UNIVERSITY OF LOUISVILLE

# Chemistry 207
# Introduction to Chemical Analysis I
# Sample Course Outline
# Panama Program

**Introduction:**
Analytical Chemistry is the branch of science that deals with methods, techniques and instrumentation used to identify and quantify chemical substances. Analytical chemists develop methods of analysis, use, and design instrumentation for conducting analyses, and determine the significance of results obtained from analyses.

**Course Description and Objectives:**
Chem 207 is an introductory course in analytical. It is designed to introduce fundamental laboratory procedures from an analytical chemistry prospective. There will be three sections of 22 students as a maximum; each of them will have to perform four experiments. This course consists of a one-hour lecture and a three-hour laboratory per experiment. The lecture and the laboratory sessions will be conducted by the instructor. The purpose of the lecture is to introduce important concepts and techniques necessary for successful understanding and completion of experiments performed in the laboratory. Since, a final exam will include material covered in the lectures; **lecture attendance is expected and highly advisable.**

## Chem 207 Laboratory Schedule

| Lecture | Experiment #: |
|---|---|
| Statistical Analysis, Molarity/Dilutions | Check-in |
| Proper use of glassware, Acid/Base Rxns | 1 – Acid-Base Titration (monoprotic acid) |
| Poly-protic Acids<br>Aqueous Chemistry | 2– Acid-Base Titration (diprotic acid) |
| Molarity/Dilutions | 3 – Back titration (aspirin) |
| Redox-reactions<br>Final exam | 4 – Redox titration |