1. KentVision Code and title of the module

CHEM6910 – Chemistry Research Project

## Division and School/Department or partner institution which will be responsible for management of the module

Division of Natural Sciences (Chemistry & Forensic Science)

## The level of the module (Level 4, Level 5, Level 6 or Level 7)

Level 6

## The number of credits and the ECTS value which the module represents

15 Credit (7.5 ECTS)

## Which term(s) the module is to be taught in (or other teaching pattern)

Autumn and Spring

## Prerequisite and co-requisite modules and/or any module restrictions

None

## The course(s) of study to which the module contributes

Compulsory for the following courses:

BSc (Hons) Chemistry

BSc (Hons) Chemistry with a Foundation Year

BSc (Hons) Chemistry with a Professional Placement

BSc (Hons) Chemistry with a Year Abroad

Not available as an elective module

## The intended subject specific learning outcomes. On successfully completing the module students will be able to:

8.1 Demonstrate knowledge and systematic understanding of core and foundation scientific concepts, terminology, theory, and laboratory practice and methods in relation to the conducting scientific research in the chemical sciences.

8.2 Demonstrate knowledge and systematic understanding of areas of project specific knowledge including computational chemistry, organic and inorganic synthesis and advanced characterisation methods.

8.3 Appreciate developments at the forefront of specific areas of chemical sciences.

8.4 Demonstrate knowledge and understanding of essential facts, concepts, principles and theories relating to the subject and to apply such knowledge to develop, plan, conduct and report scientific research.

8.5 Recognise and analyse problems and plan strategies for their solution by the evaluation, interpretation and synthesis of scientific information and data.

8.6 Demonstrate skills in the safe handling of chemical materials, taking into account their physical and chemical properties, including any specific hazards associated with their use and to risk assess such hazards.

## The intended generic learning outcomes. On successfully completing the module students will be able to:

9.1 Demonstrate problem-solving skills, relating to qualitative and quantitative information, extending to situations where evaluations have to be made on the basis of limited information.

9.2 Demonstrate information-retrieval skills, in relation to primary and secondary information sources, including information retrieval through on-line computer searches.

9.3 Demonstrate information-technology skills such as word-processing and spreadsheet use, data-logging and storage, Internet communication, etc.

9.4 Demonstrate time-management and organisational skills, as evidenced by the ability to plan and implement efficient and effective modes of working. Self-management and organisational skills with the capacity to support life-long learning.

9.5 Demonstrate study skills needed for continuing professional development and professional employment.

## A synopsis of the curriculum

In this module students will undertake individual research projects. You will gain skills in conducting and directing scientific research, data analysis and interpretation, problem solving and communication of results, culminating in the writing of your dissertation.

## Reading list

## The University is committed to ensuring that core reading materials are in accessible electronic format in line with the Kent Inclusive Practices.

## The most up to date reading list for each module can be found on the university's [reading list pages](https://kent.rl.talis.com/index.html).

## Contact Hours

Private Study: 90 Hours

Contact Hours: 60 Hours

Total: 150 Hours

## Assessment methods

13.1 Main assessment methods

* Progress Report (2 hours) – 10%
* Presentation (4 hours) – 20%
* Supervisor Assessment – 20%
* Dissertation (20 hours) – 50%

13.2 Reassessment methods

* Like-for-like

## Map of module learning outcomes (sections 8 & 9) to learning and teaching methods (section 12) and methods of assessment (section 13)

**Module learning outcomes against learning and teaching methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Private Study | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** | **x** |
| Practical Research | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

**Module learning outcomes against assessment methods:**

| **Module learning outcome** | 8.1 | 8.2 | 8.3 | 8.4 | 8.5 | 8.6 | 9.1 | 9.2 | 9.3 | 9.4 | 9.5 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Progress Report | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** | **x** |
| Presentation | **x** | **x** | **x** | **x** | **x** |  | **x** | **x** | **x** | **x** | **x** |
| Supervisor Assessment | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |
| Dissertation | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** | **x** |

## Inclusive module design

The Division recognises and has embedded the expectations of current equality legislation, by ensuring that the module is as accessible as possible by design. Additional alternative arrangements for students with Inclusive Learning Plans (ILPs)/declared disabilities will be made on an individual basis, in consultation with the relevant policies and support services.

The inclusive practices in the guidance (see Annex B Appendix A) have been considered in order to support all students in the following areas:

a) Accessible resources and curriculum

b) Learning, teaching and assessment methods

## Campus(es) or centre(s) where module will be delivered

Canterbury

## Internationalisation

Science is an international discipline with widely applicable international resonance. This module presents subject-specific knowledge generated, developed, and refined by scientists around the world. Mastery of the learning outcomes will equip students to apply the knowledge in a wide range of international contexts and these will be addressed in making the content relevant to current global issues. The Division of Natural Sciences is an international community of students and staff and group activities and teaching will provide a platform for internationally-focussed discussion.

**DIVISIONAL USE ONLY**

**Module record – all revisions must be recorded in the grid and full details of the change retained in the appropriate committee records.**

| Date approved | New/Major/minor revision | Start date of delivery of (revised) version | Section revised  (if applicable) | Impacts PLOs (Q6&7 cover sheet) |
| --- | --- | --- | --- | --- |
| 22 No 2022 | Minor | Sept 2023 | 5 | No |
|  |  |  |  |  |