CHEM 130B: Pharmaceutical Chemistry 2, Spring 2017
Academia Sinica Taiwan

This course will provide hands-on experience with modern computational methods used in the drug design process. A variety of different computational methods—pharmacophore modeling, automated molecular docking, etc.—will be described and applied using real-life drugs and related molecules.

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Recommended Texts

• *"Molecules and Medicine" E. J. Corey, Barbara Czako, Laszlo Kurti Wiley, 2007*
• *"The Organic Chemistry of Drug Design and Drug Action", 3nd Edition Richard B. Silverman Elsevier/Academic Press*

Our Expectations

• *This class is not about memorization. It is about developing analytical thinking and problem-solving skills.*
• We will utilize and expand upon most everything covered in undergraduate Organic Chemistry.

Course Requirements

• ***mini lab reports****:*	425 points total
• ***presentation****:*	150 points total
• ***drug design report****:*	425 points total (2 parts; see below)
• ***total****:*	425+150+425 = 1000 points total

Drug Design Report

• ***proposal****:* your choice of a "drug family"; 25 points
• ***report****:* background on your "drug family" + description of computations you perform on your "drug family" to design new analogues; 400 points

Presentation
• Individual 10 minute presentations on your drug design project; 150 points

Policies

• ***assignments****:* All late assignments will be assessed a penalty that is proportional to how late the assignment is. No exceptions will be made.
• ***mutual respect****:* We are all adults and should treat each other as such. Cheating of any kind (including plagiarism!) will not be tolerated.

Strategies for Success

• ***build models****:* Build models of molecules whenever you can!
• ***don't wait***: The drug design project is a lot of work, so we highly recommend starting as early as possible!