This LibreText is for the 1st course in analytical chemistry at Providence offered each fall to our Jr. chem & biochem majors. The subjects covered in the course include, measurements and statistics, simple optical spectroscopy in the UV and visible, separations, and mass spectrometry. Chapters 1 - 5 are largely from Harvey's Modern Analytical Chemistry, Chapters 6 - 14 mimic Skoog's Instrumental Analysis, & Chapter 15 is a collection of LibreText pages in accord with my outline for Mass Spec.

- Front Matter
- 1: Introduction to Analytical Chemistry
- 2: Basic Tools of Analytical Chemistry
- 3: Evaluating Analytical Data
- 4: The Vocabulary of Analytical Chemistry
- 5: Standardizing Analytical Methods
- 6: General Properties of Electromagnetic Radiation
- 7: Components of Optical Instruments for Molecular Spectroscopy in the UV and Visible
- 8: An Introduction to Ultraviolet-Visible Absorption Spectrometry
- 9: Applications of Ultraviolet-Visible Molecular Absorption Spectrometry
- 10: Molecular Luminescence Spectrometry
- 11: An Introduction to Chromatographic Separations
- 12: Gas Chromatography
- 13: Liquid Chromatography
- 14: Capillary Electrophoresis and Electrochromatography
- 15: Molecular Mass Spectrometry
- Back Matter