



STARK STATE COLLEGE

GENERAL SYLLABUS

Course Information

Course Name: Clinical Immunology/Serology
Course Number: MLT126

Required Materials

Textbook(s):

Stevens, C. D., & Miller, J. M. (2017). *Clinical immunology and serology: A laboratory perspective* (4th ed.). F.A. Davis Company.

Required Readings:

See weekly calendar below.

Additional Materials:

Personal Protective equipment: nonlatex gloves, disposable fluid resistant lab coat, facemask, eye protection, black markers, scientific calculator and note taking supplies

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 | Topic/Assigned Reading | Assesments | Lab Activity | Lab & Class Assignments |
|------|---|------------------------------------|---|--|
| 1 | Chapter 9: Laboratory Math (Dilutions) Chapter 1: Introduction to Immunology | | Evotek –practice pipetting | lab due at end of lab |
| 2 | Continue Chapter 1 Introduction to Immunology Chapter 3: Innate Immunity | Test: Laboratory Math Chapter 9 | In Vitro Phagocytosis | Math assignments due Phagocytosis lab due at end of lab |
| 3 | Chapter 5: Antibodies Chapter 2: Antigens, epitopes and Immunogenicity | | Antigen /antibody reactions | Ag/Ab lab due at end of lab |
| 4 | Chapter 4 and 6: Adaptive Immunity and cytokines | Test #1 (chapters 1, 3, & 9) | Hemagglutination titer procedure – macro in tubes | HW #1 Lab due at end of lab |

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| 5 | Chapter 6: Cytokines Chapter 7: Complement | | Hemagglutination titer procedure – micro titer | Lab due at end of lab |
| 6 | Chapter 10: Agglutination and precipitation reactions | Test #2 (chapters 2, 4, 6 and 7) | Ouchterlony | HW #2 |
| 7 | Chapter 11: Labeled Immunoassays | | RID | Ouchterlony Lab due |
| 8 | Chapter 19: Primary immunodeficiency diseases Chapter 24: HIV | Test #3 (chapters 10 and 11) | ELISA | RID Lab due ELISA Lab due HW #3 |
| 9 | Chapter 23: Herpesviridae Family And other serologically diagnosed viruses | | MonoSpot* RPR* HcG* Strep* Flu A&B* Drug Screen* | Lab due at end of lab |
| 10 | Chapter 20 and 21: Bacterial Serology | | MonoSpot* RPR* HcG* Strep* Drug Flu A&B* Drug Screen* | Lab due at end of lab |
| 11 | Chapter 17: Tumor Immunology | Test #4 (chapters 19, 20, 21, 23, 24) | Morphology of Cancer cells Edvotek #990 | Lab due at end of lab HW #4 |
| 12 | Chapter 15: Systemic, Organ and tissue specific autoimmunity | | Antinuclear antibodies ANA | Lab due at end of lab Med-training Anti-nuclear antibody** |
| 13 | Chapter 14: Hypersensitivity Reactions | Test #5 (chapters 17 and 15) | Review for Practical and Final Exam | HW #5 |
| 14 | No class Thanksgiving holiday | | No lab | |
| 15 | | | Practical | |
| 16 | | | Comprehensive final Including chapter 14 | |