

**Reading:**

Biophysical Chemistry: Techniques for the Study of Biological Structure and Function, Vol 2

Cantor and Schimmel

Pages 356-359 (Interaction of light with molecules)

Pages 361-368 (Absorption spectroscopy of electronic states)

Pages 433-439 (Fluorescence Spectroscopy)

Copies of the selected pages are available in the library

**Questions:**

- 1) What parameters determine the amount of light absorbed in a sample (Beer-Lambert Law)?
  
  
  
  
  
  
  
  
  
  
- 2) What is the Frank-Condon principle?
  
  
  
  
  
  
  
  
  
  
- 3) What selection rule is important for electronic absorption spectra? (The answer is not strictly in the assigned reading, but can be found in a physical chemistry textbook such as Atkins)
  
  
  
  
  
  
  
  
  
  
- 4) What three processes can a molecule undergo that involve absorption or emission of a photon?
  
  
  
  
  
  
  
  
  
  
- 5) What pathways are available for returning an excited molecule to the ground state?