

# Analytical Chemistry

## Course Information

by

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Chapter Name

by Main Author's Name

<http://ocw.ump.edu.my/course/view.php?id=XX>

# Synopsis

- This course will provide students with a basic understanding of analytical chemistry and major aspects of quantitative chemical analysis.
- The course is an introductory part of a series of analytical chemistry courses for industrial chemistry program.
- It will concentrate upon descriptive analytical chemistry and analytical methods based on chemical equilibrium which include precipitation and volumetric analysis.



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# Course Outcomes

- CO1: Describe the theory and basic technique in analytical chemistry.
- CO2: Solve problems involving both the qualitative and quantitative analysis.
- CO3: Apply the essential facts, concepts, principles and theories relating to analytical chemistry to solve the real chemical analysis problems.



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# Chapter Information

- Chapter 1 – Introduction to Chemical Analysis
- Chapter 2 – Experimental Errors and Statistics
- Chapter 3 – Basic Skills in Chemical Analysis
- Chapter 4 – Sampling and Sample Preparation
- Chapter 5 – Quantitation and Calibration Methods
- Chapter 6 – Introduction to Titration
- Chapter 7 – Gravimetric Analysis
- Chapter 8 – Acid-Base Titration
- Chapter 9 – Precipitation Titration
- Chapter 10 – Complexometric Titration



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# References

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5. Harris, D.C. Quantitative Chemical Analysis, W. H. Freeman & Company: New York. 2010
6. Kellner, R., Mermet, J.M., Otto, M., Valcarcel, M. & Widmer, H.M. Analytical Chemistry: A Modern Approach to Analytical Science. Wiley-VCH. 2004



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