Chem 431 Chapter 28 Study Questions (Pages to read: 816-830, 836-848)

- What are the principal components of an HPLC system?
- What are sources of extra-column broadening?
- What do we mean by gradient vs isocratic elution?
- How does a reciprocating pump work?
- How does an HPLC injector work?
- What is a guard column?
- What are the typical packing materials for an HPLC analytical column, and what are the characteristics of these particles?
- What are the principles of operation for each of the following HPLC detectors:
    - Absorbance
    - Fluorescence
    - Refractive Index
    - Evaporative Light Scattering
    - Electrochemical
    - Mass Spectrometry
- What are the common stationary phases and mobile phases for both normal and reversed-phase HPLC?
- What are the principles of ion chromatography?
- Why is ion suppression important in ion chromatography and how is this accomplished?
- What are the principles of ion-pair chromatography?
- What are the principles of size exclusion chromatography?
- What are the principles of affinity chromatography?
- How are separations of chiral compounds typically carried out?

Chapter-end problems: none