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FOAR705 Digital Methods

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Faculty of Arts
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The context of Research Data Management

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Code of Conduct

Expectations

Don’t panic!

What, and why?

Tools and Communication

Moving on to Data Carpentry

Minute cards!

References

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Code of Conduct

Unit Code of Conduct

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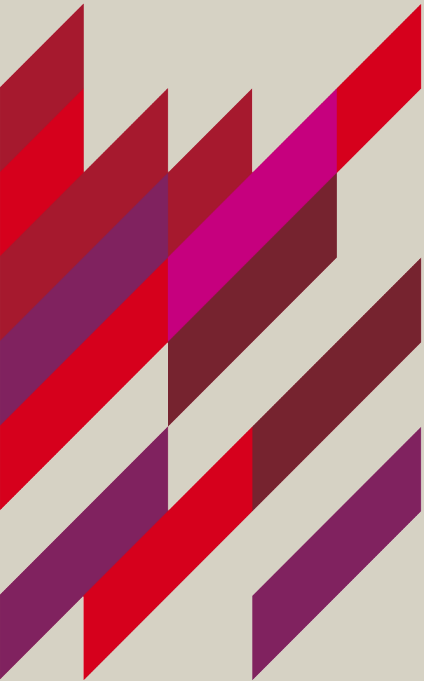
This class is using a great deal of material from The Carpentries. All interactions related to this class, inside and outside, abide by The Carpentries Code of Conduct.

Report code of conduct violations to Shawn, Brian, or eresearch@mq.edu.au.

`https://docs.carpentries.org/topic_folders/policies/code-of-conduct.html`

In summary, we want to emphasise:

- Use welcoming and inclusive language
- Be respectful of different viewpoints and experiences
- Gracefully accept constructive criticism
- Focus on what is best for the community
- Show courtesy and respect towards other community members



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Expectations

Is the content 'too hard'?

'I still have my concerns about how over-technical this course is given it is now meant to be taken by students from across the entire Faculty from diverse backgrounds and with diverse interests...I suspect will cause students anxiety and maybe lead to drop out.'

- Before we start, what was your reaction to reading the Unit description?
- Do you agree with the quote above?

Expectations and workload

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You are undertaking an Masters of Research at a top one-percent university (QS ranking 125 in Arts and Humanities, 202 in Social Sciences). Expectations and workload higher than what you are accustomed to.

- Expect a workload of six hours per week outside of class to earn a DN or HD.
- Avoid missing classes. If you do, expect to spend four hours to catch up.
- If you want to continue to a PhD you need to maintain a DN or HD average.
- Both of us have taught internationally, and know what it takes to compete against those who have done postgraduate work in the US or Europe.
- Considering the academic job market, competition is fierce.
- Most of you will not get academic jobs, so transferable skills are crucial.
- It is our job to prepare you for this environment, and yours to make yourself competitive.

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Don’t panic!

Data Carpentry: a proven approach

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‘Building communities teaching universal data literacy’

‘Data Carpentry trains researchers in the core data skills for efficient, shareable, and reproducible research practices. We run accessible, inclusive training workshops; teach openly available, high-quality, domain-tailored lessons; and foster an active, inclusive, diverse instructor community that promotes and models reproducible research as a community norm.’ [Teal, 2016]

‘Since 1998, Software Carpentry has been teaching researchers the computing skills they need to get more done in less time and with less pain. Our volunteer instructors have run hundreds of events for more than 34,000 researchers since 2012.’ [Duckles et al., 2018]

Data Carpentry: widely used worldwide in HASS

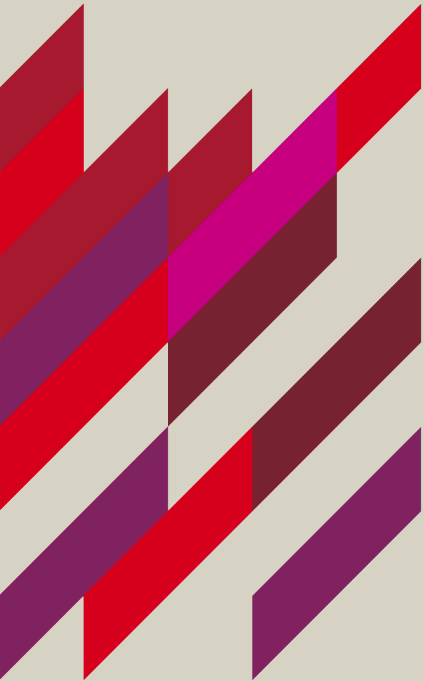
Carpentries training is used all over the world to teach digital literacy and computational thinking to Humanities and Social Sciences students and researchers.

- Digital Humanities at Oxford Summer School
- CODATA-RDA School of Research Data Science
- Australian Research Data Cloud training

Data Carpentry: used at Macquarie

Other MRes students at this university have successfully undergone DC training:

- BIOL703 Research Skills for Biology
- No excess attrition, high student satisfaction, good feedback
- Nominated for a Vice-Chancellor's Learning and Teaching award
- Is the background or needs of Arts students that different from ecology, biology, environmental sciences, and related fields?



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What, and why?

Digital literacy: creators, not consumers

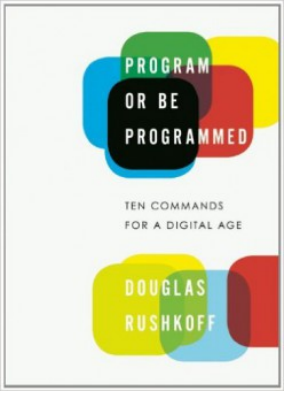


Figure 1: Program or be Programmed, Douglas Rushkoff

See also: `https://impossiblehq.com/an-unexpected-ass-kicking/`

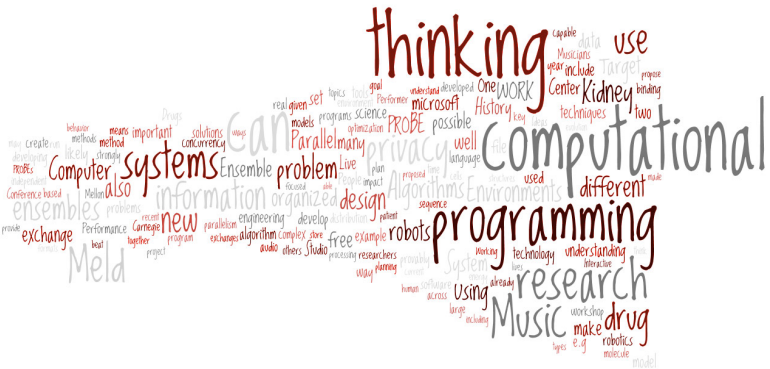
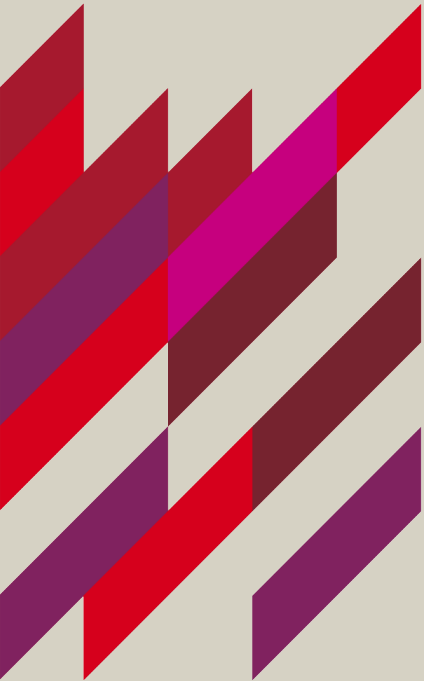


Figure 2: 'To flourish in today's world, computational thinking has to be a fundamental part of the way people think and understand the world.'
[Center for Computational Thinking, 2012]

Tools and approaches

Only within these frameworks can you use available tools and approaches - but we will introduce you to a range of them, customised to the disciplinary mix in the class.

- Research design and project management
- Data management planning
- Data capture
- Data analysis and collaboration
- Data archiving and dissemination



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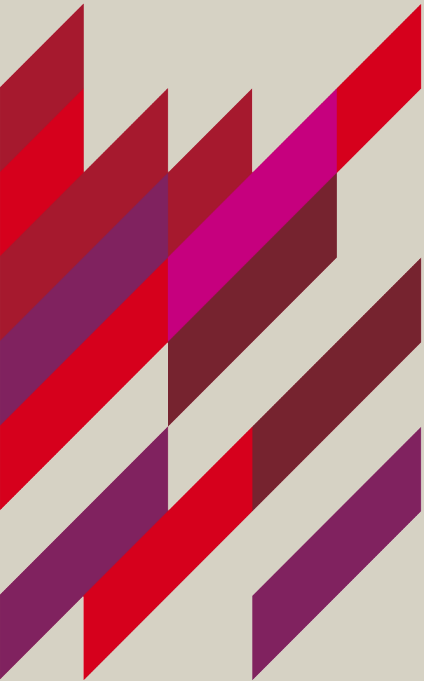
Tools and Communication

Discussion on which tools we will use as a class

- Chat/coordination/project management software
- Typesetting software
- Version control online repository
- File sharing mechanisms
- Backup mechanisms

Coordination outside of class

- Hacky-hour/study groups: `https://science.mozilla.org/programs/studygroups`
- Consultation Hours: Friday 12:45-1:45pm (AHH Level 2 lobby) and 4:15-5:15pm, campus hub (before and after seminar)
- `https://twitter.com/Rusers_MQ`



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Moving on to Data Carpentry

Pre-Carpentry survey

At the start and end of every carpentries workshop, we poll participants.

`https://bit.ly/FOAR705-pre`

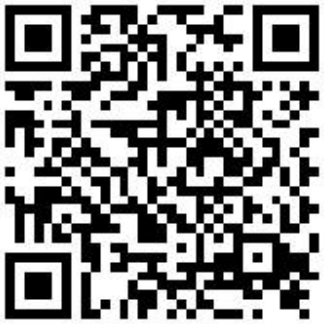

Figure 3: https://mqedu.qualtrics.com/jfe/form/SV_5v6iQJSBZDNhq4d?w

Sticky notes

We use sticky notes during our workshops (and thus during our classes) to indicate progress or needs for assistance.

We also use them as minute cards for feedback and the end of each session.

Starting the workshop

https://datacarpentry.org/socialsci-workshop/

- https://datacarpentry.org/spreadsheets-socialsci/setup.html
- https://datacarpentry.org/openrefine-socialsci/setup.html
- https://datacarpentry.org/r-socialsci/setup.html

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Minute cards!

Feedback time

On your green sticky, write one thing we did well today.

On your red sticky, write one thing we could improve upon for next time. Be specific.

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References

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Thank you!

Source code for this presentation is available at:
`https://github.com/MQ-FOAR705/MQ-FOAR705-Week1`