

Department of Chemistry

Syllabus Distribution

SEM –III Practical and Tutorial

3	CHEM-H-CC3-3- Th (DSCC-3)	Physical Chemistry - I	Thermodynamics -II, Applications of Thermodynamics – I, Electrochemistry-I.
	CHEM-H-CC4-3- Th (DSCC-4)	Organic Chemistry – I	Aromatic Substitution Reaction. General Treatment of Reaction Mechanism-II, Stereochemistry – III, Conformation, Substitution, elimination, Addition to alkenes, dienes, alkynes.
	CHEM-H-SEC3-3- Th (SEC-3)	Introduction to Numerical Methods for Chemists	Linear Regression, Root Finding, Numerical Differential and Integration, Fourier Transform

Paper	Syllabus in detail	To be covered by
Practical :(30 Lectures) PAPER: CHEM-H-CC3-3-P (DSCC-3)	1. Determination of rate constant of the reaction between H ₂ O ₂ and acidified KI solution using Clock reaction. 2. Determination of the rate constant for the decomposition of H ₂ O ₂ using FeCl ₃ as catalyst.	Dr.Mumu Chakraborty (15 Lectures)
	3. Determination of the rate constant for the first order acid catalyzed hydrolysis of an ester. 4. To study the kinetics of the inversion of cane sugar using a polarimeter.	Dr.Bhaswati Bhattacharya (15 Lectures)

Practical :(30 Lectures) PAPER: CHEM-H-CC4-3-P (DSCC-4)	Identification of PureSingle organic Compound. Solid compounds Oxalic acid, tartaric acid, citric acid, succinic acid, resorcinol, urea, glucose, cane sugar, benzoic acid and salicylic acid	Dr.Mumu Chakraborty (15 Lectures)
	Liquid Compounds: Formic acid, acetic acid, ethyl alcohol, acetone, aniline, dimethylaniline, benzaldehyde and nitrobenzene	Dr.Bhaswati Bhattacharya (15 Lectures)
Tutorial:(15 hours) PAPER: CHEM-H-SEC3-3-Tu	Experiment 1 and 2	Dr.Mumu Chakraborty (8 Lectures)
	Experiment 3	Dr.Bhaswati Bhattacharya (7 Lectures)