SYLLABUS
PART I
EDISON STATE COMMUNITY COLLEGE
MLT 211S IMMUNOLOGY
1 CREDIT HOUR

COURSE DESCRIPTION
The study of the formation, characteristics, and reaction of antigens and antibodies. Topics include serological applications of these principles as they are investigated in theory and application. Prerequisite: MLT 121S with grade of "B" or better and acceptance into the MLT program.

COURSE GOALS

The student will:

Bloom's level		Program Outcomes
3	1. Define and use the terminology related to the study of immunology.	4
3	2. Describe specific and non-specific immune mechanics that protect the host.	4
2	3. Describe the clinical features of congenital abnormalities of the immune system.	4
2	4. List the different immunoglobulin classes and describe the characteristics and functions of each.	4
2	5. State the factors which activate the complement system and outline the steps in its activation.	4
1	6. State the current theories of autoimmunity for each autoimmune disease and list the clinical and diagnostic findings.	4
4	7. Compare and contrast immediate and delayed hypersensitivity in relation to immunological reactions.	4
2	8. Describe the theories and findings in transplant immunology in relation to HLA antigens and immunological tolerance.	4
2	9. Describe the purpose, principle, procedure, interpretation, and results for: VDRL, RPR, CRP, ASO, Cold agglutinins, Rheumatoid Factor, Paul Bunnel, Davidson differential, and HCG.	3,4
2	10. Describe the principle for agglutination tests, reverse passive (HEM) agglutination, precipitation, Elek test, radial immunodiffusion, immunoelectrophoresis, rocket electrophoresis, counterelectrophoresis, complement fixation, fluorescent antibody (direct and indirect), and neutralization tests.	3,4

CORE VALUES

The Core Values are a set of principles that guide in creating educational programs and environments at Edison State. They include communication, ethics, critical thinking, human diversity, inquiry/respect for learning, and interpersonal skills/teamwork. The goals, objectives, and activities in this course will introduce/reinforce these Core Values whenever appropriate.

TOPIC OUTLINE

1. Antigen-antibody reactions
2. Congenital abnormalities of the immune system

3. Immunoglobulin classes
4. Complement
5. Autoimmunity
6. Immunological testing techniques