

1. **KentVision Code and title of the module**
CHEM5710 – Biochemistry – Biomolecules and Enzymes
2. **Division and School/Department or partner institution which will be responsible for management of the module**
Division of Natural Sciences (Chemistry and Forensic Science)
3. **The level of the module (Level 4, Level 5, Level 6 or Level 7)**
Level 5
4. **The number of credits and the ECTS value which the module represents**
15 credits (7.5 ECTS)
5. **Which term(s) the module is to be taught in (or other teaching pattern)**
Autumn
6. **Prerequisite and co-requisite modules and/or any module restrictions**
None
7. **The course(s) of study to which the module contributes**
Compulsory for the following courses:
 - BSc(Hons) Chemistry
 - BSc(Hons) Chemistry with a Professional Placement
 - BSc(Hons) Chemistry with a Year Abroad
 - BSc(Hons) Chemistry with a Foundation Year
 - MChem Chemistry
 - BSc(Hons) Forensic Science
 - BSc(Hons) Forensic Science with a Professional Placement
 - BSc(Hons) Forensic Science with a Year Abroad
 - BSc(Hons) Forensic Science with a Foundation Year
 - MSci Forensic Science
 Not available as an elective module
8. **The intended subject specific learning outcomes.**
On successfully completing the module students will be able to:
 - 8.1 Demonstrate knowledge and critical understanding of non-covalent interactions;
 - 8.2 Demonstrate an understanding of some important classes of biological oligomers;
 - 8.3 Demonstrate an understanding of concepts such as drug metabolism, and pharmacokinetics and the role of medicinal chemistry in improving these parameters;
 - 8.4 Describe and critically evaluate examples of medicinal chemistry case studies.

9. The intended generic learning outcomes.

On successfully completing the module students will be able to:

- 9.1 Demonstrate a range of appropriate communication skills;
- 9.2 Demonstrate generic skills needed for students to undertake further training of a professional nature;
- 9.3 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;
- 9.4 Demonstrate the correct use of units, and modes of data presentation;
- 9.5 Demonstrate information-technology skills such as word-processing;
- 9.6 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;
- 9.7 Demonstrate study skills needed for continuing professional development and professional employment.

10. A synopsis of the curriculum

This course will introduce students to the key ideas and fundamental molecular components of biochemistry. The course will cover simple biomolecules and non-covalent interactions, building up to biological oligomers. This will lead to introductory pharmacology and pharmacokinetics, illustrated with medicinal chemistry case studies.

11. 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](#).

12. Contact Hours

Private Study: 124

Contact Hours: 26

Total: 150

13. Assessment methods

13.1 Main assessment methods

- Online Quiz 1 (1 hour) – 5%
- Online Quiz 2 (1 hour) – 5%
- Assessed Worksheet 1 (4 hours) – 15%
- Assessed Worksheet 2 (4 hours) – 15%
- Examination (2 hours) – 60%

13.2 Reassessment methods

- 100% Examination

14. **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	9 1	9 2	9 3	9 4	9 5	9 6	9 7
Private Study	X	X	X	X		X		X	X	X	X
Workshop	X	X	X	X	X	X	X	X	X	X	X
Lectures	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	9 1	9 2	9 3	9 4	9 5	9 6	9 7
Online Quizzes	X	X	X	X	X	X	X	X	X	X	X
Assessed Worksheet	X	X	X	X	X	X	X	X	X	X	X
Examination	X	X	X	X		X	X	X	X	X	X

15. **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:

- Accessible resources and curriculum
- Learning, teaching and assessment methods

16. **Campus(es) or centre(s) where module will be delivered**

Canterbury

17. **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)
9 Dec 2021	Minor	Sept 2022	13-14	No