Types of Assignments

TYPES OF ASSIGNMENTS

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MODULE OVERVIEW

Aims and objectives

This module will:

 explore different assignment types examine resources and tools to help you produce your assignments.

After completing this module, you will be able to:

- use effective strategies to produce assignments in different mediums
- evaluate and select different tools to create videos, presentations, websites, online portfolios or a model or prototype.

Module sections

- 1. Essential steps
- 2. Written assignments
- 3. Video
- 4. Audio and podcasts
- 5. Presentations, posters and infographics
- 6. Websites, blogs and wikis
- 7. 3D models
- 8. Coding
- 9. Check your knowledge
- 10. Conclusion

<u>Download versions</u> available on the homepage.



Approximately 30 minutes

Student partnership 🔯



This module was developed with UQ student partners as part of a Student-Staff Partnership project.

Graduate attributes

Knowledge and skills you can gain from this module to contribute to your **Graduate** attributes:

Accomplished scholars

Influential communicators

This module is part of **Digital** Essentials, a series of online modules to help you quickly build your digital skills so you can succeed in study and work.

Return to **UQ Library**.

1. ESSENTIAL STEPS

Before you start your assignment, read the instructions and the assignment marking criteria in detail. Check with your course lecturer or tutor if you are unsure about where to find this information.

Artificial intelligence (AI)

Before you use AI for an assignment, check the <u>AI Student Hub</u> to:

- learn how to use AI responsibly and effectively
- explore resources, tools and tips to confidently integrate AI into your learning experience at UQ.

Academic integrity

Maintain the highest standards of <u>academic integrity</u> in your work:

- Use correct referencing techniques to avoid plagiarism. Get information on different referencing styles and learn more about referencing in the Write, cite and submit module.
- Don't breach copyright when using images, audio or any materials that have been created by other people. Our Find and use media module explains copyright and how to find Creative Commons resources for reuse.



Find out about <u>UO's Academic Integrity Modules (AIM)</u>. The modules:

- are compulsory for all new to UQ students and new to a program students
- will help you learn what academic integrity is, why it is so important, and how you can act with integrity in your studies
- are in two parts and it will take about an hour to complete each of them.

Group assignments

Student Services has information to assist you when working in a group, including how to overcome problems associated with group work.

Get strategies and tools for working with a group online (from the Communicate and collaborate module), including:

- what messaging tool to use
- collaborating online on a document
- holding online meetings.

Find information and data

Learn about strategies and resources for finding scholarly information (from the Information essentials module).

Get information about <u>finding or gathering data</u> and strategies and tools to <u>visualise data</u> (in the <u>Work</u> with data and files module).

Backing up your assignments

It's very important to back up your work as you do your assignments. The Working with files module has tips on how to manage your files and back up your work.

Submitting your assignments

As a UQ student you will be required to submit your assignments through your Learn.UQ (Blackboard) course site. Get tips on using Learn.UQ to <u>submit different assignment types</u> (in the <u>Write, cite and submit</u> module).

2. WRITTEN ASSIGNMENTS

- Writing and researching
- Writing tools and techniques
- Editing and proofreading
- Grammar and spelling
- Audience, tone and purpose

There are many different types of written assignments, including essays, reports and reviews. **Student Services** has resources to help you understand different types of written assignments and how to structure your work:

- <u>Assignment types</u> outlines the purpose, audience, tone of writing and structural features of some
 written assignment types, including research essays, reports, annotated bibliographies and reflective
 journals
- <u>Steps for writing assignments</u> breaks the assignment writing process into a series of manageable tasks
- During semester <u>Student Support offers workshops</u> to help improve your study and assignment writing skills.

Writing and researching

Online tools and courses to improve your skills:

- The <u>Academic Phrasebank</u> provides examples of phrases to use in academic writing, including writing introductions, describing methods, reporting results, discussing findings and writing conclusions
- Writing research papers (LinkedIn Learning course, 1h56m) a UQ login is required. This
 course covers understanding different types of research papers, researching the topic, brainstorming
 your focus, developing a thesis statement, writing topic sentences, composing a title, using a style
 guide and formatting your paper
- Improving writing through corpora (UQx free online course, 8h) this course aims to provide you
 with the tools, knowledge and skills to become a 'language detective', using special software to
 improve your academic writing. Boost your knowledge of academic words and phrases to improve
 your vocabulary and written fluency.

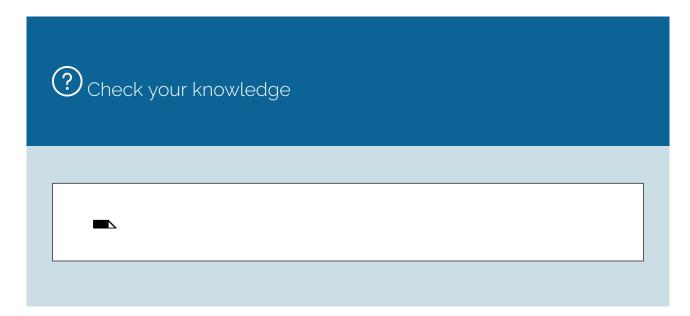
Read about different types of <u>research-based law assignments</u> in Legal Research Essentials.

② Do you know the difference between a literature review and a systematic review? Visit our <u>Literature review quide</u> or <u>Systematic review quide</u> for an explanation of the differences.

Writing tools and techniques

- Writing and referencing tools has information on different tools and software to use for your written assignments
- Beginner to advanced training in Microsoft Word is available at the Library, including using styles, sections and tables. Knowing all the shortcuts and tricks can save you a lot of time when you are writing your document. Check our Online and in-person training calendar.
- LinkedIn Learning has many Word tutorials. Choose one that covers the version of word you use. You may like to start with Word Essential Training (Microsoft 365) (LinkedIn Learning, 2h 33m) a UQ login is required.

Editing and proofreading



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://uq.pressbooks.pub/digital-essentials-types-assignments/?p=34#h5p-2

Sometimes when we read aloud we say the words that should be there, even if they are not. A **text-to-speech tool** is a good way of checking the accuracy and flow of your assignment. The tool will only read what actually is written on the page. <u>Study hacks lists text-to-speech tools</u>.

Student Support has information on finding a proofreader.

Grammar and spelling

You can use the spelling and grammar features in your word processing tool (e.g. <u>Microsoft</u> <u>Word</u> and <u>Google Docs</u>) to check what you have written.

Some writing tools use generative artificial intelligence to make recommendations. <u>Our Artificial Intelligence (AI) module</u> includes information about what you should consider before using AI writing tools in assessment tasks.

Use the <u>Macquarie Dictionary and Thesaurus</u> if you are unsure about any words. It is regarded as the standard reference on Australian English.

Audience, tone and purpose

To write effectively, you should think carefully about the intended audience and purpose of your assignment. Adjust your tone to suit your audience and the medium you are using.

The <u>Communication Learning in Practice for Scientists (CLIPS) website</u> outlines how the audience, context and purpose affects how you should communicate. The website was developed to help undergraduate science students develop their communication skills but is relevant for students in all fields.

3. VIDEO

- Equipment for video and audio
- Plan your video
- Using your mobile phone
- Write a script
- Lighting
- Screen recording
- Video editing tools

Equipment for video and audio

Essential or very useful equipment:

- Video camera or smartphone newer smartphones can record high quality video
- Microphone/audio recorder an external microphone is preferable to the built-in one on your device
- Tripod to avoid shaky footage
- Lights for videoing indoors.

Your school or faculty may have equipment you can borrow to produce your video assignment.

You will also need storage for your video and audio files. High definition (HD, 1080p or 4K) video requires a lot of storage. The *Work with data and files* module has information on how to <u>manage files</u> and <u>storage</u>.

Plan your video

Remember to check your assignment criteria first and think carefully about the intended audience and purpose of your assignment.

Using your mobile phone

Filming with your phone (YouTube, 15m 8s) provides key information and many tips for filming a video on your mobile phone, including lighting, audio and editing:



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://uq.pressbooks.pub/digital-essentials-types-

assignments/?p=44#oembed-1

Write a script

Write a script before you start recording so you:

- know what you want to say, and
- don't forget to include important points.

If you improvise you might be too wordy, leave too many pauses and say too many "umms" and "ahhs" as you think about what to say next.

Script essentials

- Use a conversational tone
- Keep your sentences short and simple. Don't use connecting phrases such as "so then..." or " as previously mentioned..."
- Avoid repetition
- If you are doing a live recording, do a practice recording (or a few) before the real thing. Work on trying to sound natural
- Try to keep your video as short as possible. Viewers tend to be annoyed by lengthy introductions or interludes that just waste their time. Check the length requirements in your assignment instructions first.

Storyboard

The storyboard is used to plan the visual elements that will go with your script. Your video may include a combination of text, photos, graphics, audio and video.

The storyboard can be a simple document or drawing that maps out your video. You can use it to plan what video shots, text or images to show for each part of your script.

Use this example Google Doc storyboard template.

Example of a simple storyboard

Slide no. and approximate timing	Image, concept or idea	Script
Slide 1 15 seconds	Show images of different types of ibis "Threskiornis molucca -Canberra, Australia -flying" by Duncan McCaskill is licenced under CC BY 3.0	The Straw-necked Ibis, Glossy Ibis and Australian White Ibis are native to Australia. Australians enjoy a love-hate relationship with the ibis, often referring to them as "bin chickens".
Slide 2 20 seconds	Video group of ibis in city near bins. Start with a wide shot of group. Then a close up of an ibis with its head going into a bin. Put source of information in — Friday essay: the rise of the 'bin chicken', a totem for modern Australia from the Conversation.	Brisbane has approximately 5000 ibis. Sydney's ibis population is estimated at 10000. Hold onto your lunch extra tightly if you go down there.
Slide 3 15 seconds	"Threskiornis molucca -Canberra, Australia -flying" by Duncan McCaskill is licenced under CC BY 3.0	When you feel annoyed at an ibis, try to remember that drought and habitat loss have forced them from their inland wetland home to coastal regions.

Note: It's important to keep track of any sources and include them in your video.

Other <u>storyboard templates</u> are available for download.

Script tutorials

- Writing your script (YouTube, 4m38s) looks at effective video script formats and the scripting process.
- <u>Video script writing (LinkedIn Learning, 2h10m)</u> has more in-depth instructions on planning, formatting and writing a script a UQ login is required.

Lighting

When light comes from a single, direct source, such as the sun or an overhead light, it produces "hard light". Hard light creates distinct shadows and can be harsh and unflattering. A "soft light", produced by less direct sources of light, creates softer shadows and tends to be more flattering to your subject.

Outdoors, to have a soft light, it is best to video when the sun is not at it's strongest:

- On a cloudy day
- An hour before sunset
- An hour after sunrise.

Indoors it is best to record:

- In a room that has a lot of natural light
- Use extra light or lamps as demonstrated in <u>Lighting your video with available lights (YouTube, 1m50s)</u>.

Location

Choose a location that suits the theme of your video.

- Plan your shot carefully. Your audience is sure to notice something that appears in the background, that you didn't intend to show
- Consider how noisy or windy it is, if you are recording audio while videoing
- Record in front of a green screen so that you can choose a different background and avoid a noisy environment. Find out how to record a video with a virtual background using Zoom software.

Video techniques

1. Video in short takes. Then you can easily redo anything that doesn't turn out quite right

- 2. Video extra at the start and end, for easier editing
- 3. Hold your camera horizontally while videoing to avoid having black spaces on the side, when you view it in wider formats
- 4. Don't video with strong light behind your subject. Preferably, video in a soft light or have the light behind the camera.



Camera facing towards the light.



No light shining into the camera.

Avoid shaky video footage

If you can't use a tripod, use a surface to balance your smartphone or video camera e.g. on a stack of books on a desk. If you have to hold your device:

- 1. Use two hands
- 2. Tuck your elbows in to your sides
- 3. Stand with your feet shoulder-width apart
- 4. Breath slowly.

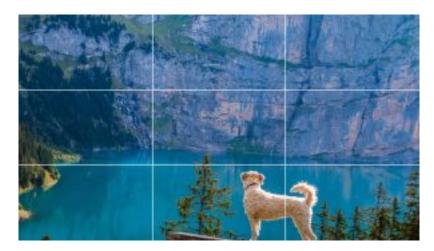
Framing

You can compose different types of shots to make your video more interesting, such as wide shots and close-ups. Visit how to frame different kinds of shots.

When framing a video for an interview don't have too much space above the subject's head. Don't cut off the top of the head either.

Rule of thirds

The "rule of thirds" is a composition technique for getting well-balanced shots. Imagine the scene broken into a 3 by 3 grid. Frame your shot to place your subject where the lines intersect.



Bad "rule of thirds" framing.



Better "rule of thirds" framing.

Video tutorials

These tutorials have more techniques for creating videos:

- 20 tips for shooting great videos
- <u>Learning video production and editing (LinkedIn Learning, 19m25s)</u> a UQ login required.
- Become a video editor (LinkedIn Learning, 1d8h) UQ login required. Do this LinkedIn Learning
 Path to get a solid foundation in story structure, editing techniques, video compression and colour
 correction.

Screen recording

For instructional videos you may want to record your computer screen. Screen capture instructions and tools:

- Record your screen in PowerPoint
- How to record the screen on your Mac
- <u>Screencastify</u> is an extension for your Chrome browser that can record your screen.

Video editing tools

Tool	Free	Limitations	Guides	Tutorials
iMovie (MacOS and iOS)	Yes	Good editing tool but for Mac and iOS users only	iMovie support	iMovie 10.1.16 Essential Training (LinkedIn Learning, 2h31m) UQ login required
Adobe Express	Yes. Available for UQ students and staff	Access Adobe Express online on your own device	Adobe Express tutorials	Learn Adobe Express (LinkedIn Learning, 1h16m) UQ login required
Adobe Premiere Pro	No	Complicated interface requires a bit of time to learn	Premiere Pro user guide	Premiere Pro (LinkedIn Learning pathway) UQ login required
Microsoft PowerPoint	Free for UQ staff and students			PowerPoint video and audio (LinkedIn Learning course) UQ login required
Powtoon	Yes, free online tool	Free plan can do up to 3 mins only. No download of videos but can share and upload to YouTube.	Powtoon QuickStart Guide	Powtoon Quickstart video tutorials

Get more information on tools for working with video, including EchoVideo, Zoom and Adobe Spark.

Submitting your video assignment

- <u>EchoVideo</u> allows you to record video and audio. You can use it to submit video assignments for your courses.
- Record video or audio through EchoVideo has instructions on using Echo to submit video assignments.

Video hosting sites

After you have created your video, you can upload it to a video platform for others to view it.

Site	Free account available Guides Tutorials		Tutorials
YouTube	Yes	Upload videos to YouTube	Create and manage a YouTube channel (LinkedIn Learning, 3h10m) UQ login is required
Vimeo	Yes	Vimeo Uploading basics	Vimeo School

4. AUDIO AND PODCASTS

- Microphones
- Where to record audio
- Audio settings
- Audio recording with smartphone apps
- Audio editing software
- **Podcasts**

Bad audio quality can not only make your audience feel irritated but also affect your credibility.

6 b Listen to how sound quality affects our perception of facts (ABC Radio, 3m37s). This study, by Dr Eryn Newman, found that people were less likely to trust the speaker if the audio was poor quality.

Microphones

If possible, use an **external microphone** or audio recorder rather than your smartphone or camera's builtin microphone. Check if your course or school has microphones you can borrow to do your assignment. An external microphone will allow you to:

- get the microphone as close as possible to the sound source
- record the sound you want to pick up. The built-in microphone will pick up all the sound in the surrounding environment
- handle and adjust the controls on your video recorder without worrying about the noise you make.

A lavalier (lapel microphone) or a headset microphone, particularly with a noise cancelling feature to filter out background noise, will record clearer audio than a built-in microphone.

If you want to buy a microphone, the *Podcast Host* has some recommendations:

- Best podcast microphones
- Best USB microphones
- Choosing a digital recorder.

Where to record audio

If you are videoing in a noisy environment, it would be better to record your audio in another location. You can use editing software to add the audio to the video later. Audio or video editing software can be used to reduce background noise but it will require a lot more effort.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://uq.pressbooks.pub/digital-essentials-types-assignments/?p=47#h5p-3

Audio settings

Microphone settings

- 1. Place the recording device about 10 cm away from the person speaking
- 2. If you have an external microphone, set it at an angle from the mouth (45 degrees) to avoid breathing straight onto it
- 3. Record in stereo (two channels left and right) to get a better sound
- 4. Choose to record as a **WAV file**, if possible. This is a high quality, uncompressed format. Keep it as a WAV file when you are editing. When you are finished, you can select to export the file as a lower quality, lossy compressed format, such as MP3 or ACC, for a smaller file size. Find out more about file types and compression in our <u>Work with data and files</u> module.

Sample rate and bit-depth

Set the <u>sample rate</u> and <u>bit depth</u> in the audio editing software on your computer or the app on your smartphone. If possible, choose a:

- Sample rate of **at least 41 KHz** (41000 Hz) a higher sample rate will record a higher range of frequencies, which gives a better quality sound, but the file size can be very large
- 16-bit depth or sample format the bit depth affects the dynamic range of the recording. 16-bit is a good, general purpose, high quality setting. A 32-bit recording will give a better quality but the file size might be too large for exporting and uploading.

Audio recording with smartphone apps

If you cannot use an external microphone, use a recording app on your smartphone, that lets you set it to **stereo** and **WAV** file. Read <u>how to make high quality recordings using your smartphone</u> for more tips. If you don't have a recording app installed, try one of these apps from Google Play or the App Store:

- <u>Voice Record Pro</u> (iOS)
- Rev (iOS and Android)

Audio editing software

You can use audio editing software on your computer to record and edit sound.

Tool	Download for free	Available on Library computers	Guides	Tutorials on LinkedIn Learning (A UQ login is required)
<u>Audacity</u>	Yes	Yes	Audacity Manual	Learning Audacity (LinkedIn Learning, 1h42m) UQ login required
GarageBand (for MacOS)	Yes	No	Garageband Support	Garageband Essential Training (LinkedIn Learning, 4h4m) UQ login required
Adobe Audition	No	No but it is <u>available for</u> some courses. Check with your school.	Audition tutorials	Audition Essential Training (LinkedIn Learning, 4h15m) UQ login required

Get more information on tools for working with sound, including Logic Pro X.



Beyond Audacity vs. GarageBand: Podcast Editing Software

Read this article to help you decide which free audio editing software to use.

Use Word for the web to transcribe audio recordings. You can:

- record in Word, or
- upload a file to Word. Transcribe supports .wav, .mp4, .m4a and .mp3 formats.

Instructions for <u>accessing Microsoft 365</u> to use Word for the web.

Having a transcript for audio content can help make your content more accessible.

Submitting your audio assignments

You may be required to upload your audio file to <u>EchoVideo via Learn.UQ (Blackboard)</u>. Get instructions on how to <u>submit a video assignment with EchoVideo (Original)</u>.

Podcasts

A podcast is a digital recording, usually audio, made available online for downloading. Often users can subscribe to the podcast program and are notified when new podcasts are published. Podcasts can be a monologue, an interview, a documentary and a range of other formats.

Prepare a podcast

Quick tips:

- 1. Prepare your script or interview questions using everyday language and short sentences. Long sentences can confuse your listeners
- 2. Practice reading your script. Try to vary your tone of voice. Avoid a monotone
- 3. Use music to create the mood and engage your audience. The <u>Find and use media</u> module lists sources for music and sound effects.

Podcast tutorials

- How to start a podcast: Step by step includes planning, recording and publishing tips
- Get started with podcasts and Podcast authoring best practices from Apple

LinkedIn Learning podcast courses

These courses require a UQ login:

- Garageband: Podcasting (LinkedIn Learning, 2h17m)
- Producing professional podcasts (LinkedIn Learning, 5h6m)

Podcast hosting

After you create your audio file for your podcast, you can upload it to a site for others to access it.

Tool	Free account available	Storage space for free accounts	Guides
Soundcloud	Yes for a Basic account	3 hours	Creator guide
Podbean	Yes for a Basic plan	5 hours	Podbean podcasting basics
WordPress	Yes	3GB	Podcasting on WordPress

You can then submit your podcast to directories like:

- <u>iTunes</u>
- Spotify for podcasters

More audio tutorials

Do these tutorials if you would like to understand more about audio techniques:

- Introduction to audio
- Audio for video: Getting started (LinkedIn Learning, 35m41s) a UQ login is required

5. PRESENTATIONS, POSTERS AND INFOGRAPHICS

Presentations can be in person or online, live or recorded or a mixture of all of these. Check your assignment instructions or marking criteria first, so you know exactly what is required.

- <u>Techniques for keeping your audience engaged</u>
- Zoom
- Interactivity for online presentations
- Presentation slides
- Font
- Colour
- Images and icons
- <u>Posters</u>
- Infographics

Types of presentations

Consider the audience, purpose, context and format when planning your presentation.

- Will your presentation be **face-to-face**, **online**, **or both**? You might do your presentation to a "live" audience but have it recorded for others to watch later.
- What **format or medium** will you use? A visual presentation may take the form of slideshow, a poster or an infographic. An oral presentation could be with or without extra visual elements.
- An **interactive presentation or workshop** will involve you presenting your knowledge and ideas but should also provide opportunities for activities and interaction, including debate, questions or role play.

Regardless of the format, a **clear structure** and **compelling content** are essential to keep your audience interested. <u>Presentation skills</u> from Student Support gives an overview of things to be aware of when presenting, like using effective eye contact and gestures.

Techniques for keeping your audience engaged

Practice your presentation — record yourself to check the timing. Are you speaking too fast or too slow?

Are you changing your tone of voice? A monotone can be very boring. Practice again to improve your pace and tone.

Central Library has a Presentation room where you can practice your presentation with the same equipment that you will use in your lecture room. Feel confident using a data projector, interactive whiteboard, document camera and more, to be ready to present in your lecture.

Know your topic well — if you barely understand what you are talking about it will be difficult to speak well. Find out as much as you can to inform your presentation. Think about how much your audience knows on the topic so you know what needs to be explained. Examples or anecdotes help make a presentation more interesting and relevant.

Use notes or an outline as a prompt — when you are nervous it is easy to forget the brilliant things you had planned to say. Notes can act as a reminder of the key points. However, if you have the whole speech written out, you will be tempted to read it as is and that can ruin the conversational tone or spontaneity of your presentation.

Use strategic pauses — pause before and after important points to **provide emphasis** and to grab your audience's attention.

Ask questions — this is a good way to keep your audience interested and involved. Prepare some questions to ask your audience. Questions about their own experiences or thoughts are easier and less scary for your audience to answer than questions that require a "correct" response.

Repeat audience questions — if a participant asks a question it is always a good idea to repeat the question to ensure that everyone hears it. This is crucial for online attendees who often can't hear anything not spoken into the microphone.



The secret structure of great talks (TED Talk, 16m)

Watch this video in the How to make a great presentation playlist for tips on how to make a lasting impression on your audience.

Tools for online presenting

Zoom

Zoom is video conferencing software that can be used for presentations and meetings. UQ provides access to an upgraded version of Zoom for students and staff. You can send a link to participants to join your presentation. The web browser client will download automatically when the participants join their first Zoom meeting, and is also available for manual download. You can share your screen and record the session. Make sure you get your participants' permission before you start recording.

Interactivity for online presentations

These tools and features can help make your online presentation more interactive:

Chat — turn chat on so your audience can type their questions and respond to your questions. If possible, have a helper to monitor chat for you.

The ability to mute or unmute participants — allow individuals in your audience to ask questions and respond without having the constant noise of the whole audience unmuted in the background. Establish some guidelines at the start of your session about how participants can indicate that they want to ask a question. Some tools allow participants to use a raised hand icon or they can send a message via the chat function.

Whiteboard tool — the whiteboard will usually allow text, drawing, highlighting etc. You and your audience can share concepts and ideas.

Shared document — this could be a Word document or spreadsheet on OneDrive or Google Drive. Set the access so others can comment or edit the shared document. Writing and referencing tools has information on accessing and using these tools.

Mind mapping and brainstorming tools — tools like <u>Coggle</u> and <u>Bubbl.us</u> are good for thinking up ideas and mapping out complex concepts. <u>Padlet</u> allows posts, linking, uploads etc. <u>UQ has a licence for Padlet</u> with additional functionality compared to the free version. Visit <u>Study tools</u> for more information about mind mapping and brainstorming tools.

Poll tool — you can post a question or idea and your audience can vote on it or provide feedback or comments:

- Zoom has a poll tool. View **Host a poll** instructions on <u>Managing Zoom meetings</u>.
- <u>Slido</u> has a free basic plan that requires registration. Slido allows audience members to comment or ask questions during a presentation
- <u>Tricider</u> is a free polling tool that doesn't require registration, just a link to the question.

Presentation slides

If your design skills aren't great, follow these design tips to create appealing presentations:

- Be consistent with your headings, fonts, colours, layout, themes (shapes, symbols, icons etc)
- Only have **one idea or point** per slide
- Have no more than six bullets per slide
- Use words as cues rather than having complete sentences
- Only use one chart or graphic per slide. For information on how to visualise your data, visit our
 Working with data and files module.

Slide and presentation tools

Tool	Free account	Account available via UQ	On Library computers	Guides	Training and tutorials
PowerPoint	No	Yes with Microsoft 365	Yes	PowerPoint help centre	PowerPoint training at the Library PowerPoint Essential Training (Microsoft 365) (LinkedIn Learning, 2h32m) UQ login required
Google Slides	Yes with a Google account	No	Access online	Get started with Slides	Google Slides Essential Training (LinkedIn Learning, 1h8m) UQ login required

Find out about more presentation tools.

Fonts

- Fonts should be easy to read
- Be **consistent** with your sizing for headings, subheadings and paragraphs
- Make your heading font **distinctive** from your paragraph font
- Use a maximum of **two or three** fonts
- Don't go smaller than an 18 point fort for face-to-face presentations. It has to be large enough to be visible on the screen
- Same family fonts look good together.

Get information and tips to help you choose fonts.

Colour

- Use just two colours for a simple, clean design
- Grey is a good contrast colour or choose a lighter shade of the main colour.

Get tips on how to pick colours for your presentation.



Try the Adobe Color wheel. To pick different colour combinations:

- 1. Try the Color Harmony options, such as Analogous, Complementary and Shades
- 2. Drag the circles on the wheel to spin to different colours

- 3. Change the **RGB** (Red, Green, Blue) colour value codes that set the hue, saturation and lightness.
- 4. You could also click the **Explore** option to search for different colour combinations

Copy the code values to set the same colours in your presentation.

Other colour tools

- w3schools.com has a <u>colour picker tool</u> to set different colour values
- <u>Colorbrewer2.org</u> allows you to select a Colorblind safe option. It is designed for creating map
 colours but you can use the colour information in your presentations. You can change the number of
 colours and there are different export formats.

Images and icons

Using images or icons instead of text can make your presentation look more interesting. The <u>Find and use media</u> module lists sources of images. Remember to check the Creative Commons licence type to see how you should credit the author. Public domain images do not require an attribution.

High resolution images are better for print formats. Images you download from the web are often low resolution to reduce the file size. If you are creating a print document, look for the full resolution option, if available.

Find **icons** for reuse:

- <u>The Noun project</u> has Creative Commons and public domain icons
- flaticon.com

Screenshots:

- <u>Take a screenshot.org</u> explains how to capture the full screen or a specific area on different devices
- Nimbus Screenshot & Screen Video Recorder this Chrome extension lets you take a screenshot of
 the entire current page. It also has a screen recording function but it is limited in the free version.
 Other browsers should have similar tools.

Use <u>GIMP</u>, free image editing software, to resize or edit images. Find out about <u>more tools for working</u> <u>with images</u>.

Watch How to avoid death by PowerPoint (YouTube, 20m, 31s) – Learn the art of making a good presentation.



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://uq.pressbooks.pub/digital-essentials-types-

assignments/?p=49#oembed-1

Posters

Posters are often used at conferences or other events to share important research. You can use the same design tips for colour, fonts and themes for creating a research or abstract poster. Other design elements include:

- Use a 3 or 4 **column** format
- Try to keep 40% of the poster as **white space**, with no text or images. It helps organise the flow of information and prevents cluttering
- Keep a margin around the edge of the poster
- Use a large **heading** for your title across the top and **sub-headings** on your columns
- **Text size** recommendations
 - Title heading 85 point font
 - Subheadings 36 point
 - Body text 24 point

The CLIPS website has information on what to put in a science poster, a PowerPoint for posters video and PowerPoint templates, in different sizes, for download.

More PowerPoint instructions:

- Set the size of the slides to the poster requirements before you start
- Convert your slide to a PDF before you print it to keep the formatting as you intended.

<u>Layout and Composition: Grids (LinkedIn Learning, 1h1m)</u> looks at how to use grids to create strong and consistent designs for posters. A UQ login is required.

Don't forget to include references and attributions.

Print your poster

You can print up to A3 size, using your UQ ID card or print/copy card in the Library.

Other <u>specialised printing services</u> are available for larger sizes and high quality colour, including from **UQ** Print.

Infographics

Infographics and presentation software are excellent ways to present information and data in a visually appealing format. Online infographics can include interactive elements. Infographic examples:

- Information is Beautiful
- Tableau Public Gallery
- Daily Infographic

Choose a tool that allows you to share a link to your infographic or presentation.

Tool	Free account available	Shareable link to infographic	Download of infographic	Training and tutorials	Tips
Venngage	Yes	Yes	Not with the free version	Video Guide to Creating Your First Design	What is an infographic? Examples, templates and design tips
<u>Canva</u>	Yes	Yes	Yes	Design School for Canva	Presentation checklist
Piktochart	Yes	Yes	Yes	Piktochart video tutorials	Piktochart Blog

Get more information about infographic tools.

6. WEBSITES, BLOGS AND WIKIS

Use web writing strategies for any content you write for websites, blogs or wikis. Remember to check your assignment criteria carefully before you start.

Writing for the web is different than writing print

Screens don't hold your audience's attention as easily as print. People tend to scan and skim when reading online content. They scan the text and jump to headings, bulleted lists and links.

Grab your audience's attention and convey your message by creating web content that is easy to:

- read use simple vocabulary and short sentences
- scan put the most important information at the top, use sub-headings, lists and short paragraphs
- find use the vocabulary that your audience would use, to make your content easier to find in search engines. Be clear and descriptive.

Make it easy for **all** your readers— your content should be accessible for everyone. Learn more about creating accessible web content.



Avoid using jargon when writing web content

The author, Bill Bryson, describes jargon as "the practice of never calling a spade a spade when you might instead call it a manual earth-restructuring implement".

Note: A spade is a tool for digging.

Websites

You can sign up to a website building platform to create your own website:

Tool	Free account available	Guides	Tutorials	Design tips
Google Sites	Yes	How to use Google Sites	Googe Sites Essential Training (LinkedIn Learning, 57m) A UQ login is required	Choose a Site theme (LinkedIn Learning, 4m40s) UQ login required
WordPress	Yes	Get started	WordPress Essential Training (LinkedIn Learning, 1h54m) A UQ login is required	<u>Themes</u>
<u>Wix</u>	Yes	Getting started with Wix	10 essential tutorials that every Wix newbie should know	Templates

HTML, CSS and other web development languages

Website building platforms may not require you to know anything about HTML, CSS or other web development languages. Knowing a bit about HTML can be useful to identify and fix small glitches that can occur in the source code.

- w3schools lets you try different coding languages in their platform to see how it works
- Learn HTML and CSS to create a website.

Blogs

Blogs are regularly updated websites, usually used to post reflections or ideas on a topic. You may be asked to create a blog post or comment on other blog posts in Learn. UQ for your course.

Get more tips on how to communicate effectively online.

You can set up a blog on web building platforms like WordPress.

Online discussions

You may be required to contribute to your course discussion board as part of your assessment. Get tips on how to <u>use the Learn.UQ discussion board</u>.

Wikis

Wikis are collaborative webpages. Multiple people can edit the pages and keep track of any changes. Learn how to edit a wiki on Learn.UQ.

Wikipedia is probably the most well-known wiki. Anyone can edit it, after creating an account.



"Edit wars" occur when people, repeatedly, make conflicting edits to a page. Any changes can be reversed. Some people get banned from further editing, if they breach Wikipedia's Policies and guidelines

Embed interesting elements on webpages

You can often embed different kinds of media into webpages. In Learn.UQ you can

- <u>insert and embed content</u> to embed hyperlinks, files, images and equations
- <u>insert media</u> such as videos and voice recordings.

When embedding images on webpages, it is a good idea to have a small file size to reduce the time it takes for your image to load on the page. Read more about file formats in the Working with Data and Files module.

tiny png is an online tool for reducing the file size of PNG and JPG image files. It's free for images up to 5MB each.

Drop or upload a PNG or JPG file to tiny.png, to see how much you can reduce the file size.

Other media you might like to embed on your websites:

- Videos many video hosting sites have an embed code on their videos. Often the embed code is an iframe
- <u>Timeline tool</u> if your presentation has a chronological narrative, you might like to use a timeline
- <u>Juxtapose tool</u> this tool is useful for comparing images and gifs. You can highlight changes over time or dramatic events
- A poll or survey tool <u>Crowd Signal</u> lets you embed polls, surveys and quizzes into webpages. You can sign up for a free plan.

7. 3D MODELS

When you start creating 3D Models, you should be familiar with these terms:

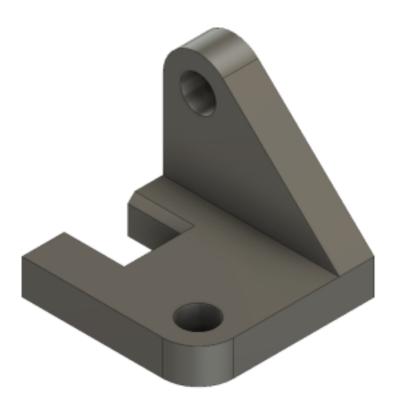
- Part a single component or body that you are designing
- **Dimension** a constraint applied to edge length or surface size
- **Assembly** an arrangement of parts to form a construction
- **CAD** Computer Aided Design

Types of 3D models

There are two types of 3D models that you might like to design:

- Geometric models components made entirely from lines, shapes and extrusions
- **Organic models** involve using curves to sculpt a mesh to a desired form.

Geometric models are typically used for engineering and construction applications, while organic models are used in 3D animations and industrial design. A combination of both types is also possible.



Example geometric part



Example organic part

Designing a 3D model for your assignment

Use this strategy to approach the design of a 3D model:

- 1. **Draw** a rough sketch of the part with pencil and paper
- 2. Annotate your sketch with dimensions, constraints or other key features
- 3. **Plan** steps to convert your drawing to a digital model (e.g. sketch, extrude, fillet, etc...)
- 4. **Apply** these steps in your 3D modelling software
- 5. **Refine** your model according to other details from your sketch

6. **Verify** that all dimensions and constraints were correctly applied.

Prepare your model for 3D printing

3D modelling software can export your model in a variety of formats. Depending on how or where you 3D print your model, these formats are typically used:

- A stereolithography file (.STL)
- A Wavefront 3D model file (.OBJ)

Steps for exporting your model in these formats are generally found in the help pages of the software you are using.

3D modelling software

Use of 3D modelling software largely depends on the model you are trying to create. If you are creating:

- a geometric engineering component, CAD software is usually the best option
- an organic model for 3D animation, then 3D modelling software is best.

Get more <u>information on 3D modelling tools</u>.

3D Photogrammetry software

Photogrammetry software is a very useful tool for constructing 3D Models from photographs. This can be done with photos from a phone or digital camera, and then the software's algorithms do all the work. Visit 3D Photogrammetry tools for more information.

Ways to get 3D models

3D modelling can be used in a variety of ways. You can upload a 3D model for online interaction, 3D printing, animation or for use within VR/AR applications.

You can get a 3D model via:

- CAD or 3D Modelling software 3D Models can be created from scratch using this software
- Photogrammetry construct 3D models from photographs at the click of a button using specialised software
- MRI/CT Scan Conversion extract a 3D model from any CT Scan or MRI data
- 3D Scanning scanning an object with a 3D scanner

• Online Collections — download an online 3D model

Examples of 3D models you can create using photogrammetry. Press the play buttons to interact with each model:

Trilobite 3D model



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://uq.pressbooks.pub/digital-essentials-types-assignments/?p=53

Trilobite by Nick Wiggins on Sketchfab

Kangaroo Cranium 3D Model



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://ug.pressbooks.pub/digital-essentials-types-assignments/?p=53

Kangaroo Cranium by Nick Wiggins on Sketchfab

Model of sculpture 'A student's head' 3D Model



One or more interactive elements has been excluded from this version of the text. You can view them online here: https://uq.pressbooks.pub/digital-essentials-types-assignments/?p=53

Model of sculpture 'A student's head' by The University of Queensland Library on Sketchfab

Q Find existing 3D models

Find designs to download and use under a Creative Commons Licence from:

- Thingiverse a MakerBot website for sharing 3D models
- Yeggi 3D model search engine
- NIH 3D Print Exchange a collection biomedical 3D models that include, anatomy objects, proteins, cells and tissues

Museum collections

Some museums are now making parts of their collections available as scans for home 3D printing:

- British Museum Exhibits on Sketchfab
- The New York Metropolitan Museum of Art on Thingiverse
- <u>Smithsonian</u>

8. CODING

- Learning programming languages
- Strategies for programming assignments
- Citing code

Coding assignments can range from simple programs to full-blown applications. It is important to know how to approach such assignments, so that you can complete them to the best of your ability. Some platforms you may be asked to develop for are:

- Web websites and web apps for browsers like Chrome or Firefox
- Mobile mobile apps for iOS and Android
- Desktop desktop applications or programs for Windows, macOS and Linux.

Learning programming languages

If you are starting a coding assignment in a programming language that you are not familiar with, there are tutorials you can take to understand the basics in a few hours:

- Learn a range of <u>programming language training and tutorials</u> from LinkedIn Learning (UQ login is required)
- <u>Codecademy</u> has courses on web development, data science and computer science
- <u>w3schools</u> has tutorials on web development languages HTML, CSS, JavaScript, Python etc.

Get more information on tools for web, software and mobile application development.

Strategies for programming assignments

Universal strategies that can be applied to make your programming assignments easier:

- 1. **Start early** this gives you more time to think about the task and how you might approach it, but also more time to get help, if needed
- 2. **Plan your program using pseudocode** <u>pseudocode</u> is a great method for planning what you want to code in way that is easy for people to understand
- 3. **Prepare the file structure** for simple cases this may be a single file, but for larger assignments it is helpful to create all files within a project and link them appropriately. For example, if you are

coding a single-page website:

- · Create the HTML, CSS and JavaScript files
- Link the CSS and JavaScript files using the appropriate tags in your HTML file.
- 4. **Use comments** all programming languages allow you to write comments that are lines which are ignored by the program. A great way to use comments is to type out the steps required for coding a piece of functionality. You can then follow these steps to code it line by line
- 5. **Take a break** if you ever get stuck, it's probably a good time to take a break. Breaks as short as 5 minutes can be enough to clear your mind
- 6. **Explain your problems to a rubber duck** Rubber duck debugging is actually a legitimate way of solving programming related problems. It works simply by explaining your problems aloud, which can help you find what's causing bugs in your code.



Citing code

Students should confirm what is permitted for a specific assignment prior to commencing. Some assignments do not permit the use of external support and all code must be written by the individual. However, if you are allowed to use externally sourced code it must be referenced if it is not your own original work. Failure to reference externally sourced, non-original work can result in misconduct proceedings. An external source is code, including from anywhere on the internet or from a tutorial, taken or used to write your own code.

References should provide clear and accurate information for each source and should identify where they have been used in your work. A single URL is not a complete or accurate reference. URLs should link directly to the work cited, not just to the website it is hosted on. An example format for referencing online sources:

[where used] : [title of asset], [creator of asset]; retrieved from [website title] ([URL]), Last accessed [DD/MM/YYYY]

For code references, the [where used] should map to the position in the code e.g. in the code itself, create a comment to identify where in your code you have used an external source:

For code with no changes or adaptations

In text

(How to comment) retrieved from Unity Answers: how to comment the lines? (http://answers.unity3d.com/answers/221574/view.html target="_blank" rel="noopener noreferrer") Last accessed 11/9/2017

In code

Ensure you are using syntax specifically for the programming language being used.

```
/*
The code snippet (1. How to comment) below has been sourced from
http://answers.unity3d.com/answers/221574/view.html
The code snippet appears in its original form
*/
CODE HERE
/ / End code snippet (1. How to comment)
```

For code that you have changed or adapted

You should describe how you adapted it.

In text

(Output Loop) retrieved from Unity Answers: Writing a Loop (http://answers.unity3d.com/answers/221574/view.html target="_blank" rel="noopener noreferrer") Last accessed 9/9/2017

In code

Ensure you are using syntax specifically for the programming language being used.

```
/*
The code snippet (2. output loop) below has been adapted from
http://answers.unity3d.com/answers/221574/view.html
I have changed variable types to output strings instead of numbers and
*/
CODE HERE
/ / End code snippet (2. output loop)
```

9. CHECK YOUR KNOWLEDGE

All the answers to the quiz questions can be found in this module.

Your response data will **not** be gathered if you answer the questions below. <u>Take a screenshot</u> of **Your result** at the end of the quiz if you are required to show you have completed it.

? Types of assignments quiz

There are 7 questions to answer. After you answer a question, click the arrow to move to the next question.



An interactive H5P element has been excluded from this version of the text. You can view it online here:

https://uq.pressbooks.pub/digital-essentials-types-assignments/?p=57#h5p-1

If you are required to get a certificate with your name, take this version of the <u>Types of Assignments quiz</u> (requires a UQ login).

Note for teaching staff: You can embed the module and the H5P quiz in your courses.

Module summary

1 Essential tips

- Maintain high standards of academic integrity in your assignments
- Links to resources for group assignments, finding information and backing up your files.

- Links to resources on the purpose, audience, tone of writing and structural features of some written assignment types
- To be effective, think carefully about the intended audience and purpose of your assignment.

3 Video

- Plan your video with a script and storyboard
- Use different techniques to make your video visually appealing.

4 Audio and Podcasts

Good quality audio is essential to keep your audience listening Recording locations and settings can improve your audio quality.

5 Presentations, posters and infographics

- Engage your audience using different techniques
- Use interactivity in your online presentations
- Make your presentations and posters visually appealing and interesting through good design.

6 Websites, blogs and wikis

- Web content requires a different style of writing than print
- Embed different kinds of interesting media in your websites and blogs.

7 3D models

- Use a strategic approach when designing a 3D model
- Links to resources for learning 3D modelling software.

8 Coding

- Strategies to use for programming assignments
- Links to resources for learning programming languages.

10. CONCLUSION



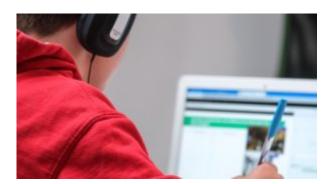
You have completed the Types of Assignments module.

Tell us what you think

Use our <u>Digital Essentials feedback form</u> to give **anonymous** feedback on this module. You can provide your email if you would like us to reply to you.

Digital Essentials modules

Build your digital skills with Digital Essentials. Select modules from the 6 themes that match your interests and will help you succeed in study and work.





- Getting started at the UQ Library
- <u>Use UQ systems</u>, includes:

- Book rooms
- Printing at UQ.



Assignment essentials

- Find and use media
- Information essentials
- Write, cite and submit
- Types of assignments



Digital creation

- Accessibility
- Choose the right tool
- Intellectual Property



Digital security and safety

- Digital security
- <u>Internet essentials</u>
- Social media



Professional identity and skills

- Communicate and collaborate
- <u>eProfessionalism</u>



Work with information

• Artificial Intelligence

- Work with data and files
- Document your research data

Teaching staff – use the modules in courses

Teaching staff can embed or link the modules in courses to help build your students' digital literacy.

- There are interactive elements throughout each module and a short H5P quiz at the end.
- The modules are also available for your students to download in EPUB, PDF and HTML format to make them more accessible.

Learn how to add the Pressbook module to your Learn.UQ (Blackboard) course.

Assess student learning

Most modules have a final short quiz created in H5P. You can download the H5P quiz from the module and embed it in your course if you would like to check your students' completions or to allow for the results to be transferred to the Grade Centre in your course.

The H5P quiz content will not record any completion data unless you download and add the H5P quiz directly to your course. Students can screenshot the quiz if they are required to show completion.

Learn how to add the H5P content to your course.