# <u>I – Academic Planner</u>

A. Teaching Plan (Year: 2021-2022 Semester: Odd)

Teacher's Name <u>Dr. Ruchi Sharma Pandey</u> Department <u>CHEMISTRY</u>

S. No.	UPC	Paper Name	Core/AECC /GE/SEC	Topic/Unit	Start Date	End Date
1.	B.Sc. (H) Chemistry III Year, V Semester 32171502	Quantum Chemistry and Chemical Bonding (Practical)	Core	Colorimetry Experiments	20 <sup>th</sup> July 2021	17 <sup>th</sup> Sep 2021
				UV-Visible Spectroscopy Experiments	23 <sup>rd</sup> Sep 2021	10 <sup>th</sup> Nov 2021
2.	BSc (H) Chemistry II Year, III Semester 32171303	Phase Equilibria and Electrochemistry (Practical)	Core	Phase Equilibria Experiments	20 <sup>th</sup> Aug 2021	30 <sup>th</sup> Oct 2021
				Potentiometry Experiments	3 <sup>rd</sup> Nov 2021	24 <sup>th</sup> Nov 2021
				Distribution Law Experiments	1 <sup>st</sup> Dec 2021	8 <sup>th</sup> Dec 2021
3.	BSc (P) Physical Sciences II Year, III Semester 32173901	IT Skills for Chemists (Practical)	SEC	Spreadsheets	20 <sup>th</sup> Aug 2021	20 <sup>th</sup> Oct 2021
				Drawing Chemical Structures, Reactions and Mechanisms	25 <sup>th</sup> Oct 2021	3 <sup>rd</sup> Nov 2021
				Document Editor	5 <sup>th</sup> Nov 2021	8 <sup>th</sup> Dec 2021

4.	BSc (P) Physical Sciences II Year, III Semester 32173901	IT Skills for Chemists (Theory)	SEC	Unit 1, 3 and 4	20 <sup>th</sup> Aug 2021	1 <sup>st</sup> Nov 2021
				Unit 2	8 <sup>th</sup> Nov 2021	22 <sup>nd</sup> Nov 2021
				Unit 5	29 <sup>th</sup> Nov 2021	8 <sup>th</sup> Dec 2021
5.	BSc (P) Physical Sciences III Year, V Semester 32173902	Basic Analytical Chemistry (Practical)	SEC	Experiments in syllabus	20 <sup>th</sup> July 2021	13 <sup>th</sup> Nov 2021
6.	BSc (P) Physical Sciences III Year, V Semester 32173902	Basic Analytical Chemistry (Theory)	SEC	Unit 1: Analytical Chemistry	20 <sup>th</sup> July 2021	14 <sup>th</sup> Aug 2021
				Unit 2: Soil	21st Aug 2021	4 <sup>th</sup> Sep 2021
				Unit 3: Water	11 <sup>th</sup> Sep 2021	9 <sup>th</sup> Oct 2021
				Unit 4: Chromatography	16 <sup>th</sup> Oct 2021	16 <sup>th</sup> Nov 2021
7.	B.Sc. (H) Chemistry I Year, I Semester 32171102	Physical Chemistry-I States of Matter and Ionic Equilibrium (Theory)	Core	Ionic Equilibrium	22 <sup>nd</sup> Nov 2021	20 <sup>th</sup> Jan 2022
				Solid State	21 <sup>st</sup> Jan 2022	11 <sup>th</sup> Mar 2022

## B. FDP/Seminar/Workshops/Lectures to be attended and/or to be conducted by Teachers

1. Event Topic		Tools for Exploring Chemistry			
Type / Nature (FDP/W	Type / Nature (FDP/Webinar/Workshop etc.) Workshop				
Organizing In-charge		Department of Chemistry, Rajdhani College			
Details regarding invite	d Resource Person	Multiple Speakers			
Nature of Participation (e.g. Invited Speaker, Participant etc.)		Participant			
Date/s 12th -13th July 2	021	Timing/s	9am-4 pm	Mode	Online

2. Event Topic	Hands-on Workshop on UV Visible Spectrophotometry and its Applications			
Type / Nature (FDP/Webinar/Workshop etc.)	Workshop			
Organizing In-charge DBT Star college Scheme, Kirori Mal College				
Details regarding invited Resource Person	Dr. Kiran Arora and Dr. Ruchi Sharma Pandey, Department of Chemistry, Kirori Mal College			
Nature of Participation (e.g. Invited Speaker, Participant etc.)	Invited Speaker/Resource Person			
Date/s 19th July 2021	Timing/s	3-5 pm	Mode	Online

3. Event Topic Colloquium: International Lecture Series					
Type / Nature (FDP/Webinar/Workshop etc.)	be / Nature (FDP/Webinar/Workshop etc.)  Lectures				
Organizing In-charge	Seminar Committee, Department of Chemistry, Kirori Mal College				
Details regarding invited Resource Person		Dr. Ashok Prasad, Dean, Faculty of Science and Head, Department of Chemistry, DU Dr. Vivek Sharma, Associate Director, Technology – Nucleic Acids, MassBiologics, USA			
Nature of Participation (e.g. Invited Speaker, Participant etc.)	Participant				
Date/s 17th September 2021	Timing/s	2:30-5:00pm	Mode	Online	

4. Event Topic	Online To	Online Tools for Chemistry				
Type / Nature (FDP/Webinar/Workshop et	:.) Students Sk	Students Skill Development Workshop				
Organizing In-charge	Seminar Committee, Department of Chemistry, Kirori Mal College					
Details regarding invited Resource Person	Dr. Shashw College	Dr. Shashwat Malhotra and Dr. Ruchi Sharma Pandey, Department of Chemistry, Kirori Mal College				
Nature of Participation (e.g. Invited Speaker Participant etc.)	Invited Spe	Invited Speaker/Resource Person				
Date/s 22 <sup>nd</sup> -23 <sup>rd</sup> October 2021	Timing/s	2:30-5:30pm	Mode	Online		

5. Event Topic	Practical Numerical Methods in Python				
Type / Nature (FDP/Webinar/Workshop etc.)	Short Term Course				
Organizing In-charge CDTE, Indian Institute of Technology - Kanpur					
Details regarding invited Resource Person	Prof. Mahendra Verma, Department of Physics, Indian Institute of Technology - Kanpur				
Nature of Participation (e.g. Invited Speaker, Participant etc.)	Participant				
Date/s 19th -25th November 2021	Timing/s	9:00 am to 4:00 pm	Mode	Online	

6. Event Topic	Programm	Programming in Python				
Type / Nature (FDP/Webinar/Workshop etc.)	FDP	FDP				
Organizing In-charge Department of Physics, Kirori Mal College and Mizoram University, PMMMNMTT						
Details regarding invited Resource Person	Dr. Sandee	o S. Ghugre, Centre Director, UGC-DAE, Kolkat	a Centre			
Nature of Participation (e.g. Invited Speaker, Participant etc.)	Participant					
Date/s 6th -10th December 2021	Timing/s	9:00 am to 4:00 pm	Mode	Online		

#### C. Internal Assessment: House Exam (Test/Presentation etc.) & Assignment\*

Course Code	Course Name	Unique Paper Code	Topic Name	Day and Date	Date/s of Exhibiting the Assessment Sheet to students, Discussing the marks, Returning/Retaining
SEC	IT Skills for Chemists	32173901	Unit 1: Mathematical Concepts	15 <sup>th</sup> Nov 2021	1st Dec 2021
SEC	Basic Analytical Chemistry	32173902	Unit 1 and 2: Analytical Chemistry and Soil	27 <sup>th</sup> Oct 2021	07th Nov 2021
CORE	Physical Chemistry-I States of Matter and Ionic Equilibrium	32171102	Ionic Equilib <del>r</del> ia	Jan 29, 2022	Feb 16, 2022

<sup>\*</sup>Marks of the Internal Assessment to be submitted to the College 15 days before the last working day of every semester

## <u>I – Academic Planner</u>

A. Teaching Plan (Year: 2021-2022 Semester: Even)

Teacher's Name <u>Dr. Ruchi Sharma Pandey</u> Department <u>CHEMISTRY</u>

S. No.	UPC	Paper Name	Core/AECC/GE/SEC	Topic/Unit	Start Date	End Date
1.	B.Sc. (H) Chemistry III Year, VI Semester 32177903	Applications of Computers in Chemistry (Practical)	DSE	Spreadsheets – MS Excel	Jan 3, 2022	Jan 24, 2022
				QBASIC Programming	Jan 29, 2022	March 15,2022
				Numerical Methods	March 22,2022	Apr 25, 2022
2.	BSc (H) Chemistry III Year,	Polymer Chemistry (Practical)	DSE	Synthesis and Characterization	04 <sup>th</sup> Jan 2022	29 <sup>th</sup> April 2022

	VI Semester 32177906					
3.	BSc (H) Chemistry II Year, IV Semester 32171403	Conductance and Kinetics (Theory)	CORE	Unit 1: Conductance	04 <sup>th</sup> Jan 2022	15 <sup>th</sup> March 2022
				Unit 3: Catalysis	March 22, 2022	29 <sup>th</sup> April 2022
4.	BSc (H) Chemistry II Year, IV Semester 32171403	Conductance and Kinetics (Practical)	CORE	Unit 1: Conductance	04 <sup>th</sup> Jan 2022	20 <sup>th</sup> March 2022
				Unit 2: Kinetics	1 <sup>st</sup> Apr 2022	29 <sup>th</sup> April 2022
5.	BSc (P) Physical Sciences, II Year, IV Semester 42174404	Chemistry of s- & p- block elements, States of Matter and Chemical Kinetics (Theory)	Core	Gases Liquids Solids Chemical Kinetics	04 <sup>th</sup> Jan 2022 15 <sup>th</sup> Feb 2022 1 <sup>st</sup> Mar 2022 01 <sup>st</sup> Apr 2022	13 <sup>th</sup> Feb 2022 28 <sup>th</sup> Feb 2022 22 <sup>nd</sup> Mar 2022 28 <sup>th</sup> April 2022
6.	B.Sc. (P) Physical Sciences I Year, II Semester 42171205	Chemical Energetics, Equilibria and Functional Group Organic	CORE	Chemical Energetics	Apr 9, 2022	Jun 4, 2021

Cher (T	mistry - I 'heory)			
		Chemical Equilibrium	June 11, 2022	June 25, 2022
		Ionic Equilibrium	July 2, 2022	July 26, 2022

### B. FDP/Seminar/Workshops/Lectures to be attended and/or to be conducted by Teachers

1. Event Topic	Environmental Sciences and Public Health			
Type / Nature (FDP/Webinar/Workshop etc.)	FDP	FDP		
Organizing In-charge	Department of Chemistry, Kirori Mal College and Mizoram University, PMMMNMTT			
Details regarding invited Resource Person	Multiple Speakers			
Nature of Participation (e.g. Invited Speaker, Participant etc.)	peaker, Participant			
Date/s 1st - 5th February 2022	Timing/s	2:00 pm to 8:00 pm	Mode	Online

2. Event Topic	Drug Discovery and Development				
Type / Nature (FDP/Webinar/Workshop etc.)	International Workshop				
Organizing In-charge	DE <code> LIFE MSME NO:- UDYAM-HR-0003993</code>				
Details regarding invited Resource Person	Multiple speakers				
Nature of Participation (e.g. Invited Speaker, Participant etc.)	Participant				
Date/s 21st May to 15th June 2022	Timing/s	7:00 pm to 8:30 pm	Mode	Online	

3. Event Topic	Emerging Trends and Careers in Chemistry	
Type / Nature (FDP/Webinar/Workshop etc.)	Outreach Program	
Organizing In-charge	Bal Bharti Public School, Pitampura, Delhi	

Details regarding invited Resource Person  Prof. Kalpana Bhrara, Dr. Palash Jyoti Das and Dr. Ruchi S. Pandey, Department of Kirori Mal College			rtment of Chemistry,		
Nature of Participation (e.g. Invited Speaker, Participant etc.)		Invited Lecture			
Date/s 20th April 2	022	Timing/s	11:00 am to 2:00 pm	Mode	Offline

4. Event Topic	Introduction	Introduction to Python Programming			
Type / Nature (FDP/Webinar/Workshop etc.	Workshop	Workshop			
Organizing In-charge	Departmen	Department of Chemistry, University of Delhi			
Details regarding invited Resource Person	Dr. Sandee	Dr. Sandeep S. Ghugre, Centre Director, UGC-DAE, Kolkata Centre			
Nature of Participation (e.g. Invited Speaker, Participant etc.)	Participant	Participant			
Date/s 1st-2nd July 2022	Timing/s	10:00 am to 5:00 pm	Mode	Offline	

#### C. Internal Assessment: House Exam (Test/Presentation etc.) & Assignment\*

Course Code	Course Name	Unique Paper Code	Topic Name	Day and Date	Date/s of Exhibiting the Assessment Sheet to students, Discussing the marks, Returning/Retaining
582	B.Sc. (P) Physical Sciences I Year, II Semester	42171205	Unit 1: Chemical Energetics	June 21, 2022	July 12, 2022
582	BSc (P) Physical Sciences, II Year, IV Semester	42174404	Gases, Liquids and Solids	April 26, 2022	May 5, 2022
577	BSc (H) Chemistry II Year, IV Semester	32171403	Conductance	April 22, 2022	May 5, 2022

<sup>\*</sup>Marks of the Internal Assessment to be submitted to the College 15 days before the last working day of every semester