



UNIVERSITY OF JAMMU

(NAAC ACCREDITED 'A ++' GRADE' UNIVERSITY)
Baba Sahib Ambedkar Road, Jammu-180006 (J&K)

Academic Section

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NOTIFICATION

In partial modification of this office Notification No. F.Acd/II/25/3401-20 dated 11.06.2025, it is hereby notified for the information of all concerned that the amended Course Structure of the Syllabi and Courses of Studies of the Subject of **Chemistry** for One and Two Year PG Programme as per NEP-2020 for Semester I to IV (as given in the annexure).

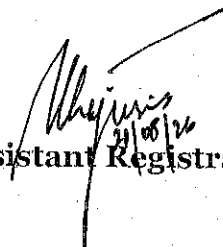
The Syllabi of the courses are also available on the University website: www.jammuuniversity.in

Sd/-
DEAN ACADEMIC AFFAIRS

No. F. Acd/II/26/5747-70
Dated: 21/08/2026

Copy for information and necessary action to:

1. Dean, Faculty of **Science**
2. Convener, Board of Studies in **Chemistry**
3. All members of the Board of Studies
4. Joint Registrar (Evaluation/P.G. Exam.)
5. Programmer, Computer Section, Examination Wing


Assistant Registrar (Academic) .

MODIFIED COURSE STRUCTURE FOR TWO YEAR PG PROGRAMME

S. No.	Course No.	Course Title	No. of Credits	Credits Level	Credit Point	Course Type	Core/Elective/Any Other	Theory	Marks	Practical	Global	Nature of Course	Regional	Skill	SWAYAM/ MOOC	Vocational Course	Research Project/ Summer Internship / Dissertation
Semester-I																	
1.	P2CHTC101	Inorganic Chemistry-I	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
2.	P2CHTC102	Quantum Chemistry	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
3.	P2CHTC103	Organic Chemistry-I	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
4.	P2CHTC104	Principles of Spectroscopy	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
5.	P2CHPC105	Practical Course in Inorganic, Organic & Physical Chemistry-I	4	6.5	26	Core		-	100	Global	-	-	-	Skill	-	-	-
Total Credits (Semester-I)									20		500						
Semester-II																	
1.	P2CHTC201	Inorganic Chemistry-II	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
2.	P2CHTC202	Chemical Dynamics, Surface and Electro Chemistry	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
3.	P2CHTC203	Organic Chemistry-II	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
4.	P2CHTC204	Applications of Spectroscopy in Organic Chemistry	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
5.	P2CHPC205	Practical Course in Inorganic, Organic & Physical Chemistry-II	4	6.5	26	Core		-	100	Global	-	-	-	Skill	-	-	-
Total Credits (Semester-II)									20		500						
Semester-III																	
1.	P2CHTC301	Environmental Chemistry	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
2.	P2CHTC302	Nano-Chemistry	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
3.	P2CHTC303	Bioorganic and Medicinal Chemistry	4	6.5	26	Core		100	-	-	Global	-	-	-	-	-	-
4.	P2CHTE304	Analytical Chemistry	4	6.5	26	Elective		100	-	-	Global	-	-	-	-	-	-
5.	P2CHTE305	Spectroscopy and Photochemistry in Inorganic Chemistry	4	6.5	26	Elective		100	-	-	Global	-	-	-	-	-	-
6.	P2CHTE306	Heuristic Approach to Organic Synthesis	4	6.5	26	Elective		100	-	-	Global	-	-	-	-	-	-
7.	P2CHTE307	Chemistry of Natural Products	4	6.5	26	Elective		100	-	-	Global	-	-	-	-	-	-
8.	P2CHTE308	Thermodynamics and Statistical Mechanics	4	6.5	26	Elective		100	-	-	Global	-	-	-	-	-	-

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S. No.	Course No.	Course Title	No. of Credits	Credits Level	Credit Point	Course Type	Marks	Nature of Course	SWAYAM/ MOOC	Vocational Course	Research Project/ Summer Internship / Dissertation
9.	P2CHTE309	Chemistry of Materials and Liquids	4	6.5	26	Elective	100	-	-	-	-
10.	P2CHPE310	Practical Course in Inorganic Chemistry	4	6.5	26	Elective	-	100	Global	-	-
11.	P2CHPE311	Practical Course in Organic Chemistry	4	6.5	26	Elective	-	100	Global	-	-
12.	P2CHPE312	Practical Course in Physical Chemistry	4	6.5	26	Elective	-	100	Global	-	-
13.	P2CHMO351	MOOC/SWAYAM Course	4	6.5	26	Elective	100	-	Global	SWAYAM/ MOOC	-
Total Credits (Semester-III)			28				700				

[In addition to core courses, the students of Semester-III have to opt for two elective theory courses and one elective practical course out of the basket of six elective theory courses and three elective practical courses respectively (from Inorganic/Organic/Physical branch)]

Semester-IV

1.	P2CHTE401	Organotransition Metal Chemistry	4	6.5	26	Elective	100	-	Global	-	-
2.	P2CHTE402	Bioinorganic and Supramolecular Chemistry	4	6.5	26	Elective	100	-	Global	-	-
3.	P2CHTE403	Chemistry of Heterocyclic Compounds	4	6.5	26	Elective	100	-	Global	-	-
4.	P2CHTE404	Catalysis in Organic Synthesis	4	6.5	26	Elective	100	-	Global	-	-
5.	P2CHTE405	Solid State Chemistry	4	6.5	26	Elective	100	-	Global	-	-
6.	P2CHTE406	Polymer Chemistry	4	6.5	26	Elective	100	-	Global	-	-
7.	P2CHPE407	Project in Inorganic Chemistry	16	6.5	104	Elective	-	400	Global	-	Project
8.	P2CHPE408	Project in Organic Chemistry	16	6.5	104	Elective	-	400	Global	-	Project
9.	P2CHPE409	Project in Physical Chemistry	16	6.5	104	Elective	-	400	Global	-	Project
Total Credits (Semester-IV)			24				600				

[Students of Semester-IV have to opt for two elective theory courses and one elective project course out of the basket of six elective theory courses and three elective project courses respectively (from Inorganic/Organic/Physical branch)]

Total Credits (Semester-I, II, III & IV)			92				2300				
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MODIFIED COURSE STRUCTURE FOR ONE YEAR PG PROGRAMME

S. No.	Course No.	Course Title	No. of Credits	Credits		Course Type	Marks		Nature of Course				SWAYAM/ MOOC	Vocational Course	Research Project/ Summer Internship / Dissertation
				Level	Point		Core/Elective/ Any Other	Theory	Practical	Global	National	Regional			
Semester-I															
1.	PICHTC101	Environmental Chemistry	4	6.5	26	Core	100	-	Global	-	-	-	-	-	-
2.	PICHTC102	Nano-Chemistry	4	6.5	26	Core	100	-	Global	-	-	-	-	-	-
3.	PICHTC103	Bioorganic and Medicinal Chemistry	4	6.5	26	Core	100	-	Global	-	-	-	-	-	-
4.	PICHTC104	Analytical Chemistry	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
5.	PICHTC105	Spectroscopy and Photochemistry in Inorganic Chemistry	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
6.	PICHTC106	Heuristic Approach to Organic Synthesis	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
7.	PICHTC107	Chemistry of Natural Products	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
8.	PICHTC108	Thermodynamics and Statistical Mechanics	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
9.	PICHTC109	Chemistry of Materials and Liquids	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
10.	PICHTPE110	Practical Course in Inorganic Chemistry	4	6.5	26	Elective	-	100	Global	-	-	Skill	-	-	-
11.	PICHTPE111	Practical Course in Organic Chemistry	4	6.5	26	Elective	-	100	Global	-	-	Skill	-	-	-
12.	PICHTPE112	Practical Course in Physical Chemistry	4	6.5	26	Elective	-	100	Global	-	-	Skill	-	-	-
13.	PICHTMO151	MOOC/SWAYAM Course	4	6.5	26	Elective	100	-	Global	-	-	SWAYAM MOOC	-	-	-
Total Credits (Semester-I)			28					700							
[In addition to core courses, the students of Semester-III have to opt for two elective theory courses and one elective practical course out of the basket of six elective theory courses and three elective practical courses respectively (from Inorganic/Organic/Physical branch)]															
Semester-II															
1.	PICHTTE201	Organotransition Metal Chemistry	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
2.	PICHTTE202	Bioinorganic and Supramolecular Chemistry	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
3.	PICHTTE203	Chemistry of Heterocyclic Compounds	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
4.	PICHTTE204	Catalysis in Organic Synthesis	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-
5.	PICHTTE205	Solid State Chemistry	4	6.5	26	Elective	100	-	Global	-	-	-	-	-	-

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S. No.	Course No.	Course Title	No. of Credits	Credits Level	Credit Point	Course Type	Marks	Nature of Course	SWAYAM/ MOOC	Vocational Course	Research Project/ Summer Internship/ Dissertation
6.	P1CHTE206	Polymer Chemistry	4	6.5	26	Elective	100	Global	-	-	-
7.	P1CHPE207	Project in Inorganic Chemistry	16	6.5	104	Elective	-	Global	-	-	Project
8.	P1CHPE208	Project in Organic Chemistry	16	6.5	104	Elective	-	Global	-	-	Project
9.	P1CHPE209	Project in Physical Chemistry	16	6.5	104	Elective	-	Global	-	-	Project
Total Credits (Semester-II)			24				600				
[Students of Semester-IV have to opt for two elective theory courses and one elective project course out of the basket of six elective theory courses and three elective project courses respectively (from Inorganic/Organic/Physical branch)]											
Total Credits (Semester-I & II)			52				1300				

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