students the opportunity to enter into or expand their experience in experimental research in the areas of health disparities, cancer, environmental biology, cardiovascular disease, mycology, parasitology, and microbiology. The degree allows students to gain employment in industry, education, or pursue further study in doctoral programs in health related fields or biomedical or environmental research.

Admission Requirements:

- To be considered for the Master of Science degree program in Biology, applicants must have completed the B.S degree from a department from an accredited institution in the following areas for the Master's program in:
    - Biology
    - Chemistry
    - Biomedical Engineering
    - Psychology
    - Bio Physics
    - Computational Biology
- Prerequisite academic

Advisory/Examination Committee:
During the first semester of his/her study in the Master of Science program, the student and his/her Major Professor must recommend to the Head of the Department for approval, the student's Advisory Committee consisting of a minimum of five members including the Major Professor. Two of the members can be from outside

List of Elective Courses

BIOL 0502. ADVANCED MICROBIOLOGY. 1st Semester Lect. 2,

BIOL 0518. IMMUNOLOGY. 2nd Semester. Lect. 3, Lab 3, 4 credits. The basic principles of immunity and hypersentivity, mechanisms of antibody formation, chemical and physical characteristics of antigens and antibodies, auto immunity phenomena, allergy and transplantation immunity.

BIOL 0519. HUMAN GENETICS. Alternate 2nd Semesters. Lect. 3, 3 credits. A modern presentation of the principles of human genetics which emphasizes classical and molecular approaches to understanding the nature of the gene. Information will be derived from family, pedigree, population and molecular studies. Prerequisites: BIOL 0309, MATH 0107, one year of chemistry or permission of the instructor.

BIOL 0540. FOUNDATIONS OF CANCER BIOLOGY. 2nd Semester. Lect. 3, Lab 0, 3 credits. This course will encompass the fundamentals of cell biology that underlie cancer and cancer progression. In doing so, it will examine selected cutting edge approaches and findings from the areas of basic

BIOL0596.NEUROSCIENCES 1st Semester Lect. 3, Lab 3, 4 credits. Course will consist of instruction through lecture and laboratory sessions. Lectures will include: introduction to the nervous system, cellular neurosciences, synaptic functions, structure and function of biological membranes, ion transport through membranes, physiology of ion channels, mechanism of receptor regulation, functional reconstitution of membranes, phospholipid bilayers, neural plasticity, learning and memory. Laboratory sessions will include dissection of sheep brain, making patch pipettes, bilayer formation on bimolecular lipid membrane chamber and reconstitution