MLT 205
Blood Bank/Serology
Fall 2013

INSTRUCTOR: Lisa J. Prescott, MT (ASCP)
OFFICE/OFFICE HOURS: location varied and times by appointment only

ROOM: Pullen 115
TIME: TTH 12: 30 – 2:00 p.m.
E-MAIL lisa.prescott@maine.edu

TEXTBOOKS


EVALUATION

Three exams @ 20% = 60%
Quizzes = 10%
Laboratories; homework = 10%
Final exam = 20%

MLT majors must earn a passing grade of 77 (C+) in Mlt 205 to remain in the program. A (C) or (C-) is NOT passing. If an Mlt major fails to get a passing grade they will be dismissed from the program and must reapply for admission.

MAJOR GOALS AND OBJECTIVES

Upon completion of Mlt 205 the MLT student:

• understands the basic principles of genetics
• comprehends the basic principles of immunology
• understands the immune response
• understands the ABO blood group system
• understands the Rh blood group system
• understands the complement system
• comprehends the direct and indirect antiglobulin tests
• understands other common blood groups
• comprehends the antibody identification procedures and is able to interpret panel results
• understands and is able to explain the crossmatch
• comprehends autoimmune hemolytic anemia and is able to identify and classify various types
• understands the concept of hemolytic disease of the newborn
understands the physical requirements and other requirements which are needed for blood donation
- understands the importance and use of blood components
- understands the concept of transfusion reactions
- comprehends the clinical and laboratory aspects of syphilis, infectious mononucleosis, RA, and CRP
- understands the clinical and laboratory aspects of streptococcal infections, Hepatitis, and HIV

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<thead>
<tr>
<th>DATE</th>
<th>ASSIGNMENT*</th>
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<tbody>
<tr>
<td>Sept 3</td>
<td>Genetics and Introduction to Immunology</td>
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<td>Sept 5</td>
<td>Immunology</td>
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<tr>
<td>Sept 10</td>
<td>ABO Blood Group System</td>
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<tr>
<td>Sept 12</td>
<td>ABO cont.</td>
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<tr>
<td>Sept 17</td>
<td>RH Blood Group System</td>
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<td>Sept 19</td>
<td>Rh Continued</td>
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<td>Oct 24</td>
<td>Ag-Ab Reactions in vitro, Complement</td>
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<td>Oct 26</td>
<td>Direct and Indirect Antiglobulin Tests</td>
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<td>Oct 1</td>
<td>EXAM</td>
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<tr>
<td>Oct 3</td>
<td>Direct and Indirect Antiglobulin Tests cont. Lewis System, Kidd, Kell, Duffy</td>
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<tr>
<td>Oct 8</td>
<td>Other Blood Groups</td>
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<tr>
<td>Oct 10</td>
<td>Other Blood Groups con.</td>
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**Fall Break October 12th – October 15th (No class October 15th)**

| Oct 17 | Antibody Identification | Chapter 7 |
| Oct 22 | Compatibility Testing | Chapter 8 |
| Oct 24 | Autoantibodies (Immune Hemolytic Anemia) | Chapter 15 |
29  EXAM #2

31  Blood Bank Automation-Guest Lecturer  Chapter 9
Nov.  5  Case studies/Antibody panels/Misc.

7  Hemolytic Disease of the Newborn  Chapter 11
12  Donor Collection: Processing and Storage  Chapter 12
14  Component Therapy, Plasmapheresis  Chapter 14
19  Blood Transfusion, Transfusion Reactions  Chapter 10
21  Serology Introduction: Immunological Techniques: Monotest  Chapter 22 (T)
26  CRP, RA  Chapter 30 (T) pp. 93-98(T)

Thanksgiving Vacation November 27th – November 29th (No class Nov. 28th)

Dec.  3  ASOT, Streptozyme, RPR  Chapter 17 (T)
        3  Chapter 18 (T)
Dec  5  EXAM #3

10  Hepatitis testing  Chapter 23 (T)
12  AIDS/Review  Chapter 25 (T)

FINAL EXAM: December 19th

LABORATORY SCHEDULE
(Varies according to laboratory site)

UMPI Schedule (Folsom 305, 1:00 – 4:00pm)
Lab 1 – Sept 20
Lab 2 - Oct 18
Lab 3 – Nov. 22

UMA lab Schedule
(further details on site, times, and group assignments available from Margaret Naas)
Lab 1-
Group A – Sept 20 & 21
Group B - Sept 27 & 28
• All Assignments (homework and otherwise) will be posted in Blackboard
• Homework is due with the following exam. You will pass it in to your exam proctor. Late assignments will not be accepted!

Blackboard

All students are required to log on to the course's “Blackboard” page, found at http://www.courses.maine.edu. Please see http://www.learn.maine.edu/crs/bb5_guide.html for current login info – if students have not already done so, they must activate their UMaine System email account before they can enter Blackboard. For further information, see the Quick Guide at http://www.learn.maine.edu/crs/bb5_guide.html.

Quizzes will be posted following the corresponding lecture and must be completed before the exam on the material!
• If a quiz is not completed within the time allowed, a grade of 0 (zero) will be given.
• Quizzes must be completed in one attempt – so be prepared to complete the quiz in one sitting! Multiple attempts are not permitted. If you get locked out of a quiz email the instructor (when it happens) to have the quiz reset.
• Blackboard will partially grade the quiz (except for some short answers or essays) and inform you of the results. The instructor will grade the quizzes and assign the final quiz grade.
• Quizzes completed by the student 24 hours or more before the exam will be graded before the exam date.

You can keep track of how you're doing in class by checking your grade on Blackboard.

The reading assignments are essential! They will help clarify lectures and tie everything together. Take the time to read them carefully concentrating on material covered in class.

Attendance is required for all classes and labs. Please notify your instructor in advance if possible of all absences. Excessive absences may result in removal from the class and/or removal from the MLT program. Due to the availability of your instructor and materials, labs are not able to have a make-up session.
**Electronic Media in the lecture and Laboratory**
Respect your instructor and your fellow students: Turn off or put on “silent” all cell phones during lecture and the labs. You may use your lap top computer or electronic pad for note taking during the lecture and to enhance learning of the current topic as appropriate.

If you have a disability and need an accommodation or assistance in this course, please make an appointment to talk with me to discuss how I can help you or contact Mary Kate Barbosa, Director, Student Support Services, South Hall (ext. 9613) or by email at mary.barbosa@umpi.edu. A copy of the accommodations request form can be found at [http://www.umpi.edu/current-students/sss/disability-services/registration](http://www.umpi.edu/current-students/sss/disability-services/registration).

**ACADEMIC INTEGRITY**

As a student at a distance, it is important that you know about the University of Maine System policy on academic integrity. Violations of student academic integrity include any actions which attempt to promote or enhance the academic standing of any student by dishonest means (e.g., cheating, plagiarism, fabrication and academic misconduct). Students may be accused, charged, and penalized for any violations as appropriate. Please refer to the UMS Student Conduct Code for definitions and procedures.

If you have any questions regarding the requirements for this course, please consult me. If you have any questions about the academic integrity process, please contact the Student Services Coordinator at your local center.