



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: Immunohematology

Course Number: MLT125

Required Materials

Textbook(s): Howard, P. R. (2017). *Basic & applied concepts of blood banking and transfusion practices* (4th ed.). Elsevier.

Required Readings: See weekly calendar below.

Additional Materials: Black permanent marker to write on glass test tubes, Personal protective equipment for lab and Scientific calculator

Course Outline/Calendar

The date of coverage and order of coverage may be modified based on the faculty member and events beyond the control of faculty members that interfere with class times and teaching.

Week	Lecture topic/Assigned Reading	Lab activity	Assessment
# 1	Immunology Principles for Blood Bank: Chapter 2 a. Part 1: review of the immune system b. Part 2: antigen and antibody c. Part 3: antigen and antibody interactions ABO blood group and blood bank reagents: Chapter 3	General guide lines, ABO forward and reverse typing Making 5% RBC suspension Setting up test tube rack	Lab assignments are due at the end of lab unless otherwise specified.
# 2	Genetics principles in blood banking: Chapter 4 ABO and H blood group systems: Recognition and Resolution of ABO Discrepancies: Chapter 5	ABO forward, reverse typing, Rh with weak D	
# 3	Rh blood group system: Chapter 6	ABO/ Rh weak D Antibody screen AHG/ Coombs' reagent	HW#1 due Test #1

# 4	Essentials of Pretransfusion testing: Antibody detection and identification: chapter 8 Compatibility Testing: Chapter 9 and Chapter 5	ABO, Rh, Screen, Crossmatch, and Qc reagents	HW #2 due
#5	Other Blood Group Systems: Chapter 7 Antibody identification: Chapter 8	ABO, Rh, Screen, Crossmatch, phenotyping and Qc reagents	
#6	Continue with; Other Blood Group Systems: Chapter 7 Antibody identification: Chapter 8	ABO, Rh, Screen, phenotyping and crossmatch AHG	HW#3 Test #2
#7	Other Blood Group Systems: Chapter 7	Antibody Panel, Phenotyping RBC's for other antigens, QC reagents, testing for A1 and A2	
#8	HDN: Chapter 12	Antibody Panel, Phenotyping RBC's for other antigens and crossmatch AHG	HW #4
# 9	Autoimmune hemolytic anemia: Chapter 8 DAT	Rhlg workup and DAT	Test #3
#10	Donor Blood testing: Chapter 14	Freeze Thaw Elution Acid elution	HW #5
#11	Adverse Complications of Transfusions: Chapter 11	Antibody Panel, Phenotyping RBC's for other antigens and crossmatch AHG	HW#6
#12	Transfusion Therapy in selected Patient: Chapter 16 Gel Technology: Chapter 3 page 66	Transfusion reaction workup *** see notes below***	Test #4
#13	Donor Selection and Phlebotomy: Chapter 13	Gel technology	
#14	Review and catch up	Problem resolution Gel technology Practice Practical	HW#7
#15	Lab Practical	Lab Practical	

#16	Finals week		Final Comprehensive exam
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