

Final Exam Review CHEM 212

Topics covered in the course:

Scientific method
Gravimetric analysis
Errors and error propagation
Statistics
Calibration
Quality assurance and Quality control
Method selection and validation
Thermodynamics
Solubility product
Activity
Systematic treatment of equilibrium: Charge balance, Mass balance
Strong acid-base reactions and titrations
Weak acid/strong base
Weak base/ strong acid
buffers
Polyprotic acid-base equilibrium
Complexation reactions
Electrochemistry
Spectroscopy
Mass Spectrometry
Solvent Extraction
Separations

Things that **will** be on the exam:

- Propagation of error
- Acid-base titration problem
- Nerst style electrochemistry problem
- Diagram, label, and describe instruments: spectroscopy, mass spectrometry, separations

Things to do to study:

- Review worksheets, videos, exam reviews, exams, and homework problems.
- Practice doing label, diagram, and describe type problems

Things you can use on the exam:

- Non programmable calculator
- Equation sheet- collected from pervious exams
- Your brain