

Chemistry year 1 weeks 1 and 2 tutorial outlines

The following tutorials outlines for weeks 1 and 2 (2020/21) were kindly shared by Chris Adams (Lecturer, School of Chemistry). The first session is aimed at creating connections between the tutor and the tutees, checking they have engaged with some key information and done the *Digitally Ready* course. The second session directs tutees to a video that explores how learning and studying work at university and then follows with a quiz on the content of the video. This approach encourages students to think about how they learn, what their strategies for learning are, and should be, and aims to empower them with approaches that will enable them to engage effectively with their subject.




Week 1

Welcome!

Your first tutorial is an opportunity to meet your tutor.

Before the tutorial: Map out the activities you have this week, both synchronous and asynchronous, across all your courses. Allocate some time to each one, and write a plan for how you're going to schedule your work this week. Bring it to your tutorial with you.

After the tutorial, work through the 'Making notes' resource. There's a little checklist that you can use to tick off the work as you go through.

-  Making notes
-  Week 1 checklist
-  Instructions for tutors

Hidden from students

Staff instructions – Week 1 tutorial.

This session is simply an opportunity to meet your new tutees. Introduce yourself, and introduce them to each other. Please email them beforehand and introduce yourself.

Find out how they're settling in, how they're finding Bristol, whether they have any questions. They're likely to have lots of concerns about being here given the COVID-19 situation. Please email your tutees beforehand (if you haven't done so already), if only to introduce yourself prior to the first tutorial.

Ask them about their choice of chemistry as a degree and to ask what their aims and aspirations are at this early stage of their academic career. Look on MAF to see if they are BSc or MSci students, go through the differences in the courses, the possibilities of transferring (get them to email the Chem Ug Office Mailbox (chem-ug-office@bristol.ac.uk)) and the progression rules where applicable. If your tutees ask about changing their optional unit, the answer at this stage would have to be no due to timetabling issues. If any are considering changing course entirely (hopefully not) the Faculty deadline for this is Tuesday 13 October.

It would be useful if you asked your tutees where they are living (North, West or East Residential Village or are they in private accommodation?) and if they have settled in. If tutees are having problems (homesickness or problems with flatmates) and would like to talk to someone about wellbeing concerns they should contact the Residential Life wellbeing advisers (wellbeing-access@bristol.ac.uk, 0117 456 9860).

Ask tutees about any societies they have joined (or are considering joining) and interests they have outside of their academic studies.

Normally at this point we would take them on a brief tour of the department - the lecture theatres, teaching labs, library, porters, toilets, etc. Whether you think this is useful/possible/sensible I leave up to you.

Your students should have undertaken the 'Digitally ready' course last week, which introduces the DLM and online learning. Please ask them if they have done it, and if not then tell them to do so asap. They were asked to map out their activities for this week and bring them to the tutorial, so you could look at those and check that they've done them. Time management is going to be critical with blended learning, so we're trying to get them into good habits early on. They'll probably have questions about learning online, so it might be useful if you have a computer you could take to show them the DLM and MAF. If students have any timetabling issues direct them to the Chem Ug Office (chem-ug-office@bristol.ac.uk).

They have work to do after the tutorial about taking lecture notes, and there is also some preparation that they need to do for next week. It's all on the DLM page at <https://dlm.chm.bris.ac.uk/dlm2020-21/course/view.php?id=663>.

Please remember to record tutorial attendance in MAF afterwards.


Week 2


Studying at University

Before you come to the tutorial, have a look at the piece called 'What can we advise chemistry students about studying?', available from <https://blogs.ed.ac.uk/chemdot/2019/01/22/what-can-we-advise-chemistry-students-about-studying/>. Then, write about 300 words summarising what you think are the most important ideas in it, and bring your work to the tutorial with you.


After the tutorial, you have three tasks which span the next couple of weeks, and which you'll need for next time:

- Continue to work on your note-taking skills.
- Try and keep a log of how much work you're doing. Write down when you're studying and how long for, and what it is you're doing.
- Find your CV. You can use a CV that you already have, but if you need any advice on how to write one (or if you don't have one) you can use the [Careers Service CV Builder tool](#).

 Week 2 checklist

 Week 2 tutorial instructions for tutors

Hidden from students

 Week 2 tutorial question slides

Hidden from students

Week 2 tutorial instructions

This week continues the study skills theme. The students have been asked to read the piece called "What can we advise chemistry students about studying?" at <https://blogs.ed.ac.uk/chemdot/2019/01/22/what-can-we-advise-chemistry-students-about-studying/> and should have written a short 300 word piece summarising it. You do not have to look at or mark this – it is for them - but you might look at the article.

At the start of the tutorial, please ask the students the questions in appendix 1 (it might be easiest to print them off and do it on paper). They should answer them individually, and are not allowed to

confer or to consult their essay. Then, collect the answers in, and do the questions again, but this time they work as a group and are allowed to confer.

Then mark the tests. What you will probably find is that the group score is much better than the individual scores.

The answers are:

1: 2 - Constructivism

2: 1 - What the learner already knows

3: 1 – Relationships between new information and what they already know

4: 1 – Undertaking activities that require the use and testing of knowledge

5: 1 – An activity that students do in addition to required activities on their course

6: 3 – Deep – surface

7: 3 – The best study occurs in groups

8: 1 – Sense check new content

9: 2 – Watching portions to try and understand difficult topics

10: 3

Then, ask them what the activity is designed to illustrate. There are three main aims:

1) They have read and thought about the article, which contains lots of really valuable ideas about how to study for them to put into practice.

2) In writing about it, they've actually practised one of those ideas: they've actively processed the material

3) In working together and discussing the questions they've done another: confirmed their understanding

Their homework is now to put into practice another one of the ideas, by keeping a log of their studying.

There will probably be some time left after the activity. Please use this to check how your students are settling in. The next tutorial is a 1-1 session in two weeks time; next week they have a workshop instead, so you should alert them to this.

Please do not forget to record attendances and absences on MAF.

Appendix 1 – test questions

1. What is the name of the educational framework that describes the process of learning and understanding?

1. Transmissionism

2. Constructivism

3. Cognitivism

4. Foundation-based learning

2. According to David Ausubel, what is the most important single factor influencing learning?

1. What the learner already knows

2. Whether the student is intrinsically or extrinsically motivated

3. Inspirational teaching

4. The study habits of the student

3. In generative learning theory, what do learners generate?

1. Relationships between new information and what they already know

2. A comprehensive set of notes

3. A dialogue between the student and the instructor

4. New knowledge

4. What is the best way of creating understanding?

1. Undertaking activities that require the use and testing of knowledge

2. Generating a perfect set of lecture notes

3. Filling in gaps in knowledge by studying textbooks

4. Studying past exam questions

5. How did Scott Lewis define study?

1. An activity that students do in addition to required activities on their course

2. The work set by the teachers on a course

3. The devotion of time and attention to gaining knowledge of an academic subject

4. Learning about a subject by reading books

6. Which of these pairs is a way of categorising study approaches?

1. Deep - Shallow

2. Complex - Simple

3. Deep - Surface

4. Intrinsically motivated - Externally motivated

7. Which of these is not one of Seery's pieces of advice?

1. Define study periods in your schedule

2. Focus on quality of study, not quantity

3. The best study occurs in groups

4. Use past exam questions to check understanding of a topic

8. What does Seery recommend you should do during your first study session?

1. Sense check new content
2. Fill in any gaps in your notes
3. Make links to previous content
4. Use lecture recordings to reaffirm understanding

9. What's the best use of lecture recordings?

1. Catching up on lectures you missed
2. Watching portions to try and understand difficult topics
3. To try and fill in gaps in notes
4. To avoid getting out of bed

10. At which level of Sinapuelas and Stacy's framework is a student seeking confirmation that their understanding is correct?