CHEMISTRY 317 MISSION and OUTCOME STATEMENT

MISSION:

The mission of the course is to impart to the student a knowledge and appreciation for the intimacy and importance of biochemistry to society and the individual. This is in part accomplished and pursued by instruction in the various laws, principles and concepts of biochemistry and how they operate in living systems and in medical applications.

OUTCOME:

Students will

* Recognize organic chemical reactions embodied in biochemical processes,
* Know, recognize and be able to classify the four major classes of biomolecules,
* Predict, contrast, explain and determine the identifying and distinguishing characteristics of each class,
* Know and be able to evaluate the various biomolecular forces operative in the structural organization of proteins, nucleic acids, lipids and carbohydrates,
* Know, distinguish and be able to explain protein organization,
* Know and explain enzyme kinetics principles,
* Know catalysis mechanisms,
* Know, and be able to explain and distinguish between Michaelis-Menton (M-M) and non-M-M kinetics as well as
* Be able to calculate M-M kinetics problems,
* Know biomembrane structure, general composition, functional purposes fo various components,
* Be able to explain physicochemical properties of the biomembrane,
* Recognize and explain the various means of signaling and transport across membranes.