

## Enquiry for Course Details

No.	Course Code	Title	Credit	Pre-requisite	Available in		Semester offered in 2023 - 2024	Exam. held in 2023 - 2024	Quota	Course Coordinator	Major / Minor (The Major/Minor that this course appears as.)	
					2023 - 2024	2024 - 2025					Disciplinary Core Course	Disciplinary Elective
<b>Department of Chemistry</b>												
1	CHEM1041	Foundations of chemistry	6	Level 3 or above in HKDSE Combined Science with Chemistry component or Integrated Science, or equivalent. Students without such background but keen on taking this foundation chemistry course may approach the course coordinator for consideration. Not for students with Level 3 or above in HKDSE Chemistry or having taken any level 1 Chemistry course or above or any equivalent Chemistry course.	Y	Y	1	Dec	70	Dr A P L Tong, Chemistry		
2	CHEM1042	General chemistry I	6	Level 3 or above in HKDSE Chemistry or equivalent or a pass in CHEM1041. Not for students having taken any level 1 Chemistry course (except for CHEM1041) or above or any equivalent Chemistry course.	Y	Y	1, 2	Dec, May	450	Dr A P L Tong, Chemistry		
3	CHEM1043	General chemistry II	6	Pass in CHEM1042	Y	Y	1, 2	Dec, May	280	Dr A P L Tong, Chemistry		
4	CHEM1044	Mathematics in chemistry	6	Pass in CHEM1042 or already enrolled in this course; and Level 2 or above in Module 1 or Module 2 of HKDSE Mathematics or equivalent, or Pass in MATH1011 or SCNC1111	Y	Y	2	May	80	Dr A M Y Yuen, Chemistry		
5	CHEM2241	Analytical chemistry I	6	Pass in CHEM1042; and Pass in CHEM1043, or already enrolled in this course	Y	Y	1, 2	Dec, May	120	Dr I K Chu (1st sem); Dr E C M Tse (2nd sem), Chemistry		
6	CHEM2341	Inorganic chemistry I	6	Pass in CHEM1042; and Pass in CHEM1043, or already enrolled in this course	Y	Y	1, 2	Dec, May	120	Dr H Y Au Yeung, Chemistry		
7	CHEM2441	Organic chemistry I	6	Pass in CHEM1042; and Pass in CHEM1043, or already enrolled in this course	Y	Y	1, 2	Dec, May	200	Prof X Y Li (1st sem); Dr S K Lee (2nd sem), Chemistry		
8	CHEM2442	Fundamentals of organic chemistry	6	Pass in CHEM1042; and Not for students who have passed CHEM2441, or have already enrolled in this course.	Y	Y	1	Dec	100	Dr P H Toy, Chemistry		
9	CHEM2541	Introductory physical chemistry	6	Pass in CHEM1042 and CHEM1043  Student are recommended (but not required) to take CHEM1044 before (or along with) taking this course.	Y	Y	2	May	100	Dr J Y Tang, Chemistry		
10	CHEM3141	Environmental chemistry	6	Pass in CHEM2241 or CHEM2341 or CHEM2441 or CHEM2442 or CHEM2541  For those who have not got the above pre-requisite but with a pass in CHEM1042 and a pass in ENVS2001, and will work hard to cope with the course, they are welcome to join the course.	Y	Y	2	May	50	Dr Y X Li, Chemistry		
11	CHEM3143	Introduction to materials chemistry	6	Pass in CHEM2441; and Pass in CHEM2541 or CHEM2341	Y	Y	1	Dec	60	Dr Y F Wang, Chemistry		
12	CHEM3144	Fundamentals of Nuclear Magnetic Resonance	6	Pass in CHEM2241 or CHEM2341 or CHEM2441 or CHEM2541	Y	Y	2	May	40	Dr K K H Ng, Chemistry		
13	CHEM3241	Analytical chemistry II: chemical instrumentation	6	Pass in CHEM2241	Y	Y	1	Dec	104	Dr Y Li, Chemistry		
14	CHEM3242	Food and water analysis	6	Pass in CHEM2241 or CHEM2341 or CHEM2441 or CHEM2541. Please note that School of Biological Sciences stipulates that students who have passed CHEM3242 are not allowed to take BIOL3209 Food and nutrient analysis.	Y	Y	2	May	50	Dr K K H Ng, Chemistry		
15	CHEM3341	Inorganic chemistry II	6	Pass in CHEM2341	Y	Y	1	Dec	90	Prof V W W Yam, Chemistry		
16	CHEM3342	Bioinorganic chemistry	6	Pass in CHEM2341	Y	Y	2	May	50	Prof H Z Sun, Chemistry		
17	CHEM3441	Organic chemistry II	6	Pass in CHEM2441 [Remarks: CHEM3441 has been changed to lecture-based course from semester 2, 2015-16. For Chemistry students who admitted in 2014-15 or before, they must enroll also CHEM3443 for enrolling CHEM3441 (new version without lab component) to meet the Chemistry Major requirements.]	Y	Y	1, 2	Dec, May	300	Dr Z X Huang (1st sem); Prof X Y Li (2nd sem), Chemistry		
18	CHEM3442	Organic chemistry of biomolecules	6	Pass in CHEM2442 or CHEM3441	Y	Y	1	Dec	50	Dr P H Toy, Chemistry		
19	CHEM3443	Organic chemistry laboratory	6	Pass in CHEM2441; and pass in CHEM3441, or already enrolled in this course; NOT for students who have passed CHEM3441A in semester 1, 2015-16, or CHEM3441 in or before 2014-2015 (for students admitted in 2014-15 or before) Pass in CHEM2441 or CHEM2442 or CHEM2443; and Pass in CHEM3441 or CHEM3442, or already enrolled in any of these two courses (for students admitted in 2015-16 or thereafter)	Y	Y	1, 2	Dec, May	80	Dr A M Y Yuen, Chemistry		
20	CHEM3445	Integrated laboratory	6	Pass in CHEM3443 or already enrolled in this course	Y	Y	S	No exam	20	Dr A M Y Yuen, Chemistry		
21	CHEM3541	Physical chemistry: Introduction to quantum chemistry	6	Pass in CHEM2541	Y	Y	1	Dec	100	Prof G H Chen, Chemistry		
22	CHEM3542	Physical chemistry: statistical thermodynamics and kinetics theory	6	Pass in CHEM2541	Y	Y	2	May	50	Dr J Yang, Chemistry		

23	CHEM3999	Directed studies in chemistry	6	Pass in at least 24 credits of advanced level disciplinary core/elective chemistry courses (CHEM3XXX or CHEM4XXX) in the Chemistry Major including a pass in CHEM2341 or CHEM2441 or CHEM2442 or CHEM2541. This capstone course is for Chemistry Major/ Chemistry Major (Intensive) students only. This course is designed for third year students who would like to take an early experience on research. The earliest that a student is allowed to take this capstone course is their year 3 study.	Y	Y	1, 2	No exam	---	Prof D L Phillips, Chemistry		
24	CHEM4142	Symmetry, group theory and applications	6	Pass in CHEM3341	Y	Y	1	Dec	60	Dr E C M Tse, Chemistry		
25	CHEM4144	Advanced materials	6	Pass in CHEM3143	Y	Y	2	May	30	Dr E C M Tse, Chemistry		
26	CHEM4145	Medicinal chemistry	6	Pass in CHEM3441 or CHEM3442; and Not for students who have passed in BPHM3133, or already enrolled in this course.	Y	Y	2	May	40	Dr Y Li, Chemistry		
27	CHEM4147	Supramolecular chemistry	6	Pass in CHEM3341 and CHEM3441	Y	Y	2	May	40	Dr H Y Au-Yeung, Chemistry		
28	CHEM4148	Frontiers in Modern Chemical Science	6	Pass in CHEM3341 and CHEM3441.	Y	Y	2	May	60	Prof X D Li, Chemistry		
29	CHEM4241	Modern chemical instrumentation and applications	6	Pass in CHEM3241	Y	Y	1	Dec	50	Dr I K Chu, Chemistry		
30	CHEM4242	Analytical chemistry	6	Pass in CHEM3241 or CHEM3242	Y	Y	2	May	50	Dr H B Jiang, Chemistry		
31	CHEM4341	Advanced inorganic chemistry	6	Pass in CHEM3341	Y	Y	1	Dec	50	Prof C M Che, Chemistry		
32	CHEM4342	Organometallic chemistry	6	Pass in CHEM3341	Y	Y	1	Dec	32	Dr. J Z Liu, Chemistry		
33	CHEM4441	Advanced organic chemistry	6	Pass in CHEM3441	Y	Y	1	Dec	40	Dr J He, Chemistry		
34	CHEM4443	Integrated organic synthesis	6	Pass in CHEM3441; or Pass in CHEM3441 (without lab component) and CHEM3443	Y	Y	2	May	50	Dr Z X Huang, Chemistry		
35	CHEM4444	Chemical biology	6	Pass in BIOC3601 or CHEM3441	Y	Y	2	May	50	Prof X C Li, Chemistry		
36	CHEM4543	Advanced physical chemistry	6	Pass in CHEM3541	Y	Y	2	May	40	Prof G H Chen, Chemistry		
37	CHEM4910	Chemistry literacy and research	6	Pass in at least 24 credits of advanced level disciplinary core/elective chemistry courses (CHEM3XXX or CHEM4XXX) in the Chemistry Major including CHEM3241, and CHEM3341, and CHEM3441, and CHEM3541. This capstone course is for Chemistry Major students only. The earliest that a student is allowed to take this capstone course is their year 3 study.	Y	Y	2	No exam	---	Prof X D Li, Chemistry		
38	CHEM4911	Capstone experience for chemistry undergraduates: HKUtopia	6	Students are expected to have satisfactorily completed all introductory chemistry disciplinary core courses and at least 24 credits of advanced level disciplinary core/elective chemistry courses in the Chemistry Major. Students who are interested in taking the course should contact the course coordinator for application in April - May. Late application may not be considered. This capstone course is for Chemistry Major students only. The earliest that a student is allowed to take this capstone course is their year 3 study.	Y	Y	S	No exam	---	Dr A P L Tong, Chemistry		
39	CHEM4966	Chemistry internship	6	Pass in at least 24 credits of advanced level disciplinary core/elective chemistry courses (CHEM3XXX or CHEM4XXX) in the Chemistry Major. This capstone course is for Chemistry Major/ Chemistry Major (Intensive) students only. The earliest that a student is allowed to take this capstone course is their year 3 study.	Y	Y	1, 2, S	No exam	---	Dr K K H Ng, Chemistry		
40	CHEM4999	Chemistry project	12	Pass in at least 24 credits of advanced level disciplinary core/elective chemistry courses (CHEM3XXX or CHEM4XXX) in the Chemistry Major including CHEM3241, and CHEM3341, and CHEM3441, and CHEM3541. This capstone course is for Chemistry Major/ Chemistry Major (Intensive) students only. The earliest that a student is allowed to take this capstone course is their year 3 study.	Y	Y	0	No exam	---	Dr J Y Tang, Chemistry		