General Information
Prerequisite
Day/Time Tuesday 5:25 – 8:00 pm
Room
Instructor: Dr. Richard Thompson
Office: Phone:
e-mail: thompsri@fdu.edu
Office Hours:

Course Description
Chemical analysis is heavily utilized in the pharmaceutical industry from discovery, through development, and finally manufacture. The analyte of interest may be a small molecule or a large biomolecule. The sample source may vary from milligrams at the discovery level to tons at the manufacturing level. The analytical technology used covers a large range of techniques and disciplines. This course will focus on the analytical aspects of drug development and manufacture with emphasis on the analysis of the active pharmaceutical ingredient (drug substance). The course will also cover the quality and regulatory issues associated with analysis. The major areas covered in the course include:

1. Overview of Pharmaceutical Development
2. Spectroscopic Analysis/Wet Chemistry
3. Chromatographic Analysis
4. Physicochemical Characterization
5. Analytical Applications in Discovery, Drug Metabolism, Pharmacokinetics.

Course Objective
This course is suitable for students planning a career in the pharmaceutical industry. Students are expected to have a basic knowledge of general, organic, and analytical chemistry.

Textbook
None required
Other Useful Books (Optional)


Lena Ohannesian and Anthony Streeter, Handbook of Pharmaceutical Analysis, Marcel Dekker, 2002

Lloyd Snyder, Joseph Kirkland, and Joseph Glajch, Practical HPLC Method Development, John Wiley and Sons, 1997

Any book on Pharmaceutical Analysis

Any book on Instrumental Analysis

Useful Journals

- Journal of Chromatography A
- Journal of Chromatography B
- Journal of Chromatography and Related Technologies
- Journal of Pharmaceutical and Biomedical Analysis
- LC-GC
- American Pharmaceutical Review

Grading Policy

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<tr>
<th>Component</th>
<th>Score</th>
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<tbody>
<tr>
<td>Final exam</td>
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<tr>
<td>Mid term</td>
<td>100</td>
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<tr>
<td>Oral Presentation</td>
<td>100</td>
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