

Enquiry for Course Details

No.	Course Code	Title	Credit	Pre-requisite	Available in		Semester offered in 2020 - 2021	Exam. held in 2020 - 2021	Quota	Course Coordinator	Major / Minor (The Major/Minor that this course appears as.)		
					2020 - 2021	2021 - 2022					0=year long 1=1st sem 2=2nd sem S=Summer TBC= To be confirmed	TBC= To be confirmed	Disciplinary Core Course
Department of Chemistry													
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	156	Dr A P L Tong, Chemistry		Major in Ecology & Biodiversity (Intensive) (2020,2019,2018,2017,2016,2015)	
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	Major in Biochemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Biological Sciences (Intensive) (2020,2019,2018,2017) Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Major in Environmental Science (2020,2019,2018) Major in Molecular Biology & Biotechnology (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)	Major in Ecology & Biodiversity (Intensive) (2020,2019,2018,2017,2016,2015) Major in Environmental Science (2017,2016,2015,2014,2013,2012) Major in Food & Nutritional Science (2020,2019) Minor in Environmental Science (2020,2019,2018,2017,2016,2015,2014,2013,2012)	

3	CHEM1043	General chemistry II	6	Pass in CHEM1042; and Not for students in 2014-15 cohort or before having taken CHEM2541.	Y	Y	1, 2	Dec, May	280	Dr A P L Tong, Chemistry	Major in Biochemistry (2020,2019,2018,2017, 2016,2015) Major in Biological Sciences (Intensive) (2020,2019,2018,2017) Major in Chemistry (2020,2019,2018,2017, 2016,2015) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Major in Molecular Biology & Biotechnology (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015)	Major in Biochemistry (2014,2013,2012)
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		Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015)
5	CHEM2241	Analytical chemistry I	6	Pass in CHEM1042 (for students admitted in 2014-15 or before); Pass in CHEM1042; and Pass in CHEM1043, or already enrolled in this course (for students admitted in 2015-16 or thereafter)	Y	Y	1, 2	Dec, May	120	Dr E C M Tse (1st sem); Dr I K Chu (2nd sem), Chemistry	Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015)	Major in Environmental Science (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Minor in Environmental Science (2017,2016,2015,2014, 2013,2012)
6	CHEM2341	Inorganic chemistry I	6	Pass in CHEM1042; and NOT for students who have passed in CHEM2041, or already enrolled in this course (for students admitted in 2014-15 or before); Pass in CHEM1042; and Pass in CHEM1043, or already enrolled in this course; and NOT for students who have passed in CHEM2041, or already enrolled in this course (for students admitted in 2015-16 or thereafter)	Y	Y	1, 2	Dec, May	120	Prof V W W Yam (1st sem); Dr H Y Au Yeung (2nd sem), Chemistry	Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015)	Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
7	CHEM2441	Organic chemistry I	6	Pass in CHEM1042; and NOT for students who have passed in CHEM2041, or already enrolled in this course (for students admitted in 2014-15 or before); Pass in CHEM1042; and Pass in CHEM1043, or already enrolled in this course; and NOT for students who have passed CHEM2041, or already enrolled in this course (for students admitted in 2015-16 or thereafter)	Y	Y	1, 2	Dec, May	200	Dr X Y Li (1st sem); Prof P Chiu (2nd sem), Chemistry	Major in Biochemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015)	Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)

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	130	Dr P H Toy, Chemistry		Major in Environmental Science (2017,2016,2015,2014,2013,2012) Major in Food & Nutritional Science (2020,2019) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Environmental Science (2017,2016,2015,2014,2013,2012)
9	CHEM2541	Introductory physical chemistry	6	Pass in CHEM1042; and NOT for students who have passed CHEM2041, or already enrolled in this course (for students admitted in 2014-15 or before); Pass in CHEM1042 and CHEM1043; and NOT for students who have passed CHEM2041, or already enrolled in this course (for students admitted in 2015-16 or thereafter)	Y	Y	2	May	100	Dr J Y Tang (2nd sem), Chemistry	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Biochemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
10	CHEM3141	Environmental chemistry	6	Pass in CHEM2041 or CHEM2341 or CHEM2441 or CHEM2442 or CHEM2541	Y	Y	2	May	100	Dr Y X Li, Chemistry		Major in Chemistry (2014,2013,2012) Major in Environmental Science (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Environmental Science (2020,2019,2018,2017,2016,2015,2014,2013,2012)
11	CHEM3142	Chemical process industries and analysis	6	Pass in CHEM2241 or CHEM2341 or CHEM2441 or CHEM2442 or CHEM2541	Y	Y	2	May	60	Prof G K Y Chan, Chemistry		Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
12	CHEM3143	Introduction to materials chemistry	6	Pass in CHEM2441; and Pass in CHEM2541 or CHEM2341	Y	Y	1	Dec	100	Dr Y F Wang, Chemistry	Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
13	CHEM3241	Analytical chemistry II: chemical instrumentation	6	Pass in CHEM2241	Y	Y	1	Dec	80	Dr W T Chan, Chemistry	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Environmental Science (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Environmental Science (2020,2019,2018,2017,2016,2015,2014,2013,2012)

14	CHEM3242	Food and water analysis	6	Pass in CHEM2041 or CHEM2241 or CHEM2341 or CHEM2441 or CHEM2541.	Y	Y	2	May	50	Dr W T Chan, Chemistry		Major in Chemistry (2014,2013,2012) Major in Environmental Science (2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Environmental Science (2017,2016,2015,2014,2013,2012)
15	CHEM3243	Introductory instrumental chemical analysis	6	Pass in CHEM2041 or CHEM2241; and Not for students who have passed CHEM3241, or have already enrolled in this course.	Y	Y	2	May	65	Dr X Li, Chemistry		Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
16	CHEM3244	Analytical techniques for pharmacy students	6	Pass in BPHM2136 (This course is for BPharm students only)	Y	Y	2	May	35	Dr X Li, Chemistry		Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
17	CHEM3341	Inorganic chemistry II	6	Pass in CHEM2341	Y	Y	1	Dec	90	Prof V W W Yam, Chemistry	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
18	CHEM3342	Bioinorganic chemistry	6	Pass in CHEM2341	Y	Y	2	May	50	Prof H Z Sun, Chemistry		Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
19	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 X Y Li (1st sem); Prof D Yang (2nd sem), Chemistry	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Biochemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
20	CHEM3442	Organic chemistry of biomolecules	6	Pass in CHEM2442 or CHEM3441	Y	Y	1	Dec	50	Dr P H Toy, Chemistry		Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
21	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	Major in Chemistry (2020,2019,2018,2017,2016,2015) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)

22	CHEM3445	Integrated laboratory	6	Pass in CHEM3443 or already enrolled in this course	Y	Y	S	No exam	20	Dr J He, Chemistry	Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
23	CHEM3541	Physical chemistry: Introduction to quantum chemistry	6	Pass in CHEM2541	Y	Y	1	Dec	100	Prof G H Chen, Chemistry	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
24	CHEM3542	Physical chemistry: statistical thermodynamics and kinetics theory	6	Pass in CHEM2541	Y	Y	2	May	50	Dr. J Yang, Chemistry	Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Chemistry (2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
25	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 or CHEM3146. 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		Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
26	CHEM4142	Symmetry, group theory and applications	6	Pass in CHEM3341	Y	Y	1	Dec	60	Prof V W W Yam, Chemistry	Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
27	CHEM4143	Interfacial science and technology	6	Pass in CHEM3143 or CHEM3541 or CHEM3542	Y	N	2	May	50	Prof G K Y Chan, Chemistry		Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
28	CHEM4144	Advanced materials	6	Pass in CHEM3143	Y	Y	2	May	30	Dr E C M Tse, Chemistry	Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015)	Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)

29	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	70	Dr Y Li, Chemistry		Major in Biochemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
30	CHEM4147	Supramolecular chemistry	6	Pass in CHEM3341 and CHEM3441	Y	Y	2	May	40	Dr H Y Au-Yeung, Chemistry		Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
31	CHEM4148	Frontiers in Modern Chemical Science	6	Pass in CHEM3341 and CHEM3441.	Y	Y	2	May	60	Dr X Li, Chemistry		Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
32	CHEM4241	Modern chemical instrumentation and applications	6	Pass in CHEM3241	Y	Y	1	Dec	50	Dr I K Chu, Chemistry	Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015)	Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
33	CHEM4242	Analytical chemistry	6	Pass in CHEM3241 or CHEM3242	Y	Y	2	May	50	Dr W T Chan, Chemistry		Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)

34	CHEM4341	Advanced inorganic chemistry	6	Pass in CHEM3341	Y	Y	1	Dec	80	Prof C M Che, Chemistry		Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
35	CHEM4342	Organometallic chemistry	6	Pass in CHEM3341	Y	Y	1	Dec	40	Dr H Y Au-Yeung, Chemistry		Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
36	CHEM4441	Advanced organic chemistry	6	Pass in CHEM3441	Y	Y	1	Dec	80	Prof D Yang, Chemistry		Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
37	CHEM4443	Integrated organic synthesis	6	Pass in CHEM3441; or Pass in CHEM3441 (without lab component) and CHEM3443	Y	Y	2	May	50	Dr Huang Z X, Chemistry		Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)
38	CHEM4444	Chemical biology	6	Pass in BIOC3601 or CHEM3441	Y	Y	2	May	50	Prof X C Li, Chemistry		Major in Biochemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017,2016,2015) Minor in Biochemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012) Minor in Chemistry (2020,2019,2018,2017,2016,2015,2014,2013,2012)

39	CHEM4542	Computational chemistry	6	Pass in CHEM3541 or PHYS3351	Y	N	2	May	60	Prof G H Chen, Chemistry		Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
40	CHEM4543	Advanced physical chemistry	6	Pass in CHEM3541	Y	Y	2	May	40	Prof G H Chen, Chemistry		Major in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012) Major in Chemistry (Intensive) (2020,2019,2018,2017, 2016,2015) Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
41	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	---	Dr X Li, Chemistry		Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
42	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		Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
43	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 H Y Au-Yeung, Chemistry		Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)
44	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		Minor in Chemistry (2020,2019,2018,2017, 2016,2015,2014,2013,2012)

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