

Lecturers Title

- 1- Review of elementary concept important to analytical chemistry: Strong and weak electrolytes; important weight and concentration units.
- 2- The evaluation of analytical data: Definition of terms.
- 3- An introduction to gravimetric analysis: Statistical analysis of data; rejection of data; precipitation methods; gravimetric factor.
- 4- The scope of applications of gravimetric analysis: Inorganic precipitating agents; organic precipitating agents.
- 5- An introduction to volumetric methods of analysis: Volumetric calculations; acidbase equilibria and pH calculations.
- 6- Buffer solutions: Theory of neutralization titrations of simple system.
- 7- Theory of neutralization titrations of complex system; Precipitation titrations.
- 8- Calculation of pH in complex system; Volumetric methods based on complex system.
- 9- Equilibria in oxidation-reduction system; theory of oxidation-reduction titrations.
- 10- Spectrophotometric analysis: An introduction to optical methods of analysis; Methods based on absorption of radiation.