

Course (Unit) Title	Organic and Physical Chemistry Laboratory 1
Course (Unit) Code	CHE106G1
Credit Value	01 (45 hours of practical work)
Objective/s	<ul style="list-style-type: none"> • Develop basic practical skills involved in elemental analysis by Lassaigne's test, functional group analysis and recrystallization techniques • Design and perform simple experiments in physical chemistry
Intended Learning Outcomes	<ul style="list-style-type: none"> • Identify the elements present in an unknown organic compound • Identify the functional groups present in an unknown organic compound • Apply simple recrystallization techniques • Determine chemical parameters by conducting physical chemistry experiments
Contents	<ul style="list-style-type: none"> • Identification of elements N, S, P, Cl, Br and I present in organic compounds by Lassaigne's test • Functional group analysis of organic compounds • Simple recrystallization techniques using polar, non-polar and mixed solvents • Simple physical chemistry experiments involving chemical equilibrium, kinetics, heats of reactions and electrochemistry
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 organic Analysis</i>, Longman Scientific, 2004. • Viswanathan, B; Raghavan, P.S., <i>Practical Physical Chemistry</i>, Viva Books Private Limited, 2005.