### 2021-2022

# **Kongunadu Arts and Science College (Autonomous) Coimbatore 641029**

#### **Department of CHEMISTRY (UG)**

#### **Minutes of the Board of Studies:**

The Board of Studies meeting was held on 03.05.2021. The Chairman welcomed and outlined the changes to be made in the following for the board approval.

- Item 1. To consider revision in the Curriculum, Scheme of Examination and Syllabi of UG/PG/Certificate / Diploma courses and approval.
- Item 2. To suggest the panel of names for appointment of examiners.
- Item 3. Other academic activities in the department.

As per the suggestions and recommendations given by the variousStakeholders on the above items discussed, the existing/revised the Scheme of Curriculum / Scheme of Examination / Syllabiand Panel of Examiners are to be followed is annexedherewith for the implementation from the commencement of the Academic year 2021 – 2022.

The members after careful scrutiny of the changes to be made, unanimously accorded approval for the proposed changes/modifications. They also resolved to authorize the Chairman of Board of Studies to place the changes/modifications now approved by the BOS before the Standing Committee on Academic affairs and Academic Council.

Sem.	Course code	Name of the Course	Changes made	
Sem I	21UCH101	CORE	UNIT-IV : Limitations of Aufbau principle, multi electron	
Jeni I	210011101	CHEMISTRY	system of Pauling's exclusion principle - included	
		PAPER – I:	system of rading s exercision principle included	
		FAFER-1.		
		INORGANIC,		
		ORGANIC AND		
		PHYSICAL		
		CHEMISTRY – I		
Sem II	21UCH202	CORE	UNIT-I: Cement processing and mining operations	
		CHEMISTRY	included	
		PAPER – II		
		INORGANIC,		
		ORGANIC AND		
		PHYSICAL		
		CHEMISTRY		
Sem II	21UCH2CL	CORE	Melting point and FT-IR spectrum of Inorganic complexes	
		CHEMISTRY	included	
		PRACTICAL – I		
		INORGANIC		
		QUALITATIVE		

		ANALYSIS AND PREPARATIONS	
Sem IV	21UCH404	CORE CHEMISTRY PAPER – IV INORGANIC, ORGANIC AND PHYSICAL CHEMISTRY - IV	Unit –V Intellectual Property Rights-The art of writing and publishing-Effective dissertation writing
Sem IV	21UCH4S2	SKILL BASED SUBJECT-II WATER POLLUTION AND MANAGEMENT	Unit –III: Sample-preservation and pre concentration method- carbon absorption method, freeze concentration method, solvent extraction method. Determination of iron using spectrophotometric method, atomic absorption methodincluded
Sem IV	21UCH4C M	CORECHEMISTRY PRACTICAL – II  INORGANIC VOLUMETRIC AND ORGANIC QUALITATIVE ANALYSIS	Melting point and FT-IR spectrum of organic compounds included
Sem V	21UCH505	CORE CHEMISTRY PAPER – V SPECTROSCOPY AND CHROMATOGRAP HYIC TECHNIQUE	Instead of Raman spectra, Chromatographic techniques included
Sem V	21UCH506	CORE CHEMISTRY PAPER – VI INORGANIC CHEMISTRY	UNIT – I :ligand, Types, Industrial applications of Chelation,  EAN rule, square planar and octahedral  UNIT – II: Basic difference between nuclear reaction and conventional chemical reaction  UNIT – V: advantages of inorganic solvents over organic solvents
Sem V	21UCH507	CORE CHEMISTRY PAPER – VII ORGANIC	Specifying absolute configuration – D, L nomenclature

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		REACTION MECHANISM	
		MECHANISM	
Sem V	21UCH508	CORE	UNIT – IV
Sciii v	210011300	CHEMISTRY	OIVII - IV
		PAPER - VIII	Sorption – Absorption, Adsorption-Types of adsorption,
			adsorption of gases by solids. Adsorption isotherms –
		PHYSICAL	Freundlich, Langmuir. Adsorption of solutes from
		CHEMISTRY - I	solutions. Application of adsorption.
Sem	21UCH609	CORE	UNIT III: Alloys in automobile industry and construction
VI		CHEMISTRY	sectors
		PAPER – IX	
		SOLID STATE	
		AND	
		COORDINATION	
		CHEMISTRY	
Sem	21UCH610	CORE	
VI		CHEMISTRY	UNIT –I
		PAPER – X	classification isolation and commercial value of essential
		CHEMISTRY OF	oils
		NATURAL	
		PRODUCTS	UNIT-II
			phytochemical isolation of naturally occurring products
Sem	21UCH6S3	SKILL BASED	UNIT –V
VI		SUBJECT – III	Diarry product related tonic included instead of colorific
		FOOD	Diary product related topic included instead of calorific value of food
		CHEMISTRY	value of food
Sem	21UCH6CN	CORE	Gravimetric Analysis: Metal analysis in cosmetic products
VI	ZIUCHOUN	CHEMISTRY	using AAS.
		PRACTICAL – III	
		CDAVIMETRIC	
		GRAVIMETRIC ANALYSIS	
		THAL I SIS	
Sem	21UCH6CO	CORECHEMISTRY	Conductometric Titration (Strong acid Vs Strong base)
VI		PRACTICAL – IV	Potentiometric Titration (Acid-Base Titration HCl Vs NaOH
		PHYSICAL	CH3COOH Vs Na2CO3)
		CHEMISTRY	
		EXPERIMENTS	Potentiometric Titration (Redox Titration FAS Vs KMnO4)
			Estimation of Manganese by colorimetric method- included
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Sem VI	21UCH6CP	CORECHEMISTRY PRACTICAL – V  APPLICATION ORIENTED PRACTICAL	<ul> <li>V. Day to day activity related experiments.</li> <li>1. Natural Product extraction using Rotary vapour evaporator.</li> <li>2. Water quality analysis using hydrometer.</li> <li>3. Milk analysis using lactometer.</li> <li>4. Green synthesis reactions in microwave oven- Were Included</li> </ul>	
SEM III	20UCH1A1 /20UCH2A 1	ALLIED CHEMISTRY PAPER – I 21UCH1A1/ 21UCH2A1	Unit –I Compounds of Borane: Preparation, property, Uses and structure of diborane.  Unit-II Hybridization and VSEPR theory-Hybridization of BeCl <sub>2</sub> , H <sub>2</sub> O, CH <sub>4</sub> and NH <sub>3</sub> .	
			Unit-V Petroleum-Classification of Petroleum-Refining of crude oil-Cottrell's Process-Removal of Sulphur Compounds-Fractional distillation- Fraction by distillation of crude-Important liquid fuels derived from Petroleum-Gasoline Oil-Kerosene Oil-Diesel Oil.  The above topics were newly included.	
SEM IV	20UCH1A2 /20UCH2A 2	ALLIED CHEMISTRY PAPER – II 21UCH1A2/ 21UCH2A2	Unit-I Pauling theory and its application to Potassium Hexa cyanoferrate (II), Tetracyano nicklate (II) ion Unit-III Vitamins-Definition-Classification-Sources-	
			Unit-IV Adsorption-Adsorption versus absorption- types of adsorption-physical adsorption-chemical adsorption-factors affecting adsorption-difference between physical and chemical adsorption-applications of adsorption.  The above topics were newly included.	

Other Academic Activities:

## Signature of the Board Members

S.No.	Name	Designation	Signature
01.	Dr. S. Ponnuswamy	Associate Professor	Tomaran
02.	Dr. K.P.Elango	Professor	BA Dindey
03.	Dr. P. Viswanathamurthi	Professor	educipi
04.	Dr . N.SATHYA	Assistant Professor	N-Sar
05.	Parthiban E	Industrialist	=
06.	Dr.V.Sangeetha	Assistant Professor and Head	hoff
07.	Dr. M. S. Sivaramkumar	Assistant Professor	m J. Lue x+
08.	Dr. R. Manimekalai	Assistant Professor	20.
09.	Dr. R. Velmurugan	Assistant Professor	Redgans
10.	Dr. K. Saminathan	Assistant Professor	
11.	Dr E.Jayanthi	Assistant Professor	2m
12.	Dr.K.Krishnaveni	Assistant Professor	10 Tel
13.	Dr. K. Chandra Prakash	Assistant Professor	J. Chandra Prakal
14.	D. Thirupathi	Student	D. Thirupathi



Signature of the Chairman of the Board