



গড়গাঁও মহাবিদ্যালয়

GARGAON COLLEGE



Course Distribution
Department of Chemistry
2023-24

Course distribution of odd semester, 2023-24

Departmental meeting for distributing course

Date: 16-06-23

A meeting was held amongst the faculty members to discuss regarding commencement of class for odd session and for distribution of course. The following decisions have been taken:

- ① The course will be distributed as earlier for 3rd and 5th semesters.
- ② For the new NEP syllabus, the course will be divided amongst the faculty members as per their choice and specialisation.
- ③ Courses will be allotted equally to all the faculty members.
- ④ Classes for new NEP session will commence from 17-06-23.

Signatures

- 1) Dr. Anna Gogoi. AG
- 2) Arindra Narayan AN
- 3) Rituparna R
- 4) Pakiga Begum Paki Begum
- 5) Saleen Shelia Begum Saleen Begum
- 6) Dr. Paban Jyoti Sarma PJS

C1 Inorganic Chemistry

Faculty name	Semester	Paper Code	Unit wise division
Dr. Pakiza Begum	I	MJ	CHMC1 Unit I: Bonding and structure (from Hydrogen bonding till end of Unit I)
		MN	MINCHMC1 Unit I: Atomic Structure (except time independent Schrodinger equation and significance of Ψ and Ψ^2) Unit IV: Experimental work- Inorganic Qualitative Analysis
		SEC	SEC123 Unit II: Analysis of water
	III	H	C-301 Unit I: General Principles of Metallurgy Unit II: Acids and Bases Unit IV: Noble Gases A. Iodo/Iodimetric Titrations B. Inorganic preparations
		GE	N/A
	V (H)	DSE-501	Unit I: Qualitative and quantitative aspects of analysis Unit II: UV-Visible and IR Spectrometry Determination of dissolved oxygen in Water; Chromatographic separations
		DSE-502	Unit I: Introduction to Green Chemistry Unit II: Principles of Green Chemistry and Designing a) Chemical synthesis (points (i) and (ii))
Dr. Plaban Jyoti Sarma	I	H	C-101 C-101-LAB Unit II: Periodicity of Elements (A) Titrimetric Analysis (B) Acid-Base Titrations (C) Oxidation-Reduction Titrimetry
		GE	GE-101 GE-101 Lab Unit I: Atomic Structure Section A: Inorganic Volumetric Analysis
	III	H	C-301 C-301-LAB Unit III: Chemistry of s and p block elements A. Iodo/Iodimetric Titrations B. Inorganic preparations
		GE	N/A
	V (H)	DSE-501	Unit III: Thermal methods of analysis Unit IV: Electro-analytical methods Unit V: Separation techniques Determination of dissolved oxygen in Water; Chromatographic separations
		DSE-501-Lab	

C2 Organic Chemistry

Faculty name	Semester	Paper Code	Unit wise division
--------------	----------	------------	--------------------

Dr. Arandao Narzary	I	Maj or	CHMC1 CHMC1-Lab	Stereochemistry i. Optical Isomerism ii. Geometrical Isomerism Experimental (B) i. Purification of organic compound ii. Separation of a mixture of o-and p-nitrophenol or o and p-aminophenol by thin layer chromatography (TLC)
		Min or	MINCHM1	Introduction to Organic Chemistry
		SEC	SEC123 SEC123- lab	Soil Analysis Experimental i. Determination of dissolved oxygen in water. ii. Spectrophotometric determination of Iron in Vitamin / Dietary Tablets.
	III	H	C-302 C-302-LAB	Unit I: Chemistry of Halogenated Hydrocarbons, Unit III: Carbonyl Compounds Unit I, II, III: Functional group analysis
		GE	GE-101 GE-101-LAB	Unit-VII, VIII Unit-II
		V (H)		Unit I: Nucleic Acids Unit II: Amino Acids, Peptides and Proteins Unit IV: Lipids Unit V: Disconnection approach in Organic Synthesis
				Estimation of glycine, Study of the titration curve of glycine. Study of the action of salivary amylase on starch, Saponification value of oil or a fat.
Mr. Rituraj Tahu	I	Maj or	CHMC1 CHMC1-Lab	Basics of Organic Chemistry Experimental (B) i. Purification of organic compound ii. Separation of a mixture of o-and p-nitrophenol or o and p-aminophenol by thin layer chromatography (TLC)
		Min or	MINCHM1	Introduction to Organic Chemistry
		SEC	SEC123 SEC123- lab	Introduction Experimental i. Determination of dissolved oxygen in water. ii. Spectrophotometric determination of Iron in Vitamin / Dietary Tablets.
	III	H	C-302	Unit-II: Alcohols, Phenols, Ethers and Epoxides IV: Carboxylic Acids and their Derivatives IV: Sulphur containing compounds:

		C-302-lab	Unit –I, II, III Functional group analysis
	GE	GE-301 GE-301-lab	Unit-V: Carboxylic acid VI: Amine and diazonium salt Unit-II: Organic analysis
V (H)		C-501 C-501-Lab	Unit-III: Enzymes VI: Pharmaceutical compounds: structure and importance Estimation of glycine, Study of the titration curve of glycine. Study of the action of salivary amylase on starch, Saponification value of oil or a fat.

C3 Physical Chemistry

Faculty name	Semester	Paper Code	Unit wise division
Dr. Anna Gogoi	I	MJ	Unit-II (Liquid) Unit-IV (Experimental work A)
		MN	MINCHM1
	III	H	Unit II (Chemical Kinetics) Practical
		GE	Unit-3 (Conductance) Practical
	V (H)	C-502	Unit-II (Molecular Spectroscopy)
		C-502-Lab	Practical
Dr. Saheen Shehnaz Begum	I	H	Unit 1: Gaseous State Unit 3: Solid State
		GE	N/A
	III	H	Unit 1: Phase equilibria Unit 3: Catalysis Unit 4: Surface Chemistry
		GE	Unit 1: Solutions Unit 2: Phase equilibria Unit 4: Electrochemistry
	V	C-502	Unit 1: Quantum Chemistry Unit 3: Photochemistry

Class routine for the even semester, 2024

Course distribution of even semester, 2024

C1 Inorganic Chemistry

Faculty name	Semester	Paper Code	Unit wise division
--------------	----------	------------	--------------------

Dr. Pakiza Begum	II	MJ	CHMC2	Unit I: Non Transition Elements (One part only) (a) Noble Gas: Compounds of Xenon only Metals: Full chapter Unit IV: Experimental Work (A): Oxidation-Reduction Titrimetry
		MN	MINCHMC2	Unit I: Coordination Chemistry
		SEC	SEC223	Unit II: Petroleum and Petrochemical Industry Petrochemicals
		VA C	VAC3	Environmental Science
	IV	H	C-401 C-401-LAB	Unit II: Transition Elements Unit III: Lanthanoids and Actinoids Unit IV: Bioinorganic Chemistry A. Gravimetric Analysis B. Inorganic Preparation C. Chromatography of metal ions
		GE	GE-401 GE-401-LAB	Unit II: Coordination Chemistry Unit III: Crystal Field Theory Section A: Inorganic Chemistry
		H	C-601 C-601-LAB	Unit III: Reaction Kinetics and Mechanism Unit IV: Catalysis by Organometallic Compounds A. Qualitative Inorganic Analysis
		DSE	DSE-601 DSE-601-LAB	Unit I: Silicate Industries A. Qualitative Inorganic Analysis
		DSE	DSE-603	Dissertation (Project Work)
Dr. Plaban Jyoti Sarma	II	H	N/A	N/A
		GE	N/A	N/A
	IV	H	C-401 C-401-LAB	Unit II: Transition Elements Unit IV: Bioinorganic Chemistry A. Gravimetric Analysis B. Inorganic Preparation C. Chromatography of metal ions
		GE	GE-401 GE-401-LAB	Unit II: Coordination Chemistry Unit III: Crystal Field Theory Section A: Inorganic Chemistry
		VI (H)	C-601 C-601-LAB DSE-601 DSE-601-LAB	Unit I: Theoretical Principles in Qualitative Analysis (H_2S Scheme) Unit II: Organometallic compounds A. Qualitative Inorganic Analysis Unit II: Fertilizers A. Determination of free acidity B. Estimation of Calcium

		DSE-603	C. Analysis of Cement D. Determination of composition of Dolomite E. Preparation of Pigment Dissertation (Project Work)
--	--	---------	--

C2 Organic Chemistry

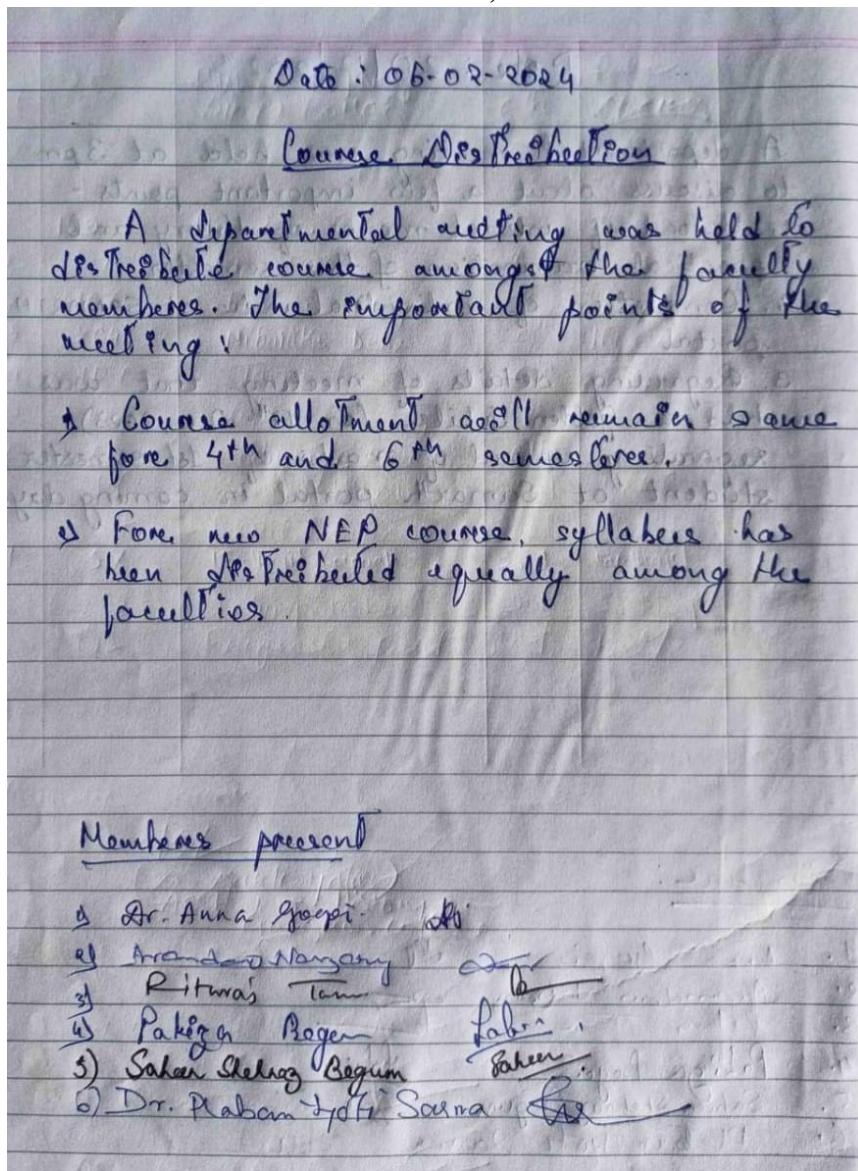
Faculty name	Semester	Paper Code	Unit wise division
Dr. Arandao Narzary	II	Maj or	CHMC2 CHMC2- Lab Carbon-Carbon pi bonds Experimental (B) (i) Detection of elements (N, S and Halogens) (ii) Detection of functional groups.
		Min or	MINCHM2 Aliphatic Hydrocarbons-2 Alkenes
		SEC	Experimental (i) To determine the Aniline point of a given lubricating oil. (ii) To determine the acid value of a given oil
	IV	H	C-402 C-402-lab Unit-II: Polynuclear Aromatic Hydrocarbons Unit III: Heterocyclic Compound-I Unit V: Terpenes EXP-1, 2 and 3 Detection of elements (N, S and Halogens, Functional group detection
		GE	N/A
	VI (H)	C-602 C-602 LAB	<u>Unit-I: Organic Spectroscopy</u> <u>II: Carbohydrates</u> <u>III: Dyes</u> <u>Unit-I, II</u> Qualitative analysis of unknown organic compounds containing monofunctional groups, Extraction of caffeine from tea leaves. Project
Mr. Rituraj Tahu	II	C-201 CHMC2-Lab	Unit-I: Basic Organic Chemistry Unit-IV: Cycloalkanes and Conformational analysis Unit-V: Aromatic Hydrocarbons Experimental (B) (i) Detection of elements (N, S and Halogens) (ii) Detection of functional groups.
			Stereochemistry
	SEC	SEC-223	Experimental (i) To determine the Aniline point of a given lubricating oil.

			(ii) To determine the acid value of a given oil
IV		C-402 C-402-lab	Unit-I: Nitrogen Containing Functional Group IV: Alkaloids EXP-1,2 and 3 Detection of elements (N, S and Halogens, Functional group detection)
		N/A	N/A
VI (H)		C-602 C-602 LAB DSE 601 DSE-603	Unit-I: Organic Spectroscopy IV: Polymers Unit-I, II Qualitative analysis of unknown organic compounds containing monofunctional groups, Extraction of caffeine from tea leaves. Unit-III: Surface Coatings Project

C3 Physical Chemistry

Faculty name	Semester	Paper Code	Unit wise division
Dr. Anna Gogoi	II	MJ	CHMC2
		MN	MINCHM2
	IV	H	Unit-II (Chemical Thermodynamics-I) Unit-II (Ionic Equilibria) Unit -IV (Experimental Work)
		GE	Unit-I (Conductance) Practical
	VI (H)	DSE-603	Dissertation (Project Work)
Dr. Saheen Shehnaz Begum	II	H	Unit 2: Systems of Variable composition Unit 3: Chemical Equilibrium Unit 4: Solutions and Colligative properties
		GE	Unit 1: Chemical energetics Unit 2: Chemical equilibrium
	IV	H	Unit 2: Electrochemistry Unit 3: Electrical and Magnetic Properties of Atoms and Molecules
		GE	Unit 4: Kinetic Theory of Gases Unit 6: Solids
	VI (H)	DSE-601 DSE-603	Unit 4: Batteries Dissertation (Project Work)

Course distribution of odd semester, 2023-24



C1 Inorganic Chemistry

Faculty name	Semester	Paper Code	Unit wise division
Dr. Pakiza Begum	I	H C-101 C-101-LAB	Unit I: Atomic Structure Unit II: Periodicity of Elements Unit IV: Oxidation-Reduction (A) Titrimetric Analysis (B) Acid-Base Titrations (C) Oxidation-Reduction Titrimetry
	GE	GE-101 GE-101 Lab	Unit I: Atomic Structure Section A: Inorganic Volumetric Analysis

	III	H	C-301 C-301-LAB	Unit I: General Principles of Metallurgy Unit II: Acids and Bases Unit IV: Noble Gases Unit V: Inorganic Polymers A. Iodo/Iodimetric Titrations B. Inorganic preparations
		GE	N/A	N/A
	V (H)		DSE-501	Unit I: Qualitative and quantitative aspects of analysis Unit II: UV-Visible and IR Spectrometry Determination of dissolved oxygen in Water; Chromatographic separations
			DSE-501-Lab	
Dr. Plaban Jyoti Sarma	I	H	C-101 C-101-LAB	Unit II: Periodicity of Elements (A) Titrimetric Analysis (B) Acid-Base Titrations (C) Oxidation-Reduction Titrimetry
		GE	GE-101 GE-101 Lab	Unit I: Atomic Structure Section A: Inorganic Volumetric Analysis
	III	H	C-301 C-301-LAB	Unit III: Chemistry of s and p block elements A. Iodo/Iodimetric Titrations B. Inorganic preparations
		GE	N/A	N/A
	V (H)		DSE-501 DSE-501-Lab	Unit III: Thermal methods of analysis Unit IV: Electro-analytical methods Unit V: Separation techniques Determination of dissolved oxygen in Water; Chromatographic separations

C2 Organic Chemistry

Faculty name	Semester	Paper Code	Unit wise division
Dr.Arandao Narzary	I	H	N/A
		GE	GE-101 GE-101-LAB
	III	H	C-302 C-302-LAB

		GE	GE-101 GE-101-LAB	Unit-VII, VIII Unit-II
	V (H)	C-501		Unit I: Nucleic Acids Unit II: Amino Acids, Peptides and Proteins Unit IV: Lipids Unit V: Disconnection approach in Organic Synthesis
		C-501-Lab		Estimation of glycine, Study of the titration curve of glycine. Study of the action of salivary amylase on starch, Saponification value of oil or a fat.
Mr. Rituraj Tahu	I	H	N/A	N/A
		GE	GE-101 GE-101 Lab	Unit-III: Fundamentals of Organic Chemistry V: Aliphatic Hydrocarbons Detection of characterized element (N, S, Cl, Br, I) in an organic compound, Separation of mixtures by Chromatography
	III	H	C-302 C-302-lab	Unit-II: Alcohols, Phenols, Ethers and Epoxides IV: Carboxylic Acids and their Derivatives IV: Sulphur containing compounds: Unit –I, II, III Functional group analysis
		GE	GE-301 GE-301-lab	Unit-V: Carboxylic acid VI: Amine and diazonium salt Unit-II: Organic analysis
	V (H)	C-501 C-501-Lab		Unit-III: Enzymes VI: Pharmaceutical compounds: structure and importance Estimation of glycine, Study of the titration curve of glycine. Study of the action of salivary amylase on starch, Saponification value of oil or a fat.

C3 Physical Chemistry

Faculty name	Semester	Paper Code	Unit wise division
Dr. Anna Gogoi	I	H C-102 C-102 Lab	Unit-II (Liquid State) Unit-IV (Ionic Equilibrium) Practical
		GE N/A	N/A
	III	H C-303 C-303-lab	Unit II (Chemical Kinetics) Practical
		GE GE-301 GE-301-lab	Unit-3 (Conductance) Practical
	V (H)	C-502 C-502-Lab	Unit-II (Molecular Spectroscopy) Practical

Dr. Saheen Shehnaz Begum	I	H	C-102	Unit 1: Gaseous State Unit 3: Solid State
		GE	N/A	N/A
	III	H	C-303	Unit 1: Phase equilibria Unit 3: Catalysis Unit 4: Surface Chemistry
		GE	GE-303	Unit 1: Solutions Unit 2: Phase equilibria Unit 4: Electrochemistry
	V		C-502	Unit 1: Quantum Chemistry Unit 3: Photochemistry

HoD, Chemistry
Head of the Department
 Chemistry Department
 Gargaon College, Simaluguri