>Read Ch15&amp;16 in book</li> <li>Pre-Quiz/PowerPoint/Post-Quiz for Ch 15&amp;16</li> </ul>	ABID  TxRxn Workup
11	November 3	<ul> <li>Homework: Watch YouTube videos and answer discussion questions</li> <li>All must be complete by 11/10</li> </ul>	
12	November 10	<ul> <li>Review Quiz Ch 10-16</li> <li>Must be complete by 11/17</li> </ul>	Fetal Screen
13	November 17	Study for Final Exam Ch 1-16	Exam 3 (Ch10-16) In-Class on Laptop Lab Final T&S in gel
14	November 24	Thanksgiving	Break
15	December 1	Study for Final Exam Ch 1-16	Will not meet on campus
16	December 8	FINAL EXAM (Ch 1-16) At Home on Laptop during normal class hours	Will not meet on campus

All of the listed week's work is due by the following Tuesday at 1300. I will accept late work with a 10% penalty until Friday at noon following the due date. Make sure you understand due dates. Should you have questions you may email me at csokol@ntcc.edu. I highly recommend submitting all assignments early. Again, if there are any questions about the schedule please email me at csokol@ntcc.edu or send message via Remind.