Summer School in Organic Chemistry 2019

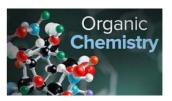
- Academic Induction Session -



Fáilte - Welcome

Outline

- Introducing the School of Chemistry at UCD
- Structure of the Summer School
 - Classes, workshops and tutorials
 - Laboratory component
- Assessment plan
- Extracurricular activities
- Key contacts for inquiries or feedback





Introducing the School of Chemistry at UCD

- UCD is home to one of the most recognised Schools of Chemistry in Ireland
- Excellence in research (24 research groups) and teaching (undergraduate and postgraduate level)





- We are based in the O'Brien Centre for Science (South)
- Modern lecture halls and state-of-the-art lab facilities

Introducing the School of Chemistry at UCD

Key locations in Chemistry (3rd Floor of Science Centre South):



Glass wall area:

- For independent study and spare time
- Have a coffee etc.



Outside lecture room (\$3.56)

- Seating area with water fountain
- Restrooms nearby



Inside 3rd floor lab (\$3.50):

- Pre-practical talks and labs will be here
- Lockers available

Structure of the Summer School

Who is involved – the team:



Assist. Prof. Marina Rubini



Assoc. Prof. Mike Casey



Assoc. Prof. Paul Evans



Declan Galvin



Dr Ray Smith



Assist. Prof. Marcus Baumann



Assist. Prof. Eoghan McGarrigle



Prof. Declan Gilheany



Dairine Morgan

Structure of the Summer School

	Monday	Tuesday	Wednesday	Thursday	Friday	
09:00	Lecture (S1.67)	Lecture (S3.56)	Lecture (S3.56)	Lecture (S1.67)*	Independent study	
10:00	Lecture (S1.67)	Lecture (S3.56)	Lecture (S3.56)	Lecture (S1.67)*	Staff tutorial/Exam (S3.56)	
11:00	Independent study	Workshop (S3.56)	Independent study	Independent study	Weekly test/exam (S3.56)	
12:00	LUNCH (Pi)	LUNCH (Pi)	LUNCH (Pi)	LUNCH (Pi)	LUNCH (Pi)	
13:00	Independent study	Independent study	Independent study	Independent study		
14:00	Lab (S3.50)	Lab (S3.50)	Lab (S3.50)	Tuta vial (64, 67)*		
15:00	Lab	Lab	Lab	Tutorial (S1.67)*	Excursions, spare time etc.	
16:00	Lab	Lab	Lab			
17:00	Independent study	Independent study	Independent study	Independent study		
18:00	Spare time & study					

^{*}Except for Thu 27th June, when lectures and tutorial are in H2.12 (Science Centre Hub building)

Lectures are Monday to Thursday (9 am to 11 am)

- Three academic staff (faculty) per module; style of lecturing will vary
- Notes (sometimes incomplete) will be posted to a shared folder in advance and printed copy will be distributed. Bring to lectures.
- Details of printing services in UCD (payment using UCard): http://www.ucd.ie/copi-print/students.html
- The recommended text is *Organic Chemistry* by John McMurry (9th ed), but earlier editions, available in the library, are fine, as are other texts with this title. Textbooks sometimes disagree, the lecture notes are the definitive source.
- A free online textbook that matches the organisation of McMurry is available at https://chem.libretexts.org/Bookshelves/Organic Chemistry/Map%3A Organic Chemistry (McMurry)

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15:00	Lab	Lab	Lab	Tutoriai (31.67)		
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Workshops and **tutorials** (aka discussion/recitation sessions) are vital to learn and understand the lecture material and apply that knowledge to problem solving

- Problem sets will be distributed in first lecture each week
- Submit your solutions during the first lecture on Thu mornings
- Solutions will be graded and returned, with feedback, in Thu afternoon tutorials taken by postgraduate tutor (Declan or Dairine)
- Homework sets are low stakes to encourage engagement, i.e. they are assessment <u>for</u> learning. The questions will be similar in style and content to the exam questions (short answer, not MCQ)
- Use your spare time for **independent study** and **home work**.
- · We encourage you to collaborate in learning, but do not plagiarise homework answers
- Friday morning: 1 h tutorial with the current lecturer, followed by 1 h test
- Friday morning: 2 h exam in weeks 4 (final for OChem1) and 8 (final for OChem2)

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Lab classes:

- There will be 2 or 3 labs each week (Mon, Tue, Wed, in S3.50)
- Sessions begin with a pre-practical talk, in the lab. This will focus on safety and attendance is mandatory
- Please prepare for each by reading through your lab manual in advance
- · Lab coats, safety goggles, etc. will be provided
- · Labs will be assessed with focus on final lab each week
- Week 8 will feature a mini-research project (details to follow)
- · Always adhere to safety procedures and following guidance by demonstrators

Structure of the Summer School

Assessment:	Final exam for module 1 and 2 (Friday July 19th and August 16th)	40%
	Laboratory (four assessments per course) (i) Safety, proficiency and efficiency in carrying out the expt (ii) Clean-up and safe disposal of waste. (iii) Quality and yield of product. (iv) Quality of report.	30% (50%) (10%) (15%) (25%)
	Tutorials (four assessments per course) Friday tests (three tests per course: weeks 1, 2, 3 and 5, 6, 7)	5% 25%

Study strategies: You will need to learn and remember quite a lot of "facts" as well as concepts; strive for understanding, don't use memorisation as a substitute for understanding

- Test yourself using exercises & homework problems
- Form study groups and keep up with material on a daily basis
- Research on "condensed" courses like this shows that outcomes are very similar to standard courses

Examinations: No MCQ exams, all short answer, will require understanding as well as recall

- Weekly tests (one hour, weeks 1, 2, 3 and 5, 6, 7) will be mainly, but not exclusively, based on the material taught in that week
- Final exams (two hours, weeks 4 & 8) will be based on all the material taught in the four-week course
- Your UC School will generate and award your final mark/grade.

This is going to be very intense, you need to <u>attend every session</u> if possible.

If you are unwell and cannot attend class, inform us and/or the assistants, and get a medical certificate. We will readjust the assessment scheme, or arrange alternative assessments, as appropriate.

Extracurricular Activities

- Several options available on/off-campus
- Organised and coordinated by Program Guides (Physics)
- Friday afternoon and weekends set aside



Cliffs of Moher, Clare



Ha'penny bridge, Dublin

- Please stay safe and inform us and/or your friends what you are planning
- Take appropriate clothing with you
- Enjoy your time in Ireland and take in as much as of this great place as possible!



Temple Bar area, Dublin

Key Contacts for Inquiries and Feedback

Class material (lectures and labs)

Academic staff members and tutor/demonstrator

All inquiries about summer school

Marcus Baumann (<u>marcus.baumann@ucd.ie</u>)
Mike Casey (<u>mike.casey@ucd.ie</u>)

General inquiries, lost & found

Deirdre Murphy and Susan Wilson (School Office, S1.10, 1st floor of South)

Specific inquiries and feedback

Programme assistants (Physics) and our team (Chemistry)

- Enjoy your time at UC Dublin and in Ireland!
- Learn everything about Organic Chemistry that is relevant for your degree.
- Please inform us about any concerns, we appreciate your feedback on this Summer School Programme.
- Have a great and successful summer at UC Dublin!



Ha'penny bridge, Dublin



Library, Trinity College Dublin



The Brazen Head, Dublin's oldest pub (estd. 1198)