ATOC/CHEM 5151, Pages to read, by topic, through Week 6
(Finlayson-Pitts and Pitts, approximate order of presentation in class)

Basics

- Chemistry in the Atmosphere (p 1-11)
- Minor Gases (p 15-21)
- Aerosols, Particles and Droplets (p 21-25)
- Temperatures (p 26-28)
- Transport in the Atmosphere, winds (p 28-30)
- Wet and Dry Deposition (p 30-33)
- Mixing Ratios, particulate mass (p 33-34)
- Visibility (p 37-38)

Spectroscopy (pretty advance stuff, for non-chemists) and Photochemistry

- Energy levels and absorption and emission (p 43-50)
- Electronically excited molecules (p 50-51)
- Quantum yields (p 51-52)
- Absorption (p 52-55)
- Photochemistry (p 55-61)
- Calculating photolysis rates (p 61-68, 76-81)
- Total ozone column (p 69-70)

Chemistry of "families"

- Chapman reactions in detail (p 86-95)
- NOx chemistry (p 95-103)
- Sulfur chemistry (p 103-106)
- Chlorine and bromine (p 111-117)

Kinetics

- Fundamentals of gas-phase chemistry (p 130-132)
- Half-lives and lifetimes (p 132-133)
- Termolecular (three-body reactions) (p 133-138)
- Temperature dependence of rate coefficients (p 138-139)
- Transition state theory (p 139-141)
- Compilations of kinetics data for atmospheric reactions (p 172-174)
- Particles in the troposphere (p 349-358)
- The "log normal" distribution (p 358-362)
- Light scattering (p 365-368)
- Visibility and Koschmieder equation (p 368-372)

Stratospheric chemistry

- Unperturbed (i.e., mid-latitudes) chemistry (p 657-658)
- Transport in the stratosphere (p 658-660)
- Chapman chemistry (p 660-661)
- NOx chemistry (p 661-669)
- Chlorine chemistry (p 669-675)
- The 'ozone hole' (p 675-680)
- Polar stratospheric clouds (p 680-684)
- Heterogeneous chemistry (p 685-690)