

MA40001

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Week 3

Tasks

- ▶ If you do not already have one, sign up for an account on <https://github.com>. We will use this next week.
- ▶ Install VSCode on your personal computer. Then install the Quarto extension on VSCode.

Python * Start embedding Python codes in your Quarto document

* Work through the exercises up to for loops and if statements.

Week 2

Tasks

Use Quarto to generate a pdf with:

- ▶ title, author
- ▶ section headings
- ▶ figures
- ▶ tables
- ▶ equations using latex
- ▶ schematic diagrams
- ▶ cross referencing of different objects
- ▶ bibliography
- ▶ appendices

Project narrative (suggestion)

- ▶ One sentence summary of your project
- ▶ Why is the topic important?
- ▶ What is the background to your project (place the work in historical context)?
- ▶ What are the project Aims?
- ▶ What work did you do to address the Aims?
- ▶ Outlook, reflection (recap the project, were the aims addressed?, what are the limitations of the work? what would come next?)

Disclaimer: there are other ways to structure a project narrative.
Discuss this with your project supervisor.

Weeks 1 and 2

Tasks

- ▶ Get assigned your project
- ▶ Set up a meeting with your project supervisor
- ▶ Devise a plan for how you are going to work on your project
- ▶ Read Chapter 1 of lecture notes
- ▶ Start using Quarto (Chapter 2 of lecture notes)

Modules Aims:

- ▶ investigate a new mathematical topic
- ▶ develop communication skills
- ▶ develop independent study skills
- ▶ critical analysis
- ▶ develop programming skills

Module Structure

Your project content

- ▶ work independently
- ▶ meet with your project supervisor (you need to discuss and arrange a meeting schedule).

Writing/presentation

- ▶ weekly sessions developing communication/writing/programming skills (see timetable).

Optional

- ▶ 2 p.m. on Monday is Maths seminar - you are encouraged to attend but it is optional.

Module assessment

- ▶ presentation (10%)
- ▶ interim report (15%)
- ▶ poster (10%)
- ▶ final report + *viva* (65%)

Template projects and presentations will be available.

How did projects get assigned?

- ▶ Algorithm maximises overall satisfaction (tries to get as many students as high up preference list as possible) and is constrained by supervisor workload
- ▶ If you are not satisfied, please come and discuss with me.

Feedback

- ▶ Formative assessment. You will receive feedback
 - ▶ on submitted weekly work
 - ▶ practice presentation sessions
 - ▶ from your supervisor in meetings
 - ▶ documents that your supervisor reads in advance of submission
- ▶ Summative assessment
 - ▶ You will receive an email with grades and feedback from examiners

Any potential issues

- ▶ It's a 30 credit module
- ▶ Speak with your project supervisor
- ▶ Come and speak with me
- ▶ SSLC