


Switching from Face-to-Face to Online Teaching

Case Study from UCL Chemistry

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Restructuring modules for online learning at UCL Chemistry

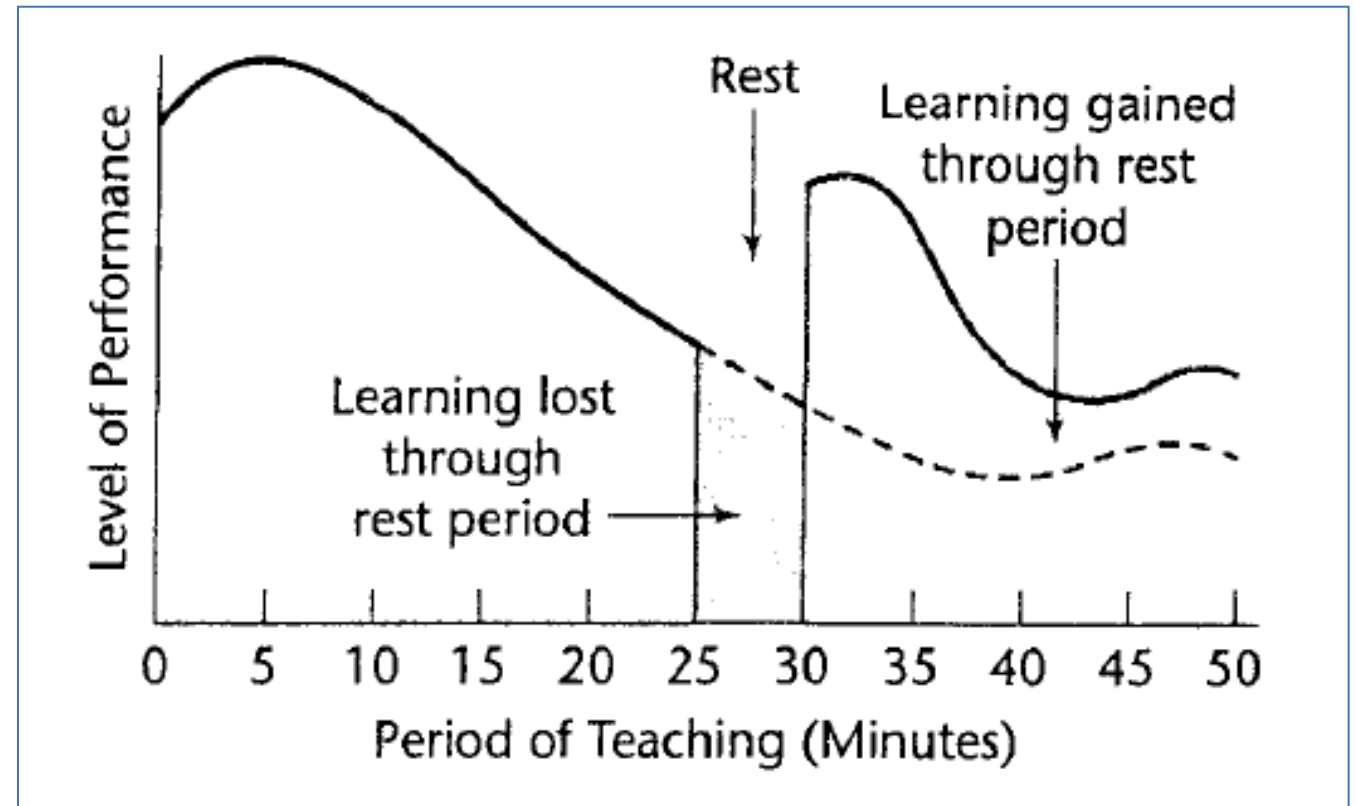
With the current pandemic and restrictions on room capacity, all lectures have been moved online for 2020/21.

Advice we have been given:

- Redesign Moodle pages to take a distance learning approach.
- Break down 50-minute lectures into bite-sized chunks.
- Use completion tracking to facilitate engagement monitoring.

How long should online lectures be?

- Bligh (2000) discussed the importance of rest periods during lectures.
- At UCL, we are being advised that:
 - Lecture videos should be 5–15 min long. No longer.
 - Should be broken up with activities to increase student engagement
 - Keep evaluation frequent.



CHEM0027 Chemical Literature

A third-year module where students complete a literature review.

Pre-COVID

- Students were given periodic lectures/Q&A sessions throughout the module to keep them on track.

Mid-COVID

- The Moodle page needs to be structured as a timeline with clear activities and guidance on navigation and expectations (UCL Connected Learning Essentials Course; Seery 2012).

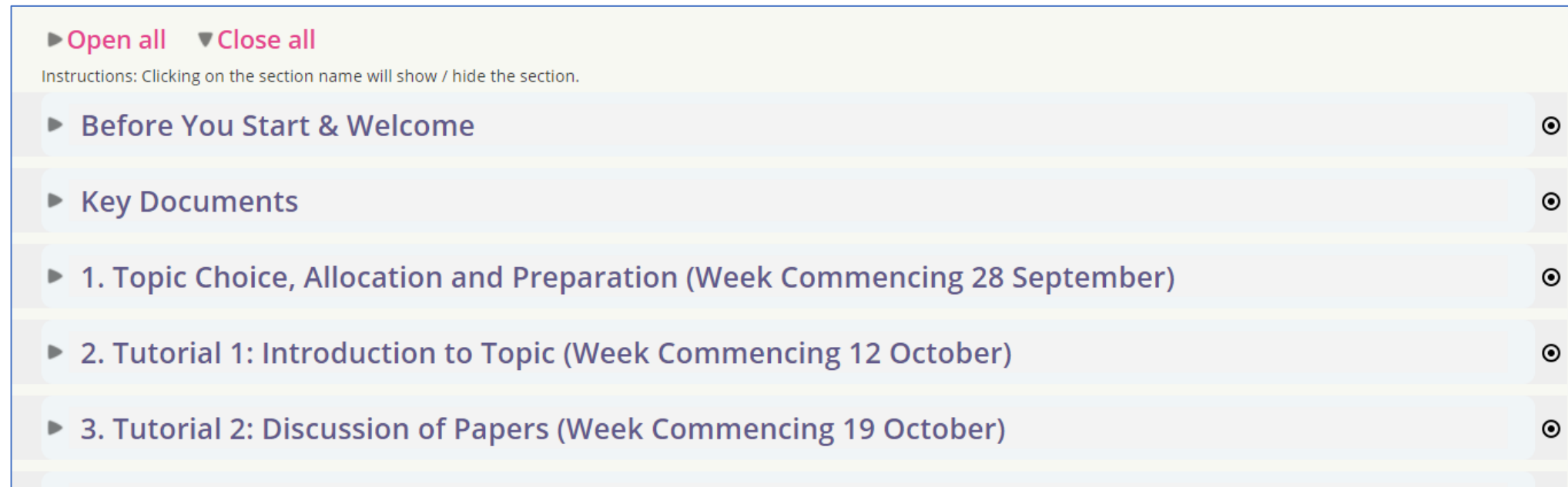
From “Tabs” to “Timeline”








General Information Topic Allocation Preparatory Work Lecture & Workshop Material Seminars Reports Posters Search Tools

Scientific Publishers **File Submissions** **End of Year Party**

CHEM0027: Chemical Literature
Module Organiser: Dr Stephen Potts



► **Open all** ▼ **Close all**
Instructions: Clicking on the section name will show / hide the section.

- **Before You Start & Welcome** 
- **Key Documents** 
- **1. Topic Choice, Allocation and Preparation (Week Commencing 28 September)** 
- **2. Tutorial 1: Introduction to Topic (Week Commencing 12 October)** 
- **3. Tutorial 2: Discussion of Papers (Week Commencing 19 October)** 







Making the Navigation Clear – Synchronous & Asynchronous

- Numbering key items.
- Completion tracking.
- Giving expected time spent.

▼ Before You Start & Welcome

Introduction to the Module

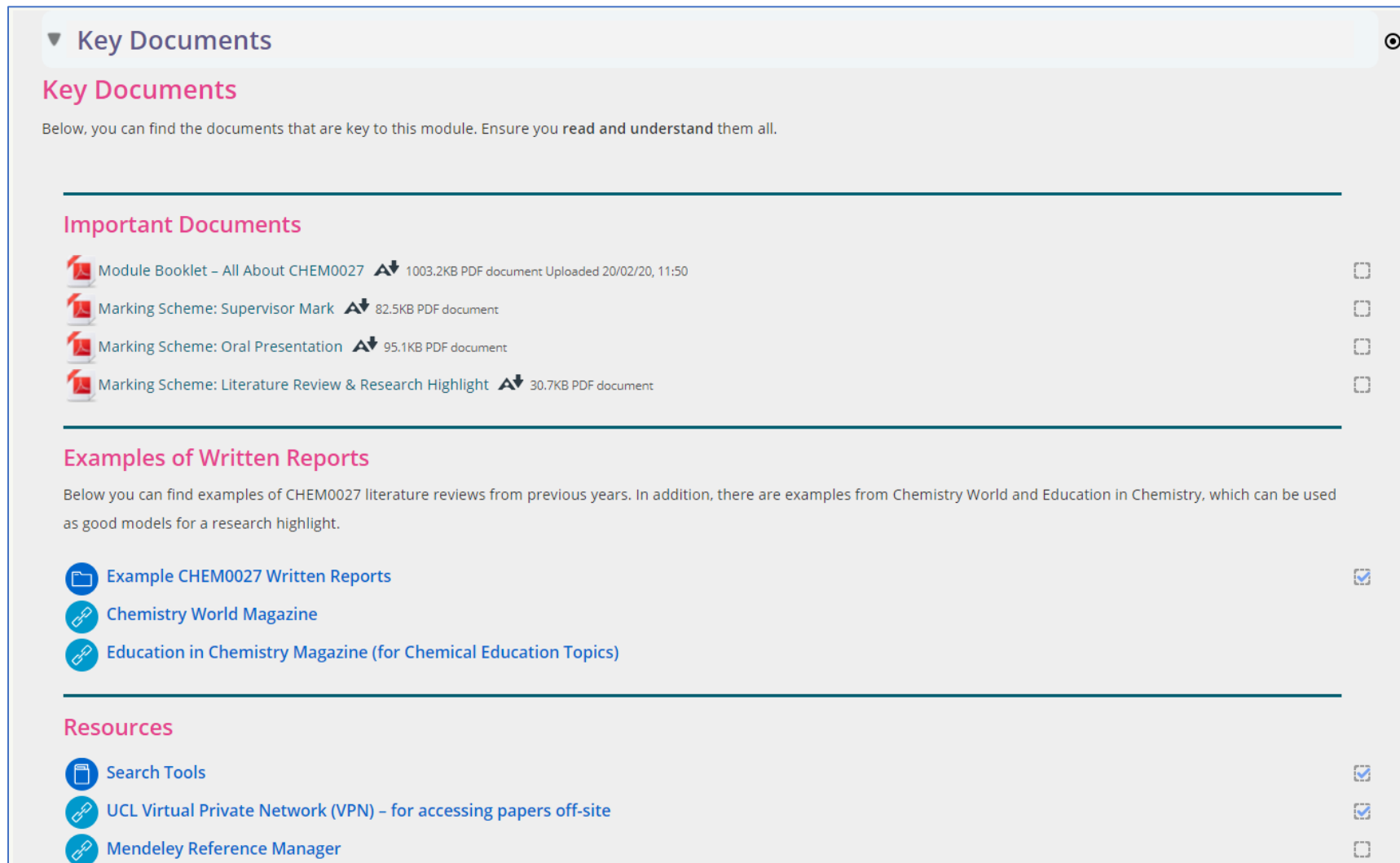
Below, you can find the induction material and an explanation of how this module works.

- | | | |
|---|---|-------------------------------------|
|  | 0.1. Video: Welcome & Introduction [10 min] | <input type="checkbox"/> |
|  | 0.1.1. Introduction Slides [5 min]  1.2MB Powerpoint 2007 presentation | <input type="checkbox"/> |
|  | 0.2. Intended Learning Outcomes [1 min] | <input checked="" type="checkbox"/> |
|  | 0.3. Navigating This Moodle Page [2 min] | <input checked="" type="checkbox"/> |
|  | 0.4. Live Session: Welcome Q&A [30 min] | <input type="checkbox"/> |

Thursday, 1 October 10:00 AM - 10:30 AM

Making the Navigation Clear – Resources Area

- Recommend placing this early so students always know where to find resources.
- Keep “clutter” to a minimum – key information is within the resources.











▼ Key Documents

Key Documents




Below, you can find the documents that are key to this module. Ensure you read and understand them all.

Important Documents




-  Module Booklet – All About CHEM0027  1003.2KB PDF document Uploaded 20/02/20, 11:50
-  Marking Scheme: Supervisor Mark  82.5KB PDF document
-  Marking Scheme: Oral Presentation  95.1KB PDF document
-  Marking Scheme: Literature Review & Research Highlight  30.7KB PDF document

Examples of Written Reports

Below you can find examples of CHEM0027 literature reviews from previous years. In addition, there are examples from Chemistry World and Education in Chemistry, which can be used as good models for a research highlight.

-  Example CHEM0027 Written Reports
-  Chemistry World Magazine
-  Education in Chemistry Magazine (for Chemical Education Topics)

Resources

-  Search Tools
-  UCL Virtual Private Network (VPN) – for accessing papers off-site
-  Mendeley Reference Manager






Making the Navigation Clear – Asynchronous Activities

▼ 1. Topic Choice, Allocation and Preparation (Week Commencing 28 September)

Make Your Choice and Prepare






Topic Choice & Allocation

Topic choices, allocations and code-names (for anonymous marking) will be posted here. If you require more information about a specific topic, please email the member of staff directly.

-  1.1. List of Research Topics 2020/21 [2 min]  106.2KB PDF document
 -  1.2. Submit Your Topic Choices – Deadline 4 pm, Monday 5 October [5–10 min]
 -  1.3. Tutorial Group Allocations and Codes [1 min]  141.5KB PDF document
-


Preparatory Work

The activities below must be completed **before** your first tutorial. You should obtain your completion certificate before you attend. In order to obtain your certificate, you need to have completed tasks below **AND** looked at the **module booklet**.

-  1.4. Reading: Blog on "How to Write a Good Scientific Literature Review" [2 min]
-  1.5. Reading: Section 4 (p 11) in the RSC's Key Transferable Skills for Scientists Booklet [5–10 min]
-  1.6. Lesson: Preparation for a Literature Review – What We Expect [15 min]
-  1.7. Quiz: Chemical Literature [10 min]
-  1.8. Get Your Completion Certificate [1 min]




Restricted Not available unless:

Making the Navigation Clear – Year 1 Chemical Skills

 1.1. Intended Learning Outcomes: Risk Assessments, Lab Notebooks & Reports [1 min]

Risk Assessments

 1.2. Video: Risk Assessments [15 min]

-  1.2.1. Slides from Risk Assessment Video  660.8KB PDF document
-  1.2.2. Blank Risk Assessment Form  29.1KB Word 2007 document

 1.3. Chemical Industry Disasters [5 min]

 1.4. Forum: Hazard Identification [15–20 min]


 1.5. Lab Safety Quiz [10 min]

Lab Notebooks and Reports

 1.6. How Observant Are You? [1 min]

 1.7. Check to See How Observant You Were [5 min]

 1.8. Video: Keeping a Lab Notebook [15 min]

 1.9. Exercise: Theoretical and Percentage Yields [10 min]

In breakout rooms, discuss the following:

- Have you run a distance-learning or online-only module?
 - What worked well?
 - What would you change?
- What are you doing this year?
 - What types of activity are you using?
 - What activities would you recommend as a “quick win”?
 - How would you make sure students are engaged?
 - Any general tips?

Please fill out the [Microsoft Form](#) for the summary session.