

Introductory Chemistry
'Chemistry of Everything' Vlog Task
Weighting: 18% total course marks

Your task is to create a video 'portrait' of a single molecule or substance that has significant personal relevance and communicate why it is important to you. This involves explaining the structural characteristics of the molecule/substance, supported by a visual aid, that enables it to complete the role that it performs.

1. What is a Vlog?
2. Why have we set you this task in Introductory Chemistry?
3. When does it all happen?
4. What do you need to do (including one excluded molecule)?
5. What choice do you have in oral communication medium?
6. How to begin making a Vlog?
7. Assessment

1. What is a Video Blog (or Vlog)?

A vlog is a video commentary of a personal view on something – in this case a molecule or substance. You will produce a 2-3 minute presentation identifying why your chosen molecule/substance is important and what features of its structure give it the properties that are useful (supported by a visual aid).

2. Why have we set you a video task in 'Introductory Chemistry'?

This form of assessment task enhances chemistry learning outcomes in two ways:

- Learning chemistry is like learning a new language - an effective way to learn new concepts in chemistry is to explain them to someone else. In Introductory Chemistry, one of the most difficult concepts to master is the relationship between structure and chemical function.
- At UQ, we are trying to give you skills that you can acquire by simply sitting in lectures and completing experiments. Communication of science ideas is a core skill and skills in communication technologies (powerpoints, podcasts, videos, blogs and wikis) are valued by many employers.

Why use a vlog?

- A vlog can be uploaded into your private video sharing site and shared with your classmates and instructors via a private URL link that you set. Your vlogs are not shared with the world unless you deliberately choose to do so.
- You are required to create and share a visual representation of the structure of your molecule/substance which can be any of a 3D model, image, or other imaginative model. This helps your re-communication of the relationship between the structure of the molecule/substance and its significant role.
- Critical appraisal and re-communication of chemical information in a visual way helps you to learn the underlying chemical principles.

Learning Objectives

- Retrieve and organise information from multiple resources.

- Communicate the chemistry concepts that underpin the bonding within a specific molecule/substance.
- Demonstrate your conceptual understanding by developing visual tools to support representation of your molecule/substance structure.
- Professionally deliver scientific ideas using oral communication technologies.

3. What is the timeframe of the task?

The task is released on Monday 11th March 2013 (Week 3) and ends on Friday April 19th (Week 7).

4. What do you need to do?

Chemistry is integral to our daily lives in our food, health, lifestyle products, and materials that we rely on. Your task is to identify a molecule, substance, element or atom that is of particular importance to you. It could be connected to your favourite food or smell, perform an important function in your daily life or simply have a property that you value.

In a 2-3 minute vlog, you need to communicate the following information:

- Why this molecule/substance is personally important to you.
- What its structure looks like (through a visual aid that you have created).
- How its structure provides the properties that make it useful in the function that it has.

5. What choice do you have in presentation mode?

Based on feedback from students in 2011 & in 2012, we have opted to widen the communication media that your vlog can be presented in. There are several common elements to all media which include the length of the vlog and the requirement to create and use a visual aid of the structure to support your communication. You can choose one of the following three oral communication media:

- **Video.** A video which *must be a minimum of 2 minutes and a maximum of 3 minutes in length* (there will be a penalty for videos which are substantially too long or too short). The video can be made on any one of the following recording devices: video camera, digital camera, webcam, phone camera. The quality should be sufficient to meet the standards for visual/audio presentation in the assessment criteria. Acceptable file formats include .mpeg, .avi, .wmv or .mov (not moviemaker project files).
- **Narrated animation.** The narrated animation *must be a minimum of 2 minutes and a maximum of 3 minutes in length* (there will be a penalty for products which are substantially too long or too short). You can choose any software that you have access to for this type of media. You may consider Slowmation as an option you may find useful: <http://www.slowmation.com/>. Acceptable file formats include .mpeg, .avi, .wmv or .mov (not moviemaker project files).
- **Narrated powerpoint.** Again the narrated powerpoint *must be a minimum of 2 minutes and a maximum of 3 minutes in length* (there will be a penalty for presentations which are substantially too long or too short). You must embed the image(s) of your hand-created structure as the visual aid either in the form of photographs or other interactive tool such as real-time drawing. Embedded static images sourced from the internet are not sufficient as the primary visual aid for the structure.

6. How to begin making a Vlog?

You are required to create and produce a 2-3 minute vlog in one of the media listed in section 5 above. You will submit either the product file or the URL link to view the product.

Your submission must contain the following elements (refer to assessment criteria):

- **Visual Aid.** A requirement of the task is that you create and use a visual aid to help you explain how the structure of the molecule/substance gives it the properties which make it useful in the role that it has. The nature of the visual aid is your decision: it must enhance your video communication. In 2012, students used examples of a number of hand-drawn structures, home-made 3D models, and online 3D models/animations (these need to be correct and cited in the runsheet).
- **Bibliography.** A list of the sources of information that you used to construct your 'portrait' of your molecule/substance must be cited on the final page/screen image of your vlog. These must be formatted appropriately.

Note: *Separate resources will be provided with guidance on how to edit videos along with details on how and where to submit your vlog in the Blackboard Vlog task folder.*

Planning/Runsheet. A template file will be provided on Bb for you to complete to assist the planning of your vlog. In 2013, you are not required to submit your planning sheet as part of the assessment task.

Vlog Task Checklist:

- Decide on the molecule/substance that has personal relevance and significance.
- Research this molecule/substance to identify its structure and the properties that are important in its role.
- Decide which medium of oral communication you will use.
- Plan the content of your video podcast by using the planning sheet template provided.
- Create a visual aid to help you communicate the significance of your molecule/substance.
- Rehearse your recording.
- Record your product and edit.
- Check that you have met the assessment criteria.
- Upload your Vlog file to a video sharing site (Youtube/Vimeo) with privacy settings enabled.
- Paste the URL link into the Bb assessment submission window.

Referencing Website URLs!

Make sure you reference your websites correctly. Take a note of the URL, the name and author of the site and the date that you have accessed the site or downloaded information.

A guide to referencing can be found at:

<http://www.library.uq.edu.au/services/referencing.html>

Video Cameras are available for borrowing in week 6 & 7

If you do not have access to a camera/ video recording device, we have two Flipcams available for short loan in Weeks 6 & 7. Due to the large numbers of students in the course – these can be borrowed for 4 hours maximum so you will need to make an appointment and be ready to record. Email the course coordinator to arrange a loan. (g.lawrie@uq.edu.au).

7. Assessment

This is an individual task so each student will be producing and submitting their vlog. While your vlog is marked by the instructor (70% of task marks), you will also complete a peer review of six other student's vlogs (30% of task marks). Peer assessment enables you to critically appraise other videos while reflecting on your own product. Assessment criteria for both the instructor and peer assessment will be provided in Bb.