CHEM 741 – Medicinal Chemistry (Syllabus)

Spring term, Jan 13 – May 15, 2019   M, W, F 9:30-10:20 AM in SAKAM B211.
Prerequisite: Chem 372 (Suggested)

Revision: As of March 23 CHEM 741 was moved to on-line instruction.

Instructor: Dr. Jeff Romine
Office: 321A Bilger Hall
Office hours: T, W, R 11-12:00

Email: rominej@hawaii.edu

Text: “Medicinal Chemistry” by Norma Dunlap and Donna Huryn (Required)

Course Description: Isolating active agents responsible for curing diseases was one of the primary drivers advancing science itself over the last millennia. The intent of this course is for students to gain an understanding of how biologically active molecules are identified (through screening assays and literature mining) and developed into drug candidates. An emphasis will be placed on understanding structure-activity-relationship SAR and lead optimization. Students can expect to learn about a range of drug classes (enzyme inhibitors; ion channel modulators; and anti-bacterial, anti-viral anti-cancer agents).

Tentative Grading Schedule: There will be three midterm exams (100 pts each) and a final (150 points). In addition, an optional research report (50 points), and problem sets will each constitute ten percent of the grade (50 points). Final grades will be determined as a percentage of 500 points.

[%: A+ 90-100; A 85-89; A- 80-84; B+ 75-79; B 70-74; B-65-69; C+ 60-64; C 55-59; D 54-30; F 29-0].

Tentative Exam Schedule: Feb 14; March 13; April 8; May 11

Homework: Homework sets are due on the exam day. Completing all assignment constitutes 10% of the grade. The aim of homework is for students to gain a command of the material taught in the course.

Research Report (Optional): For students wishing to boost their grade, an opportunity will be provided in an assigned case study. Students are to review the relevant literature and write a 10 page report (7,000 words), including schemes, conclusion, and references. (Due on May 1st)

Makeup Exams: In order that all students be given consistent treatment, exams must be taken on the assigned test dates. A makeup exam requires a valid excuse (e.g. emergency, sickness, etc.)

Academic Misconduct: Students are expected to meet academic standards, conducting themselves honorably, maturely, and respecting the academic community at UH.