**Department of Chemistry Syllabus**

This syllabi is advisory only. For details on a particular instructor's syllabus (including books), consult the instructor's course page. For a list of what courses are being taught each quarter, refer to the Courses page. *Every instructor has prerogative to teach the course as they see fit and ultimately the instructor's syllabus supersedes all others.*

***CHE 135: Advanced Bio-organic Chemistry Lab***

Approved:

Suggested Textbook: (actual textbook varies by instructor; check your instructor)

1) Pretsch, Buhlmann, and Badertscher “Structure Determination of Organic Compounds” (Springer)

2) Pavia, Lampman, Kriz, and Engel “Introduction to Organic Laboratory Techniques” (Brooks/Cole)

3) Crews, Rodriguez, and Jaspars “Organic Structure Analysis” (Oxford)

Suggested Schedule:

Week 1 & 2: Exp. 1 (NMR, MS, IR, Polarimeter)

Week 3: Exp. 2 (Synthesis)

Week 4 & 5: Exp. 3 (Purification & Characterization)

Week 6: Exp. 4 (Log P)

Week 7: Exp. 5 (Circular Dichroism Spectroscopy)

Week 8: Exp. 6 (Fluorescence Spectroscopy)

Week 9 & 10: Exp. 7 (Toxicity)

Additional Notes:

Learning Goals:

To allow students to develop qualitative and quantitative skills used in the identification and chemical analysis of various medicinal agents by utilizing analytical instruments and synthetic techniques.