School of Chemistry

Important Degree Information:

B.Sc./M.A. Honours
The general requirements are 480 credits over a period of normally 4 years (and not more than 5 years) or part-time equivalent; the final two years being an approved Honours programme of 240 credits, of which 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 levels. Refer to the appropriate Faculty regulations for lists of subjects recognised as qualifying towards either a B.Sc. or M.A. degree.

B.Sc./M.A. Honours with Integrated Year Abroad
The general requirements are 540 credits over a period of normally 5 years (and not more than 6 years) or part-time equivalent; the final three years being an approved Honours programme of 300 credits, of which 60 credits are gained during the integrated year abroad, 90 credits are at 4000 level and at least a further 120 credits at 3000 and/or 4000 levels. Refer to the appropriate Faculty regulations for lists of subjects recognised as qualifying towards either a B.Sc. or M.A. degree.

M.Chem. Honours
General requirements are 600 credits over a period of normally 5 years (and not more than 6 years) or part-time equivalent; the final three years being an approved Honours programme of 360 credits, of which 120 credits are at 5000 level and at least a further 210 credits at 3000 and 4000 levels.

M.Sci. Honours
General requirements are 600 credits over a period of normally 5 years (and not more than 6 years) or part-time equivalent; the final three years being an approved Honours programme of 360 credits, of which 120 credits are at 5000 level and at least a further 210 credits at 3000 and 4000 levels.

Other Information: Direct entry into Level 2000 is possible, in which case credit of 120 credits at level 1000 is given on the basis of school examinations. In the case of students who spend part of the Honours programme abroad on a recognised Exchange Scheme, the Programme Requirements will be amended to take into account courses taken while abroad.

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): **Biomolecular Science**	**Single Honours Biomolecular Science (B.Sc. Honours):** **Level 1:** Biology Element: 40 credits including passes in (BL1101 and BL1102). Chemistry Element: 40 credits comprising passes in CH1401 and CH1601 **Level 2:** 120 credits comprising passes at grade 11 or better in BL2101, BL2104, CH2501 and CH2601 **Level 3:** 120 credits comprising Biology Element: BL3301, BL3310, BL3312, BL3320 Chemistry Element: CH3431, CH3612, CH3613, CH3615, CH3621, CH3716 **Level 4:** 120 credits comprising: Biology element: BL4210 and THREE modules chosen from (BL4212, BL4213, BL4215, BL4216, BL4222 and BL4223)#. Chemistry element: CH4442 and TWO other modules chosen from CH4614, CH4612, CH4613, CH5611, CH5612, CH5613, CH5614, CH5616. (By special arrangement only, BL4201 may be taken instead of CH4442; but modules chosen from # must then be eliminated.) **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.
(B.Sc. Honours): **Chemical Sciences**	**Single Honours Chemical Sciences (B.Sc. Honours):** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at grade 11 or better in CH2501, CH2601 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721 **Level 4:** 120 credits comprising CH4442, 4 from (CH4511, CH4614, CH4612, CH4711, CH5717), and 4 from (CH4513, CH4613, CH4712, CH4713, CH5513-5, CH5612-4, CH5616, CH5712-4, CH5718) **Other Information:** This course is aimed at those who like Chemistry and were good at it at school, who want the varied training that a Chemistry Degree gives, but who do not wish to be professional Chemists. Up to 30 credits from the 3000-level and 4000-level modules listed above can be replaced with modules from other Schools. This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): **Chemistry**	**Single Honours Chemistry (B.Sc. Honours):** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at grade 11 or better in CH2501, CH2601 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721. **Level 4:** 120 credits comprising CH4442, CH4461, 2 from (CH4511, CH4614, CH4711), 2 from (CH4513, CH4613, CH4712, CH4713), either CH4612 or CH5717, and 2 from (CH5513-5, CH5612-4, CH5616, CH5712-4, CH5718). **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.
(B.Sc. Honours): **Chemistry and Geology (previously known as Geoscience)**	**Joint Chemistry - Geology B.Sc. Honours Degree:** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 and 40 credits comprising passes in (ES1001 or GG1011) and (ES1002 or GG1012) **Level 2:** 60 credits comprising passes at grade 11 or better in CH2501 and either CH2601 or CH2701 and 60 credits comprising passes at grade 11 or better in (ES2001 or GS2011) or (ES2002 or GS2012) **Level 3:** 120 credits comprising CH3431, CH3511, CH3521, CH3717, CH3721, CH4513, and ES3001, ES3004, ES3006 and ES3009 **Level 4:** 40 credits from CH4511, CH4614, CH4711, CH4712, CH5711, CH5717, CH5515 and EITHER 50 credits from (ES4010 and CH4448) OR ID4441, 10 credits from CH5515, and up to 30 credits from ES3008, ES4007, ES4009, ES4006 or ID4001. **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership. In total (between the two Schools) 240 credits are required at Level 3 and Level 4 of which at least 90 credits must be achieved at Level 4.
(B.Sc. Honours): **Chemistry and Mathematics**	**Chemistry element of Joint Honours Degree (B.Sc. Honours):** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 60 credits comprising passes at grade 11 or better in CH2501 and CH2701 **Level 3:** 60 credits comprising 3 from (CH3431, CH3512, CH3615, CH3621, CH3717, CH3721), 30 credits from (CH3441, CH3511, CH3521, CH3712, CH3715) **Level 4:** 60 credits comprising CH4442, 1 or 2 from (CH4511, CH4614, CH4612, CH4711), 1 or 2 from (CH4513, CH4613, CH4712, CH4713) **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership. In total (between the two Schools) 240 credits are required at Level 3 and Level 4 of which at least 90 credits must be achieved at Level 4.

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): **Chemistry with Medicinal Chemistry**	**Chemistry with Medicinal Chemistry (B.Sc. Honours):** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at grade 11 or better in CH2501, CH2601, CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3612, CH3613, CH3615, CH3621, CH3716, CH3721, **Level 4:** 120 credits comprising CH4442, CH4461, CH4511, CH4614, CH4612, CH4613, CH5611, 2 from (CH5612-4 and CH5616). **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.
(B.Sc. Honours): **Chemistry with French**[W] [W] also available as 'With Integrated Year Abroad Degrees'	**Chemistry major element of B.Sc. Honours Degree with French:** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 80 credits comprising passes at grade 11 or better in CH2501, CH2603 and CH2701 **Level 3:** 90 credits comprising CH3441 and 70 credits from (CH3431, CH3511, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721) **Year Abroad** (if WIYA version taken): 60 credits comprising FR3101 **Level 4:** 90 credits comprising CH4442, and 50 credits from (CH4461, CH4511, CH4513, CH4614, CH4613, CH4711, CH4712, CH4713) **Other Information:** These courses are recognised by the Royal Society of Chemistry (RSC) for professional membership. In total (between the two Schools) 240 credits are required at Level 3 and Level 4 of which at least 90 credits must be achieved at Level 4.
(B.Sc. Honours): **Chemistry with Pharmacology**[N] [N] **Not available to entrants from 2010-11**	**Chemistry with Pharmacology (B.Sc. Honours):** **Level 1:** Chemistry Element: 40 credits comprising passes in CH1401 and CH1601 Biology Element: 40 credits including passes in (BL1101 and BL1102). **Level 2:** 120 credits comprising passes at grade 11 or better in BL2101, BL2104, CH2501 and CH2601 **Level 3:** 80 credits comprising CH3431, CH3512, CH3615, CH3621, CH3716, CH3721, 20 credits from (CH3441, CH3511, CH3612, CH3613) and 40 credits from BL3312, BL3313 **Level 4:** 50 credits comprising CH4447, CH4461, and 70 credits from CH4511-2, CH4612 - CH4614, CH4711-3, CH5611-4, CH5616 **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership. The project (CH4447) will be supervised jointly by staff from Chemistry and Biology.

Degree Programmes	Programme Requirements at:
(B.Sc. Honours): **Materials Science**	**Materials Science (B.Sc. Honours):** **Level 1:** 120 credits comprising passes in CH1401, CH1402, CH1602, PH1011, PH1012 and MT1002 **Level 2:** 120 credits comprising passes at grade 11 or better in CH2501, CH2602, CH2701 and either PH2011 or MT2001 **Level 3:** 120 credits comprising CH3441, CH3513, CH3712, CH3715, CH3717, CH3722, PH3002, PH3074 and two other 3000-level modules. **Level 4:** 120 credits comprising CH4442, CH4711, CH4712, CH4452 and a further three 10 credit 4000-level or 5000-level modules. **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership
(M.Chem. Honours): **Chemistry (M.Chem.) 5 years**	**Chemistry (M.Chem. Honours) Degree:** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at 15 or better in CH2501, CH2601 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721. **Level 4:** 120 credits comprising CH4442, CH4511, CH4513, CH4614, CH4612, CH4613, CH4711, CH4712, CH4713. **Level 5:** 120 credits comprising CH5461, CH5441, CH5511, CH5611, CH5711, 4 from (CH5513-5, CH5612-4, CH5616, CH5712-4, CH5717-8). **Other Information:** This course has been accredited by the Royal Society of Chemistry (RSC) for professional membership.
(M.Chem. Honours): **Chemistry with External Placement (M.Chem.) 5 years**	**Chemistry with External Placement (M.Chem. Honours):** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at 15 or better in CH2501, CH2601 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3615, CH3612, CH3621, CH3712, CH3717, CH3721, **Level 4:** 120 credits comprising CH4441, CH4451. **Level 5:** 120 credits comprising CH5441, CH5461, CH5511, CH5611, CH5711, 4 from (CH5513-5, CH5612-4, CH5616, CH5712-4, CH5717-8). **Other Information:** This course has been accredited by the Royal Society of Chemistry (RSC) for professional membership.

Degree Programmes	Programme Requirements at:
(M.Chem. Honours): **Chemistry with French (M. Chem.)** **5 years**	**Chemistry major element of M.Chem. Honours Degree with French (5 year degree) :** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 80 credits comprising passes at grade 15 or better in CH2501, CH2603 and CH2701 **Level 3:** 90 credits comprising CH3441 and 70 credits from (CH3431, CH3511, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721) **Level 4:** 90 credits comprising 70 credits from CH4442, CH4511, CH4614, CH4711, and 20 credits from CH4513, CH4613, CH4712, CH4713 **Level 5:** 90 credits comprising CH5441, CH5461 and 40 credits from (CH5511, CH5513-5, CH5611-4, CH5616, CH5711-4, CH5717-8). **Other Information:** This course has been accredited by the Royal Society of Chemistry (RSC) for professional membership.
(M.Chem. Honours): **Chemistry with French and External Placement (M. Chem.)** **5 years**	**Chemistry and External Placement major elements of M.Chem. Honours Degree with French (5 year degree) :** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 80 credits comprising passes at grade 15 or better in CH2501, CH2603 and CH2701 **Level 3:** 90 credits comprising CH3441 and 70 credits from (CH3431, CH3511, CH3512, CH3521, CH3612, CH3615, CH3621, CH3712, CH3717, CH3721) **Level 4:** 90 credits from CH4441 **Level 5:** 90 credits comprising CH5441, CH5461 and 40 credits from (CH5511, CH5513-5, CH5611-4, CH5616, CH5711-4, CH5717-8). **Other Information:** This course has been accredited by the Royal Society of Chemistry (RSC) for professional membership.

Degree Programmes	Programme Requirements at:
(M.Chem. Honours): **Chemistry with Mathematics (M. Chem.) 5 years**	**Chemistry with Mathematics (M.Chem. Honours) (5 year degree) :** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 60 credits comprising passes at 15 or better in CH2501and CH2701 **Level 3:** 125 credits comprising CH3441, and 60 credits from (CH3431, CH3511, CH3512, CH3521, CH3615, CH3621, CH3712, CH3715, CH3717, CH3721), two of (MT3501, MT3503, MT3504), MT3600 or MT3601 **Level 4:** 115 credits comprising CH4442, 3 of (CH4511, CH4513, CH4614, CH4612, CH4613, CH4711, CH4712, CH4713) and 3 further 3000 or 4000 level MT modules. **Level 5:** 120 credits comprising CH5441, CH5461, CH5711, CH5712, CH5713, CH5714, 3 from (CH5511, CH5513-5, CH5611-6, CH5717-8). **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.
(M.Chem. Honours) **Chemistry with Medicinal Chemistry (M.Chem.) 5 years**	**Chemistry with Medicinal Chemistry (M.Chem Honours)** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at 15 or better in CH2501, CH2601 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3612, CH3613, CH3615, CH3621, CH3716, CH3721 **Level 4:** 120 credits comprising CH4442, CH4511, CH4513, CH4614, CH4612, CH4613, CH4711, CH5612, CH5614. **Level 5:** 120 credits comprising CH5441, CH5461, CH5511, CH5513, CH5514, CH5515, CH5611, CH5613, CH5616 **Other Information:** This course has been accredited by the Royal Society of Chemistry (RSC) for professional membership.
(M.Chem. Honours): **Chemistry with Medicinal Chemistry and External Placement (M.Chem.) 5 years**	**Chemistry with Medicinal Chemistry and External Placement (M.Chem Honours):** **Level 1:** 60 credits comprising passes in CH1401, CH1402 and CH1601 **Level 2:** 90 credits comprising passes at 15 or better in CH2501, CH2601 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3521, CH3612, CH3613, CH3615, CH3621, CH3716, CH3721 **Level 4:** 120 credits comprising CH4441, CH4451. **Level 5:** 120 credits comprising CH5441, CH5461, CH5511, CH5611-6 **Other Information:** This course has been accredited by the Royal Society of Chemistry (RSC) for professional membership.

Degree Programmes	Programme Requirements at:
(M.Sci. Honours): **Chemistry and Physics (M.Sci. Honours) 5 years**	**Chemistry element of Chemistry-Physics M.Sci. Honours Degree:** **Level 1:** 40 credits comprising passes in CH1401 and CH1402 **Level 2:** 60 credits comprising passes at 15 or better in CH2501 and CH2701 **Level 3:** 120 credits comprising CH3431, CH3441, CH3511, CH3512, CH3615, CH3712, CH3717, CH3721, CH4711, CH4712, CH4713 **Level 5:** 40 credits from CH5441 or 60 credits from PH5101, at least 30 credits from CH5515, CH5711-CH5714, CH5717-8 **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.
(M.Sci. Honours): **Materials Science 5 years**	**Materials Science M.Sci. Honours Degree:** **Level 1:** 120 credits comprising passes in CH1401, CH1402, CH1601, PH1011, PH1012 and MT1002 **Level 2:** 120 credits comprising passes at grade 15 or better in CH2501, CH2602, CH2701 and either PH2011 or MT2001 **Level 3:** 120 credits comprising CH3441, CH3513, CH3712, CH3715, CH3717, CH3722, CH4711, CH4712, PH3002 and PH3074. **Level 4:** 120 credits comprising CH3511, CH4442, CH4452, CH4513, CH4713, two of (CH3512, CH3612, CH3613, CH3615, CH4511) **Level 5:** 120 credits from CH5441, CH5515, CH5711, CH5712, CH5713, CH5716 CH5717, CH5718, (PH5208 or PH5022) **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.
(M.Sci. Honours): **Materials Science with External Placement 5 years**	**Materials Science with External Placement M.Sci. Degree:** **Level 1:** 120 credits comprising passes in CH1401, CH1402, CH1601, PH1011, PH1012 and MT1002 **Level 2:** 120 credits comprising passes at grade 15 or better in CH2501, CH2602, CH2701 and either PH2011 or MT2001 **Level 3:** 120 credits comprising CH3441, CH3513, CH3712, CH3715, CH3717, CH3722, CH4711, CH4712, PH3002 and PH3074. **Level 4:** 120 credits comprising CH4441, CH4452 **Level 5:** 120 credits from CH5441, CH5515, CH5711, CH5712, CH5713, CH5716 CH5717, CH5718, (PH5208 or PH5022) **Other Information:** This course is recognised by the Royal Society of Chemistry (RSC) for professional membership.

Students still completing degree programmes as defined in previous Course Catalogues should discuss their module selections with their Honours Adviser(s).

Modules

InterDisciplinary (ID) Modules

This School contributes to the following InterDisciplinary modules – **SD1002 Sustainability: ensuring our common future (Section 22)** and **ID2003 Science Methods** and **ID2004 Science Ethics (Section 23).**

Chemistry (CH) Modules

CH1202 Introductory Chemistry

Credits: 10 Semester: 1

Anti-requisites: CH1401, CH1402, CH1601.

Description: This module provides an introduction to some of the fundamental aspects of Chemistry and is primarily aimed at students entering the Chemistry B.Sc. and M.Chem courses directly into second year. The module will cover structure and bonding in inorganic chemistry, states of matter and an introduction to thermodynamics and the solid state in physical chemistry and bonding, stereochemistry and reaction mechanisms in organic chemistry.

Class Hour: either 9.00 am or 10.00 am

Teaching: 2 lectures.

Assessment: 1.5-hour Examination = 100%

Re-Assessment: 1.5-hour Examination = 100%

CH1301 The Impact of Chemistry

Credits: 20 Semester: 1

Prerequisites: Standard Grade or GCSE Chemistry (Students with no formal qualification in chemistry may be admitted but should expect to undertake additional tutorial work and private study)

Description: This module explores the impact that Chemistry has on all our lives and all aspects of society. Starting with the chemical origins of life in the primordial soup, it will explore fuel and energy, the great challenge of global warming, forensic chemistry, chemistry and the environment, and chemistry in food production.

Class Hour: 12.00 noon

Teaching: 4 lectures and 1 group project hour.

Assessment: Continuous Assessment = 30%, 2-hour Examination = 70%

Re-Assessment: Continuous Assessment = 30%, 2-hour Examination = 70%

CH1401 Introductory Inorganic & Physical Chemistry

Credits: 20 Semester: 1

Prerequisites: Higher or A-Level Chemistry at Grade B or above

Anti-requisites: CH1202

Description: The module includes lectures on the origin of the elements, atoms and the Periodic Table, shapes and properties of molecules, chemistry of the elements, states of matter, thermochemistry, thermodynamics and kinetics.

Class Hour: 11.00 am

Teaching: 4 lectures, 1 tutorial and a 3-hour practical.

Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

CH1402 Inorganic & Physical Chemistry 1

Credits: 20 Semester: 2

Prerequisites: CH1401 or Higher or A-Level Chemistry at Grade B or above

Anti-requisites: CH1202

Description: The module includes lectures on bonding in simple molecules, inorganic solids, chemistry of the elements, properties of solids, properties of solutions and introductory spectroscopy.

Class Hour: 10.00 am

Teaching: 4 lectures, 1 tutorial and a 3-hour practical.

Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

CH1601 Organic & Biological Chemistry 1

Credits: 20 Semester: 2

Prerequisites: Higher or A-Level Chemistry at Grade B or above.

Anti-requisites: CH1202.

Description: The module includes lectures on the structure, stereochemistry and nomenclature of simple organic compounds, fundamental organic reaction mechanisms, organic functional groups and their reactions, introductory bioorganic chemistry, and organic spectroscopy.

Class Hour: 11.00 am

Teaching: 4 lectures, 1 tutorial and a 3-hour practical.

Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

CH2201 A First Course in Organic Chemistry

Credits: 20 Semester: 1

Prerequisites: Available to non-graduating students only.

Anti-requisites: CH1202, CH1601

Description: This module is an introductory course in Organic Chemistry. It covers aspects of structure, bonding and stereochemistry in Organic Chemistry. The syllabus includes the chemistry of alkanes, simple cycloalkanes, alkenes and alkynes together with functional group chemistry, largely that of singly-bonded functional groups. The chemistry is discussed and rationalised with reference to reaction mechanisms. The lecture course is complemented by a laboratory course.

Class Hour: 9.00 am

Teaching: 4 lectures, 2 seminars, 1 tutorial, 1 or 2 practical classes. In addition a total of 3 or 4 half-day visits to hospitals.

Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

Re-Assessment: Continuous Assessment = 20%, 2-hour Examination = 80%

CH2501 Inorganic Chemistry 2

Credits: 30 Semester: 1

Prerequisites: CH1402 or Advanced Higher Chemistry or A-Level Chemistry

Co-requisites: CH1202 if Direct entrant to 2000-level

Description: The module includes lectures on metal complexes and organometallics, descriptive transition-metal chemistry, atmospheric chemistry, inorganic spectroscopy, solid-state chemistry and descriptive main-group chemistry.

Class Hour: 11.00 am

Teaching: 5 lectures, 1 tutorial and 5 hours of practicals.

Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

CH2601 Organic Chemistry 2

Credits: 30 Semester: 2

Prerequisites: CH1601 (or Advanced Higher Chemistry or A-Level Chemistry + CH1202 if Direct entrant to 2000-level)

Anti-requisites: CH2602, CH2603

Description: The module includes lectures on carbon-carbon bond formation, interconversion of functional groups, aromatic and heteroaromatic reactivity, mechanistic biological chemistry, organic spectroscopy and organic polymer chemistry.

Class Hour: 12.00 noon

Teaching: 5 lectures, 1 tutorial and 5 hours of practicals.

Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

CH2602 Organic Chemistry 2 (Materials)

Credits: 30 Semester: 2

Prerequisites: CH1601 (or Advanced Higher Chemistry or A-Level Chemistry + CH1202 if Direct entrant to 2000-level)

Anti-requisites: CH2601, CH2603

Description: The module includes lectures on carbon-carbon bond formation, interconversion of functional groups, aromatic and heteroaromatic reactivity, semiconductor science, organic spectroscopy and organic polymer chemistry.

Class Hour: 12.00 noon

Teaching: 5 lectures, 1 tutorial and 5 hours of practicals.

Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

CH2603 Organic Chemistry 2 (French)

Credits: 20 Semester: 2

Prerequisites: CH1601 (or Advanced Higher Chemistry or A-Level Chemistry + CH1202 if Direct entrant to 2000-level)

Anti-requisites: CH2601, CH2602

Co-requisite: FR2022

Description: The module includes lectures on carbon-carbon bond formation, interconversion of functional groups, aromatic and heteroaromatic reactivity, mechanistic biological chemistry, organic spectroscopy and organic polymer chemistry.

Class Hour: To be arranged.

Teaching: 3 lectures, 1 tutorial and 5 hours of practicals.

Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 2-hour Examination = 60%

CH2701 Physical Chemistry 2

Credits: 30 Semester: 2

Prerequisites: CH1402 (or Advanced Higher Chemistry or A-Level Chemistry + CH1202 if Direct entrant to 2000-level)

Description: The module includes lectures on quantum mechanics, thermodynamics and electrochemistry, kinetics, molecular spectroscopy and diffraction and mathematical tools for chemistry.

Class Hour: 11.00 am

Teaching: 5 lectures, 1 tutorial and 5 hours of practicals.

Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

Re-Assessment: Continuous Assessment = 40%, 3-hour Examination = 60%

The details of the Honours modules – that is 3000-, 4000- and 5000-level modules – which relate to the programmes listed in this section, are available in the Honours Course Catalogue.