



COMP1710/6780

Web Development and Design

- Course lecturer and coordinator:

Dr Sabrina Caldwell

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- Course lecturer, online HTML/CSS:

Professor Tom Gedeon

Email: tom.gedeon@anu.edu.au



- COMP1710 Chief Tutor and lecturer:

David Flores-Condezo

(david.flores-condezo@anu.edu.au):

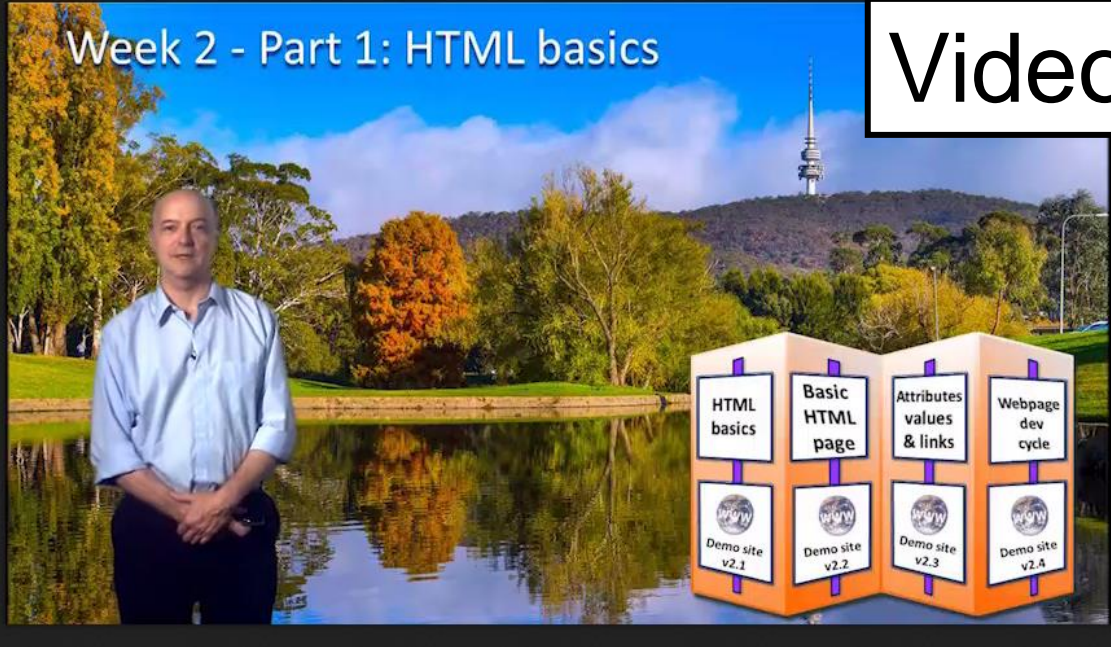
... and lots of tutors we'll tell you about next week



We will *only* contact you via your uxxxxxxxx@anu.edu.au email

Week 2 - Part 1: HTML basics

Video lessons



Associated lab activities

Lab activity (id:1.3)

Lab activity:

- 1 JS Bin
- 2 Text editor

If you have never registered for JS Bin before, register now. Login and open the demo website for this part. Review the text editors discussed in the video lesson for this part, or others in which you may be interested, and choose your preferred text editor. Don't worry, you can change at any time. Familiarise yourself with the layout and functionality of your text editor



Week 2 - Part 1: HTML basics



JS Bin features »

- Getting started
- Keyboard Shortcuts
- Exporting/importing gist

Pro features »

- Private bins
- Dropbox backup
- Vanity URLs

Blog »

- The Return and The Refactor

Help »

- Vision
- How to pre-populate bins and inject content

Donate to JS Bin »

Support JS Bin to keep the project open source & MIT for all

Follow @js_bin on twitter

By using JS Bin you agree to our legal terms

"Everyone should learn to program a computer because it teaches you how to think" - Steve Jobs

JS Bin

File • Add library • Share

HTML • CSS • JavaScript • Console • Output

HTML

```
<!DOCTYPE html>

<html>

<!-- This is the HEADER section..... -->
<head>
  <!-- This statement tells browsers how to understand our character set -->
  <meta charset="utf-8">
  <!-- This is our title. It is mandatory. -->
  <title>Using images in your website</title>
  <!-- this meta name is to identify website version in JS Bin -->
  <meta name="description" content="5.1.2 of Introduction to HTML5">
</head>

<!-- This is the body section -->
<body>

  <!-- This is our heading for our title at the top of the page -->
  <h1>Using images in your website</h1>

  <!-- This is our menu, using anchor tag links. -->
  <div id="menu">
    <ul>
      <li><a href="#why">Why use images</a></li>
      <li><a href="#choose">Choosing images</a></li>
      <li><a href="#use">Using images</a></li>
    </ul>
  </div>

  <!-- This is our anchor tag for our "Why use images" menu item -->
  <a id="why"></a>

  <!-- This is our subheading for my main content -->
  <h2>Why use images?</h2>

```

CSS

```
/* This is my style sheet */

/* Example of CSS replacing the HTML style sheet we used in the previous version */

body {background-color: white}

h1 {color: black;
    font-weight: bold;
    font-size: 36px}

h2 {color: blue;
    font-weight: bold;
    font-size: 30px}

/* 4 groups of CSS rules to format the menu division. */
/* Menu division: format the menu generally including background color, padding, margin, and border */

#menu {
  width: 600px;
  height: 35px;
  font-size: 15px;
  font-family: Tahoma, Geneva, sans-serif;
  font-weight: bold;
  text-align: center;
  background-color: #66CC33;
  border-radius: 6px;
}

/* Menu division: format the unordered list so that it appears as a menu */
#menu ul {
  height: auto;
  padding: 8px 0px;
  margin: 0px;
}

/* Menu division: format the list items so that they display as a list */
#menu li {
  display: inline;
  padding: 2px 10px;
}

```

Output

Run with JS Auto-run JS

Using images in your website

Why use images Choosing images Using images

Why use images?

With very few exceptions, your web pages will be easier to understand and more visually appealing to your viewers if you include relevant images. For example:

- Where would a website about hybrid roses be without photos of roses?
- Can you imagine an online art gallery without images?
- Would you try a recipe from a cooking website without a picture of how the dish should look?

How to choose images

What should I consider when choosing images?

Images will bring your website to life. But there are a few things to consider when choosing your images.

Your images should:

- enhance your message
- be consistent with your style
- be of a good quality
- load quickly

Your images should not:

SabrinaBCaldwell

Supporter Rollbar: Real-time error monitoring, alerting, and analytics for JavaScript developers

Who am I?



Dr Sabrina Bleecker Caldwell

School of Computing
The Australian National University

BA(Hons)/BSc 2003

1st PhD @ College of Arts & Social Sciences ANU 2008

2nd PhD College of Engineering & Computer Science ANU 2017

Information Technology Background in industry

Digital Equipment Corporation, Jostens Learning Corp,
Wizard Information Services

Sector experience

Private enterprise, community sector, government and academia

Weblog: <http://www.thephotographicalist.wordpress.com/>

LinkedIn: <http://au.linkedin.com/in/SabrinaCaldwell>









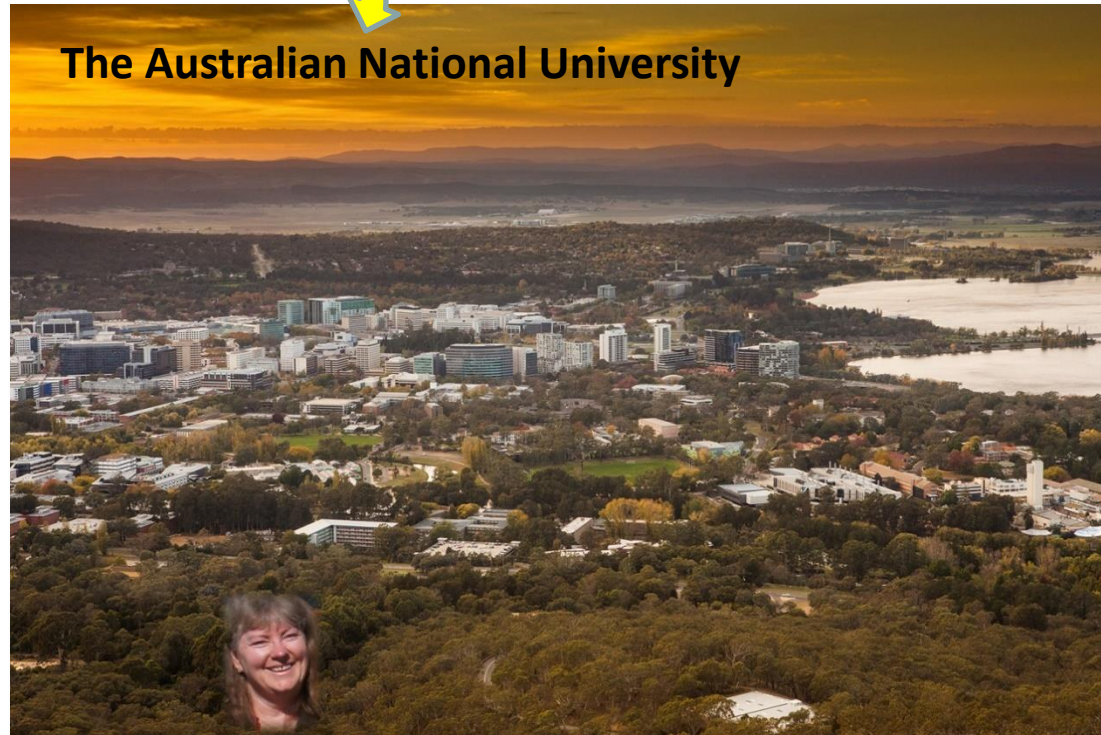
Now I teach
and research
here



The Australian National University

My Research & Teaching Areas

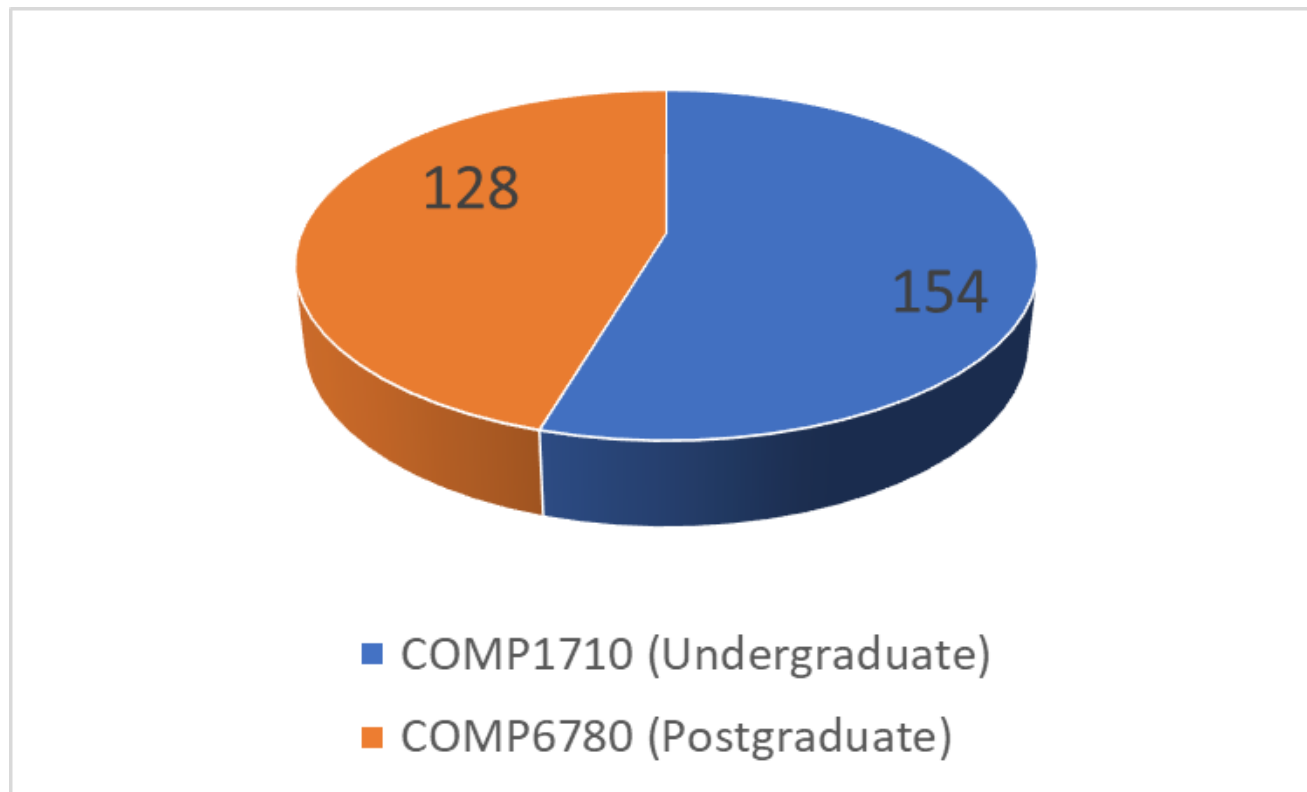
Software development management
Web development and design
Image credibility
AI and affective reasoning
Advances in higher education



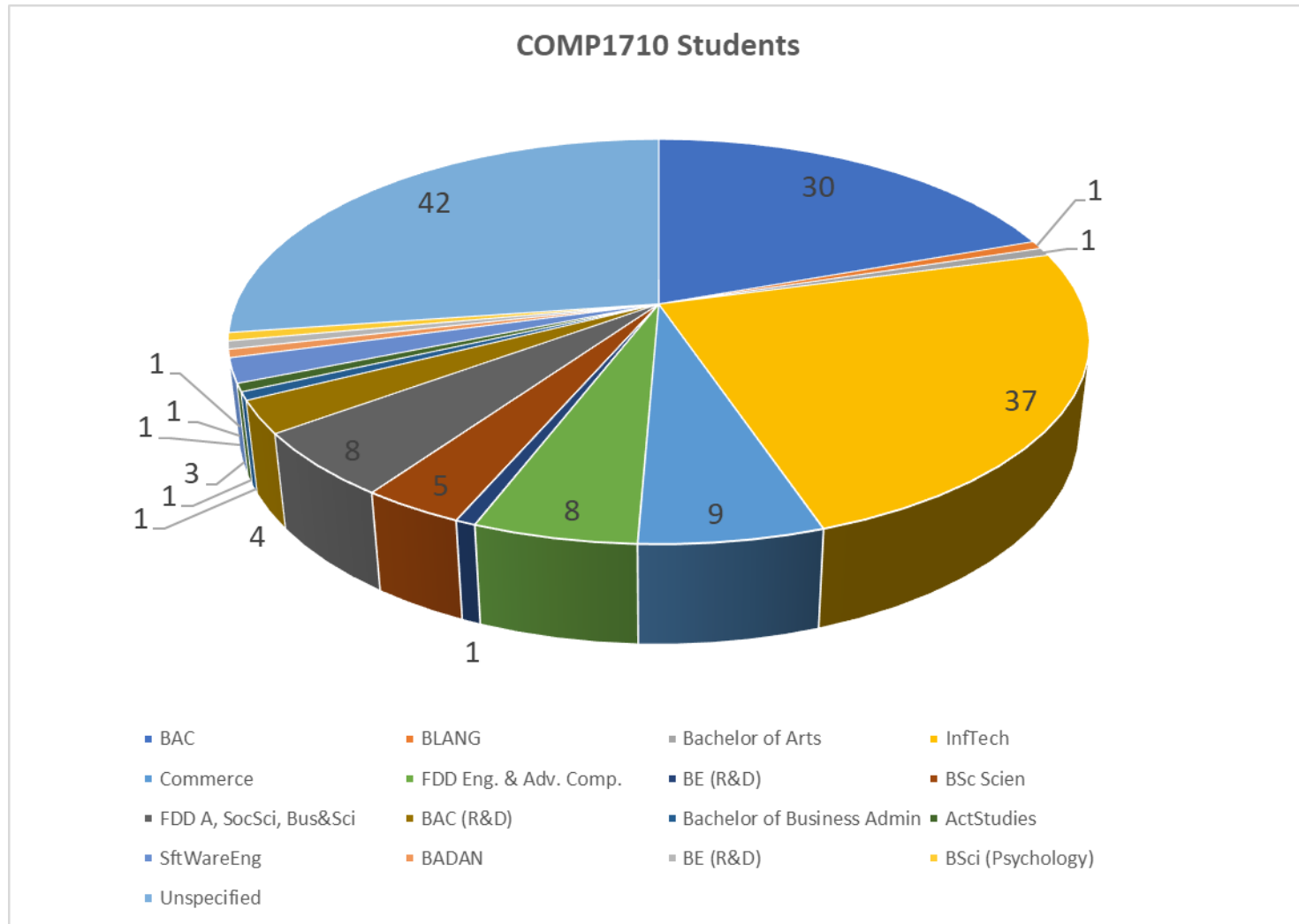
Who are you?



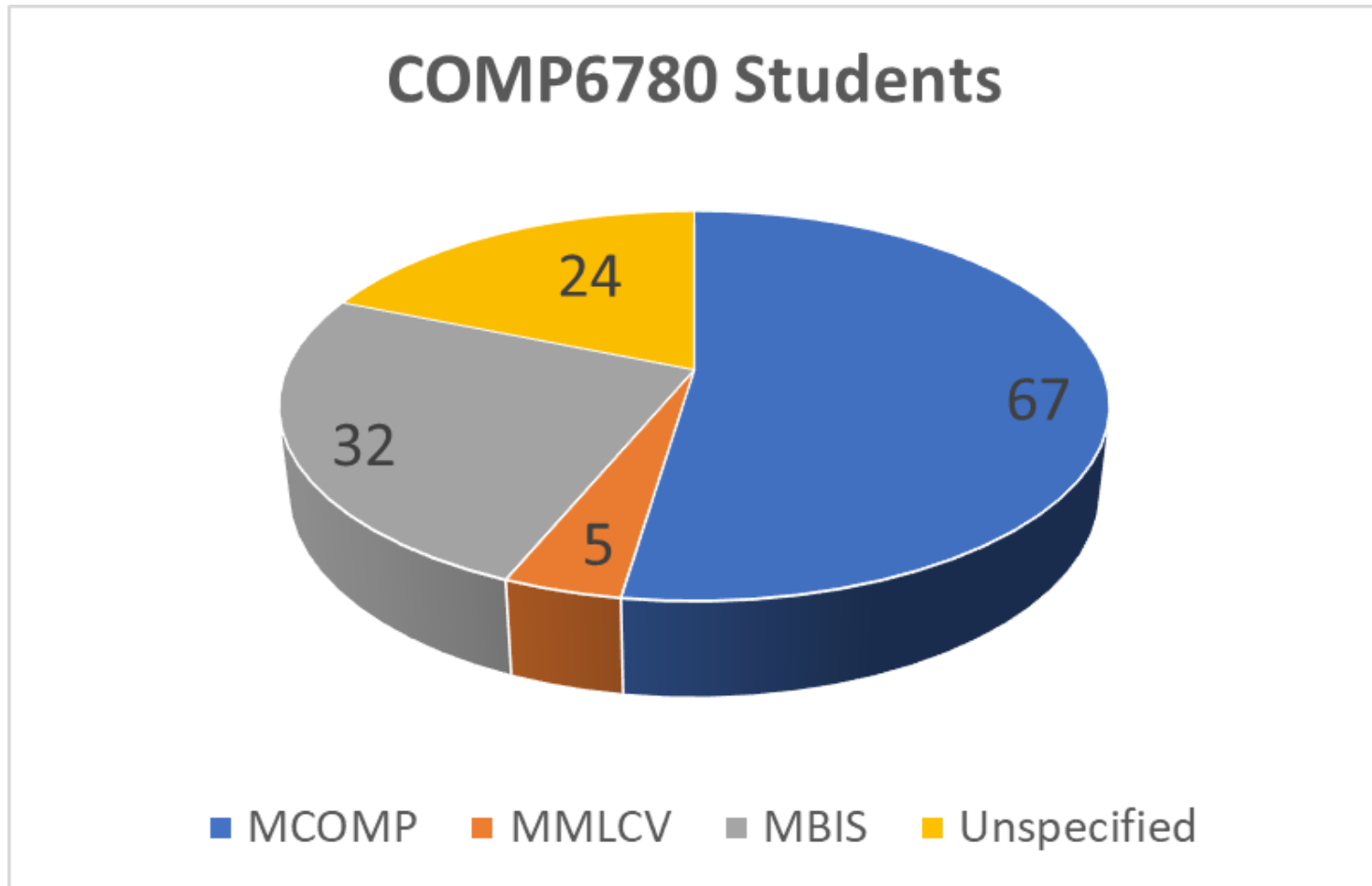
COMP1710 / COMP6780 = 282 students



COMP6780 = 154 students



COMP6780 = 128 students



More about you – a few poll questions

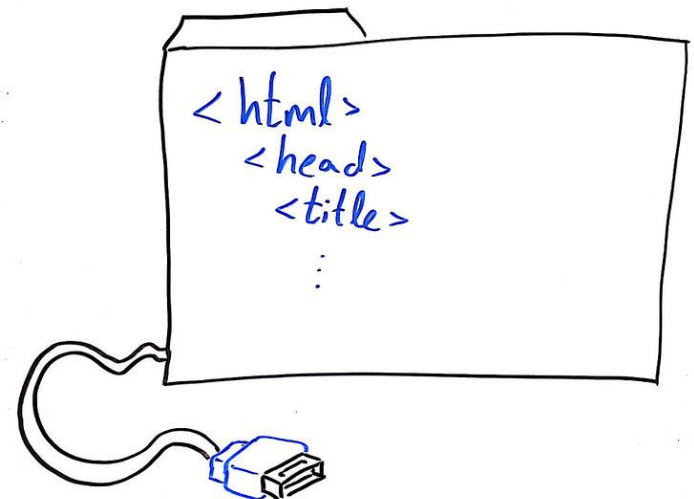




What are we all here to do?

Learn and grow new/more skills!

- This course introduces the construction of web sites and web interface/interaction design.
- Web development + design



Upon successful completion of the course, you will be able to:

- Understand and be able to develop and design interactive web sites including multimedia content by applying current web design principles, guidelines and user-centered heuristics.
- Apply a user-centred focus to the design and development of web sites.
- Demonstrate knowledge of accessibility, compliance with standards, privacy concerns and personalisation for web sites.
- Understand and be able to separately control the content, the appearance and the behaviour of web sites.
- Understand and report on the nature and practice of human-computer interaction research in an ethical environment.

- Course delivery:
Wattle, Echo360, Zoom, JSBin, Socrative
- Discussion, Q&A:
Piazza

- Lecture slot 1:
Mondays 4pm-6pm - combination of in person and online
- Lecture slot 2:
Tuesday 1pm-2pm – combination of in person and online
- In the first 6 weeks we will be delivering the MOOC version of the first half of the course material.
- Many aspects related to building a website will be discussed (copyright, image credibility, ethics, cybersecurity, etc.) throughout the semester. These are ALL important contexts within which web development must be considered.
- Please check the course-schedule in Wattle regularly.

Course Delivery: Lab-tutes

- 9-10 weeks of schedule lab-tutes
- Labs start in week 2 (next week)
- Lab tutorials are of two types: fully online and hybrid.
- The change to hybrid on-campus / Zoom model allows for more enrolments in existing labs; we are awaiting changes from the School *My Timetabling* team.

Please see the following ANU COVID advice (as of 21 June 2022):

• “Some of the most important things you can do to keep the community safe include:

- Wearing a mask indoors
- Keeping your vaccinations up to date
- Staying home and getting tested if you're unwell
- Following any isolation requirements
- Appropriately reporting your result if you test positive to COVID-19 by:
 1. Registering your positive result with ACT Health using this [online form](#), or with the state/territory health authority where you are located;
 2. Alerting the University through this [online form](#) and;
 3. Informing your supervisor or course convenor.
- Washing or sanitising your hands frequently
- Maintain physical distance between yourself and others where possible
- Wiping down surfaces after use” <https://www.anu.edu.au/covid-19-advice>

If students are wearing their masks, the lecturer can remove her/his.
We will move individual question time to the out-of-doors after the lecture.

- Assignments (30%)
 - Assignment 1 (10%)
 - Assignment 2 (10%)
 - Assignment 3 (10%)
- Communications (25%)
 - Active participation in Piazza forum (6%)
 - Active participation in a Continuous Improvement session (4%)
 - A report on participating in user-studies (15%)
- Examinations (45%)
 - 8 online quizzes (15%)
 - Final exam: (30%)

Task	Length (Max)/Workload	%	Due Date (Canberra time)	Marks/Feedback Returned
Assignment 1 (30%)				
Section 0: Topic Submission	3 preferred topics	0%	End of Week 2 (Friday 5 August 5pm)	End of Week 3 (Friday 12 September)
Assignment 1: Website Submission	5 Webpages minimum	10%	End of Week 6 (Friday 4 September 6pm)	TBA
Assignment 2: Website Submission	2 Webpages minimum	10%	End of Week 8 (Friday 2 October 5pm)	TBA
Assignment 3: Website Submission	Complete Website	10%	End of Week 12 (Friday 29 October 5pm)	TBA
Communication and Participation + Report (30%) INDIVIDUAL				
Piazza forum posting + Continuous improvement contribution	TBA	15%		N/A
Report	TBA	15%		
Examination (45%) INDIVIDUAL				
Online Quizlets		15%	End of every week	On submission
Final Exam		30%	TBD	TBA

COMP1710/6780 Roadmap for Semester 2 2022 (Subject to change)

	Wk 1	Wk 2	Wk 3	Wk 4	Wk 5	Wk 6	Teaching Break	Teaching Break	Wk 7	Wk 8	Wk 9	Wk 10	Wk 11	Wk 12	Final Exam
Lectures	Intro to Course	Intro to web dev & design	Content types, learning styles, user reqs	Image credibility, perspective taking	HCI, Web dev in the industry	Video editing, Web dev tools			Good & bad web design	Cyber sec & Phishing	Academic writing, Javascript	ePubs, Javascript	Front & back end	Exam hints & tips	
MOOC/labs	MOOC	MOOC1&2 Intro to labs & tools	MOOC3 & Creating HTML files	MOOC4 & HTML forms, source logs	MOOC5	MOOC6 & video editing			Assignment #2 assistance	Good & bad web design & phishing	TBC	ePubs & remedial	Assignment #3 assistance	TBC	
Assessment					Assign Pt 1					Assign Pt2				Assign Pt 3	
Others															Continuous Improvement – Attend a continuous improvement meeting Experiment Participation – Attend experiments totalling 2 hours offered by SONA or us. →



Comp1710/6780

Your website assignment

Assignment assessments: 10 + 10 + 10

Assignment (in 3 parts) on Web site construction: 30 marks

Web site appearance design: 10 marks

Website is further developed: 10 marks

Full website with advanced components developed: 10 marks

The assignments are based on the labs, approximately every 3 labs is one assignment

Comp1710/6780 – Assignment Part 1

Worth 1 mark

From assignment.html Your *Me and My Passion*

Replace this line with your URL link to this element in your website. Notes:
Provide any notes you may have about this element here.

From Assignment Specification:

Introduce yourself and/or your passion, interest or hobby etc. Write a mission statement or list of goals similar to the idea of a brief statement of the mission and list of goals in chapter 1 of the Unusually Useful Web Book. This section should probably take 200-400 words or so.

What we will be looking for: Thorough description, clear.

Comp1710/6780 – Assignment Part 1

Worth 1 mark for CSS

From assignment.html CSS

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

Create an external (separate) CSS file. Use at least 10 CSS rules. **Make sure your CSS includes comments that would be useful to someone taking over the maintenance of your site**, things like the purpose of each rule, exceptions to its use and the choice you made as to which selector you specified. If you create more than one CSS make sure they are deployed in a Cascading manner, i.e. there should be at least one default CSS that will be applied to all the pages in your site, with specialised CSS then being applied to specific pages of the web site.

What we will be looking for: As described in the assignment specifications

Comp1710/6780 – Assignment Part 1

Worth 1 mark

From assignment.html Site Map

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

This page should clearly depict the organisation/structure of the web site, possibly using a table or links (or both) or an image map. *Make sure you update the site map as you expand your web site in Parts 2 and 3.*

What we will be looking for: Well developed site map that is easy to understand and navigate.

Comp1710/6780 – Assignment Part 1

Worth 1 mark

From assignment.html Source Log

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

You will need to keep a log. A typical log describes the list of sources you used for your project and the modifications you applied to them. The origin of the source should be given in enough detail to ensure the marker can access the source whenever it is possible (URL, ISBN etc). *Make sure you update the source log as you expand your web site in Parts 2 and 3.*

What we will be looking for: Clear, comprehensive listing of all external sources with easy access (provide a link) to the source. Also note your own images, video, etc.

Comp1710/6780 – Assignment Part 1

Worth 1 mark

From assignment.html Feedback Form

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

Create a page which takes feedback from visitors to your site via a form.

What we will be looking for: Easy to use and understand, nice formatting, relevant to your website.

Comp1710/6780 – Assignment Part 1

Worth 1 mark

Coherence

We will be looking some sense of flow and unbroken links in your site. This is only part 1 so your site is still young, but you should have some colour scheme, some similar usage of fonts, your subject should be obvious and your pages should work together.

What we will be looking for: Well structured content in your site that ‘hangs together’ around your theme.

Comp1710/6780 – Assignment Part 1

Worth 1 mark

Quality

Even in a young site the elements can be visually appealing. We will be looking for appropriate colour schemes and font strategies, harmonious use of space, a few relevant and interesting images if appropriate for your site, etc..

What we will be looking for: Visually appealing, well-designed, excellent readability, no broken links,

Comp1710/6780 – Assignment Part 1

Worth 1 mark

Coding

We will be looking at your html and css coding. We want to see well structured, clear coding with appropriate use of indenting and especially good commenting.

What we will be looking for: Well structured code using white space and indenting, and excellent commenting.

Comp1710/6780 – Assignment Part 1

Worth 1 mark

Creativity

Although later (assignment part 3) we will be expecting to see good creativity in your website, even as a young site we expect to see some of the reason why you chose the subject you chose. We will look for your use of creativity in presenting the subject (so far) to us.

What we will be looking for: Creativity that displays thought and imagination.

Comp1710/6780 – Assignment Part 1

Worth 1 mark

Submission

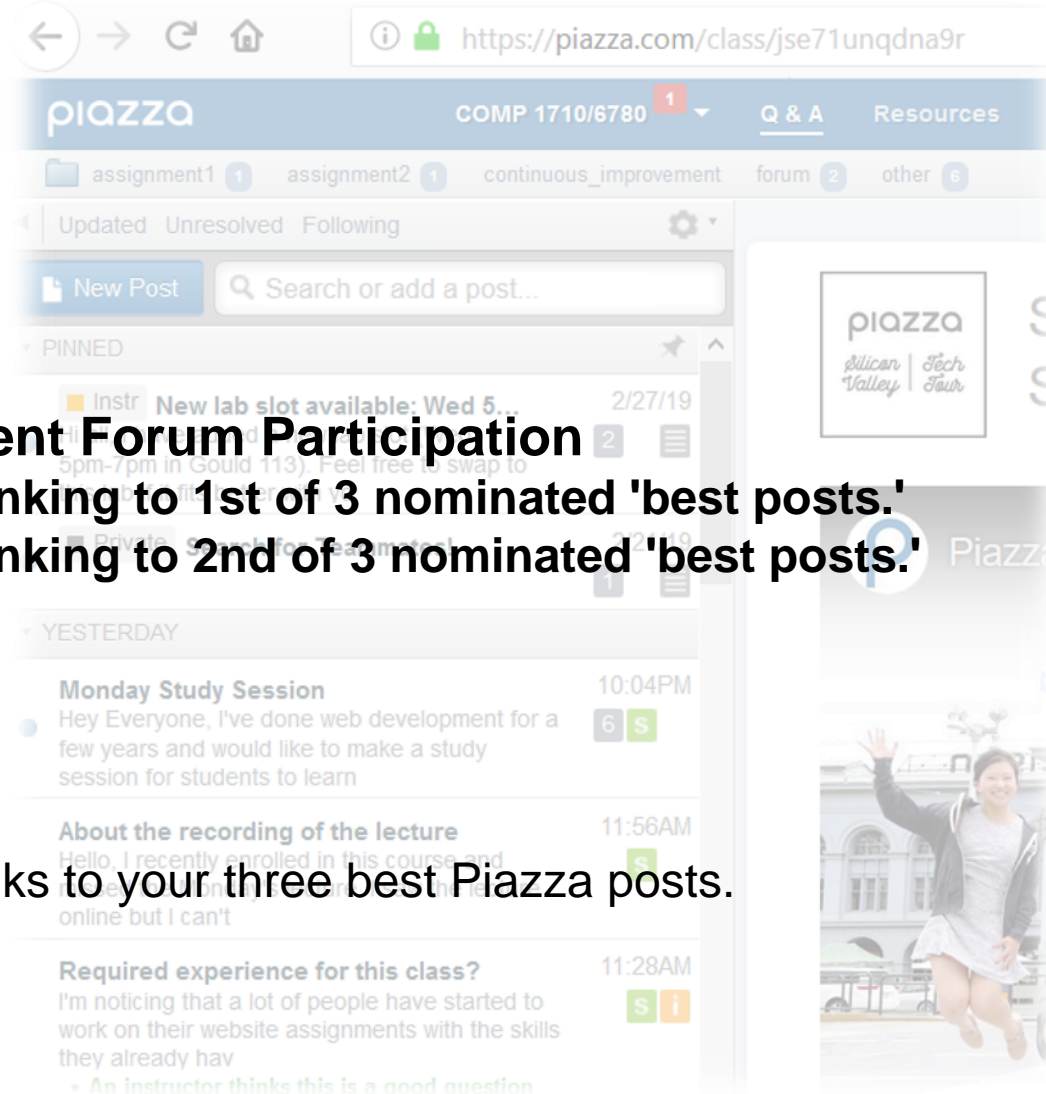
Just submitting your assignment part 1 is an important achievement. If you have submitted your assignment properly (ie we don't find only a zip file or just your student directory with no index.html) and it is on time you will get this full mark.

What we will be looking for: Properly installed website.

**Worth 4 marks –
2 posts with maximum
of 2 marks each**

From assignment.html Student Forum Participation
Replace this line with your URL linking to 1st of 3 nominated 'best posts.'
Replace this line with your URL linking to 2nd of 3 nominated 'best posts.'

From Assignment Spec:
Active Participation: Provide URL links to your three best Piazza posts.





Comp1710/6780

Assignment Part 2

Task 2.1: Image Map

Worth 2.5 marks

From assignment.html

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

Create a page which displays one or more image maps. Make sure that there are at least 3 links, with proper labels in your image map.

What we will be looking for: Excellent imagemap with 3 or more well-formed links and proper labelling

Task 2.2: Photo Gallery

Worth 2.5 marks

From assignment.html

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

Take or select at least 10 relevant photographs. Convert the photographs to *.png format. Use a template or a suitable tool like Galerie to present them with appropriate titles and any comments you wish to make. Your photo gallery should have the same look and feel as the rest of the web site. The easiest way to achieve this is to ensure it uses the same CSS. Or it may be appropriate for you to link to content stored elsewhere on the internet.

What we will be looking for: Excellent photo gallery with 10+ photographs - integrated into website look and feel – well labelled/commented

Task 2.3: Storyboard

Worth 2.5 marks

From assignment.html

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

Create a storyboard for your video as a comic (see the relevant lab). The key thing is to present your plan of how you intend your video (see 3.1) to look after editing.

The comic and the video (see next task) should represent the same story. It should be possible to understand the video by reading the comic, and understand the comic by watching the video.

What we will be looking for: Excellent storyboard that strongly supports the video

Task 2.4: Video OR Javascript

Worth 2.5 marks

From assignment.html

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

From Assignment Spec:

Shoot (or collect) and edit a video and present it on the website. The video (i.e. about your subject, its the same video) should contain at least one title and one transition. It will be inlined within a web page. Use your creativity and originality to do something interesting, useful or just funny. (More on this in Assignment and Report Specification)

What we will be looking for: Excellent inline creative video relevant to website with high quality titles/transitions

Task 2.4: Video OR Javascript

Worth 2.5 marks

From assignment.html

We will be looking for an excellent JS addition to your website that complements your theme. We expect you to speak with your tutor about your proposed JS element(s) so that you can determine whether your proposed JS addition is 'right-sized' for this assignment part.

From Assignment Spec:

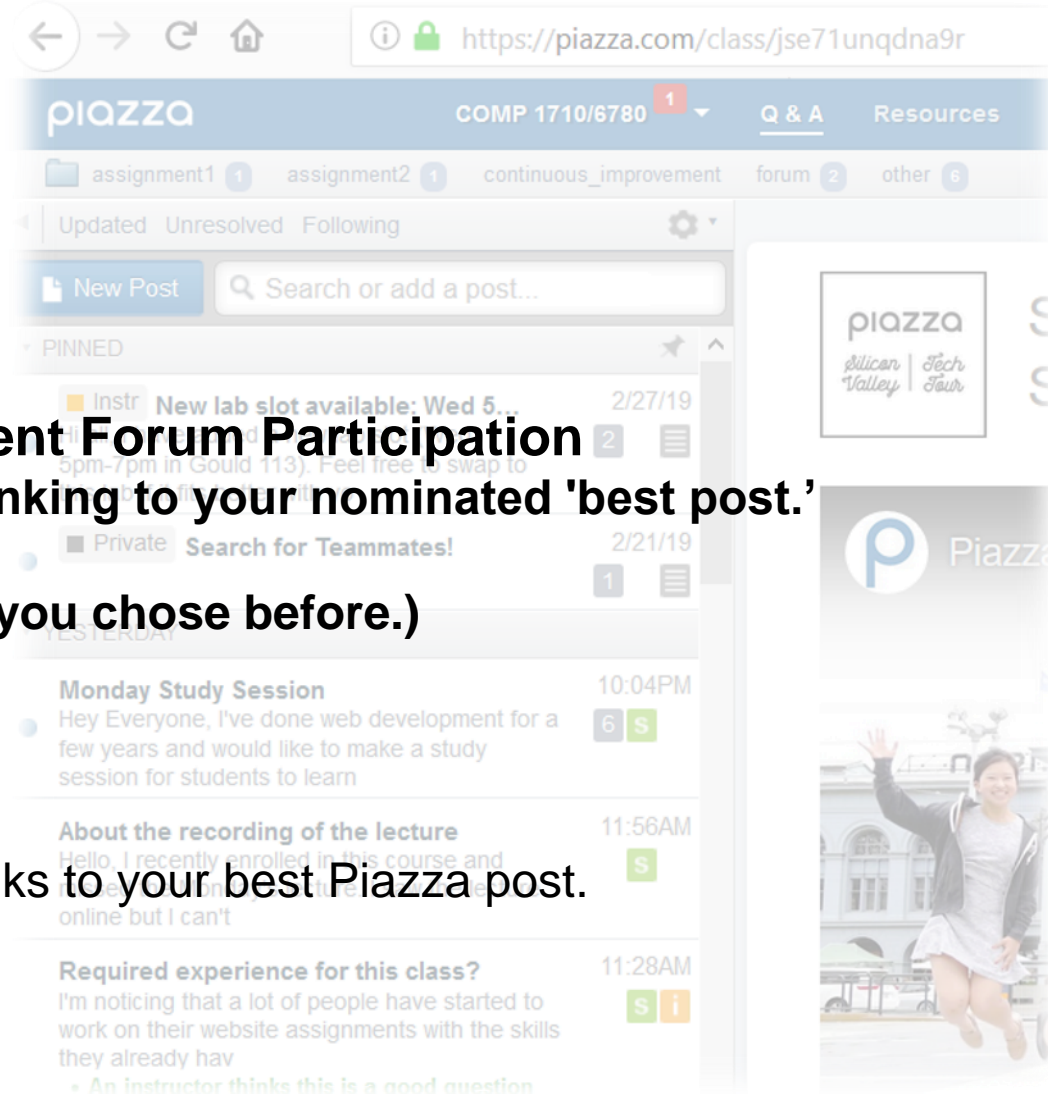
The javascript code needs to be functional, well structured, properly commented, and clearly indented.

What we will be looking for: We expect you to speak with your tutor about your proposed JS element(s) so that you can determine whether your proposed JS addition is 'right-sized' for this assignment part.

**Worth 2 marks –
1 post with maximum
of 2 marks**

From assignment.html Student Forum Participation
Replace this line with your URL linking to your nominated 'best post.'
(This of course excludes the two you chose before.)

From Assignment Spec:
Active Participation: Provide URL links to your best Piazza post.





Comp1710/6780

Assignment Part 3

Worth 1.25 marks

3.1 Reflections

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.



3.1 Provide a reflective "About my site" page

This should be a couple of paragraphs reflecting on what you have learnt about website design while actually doing it. E.g. are there things which if you had realised earlier you would have done different?

What we will be looking for: Excellent reflections that are clear and well-considered

Worth 1.25 marks

3.2 Alternative CSS

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

3.2 Provide an alternative CSS page

Create at least one extra CSS page which transforms the appearance of your website, either in an interesting way or into a more printer-friendly format.

What we will be looking for: One or more excellent alternative CSS styles for 'look and feel' that transforms the site or that creates high quality print style or ?



Worth 1.25 marks

3.3 Social Networking Button(s)

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

3.3 Provide a Social Networking button

Your site could do with more exposure, or at least once you release it into the wild beyond the ANU limited space of partch/liskov. Please provide a working button for a social networking or similar site such as done in the lab or lecture related to this topic. If your theme is such that none of this is relevant then please link to this from your assignment.html file, and of course mention why it was not relevant for you.

What we will be looking for: One or more well-placed, working (not just an href) social networking buttons in your site.

Comp1710/6780 – Assignment Part 3

Worth 1.25 marks

3.4 Social Networking Feed

Please provide a working social networking feed you have learnt about in the relevant lab.

If your theme is such that none of this is relevant then please email me and we may be able to negotiate the alternative (make sure you keep the email in which I agree to your alternative topic).

What we will be looking for: Relevance to your topic. Gracefully integrated into your website.

Worth 1.25 marks

HTML

CSS



3.5 CSS and HTML Validation

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

3.5 Validate your CSS and your HTML pages

Run your CSS and HTML pages through the W3C validation service. Create a page (or another photo gallery) showing some screenshots (if you're not sure how to take screenshots - google it) of the validation report. If you need to leave some validation errors to achieve the look you want, make a comment in your assignment.html file to explain.

What we will be looking for: Proof that you have validated your code, and explanation of any HTML or CSS that does not pass validation.

Worth 1.25 marks

Originality

3.6 Something Original

Replace this line with your URL link to this element in your website.

Notes: Provide any notes you may have about this element here.

3.6 Provide something original

Get creative and add a component or content which differs from the tasks listed above. It might be an extra page presenting some interesting content you made or wrote yourself, or which provides links to sites you have found useful while making the site, or which are about related or relevant subjects. or it might be something made with a tool you have researched and learnt to use yourself. Don't get stressed - this is meant to allow you to be creative in some way, and get marks for it.

What we will be looking for: Excellent original element that is relevant to the theme of your website and well-integrated into your design.

Worth 2.5 marks

Overall Presentation of your website

What we will be looking for: Overall the finished site is extensively developed, and reflects a high degree of excellence, attention to detail and superior design.

This week...

No Tuesday lecture this week. Use this time to decide on your website topic.

Read the course outline

Consider getting a headstart by doing the 1st week of the online 'MOOC' lab materials – these will be available from tomorrow.