# **Class Schedule Example**

### Bioinformatics, Fall 2025

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### 1 – Introduction

The class-schedule-pdf Quarto extension allows you to create a PDF document featuring a specially formatted list of topics scheduled across a defined range of dates. You can easily select recurring days of the week for each topic, making this extension especially useful for designing a syllabus or class schedule. Classes are displayed in a table format, listing topics, corresponding dates, and any additional descriptions you wish to include.

### **i** Additional use cases for this extension include:

- Creating a schedule for a conference, a workshop, or any other event that requires a structured list of topics with dates and descriptions.
- Organizing travel itineraries by listing destinations along with their corresponding dates and descriptions.
- Outlining project timelines, detailing tasks to be completed along with their deadlines and descriptions.
- · Creating meeting agendas.
- Managing to-do lists by listing tasks and their descriptions.

To create a class schedule document using the class-schedule-pdf format, follow a specific structure and syntax in your Quarto document. The guide below explains how to set up your document, including the required metadata and the schedule definition syntax.

## **2** – Metadata

The metadata at the top of your document defines the standard Quarto options used to render the document. The class-schedule-pdf format is a custom option that utilizes a dedicated LaTeX template to produce the schedule as a PDF.



### **Mandatory metadata**

Be sure to set the format to class-schedule-pdf in the YAML metadata at the top of your document. This ensures Quarto uses the custom class schedule format when rendering the PDF.

format: class-schedule-pdf

### Regular metadata

**title** The title will appear at the top of the document, and will be something like "Syllabus".

**subtitle** Below the title, and can be used to provide additional information, such as the course name and semester.

**author** Author name (Optional)

date The date of the document, which can be set to last-modified to automatically use the last modified date of the file. (Optional)

#### **Customization metadata**

You can also customize the appearance of the document by adding additional metadata. For example, you can set the logo to include a logo image, and specify its placement and height.

**logo** The path to the logo image file. This is optional, but if you want to include a logo, you should specify it here.

logo-placement The placement of the logo in the document. It can be set to L (left) or C (center). The default is L.

**logo-height** The height of the logo in the document. This is optional, but if you want to include a logo, you should specify its height in points (e.g., 40pt).

logo-text The text to be displayed at the rightmost side of the page header (optional), containing information such as the university name and department. One important thing to note is that the text can be multi-line; in this case, you should use the I character to indicate that the text is multi-line, and each line should be indented according to YAML syntax. Also, to display two lines, you **must** use a blank and indented line between the two lines of text.

**color** The color of the header in the document, headings and alternating table rows. It is an RGB color code in the form AA39CC, without the # symbol.

**color-odd** The color of the odd rows in the schedule table. The default is the same as color.

**color-even** The color of the even rows in the schedule table. The default is ffffff (white).

**color-heading** The color of the decoration in the section headings in the document. The color of the heading text itself is set with the metadata attribute sansfontoptions (see quarto PDF document fonts).

**heading-format** A boolean value that indicates whether to use a special format for the section headings. If set to true, the section headings will be rendered with a filled box around the section number. The default is true.



Refer to the template document for examples of how to utilize these metadata attributes. A full list of metadata attributes can be found in the file \_extensions/class-schedule/\_extension.yml in the class-schedule extension directory.

## **3** – Schedule syntax

Define the schedule with the ::: {.schedule} div syntax. Begin each class day or topic with a # header (e.g., # Introduction), followed by a class description in standard markdown. Use sub-headers (e.g., ## Theory) to organize sections within a class description. Class numbers and dates are automatically generated from the start and end attributes in the schedule div.

```
::: {.schedule
start="29/04/2025"
end="28/06/2025"
days="1,3,5"
headers="Class,Day,Section,Description"
dateformat="%a - %b, %d %Y"}
# Class 1
Description of class 1.
# Class 2
Description of class 2.
::::
```

#### **Div attributes**

The schedule div accepts several attributes:

- start: The start date of the schedule in the format dd/mm/yyyy. Important: The order is revelant, so the first two digits refer to the day.
- end: The end date of the schedule in the format dd/mm/yyyy.
- days: A comma-separated list of days of the week (1 for Monday, 2 for Tuesday, etc.). This describes the days on which the events occur.
- headers: A comma-separated list of headers for the table (e.g. Class, Day, Section, Description). These are used to label the columns in the table and should be four in total, and the order is fixed.
- dateformat: The format for displaying dates in the table (e.g. %a %b, %d %Y for abbreviated weekday, month, day, and year). This for the final display of the dates in the table, and you can use any valid strftime format.

## 4 - Installation

To use the class-schedule-pdf format, you need to have the quarto command line tool installed. You can install it from Quarto's official website.

You also need to have the **class-schedule** extension installed. You can install it by running the following command in your terminal:

quarto install class-schedule

## 5 - How to render the schedule

```
quarto render --to class-schedule-pdf template.qmd
```

If you have the format metadata set to class-schedule-pdf in the YAML metadata, you can simply run:

quarto render template.qmd

## **6**—Some formatting tips

#### Text outside the schedule

Standard Quarto markdown syntax applies, so you can use any formatting described in Quarto Markdown Basics. Each topic should begin with a level 2 header (##), which will

be numbered automatically. You can also use other header levels, but these will not be numbered.

### **Highlights**

To highlight text in the schedule or body, use the  $\hline \hline \hlin$ 

To change the highlight background color, use \sethlcolor{red} before \hl{RED highlighted text}. The first command sets the color for the following highlighted text but is not rendered in the document (e.g., \sethlcolor{red}\hl{RED highlighted text}).

### Note

This LaTeX code is designed specifically for PDF documents. For a more versatile method of highlighting text, consider using the mcanouil/quarto-highlight-text extension.

### 7 - Rendered schedule

#### Note

The full document will look like this: demo PDF. Check source code for the rendered schedule in the README.qmd file.

| Class | Day                   | Section              | Description                                       |
|-------|-----------------------|----------------------|---|
| 1     | Wed - Apr, 30<br>2025 | Introduction         | Regular text of the description.                  |
| 2     | Fri - May, 02<br>2025 | Introduction (cont.) | Any text can be added here, including lists:      |
|       |                       |                      | <ul><li>Welcome</li><li>Course Overview</li></ul> |

| Class | Day                   | Section       | Description   |
|-------|-----------------------|---------------|---|
| 3     | Mon - May, 05<br>2025 | Sub-header    | You can also have sub-headers in the table, which will be rendered as a separate row in the table. Add ## for a sub-header. The class {.unnumbered} is important to avoid mixing up the numbering with regular level 2 headers.  Theory  Topic 1 Topic 2  |
|       |                       |               | Practice • Exercises  |
| 4     | Wed - May, 07<br>2025 | Another class | Another formatting is the definition list notation below. The two spaces after the colon (:) are important to render the definition list correctly.:  Practice exercises  (1) Exercises 1 (2) Exercises 2 (3) Exercises 3  • Computer lab  1. Exercises 1 |

your Logo

| 5 | Fri - May, 09<br>2025 | Class XXX | This is a class with a very long description that will be wrapped in the table cell. It should be long enough to demonstrate how the text wraps around in the table cell. This is useful for showing how the schedule can accommodate longer descriptions without breaking the layout. |
|---|-----------------------|-----------|--|