4Y B.Sc. (Honours) (Major in Chemistry) (2025 Pattern) Programme

Minutes of the PAC Meeting held on 10.12.2024

Meeting No: 03 **Date: 10th December, 2024** **Time: 3.00 pm to 5.30 pm**

The PAC Meeting for 4Y B.Sc. (Honours) (Major in Chemistry) (2025 Pattern) Programme as per NEP 2020 of **School of Sciences** was held online on **Tuesday, 10-12-2024 at 3:00 PM,** School meeting hall. Following members and invitees were present in person,

01	Dr. Chetana Kamlaskar	(Chairperson) and Member
02	Prof. Ashok V Borhade	Member
03	Prof. Chetan B. Patil	Member
04	Prof. Ramesh L. Gardas	Member
05	Dr. Dnyaneshwar Bhusanur	Academic Coordinator (Chemistry Programme) and Invitee
06	Dr. Bharat More	Invitee
07	Mr. Ravindra Bharsat	Invitee
08	Dr. Jagruti Chavan	Invitee
09	Ms. Minakshi Kadel	Invitee
10	Ms. Tejaswi Kadam	Invitee

Following member could not attend the meeting due to their other engagements.

01	Dr. Sunanda More	Member

Dr. Chetana Kamlaskar, Director of the School of Sciences and Chairperson of the PAC, first welcomed the PAC members and introduced the purpose of the meeting. During the meeting, the following items were discussed for the collective decision on the proposed content of each course in the 4 Year B.Sc. (Honours) (Major in Physics) {2025 Pattern} programme.

<table>
<tr><th>SN</th><th>Details of Items</th><th>Resolution</th></tr>
<tr><td>1</td><td>Agenda Item 1: To finalize approve the credit distribution and detailed syllabus for the proposed Minor courses and VSC courses in the Chemistry discipline at semester 01 to 06, as per NEP2020, and their evaluation pattern</td><td>The PAC members unanimously finalized and approved the credit distribution and proposed detailed syllabus with evaluation pattern for,
1) All Minor courses at semester 02 to 06 in the Chemistry discipline, for the learners other than Chemistry Major, in accordance with NEP2020 guidelines. A few suggestions regarding course sequence and content were also provided as follows:
<table>
<tr><th>Sem</th><th>As per Suggestion by PAC</th></tr>
<tr><td>IV</td><td>CHE20M3: Introduction to Inorganic Chemistry
In credit 02, the unit 02-03 to be removed and unit 02-04 to be split.
<table>
<tr><td rowspan="2">02-04: MO Approach</td><td>02-03: Molecular orbital Approach I</td></tr>
<tr><td>02-04: Molecular orbital Approach II</td></tr>
</table></td></tr>
<tr><td>V</td><td>CHE30M1: Introduction to Physical Chemistry – II
To rename unit 01-01 and 01-02 of credit 01
<table>
<tr><td>Electrolytic Conductance I</td><td>Electrochemistry I</td></tr>
<tr><td>Electrolytic Conductance II</td><td>Electrochemistry II</td></tr>
</table></td></tr>
</table>
2) VSC courses at semester 03 and 05 related to Major in Chemistry.
3) For ‘Lab Activities’ type of courses, it has suggested to rephrase the activity title</td></tr>
<tr><td></td><td colspan="2">Action Taken: The credit distribution and syllabus of Minor courses and VSC courses has been updated following the discussion in the PAC meeting.
Refer Appendix I & II for updated syllabus.</td></tr>
<tr><td></td><td>Agenda Item 2: Identification of Writers/ Editors for SLM development task.</td><td>The PAC members unanimously gave their consent for the writing/editing of the Self Learning Material (SLM) development for the proposed courses. They also agreed to recommend experts for the new courses, in due course of time. It was also resolved to authorize the Director of this School to enrich and update the list of writers/editors for the Self Learning Material (SLM) development task from time to time as per the University Policy decisions/norms.</td></tr>
</table>

Meeting ends with vote of thanks by **Dr. Dnyaneshwar Bhusanur**

Thanks…

(Dr. Chetana Kamlaskar)
Chairperson, PAC B.Sc. (Chemistry)

APPENDIX I: PROGRAMME STRUCTURE:
CHEMISTRY: MAJOR, ELECTIVES, MINOR, OE, VSC, SEC, IKS COURSES
{2025 PATTERN}

Abbreviations: Yr.: Year; Sem.: Semester; Cumulative Credits: Cum. Cr. ; T- Theory Course; P- Practical course; TW-Term Work; PW- Project Work

Level	Sem	Major				Minor		OE		VSC, SEC (VSEC)		AEC, VEC, IKS		OJT, FP, CEP, CC, RP		Cum. Cr. / Sem
		Mandatory		Electives												
4.5	I	**CHE101:** Basic Inorganic & Organic Chemistry **(T)**	4	-		-		**OE101:** Chemistry in Everyday Life **(T)**	2	**VSC101:** Food Chemistry **(TW)**	2	**AEC101:** English Communication-I **(T)**	2	**CC101:** Photography Techniques & Bird Watching **(TW)**	2	22
		CHE102: Lab Activities on CHE101 **(P)**	2					**OE102:** Industrial Safety Management **(T)**	2	**SEC101:** Basic Instrumentation Skills **(TW)**	2	**VEC101:** Environmental Education-I **(T)**	2			
												IKS101: Generic IKS **(T)**	2			
	II	**CHE103:** Physical & Organic Chemistry-I **(T)**	4	-		**CHE10M1**: Introduction to Physical Chemistry-I **(T)**	2	**OE103:** Pesticides Chemistry **(T)**	2	**VSC102:** Chemistry of Biomolecules **(TW)**	2	**AEC102:** English Communication-II **(T)**	2	**CC102:** Yoga **(TW)**	2	22
		CHE104: Lab Activities on CHE103 **(P)**	2					**OE104:** Food Safety Adulteration & Detection **(T)**	2	**SEC102:** MS-Excel With AI **(TW)**	2	**VEC102:** Environmental Education-II **(T)**	2			
Cum. Cr.		12		00		02		08		08		10		04		44
5.0	III	**CHE201:** Physical & Organic Chemistry-II **(T)**	4			**CHE20M1:** Introduction to Organic Chemistry **(T)**	2	**OE201:** Fuel Chemistry **(T)**	2	**VSC201:** Introduction to Medicinal Chemistry **(P)**	2	**AEC201:** Modern Indian Language-I **(T)**	2	**CHE204:** Field Project **(TW)**	2	22
		CHE202: Ancient Indian Chemistry (IKS) **(T)**	2													
		CHE203: Lab Activities on CHE201 **(P)**	2			**CHE20M2:** Lab Activities on CHE20M1 **(P)**	2							**CC201:** Applied Arts **(TW)**	2	
	IV	**CHE 205:** Basic Analytical Chemistry **(T)**	4			**CHE20M3:** Introduction to Inorganic Chemistry **(T)**	2	**OE202:** Chemistry of Cosmetics **(T)**	2	**SEC201:** Intellectual Property Rights (IPR) **(T)**	2	**AEC202:** Modern Indian Language-II **(T)**	2	**CHE208 (CEP201)**: Bee Keeping **(TW)**	2	22
		CHE 206: Molecular Modelling Chemistry **(T)**	2													
		CHE207: Lab Activities on CHE205 & CHE206 **(P)**	2			**CHE20M4:** Lab Activities on CHE20M3 **(P)**	2							**CC202:** Astronomy for Beginners **(TW)**	2	
Cum. Cr.		28		00		10		12		12		14		12		88

Level	Sem	Major				Minor		OE		VSC, SEC (VSEC)		AEC, VEC, IKS		OJT, FP, CEP, CC, RP		Cum. Cr. / Sem
		Mandatory		Electives												
5.5	V	**CHE301:** Physical & Inorganic Chemistry **(T)**	4	**CHE304:** Chemistry in Everyday life **(T) OR** **CHE305:** Biochemistry **(T) OR** **CHE306:** Co-ordination Chemistry **(T)**	4	**CHE30M1:** Introduction to Physical Chemistry-II **(T)**	2	-	-	**VSC301:** Chemistry of Soils and Agrochemicals **(P)**	2	-	-	**CHE307:** Field Project **(TW)** **/CHE308 (CEP301):** Awareness of Sustainable Development Goals **(TW)**	2	
		CHE302: Industrial Chemistry-I **(T)**	2													
		CHE303: Lab Activities on CHE301 & CHE302 **(P)**	4			**CHE30M2:** Lab Activities on CHE30M1 **(P)**	2									
	VI	**CHE309:** Green Chemistry **(T)**	4	**CHE312:** Advanced Agrochemicals, Bio-pesticides & Fertilizers **(T) OR** **CHE313:** Forensic Chemistry **(T) OR** **CHE314:** Application of Computer in Chemistry **(T)**	4	**CHE30M3:** Introduction to Organic and Inorganic Chemistry (T)	2	-	-	-		-	-	**CHE315:** On Job Training **(TW)**	4	22
		CHE310: Industrial Chemistry-II **(T)**	2													
		CHE 311: Lab Activities on CHE309 & CHE310 **(P)**	4			**CHE30M4:** Lab Activities on CHE30M3 **(P)**	2									
Cum. Cr.		**48**		**08**		**18**		**12**		**14**		**14**		**18**		**132**

Level	Sem	Major				Minor		OE		VSC, SEC (VSEC)		AEC, VEC, IKS		OJT, FP, CEP, CC, RP		Cum. Cr. / Sem
		Mandatory		Electives												
6.0	VII	**CHE401:** Inorganic Chemistry-I **(T)**	4	**CHE406:** Physical Methods in Chemistry **(T)** **OR** **CHE407:** Polymer Chemistry **(T)**	4	**RES405:** Research Methodology **(T)**	4	-		-		-		-	-	22
		CHE402: Physical Chemistry-I **(T)**	4													
		CHE403: Organic Chemistry-I **(T)**	2													
		CHE404: Lab Activities on CHE401, CHE402 & CHE403 **(P)**	4													
	VIII	**CHE409:** Inorganic Chemistry-II **(T)**	4	**CHE415:** Analytical Chemistry **(T)** **OR** **CHE416:** Chemical Mathematics & Biostatistics **(T)**	4	-								**CHE413:** On Job Training **(TW)**	4	22
		CHE410: Physical Chemistry-II **(T)**	4													
		CHE411: Organic Chemistry-II **(T)**	2													
		CHE412: Lab Activities onCHE408, CHE409 & CHE410 **(P)**	4													
Cum. Cr.		**76**		**16**		**22**		**12**		**14**		**14**		**22**		**176**

APPENDIX II:

SYLLABUS OF MINOR AND VEC FROM CHEMISTRY

Refer the syllabus file attached with this mail separatel