

CH120

Module Delivery The Module runs over both Semesters I and II (24 weeks overall, 12 in Semester I/12 in Semester II). The theory course is delivered in 72 lectures (normally 3 one-hour lectures per week, 36 in Semester I/36 in Semester II) and 18 tutorials (normally 1 one-hour tutorial per week, 9 in Semester I/9 in Semester II).

All lectures will be delivered online, either live or pre-recorded, according to the timetable provided. Live lectures will be also recorded. All recordings will be made available on Blackboard. Further details will be provided in due course. All tutorials will be delivered on online and recorded. Live on campus tutorials may be considered later in the semester but will be recorded for those who cannot attend live. Any such change will be outlined in lectures

As far as the practical component of the course is concerned, there are 20 hours of laboratory work split into 8 practical sessions of 2.5 hours each (1 practical per week, either 8 in Semester I or 8 in Semester II as below). Students will be notified by the College the day of practicals and allocated a bench number. A prerecorded pre-practical talk will be made available on Blackboard in advance to each practical session. Further details will be provided in due course. All practicals will be carried out on campus. Students are expected to perform their laboratory work on the assigned day (no day swapping allowed). Laboratory prerequisites:

- It is mandatory to wear a face mask (not a visor) at all times while in the laboratory. Should a student arrive at a practical without their own face mask, they will not be allowed to carry out the practical and, as such, will be given an unauthorized absence. Should a student have a certified issue which prevents them from using a face mask, they should engage with the course Coordinator to determine if a visor is appropriate or if another accommodation is required.
- Students must bring their own white laboratory coat and safety glasses (available at the SU shop). Laboratory coats and safety glasses cannot be hired or borrowed anymore: should a student arrive at a practical without their own laboratory coat and/or safety glasses, they will not be allowed to carry out the practical and, as such, will be given an unauthorized absence.
- The electronic version of the laboratory manual will be available on Blackboard. Students must bring their own printout of the laboratory manual (no hardcopy provided, mobile phones/tablets/laptops strictly prohibited).

Lab sessions

You will be assigned a lab day and you must attend on this day every week.

CH120 (Marine Science only)

Semester 1

CH120 **(other than Marine Science)** registration in Semester 2

Prerequisites For Lab:

Safety glasses, White Laboratory Coat (Students Union Shop, near An Bialann, Arts/Science Building).

First Lab Session:

CH120 (Marine Science only): will be advised in lectures

CH120 (other than Marine Science): lab sessions take place in Semester 2; details about registration, etc., will be provided at the end of Semester 1.

TurningPoint Cloud

The College of Science requires all students to use TurningPoint Cloud interactive-polling software during lectures in order to facilitate discussion and engagement. TurningPoint Cloud runs as an app on smartphones and tablets and can also run in internet browsers on laptop computers. Details on downloading the app to smartphones/tablets and on accessing TurningPoint Cloud through internet browsers will be announced during Orientation Week. The software will be provided at no cost to you.

We will make extensive use of this software during your chemistry course.

Lectures:

Three lectures per week for two semesters: will be delivered live or released as prerecord at this time. Any live lectures will be recorded and all lectures can be accessed at any time once released

- Mondays at 10.00 am
- Tuesdays at 12.00 pm
- Thursdays at 12.00 pm

Tutorials

Monday, 2.00 pm (release time),

Textbook

Textbook and Reference Material • P. Flowers, K. Theopold, R. Langley, W.R. Robinson, Chemistry 2e, OpenStax™, 2019 (downloadable for free at https://assets.openstax.org/oscms-prodcms/media/documents/Chemistry2eOP_TkF9Jl3.pdf). • First Year Chemistry Laboratory Manual (downloadable from Blackboard). • Lecture notes, slides and literature papers provided in due course on Blackboard.

You are expected to attend laboratory sessions and to submit a written report of your laboratory work each week. To gain admittance to the laboratory you must attend the pre-practical talk and have the prerequisites listed above.

Module Assessment NO FORMAL WRITTEN EXAMINATION AT THE END OF SEMESTER I The Module will be assessed over the two Semesters as follows. → Continuous Assessment (CA, worth 70% overall) • Three 45 min duration online tests on topics dealt with during lectures/tutorials to be held

during the teaching Semester I (worth 30%) • Mandatory attendance to laboratory sessions and submission of a written report on the laboratory work each week (worth 30%) • 18 weekly online homework on topics dealt with during lectures/tutorials (worth 10%) → One formal 2 h duration written examination at the end of Semester II on the theory course (worth 30%)

Continuous Assessment →

Attendance ⇒ mandatory for all laboratory sessions →

Laboratory reports ⇒ reports of the laboratory work submitted each week through Blackboard
Templates of the laboratory reports are included in the laboratory manual. Downloadable templates of the laboratory reports (as Word documents) will be available in due course in the "Lab Reports Submission" section on Blackboard. Attending the laboratory only is not enough to get credits: practicals must be completed satisfactorily and complete laboratory reports must be submitted weekly through Blackboard by the relevant deadline (see table below)

Day of the Practical	Submission deadline
Monday	the following Saturday by 5pm
Tuesday	the following Sunday by 5pm
Wednesday	the following Monday by 5pm
Thursday	the following Tuesday by 5pm
Friday	the following Wednesday by 5pm

Each report will be marked out of 10. A "zero" will be assigned for late or no submission. →

Online homework ⇒ weekly assignments to be worked out online over the two semesters A total of 18 online homework will be assigned on a weekly basis over the two semesters and will need to be completed and submitted through Blackboard by the relevant deadline (to be communicated in due course). Each homework will be marked out of 10 and will comprise of short-answer questions, numerical problems and multiple-choice questions. →

Online tests ⇒ periodic assignments to be worked out online during Semester I Three online tests of 45 min duration each will be held during Semester I and will need to be completed and submitted through Blackboard. Each test will be marked out of 10 and will comprise of short-answer questions, numerical problems and multiple-choice questions.

Further details will be provided in due course. Written Exam Past exam papers are available in the Exam Papers Archive

(https://www.mis.nuigalway.ie/regexam/paper_index_search_main_menu.asp) of the James Hardiman Library. Note that, according to the policy in place at the School of Chemistry, past repeat (i.e. 2nd sitting) exam papers are not made available, nor are multiple-choice questions-type examinations. → Final Exam at the end of Semester II The written examination of 2 h duration will be marked out of 100

Further details about the format/type of exam paper will be provided in due course. Marks of online tests, laboratory reports and online homework will be made available on Blackboard. Students will be communicated the aggregate mark for the Module once the overall examination process is complete (that is, at the end of Semester II after the final written examination has been marked). A

student will have passed if the mark in the CA component is at least 35% and the aggregate mark for the Module is at least 40% (50% for OMB). A student will be deemed incomplete if the mark in the CA component is less than 35%. Should this be the case they will not be able to progress regardless of the performance in the written examination for the Module in the 1st sitting. Consequently, the student will not be allowed to re-sit either, and must reregister for the Module the following year and re-engage in all parts of the Module again. A student will have failed the 1st sitting where the mark in the CA component is at least 35% but the aggregate mark for the Module is less than 40%. In this case, the student must repeat the written examination in the 2nd sitting with a view to improving the overall Module mark, retaining the CA mark from the 1st sitting. Should the student underperform also in the 2nd sitting (that is, by obtaining an aggregate mark for the Module lower than 40%), they will have failed the 2nd sitting and will have to reregister for the Module the following year and re-engage in all parts of the Module again. Semester II (worth 30%). Continuous assessment is made up of Laboratory work assessed each week (worth 27%) and by a final lab examination (worth 13%).

Note:

To successfully pass the Chemistry examination,

- In Science modules the combined Module mark must be at least 40%.
- In Medicine courses the combined Module mark must be at least 50%.

In addition

The mark in the Continuous Assessment component must be at least 35% (corresponding to 14 out of 40 for the CA of the overall mark module). ***As continuous assessment cannot be repeated if a student fails to meet the 14/40 barrier they cannot pass in summer or autumn and will have to repeat the year.***