



Chemistry of Molecular Systems Group Poster Presentation

Faculty: Natural Sciences

Department: Chemistry

Module name: Chemistry of
Molecular Systems

Degree: BSc and MSci
Chemistry with Medicinal
Chemistry, MSci Chemistry
with Molecular Physics

Level: Y2

Academic Years: 2021-2022

Format: Group poster
presentation, coursework

**Approximate number of
students:** whole year group,
ca. 200 students

Delivery mode: Group
coursework, presented on
one day across 3 South
Kensington campus lecture
theatres

Duration: set over the 8
weeks of Summer Term, 14
hours of work from students
+ one 1-hour workshop

Weighting and credit: 30% of
module, module is 8.3% of
Yr 2, Yr 2 is 20/35% of BSc/
MSci degree respectively

Module ECTS: 5

Module Type: Core

Assessment overview

This assessment involves students working in groups of four, to create a poster on what they deem to be the 'Most Interesting Molecular System'. They then present this poster in a 10-minute presentation (plus 5 minutes scheduled for Q&A) to about 40 of their peers. The topic is purposefully left very open, without any restriction to inorganic or organic chemistry despite the module being largely inorganic; this is to make it as engaging as possible and to reflect how different parts of chemistry are interconnected across most research areas.

Design decisions

Rationale and design

The poster presentation format was chosen because the course didn't include any such presentation, apart from in an optional year 3 module, before the heavily weighted BSc project poster presentation. To keep students engaged in other groups' presentations, a 'question roulette' is used. This involves each group being allocated another group to which they must ask a question, with the allocated group being announced by staff just before the relevant presentation. This was found to work well, with students not only asking the one required question, but having more than enough questions to fill the allocated Q&A time even without the staff questions. There was no replacement of this for those who missed the presentation.

Alignment with Learning Outcomes

This assessment focuses on students working with unfamiliar molecules and applying concepts they have learnt throughout the course to unfamiliar molecules. As well as this, it also develops and assesses students' literature searching skills, which is evident in the impressive selection of molecules from students, and their understanding of the literature is shown by their presentation, in areas such as a molecular system's mechanism of action or evidence it exists.

Practicalities

Feedback and Marking

Two-thirds of the final grade came from staff grading the presentation and viva, and one-third came from a peer-assessment mark. In 2021-22, final marks were released to students 3 weeks after the presentation day. The first time this assessment ran, the final mark had an additional peer-assessment component, as students were also asked to grade all the presentations that they watched. However, this was abandoned as not only did it create extra work chasing students, but it also diluted the quality of the marking, as students tended to just mark their friends highly instead of basing grades on the quality of the presentation. This extra peer assessment had been trialled to encourage students to remain engaged in watching their peers' presentations, but this has been replaced by the 'question roulette' initiative.



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Advice for implementation

For assessment design more generally, it can pay off to think through alternatives at the same time as the standard assessment, to build in inclusivity from the design phase. In this case, this could have helped to standardise the vivas offered as a presentation alternative. It is good inclusive practice to provide access to a digital version of a poster even if the presentations take place face-to-face. This is to allow access for people who might struggle with the printed design. Having an online version extends participation to all who want to be included. Using accessibility tools to check the posters for any inclusivity issues to ensure it is readable to people with a visual impairment. This would include ensuring that the posters can be accessed via a screen reader and that visual images have appropriate tags.