CH408-15 Advanced Medicinal Chemistry

26/27

Department
Chemistry
Level
Undergraduate Level 4
Module leader
Manuela Tosin
Credit value
15
Module duration
5 weeks
Assessment
20% coursework, 80% exam
Study location
University of Warwick main campus, Coventry

Description

Introductory description

The module is designed to develop student's awareness of current problems and directions at the forefront of medicinal chemistry.

Module web page

Module aims

They will critically evaluate selected current research in medicinal chemistry. The module is designed to encourage students to be original in the application of their knowledge to the solution of research-based problems.

Outline syllabus

This is an indicative module outline only to give an indication of the sort of topics that may be covered. Actual sessions held may differ.

Introduction on modern medicinal chemistry, including different therapeutic modalities; antibiotics;

drugs that target the nervous system; cholesterol-lowering drugs/ approaches; antivirals; anti-inflammatory agents; anticancer therapeutics; anti-obesity/weight reducing therapeutics; cyclic peptide therapeutics; PROTACS, antibodies, antibody-drug conjugates.

Learning outcomes

By the end of the module, students should be able to:

- Demonstrate awareness and understanding of current research in the areas of medicinal chemistry outlined above.
- Critically evaluate recent research work in any of the fields of study described above, in light of their knowledge of organic, mechanistic and medicinal chemistry.
- Clearly and concisely communicate the results of their evaluation both verbally and in writing. Respond to verbal questions concerning the results of their evaluation.
- Apply their knowledge of organic, mechanistic and medicinal chemistry to solve original problems from the areas of study.
- Use appropriate information technology tools to prepare presentation aids.

Indicative reading list

Reading lists can be found in Talis

Specific reading list for the module

Interdisciplinary

e.g. co taught with another department or with an industry perspective, bridges two or more disciplinary concepts, ideas, etc.)

Subject specific skills

Problem solving
Critical thinking

Transferable skills

Problem solving
Critical thinking

Study

Study time

Type	Required
Lectures	14 sessions of 1 hour (9%)
Practical classes	6 sessions of 1 hour (4%)
Private study	130 hours (87%)
Total	150 hours

Private study description

Self study and revision

Costs

No further costs have been identified for this module.

Assessment

You do not need to pass all assessment components to pass the module.

Students can register for this module without taking any assessment.

Assessment group D5

	Weighting	Study time	Eligible for self-certification
Assessment component			
Presentation	20%		No
Presentation on chosen literature article from list provided.			
Reassessment component is the same			
Assessment component			
Written examination	80%		No

- Graph paper
- Answerbook Pink (12 page)
- Students may use a calculator

Reassessment component is the same

Feedback on assessment

Feedback comments and grade on assessed work (oral presentation) provided on copy of marksheet. Cohort level examination feedback provided via Moodle.

Past exam papers for CH408

Availability

Courses

This module is Core for:

- Year 4 of UCHA-F110 Undergraduate Master of Chemistry (with Industrial Placement)
- Year 4 of UCHA-F109 Undergraduate Master of Chemistry (with International Placement)
- Year 4 of UCHA-4M Undergraduate Master of Chemistry Variants

This module is Optional for:

- Year 4 of UCHA-F110 Undergraduate Master of Chemistry (with Industrial Placement)
- Year 4 of UCHA-F109 Undergraduate Master of Chemistry (with International Placement)
- Year 4 of UCHA-4M Undergraduate Master of Chemistry Variants