Organic Chemistry I for visiting students CHEM2007 20 credits

(Semester 1)

Course Description

This course covers topics in theoretical and practical aspects of organic synthesis similar to first semester organic chemistry courses taught in the US.

Course Aims

To introduce synthetic strategy with particular emphasis on functional group chemistry and stereochemistry of reactions; to illustrate the course with the synthesis of chemicals used in every day life such as pharmaceuticals, perfumes, and flavourings and to provide a general introduction to synthetic organic chemistry.

Intended Learning Outcomes of the Course

By the end of this course students will be able to:

- predict reactivity a range functional groups in organic chemistry
- Identify stereoisomers and predict conformations of organic structures
- plan synthetic routes to simple organic compounds particularly involving aromatic chemistry
- draw mechanisms for organic reactions
- perform practical synthetic chemistry and interpret spectra

Teaching Methods

39 Lectures at 10 and 11 a.m. on selected days – see timetable

Organic Chemistry	Dr A Jamieson	
	& Dr D Thomson	18 Lectures
Introduction to spectroscopy	Prof Peter Skabara	
	& Dr Neil Findlay	7 Lectures
Isomerism and Stereochemistry	Dr Andy Sutherland	7 Lectures
Aromatic Chemistry	Dr L Soler	7 Lectures

Alternative tutorial times to be arranged depending on other classes.

Synthesis laboratory total of 9 x 3 hour sessions 2-5 on days to be arranged in Lab A4-31 (Connolly Lab).

Interactive Teaching Unit (ITU1) 3 hours in week 6 2-5 p.m.

Assessment

10% Laboratory assessment

10% Class test (Organic Chemistry)

5% ITU assessment

75% Final examination (in examination period, weeks 12/13) (Organic Chemistry, Introduction to spectroscopy, Isomerism and Stereochemistry and Aromatic Chemistry)

ABSENCE FROM CLASSES

SIGNIFICANT ABSENCE FROM CLASSES

Significant absence is defined as absence of more than seven consecutive days or one which prevents a student from attending an examination or fulfilling any other requirement for the award of credit, such as attendance at a compulsory tutorial, laboratory class or deadline for handing in an assignment

Students must complete a MyCampus absence report for any significant absence and are recommended to complete an absence report for any absence for which they would like the University to take account.

Documentary evidence is required for any significant absence. MyCampus has the facility for documentary evidence to be scanned in by the student to their record. It is the responsibility of the student to keep all additional documentation and submit it to the Head of School or nominee on request. **Scanning facilities are available on Level 3 of the University Library.**

Further details are available at the following link:

https://www.gla.ac.uk/myglasgow/senateoffice/policies/studentsupport/absencepolicy/

PLAGIARISM

Plagiarism is defined as the submission or presentation of work, in any form, which is not one's own, without acknowledgement of the sources. The University's degrees and other academic awards are given in recognition of the candidate's personal achievement. Plagiarism is therefore considered as an act of academic fraudulence and as an offence against University discipline.

Allegations of plagiarism will be treated very seriously and referred to the Head of School. A full statement of the University of Glasgow procedure for dealing with cases of suspected plagiarism can be found in the General Section (page Gen. 31) of the

University Calendar

https://www.gla.ac.uk/myglasgow/senateoffice/studentcodes/staff/plagiarism/plagiarismst atement/

The University reserves the right to use plagiarism detection systems, which may be externally based, in the interests of improving academic standards when assessing student work. This regulation applies to all work submitted for assessment, including lab reports, class tests, and research projects unless you have specifically been told otherwise, for example, in the case of a group project or when a number of students share experimental data. Special cases of plagiarism can arise from one student copying another student's work or from inappropriate collaboration.

Joseph Black Building access hours

Undergraduate access to the Joseph Black Building is permitted 0830-1730. Unsupervised undergraduate access is prohibited out with these hours on working days and completely prohibited at weekends and on public holidays.

Use of Electronic Calculators in Examinations

The use of *programmable* calculators is not allowed in examinations. (Please refer to the University Fees and General Information for Students section 20 of the University Calendar,

(http://www.gla.ac.uk/services/learningteaching/aftoolkit/studentinfo/exams/)

RECORDING OF LECTURES

Please note that lecture recordings and ALL course materials provided are for your own personal use and can only be used in relation to your studies. Any unauthorised distribution of course materials, including uploading them onto unauthorised web sites and social media sites, such as YouTube or Course Hero, will be considered in breach of the code of conduct and will be subject to disciplinary action. Please see link below. http://www.gla.ac.uk/services/senateoffice/policies/regulationsandguidelines/

FEEDBACK AND ASSESSMENT

Throughout the course you will be given feedback though marks in tests, lab reports and tutorials together with verbal feedback in laboratories. This will enable you to see how you are doing in organic chemistry and enable you to seek help when necessary. This School gives marks in percentages and uses the following table to convert percentage marks to grades (other Schools use different conversion tables). The University code of assessment is given in the General Section (page Gen. 7) of the University Calendar

https://www.gla.ac.uk/myglasgow/senateoffice/policies/assessment/codeofassessment/

% mark	Grade	Grade Points
81.7	A1	22
78.4	A2	21
75.0	A3	20
71.7	A4	19
68.4	A5	18
65.0	B1	17
61.7	B2	16
58.4	B3	15
55.0	C1	14
51.7	C2	13
48.4	C1 C2 C3 D1	12
45.0	D1	11
41.7	D2	10
38.4	D3	9
35.0	E1	8
31.7	E2	7
28.4	E3	6
25.0	F1	5
21.7	F2	4
18.4	F3	3
15.0	G1	2
11.7	G2	1
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OFFICE NUMBERS FOR LECTURERS

<u>Room</u>		
A2-20	Dr Frances Docherty	Lab head
A4-36	Dr Linnea Soler	
A4-35	Dr Beth Paschke	Class Head
C5-07	Dr Andy Sutherland	
C5-03	Dr Andrew Jamieson	
A3-15	Dr Drew Thomson	
C4-13	Prof Peter Skabara & Dr Neil Fin	dlay

RECOMMENDED TEXTBOOKS

"Organic Chemistry" by J. Clayden, N. Greeves and S. Warren, 2nd edition, Oxford University Press, 2012