

Course (Unit) Title	Inorganic Chemistry Laboratory 1
Course (Unit) Code	CHE105G1
Credit Value	01 (45 hours of practical work)
Objective/s	Develop basic practical skills involved in qualitative and quantitative analyses
Intended Learning Outcomes	<ul style="list-style-type: none"> • Determine the amount of substances using titrimetry • Identify and confirm the cations and anions present in a given mixture
Contents	<p>Quantitative Inorganic Analysis</p> <ul style="list-style-type: none"> • Safe laboratory practices, introduction to measurements and errors • Acid base titrations: strong acid-strong base, strong acid-weak base, strong base-weak acid, polyprotic acid-strong base • Quantification of Na_2CO_3 in washing soda, carbonate and hydroxide in a given mixture • Redox and precipitation titration <p>Qualitative Inorganic Analysis</p> <ul style="list-style-type: none"> • Identification of simple inorganic anions and cations • Separation of different anions and cations in a given mixture
Teaching and Learning Methods / Activities	Laboratory demonstrations and hands on experiments, Assignments
Evaluation	In course assessment (Theory and Practical) 30% End of course examination 70%
Recommended References	<ul style="list-style-type: none"> • Vogel, A. I., <i>Text book of Qualitative Inorganic Analysis</i>, Longman Scientific, 2004. • Denney, R. C., Thomas, M. J. K., David J. B., and Mendham J., <i>Text Book of Quantitative Inorganic Analysis</i>, 6th Edition, Longman Scientific, 2005.