Creating PDF Files for Submission of Blackboard Assignments

1 Introduction

Your lecturer will give you guidelines on the content and structure of your submission. Please follow these carefully.

In some cases, lecturers will ask you to submit your assignment as a single PDF. Submissions of this type are batch printed. Consequently, if more than one file is submitted there is a danger that parts of your submission will become separated from the rest and it may be difficult or impossible for staff to identify related components.

This document provides a guide to producing suitable PDF documents. This guide relates to Blackboard assignments on Learning Central only. It does not apply to Turnitin assignments.

This guide covers:

1 Producing PDFs on various platforms.
2 Combining multiple PDF documents into a single document suitable for submission.

When submitting your assignment as a single PDF, please ensure that:

1 Your submission includes a coversheet on the first page providing all relevant details as outlined in the electronic submission guide available on the School website.1
2 The resulting PDF can be read on any platform. Some platforms use fonts that are not available on other systems. As a result, content may be missing or unreadable when viewed on different systems. This issue can be avoided by ensuring that all fonts used within the document are embedded in the PDF file.
3 When including program code, it is clearly formatted and easy to read. Wherever possible, code should be submitted in portrait layout. Use good programming practice to avoid long lines of code.
4 When embedding diagrams, they display correctly and are clearly legible within the PDF.
5 All content is suitable for printing in black and white on A4 paper. Colour printing is not available, so please ensure that all content is clear and understandable when printed in grayscale. Similarly there are no facilities for large format printing (i.e. larger than A4), so consideration must be given to the size constraints to ensure that diagrams are clear when printed.

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1 On the home page click the ‘Resources for current students’ link, then click on your degree programme. Guides for coursework submission are located on the right hand side under ‘For All Years’.
6 Submissions do not exceed 80 pages.

Further good practices include:

1 Addition of a header or footer containing your name and student number.
2 Use of page numbers (particularly of the format ‘Page 1 of 10’).

2 Saving Files as PDF

2.1 Windows
To illustrate the process, we have used Microsoft Word. Other applications can produce PDFs using a similar process.

1. From the File menu, select Options. In the new window, select the Save option to modify save settings. Check Embed fonts in the file. Uncheck Do not embed common system fonts if this is checked. Click OK to save these settings.

NOTE As this is a document specific setting, font embedding needs to be specified for each document you create.

2. From the File menu, select Save as.

3. Navigate to the required output directory and provide a file name.

4. Click on the Save as type dropdown and select PDF.
5. Finally, click the **Save** button to save the document as a PDF.
2.2 Mac OS X
Mac OS can produce a PDF from any application that offers printing facilities (i.e. via File -> Print). To produce a PDF:

1. Click the PDF button and select **Save as PDF**.
2. Navigate to the required output directory, provide a file name and click the Save button.

**IMPORTANT**
Please note, when creating PDFs in MS Office multiple PDFs may be generated from a single file where portrait and landscape pages are combined within a document. It is important that these are combined into a single PDF prior to submission. See section 3 for details on combining PDFs.
2.3 Linux
Many applications, such as LibreOffice allow export as PDF using the File -> Export as PDF option.

1. To ensure that all images are clearly visible and that the resulting document is compatible with other systems, select the General tab and:

2. Click the Export button.

3. Navigate to the required output directory, provide a file name and click the Save button.
For applications that do not have an ‘Export PDF’ facility, you should be able to create a PDF using the **Print** command. In the print dialogue, select **Print to File** and set output format to PDF.

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2 The location of the print to file option may vary from application to application. If this option isn’t available when the print dialogue first opens, you may need to select a different tab (e.g. the Options tab).
3 Combining PDFs

Electronic coursework submission requires the submission of a single document. In the process of completing your assignment, you may produce a number of files that need to be combined into a single overall file. For example, you may have a separate cover sheet, assignment document and appendices document. PDF documents can be easily combined using the PDFtk package.

3.1 Using the PDFtk GUI (Windows Labs)

A version of PDFtk with a graphical interface is available in the Windows labs.

1. Click on the **Zenworks Adaptive Agent** icon and navigate to CardiffApps > School Applications > COMSC. Double click the **PDFtk** icon.

2. Click the **Add PDF** button.

3. Navigate to the appropriate directory and select your source files. Holding shift while left clicking will allow you to select multiple files. Click **Open** to continue.
4. Files are imported in the order shown in the file dialogue so may need to be reordered at this point. Files can be reordered by dragging and dropping them into the appropriate location.

5. Click the **Create PDF** button.
6. Navigate to the required output directory, provide a filename and click **Save**.

![Image of file explorer with Save button highlighted]

### 3.2 Using PDFtk at the Command Line (Windows, Mac and Linux Using PDFtk)

PDF documents can be combined at the command line using the PDFtk package. If PDFtk is not available on your machine it can be downloaded from:


or installed using the software installer/manager on Linux.

PDFtk offers a range of function for processing PDF documents, including the ability to combine documents. Documents can be combined using the following command:

```
pdftk source_file_1 source_file_2 source_file_n cat output output_file
```

For example, entering the following at the command line, will result in the three source files being combined into a single PDF (combined_assignment.pdf).

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Files are combined (and will appear in the resulting document) in the order specified. Note that PDFtk only accepts PDF files. All files must be converted to PDF before they can be combined.
3.3 Mac OS X Using Preview

Mac OS X users can also use the Preview application to combine files. PDFs can be combined in Mac OS using the Preview application as follows:

1. Open the first document (i.e. the one you want to come first in the output file.
2. Open the file to append.
3. Ensure documents are visible in the sidebar. If documents are not visible, click the sidebar button.

4. If all pages are visible in the sidebar for the second document, collapse these into a single page view by clicking the triangle icon in the sidebar.

5. Click on the collapsed document in the sidebar and drag it to the position in the first document that you would like it to appear (at the end in this example). When the green plus icon appears, releasing the mouse button will insert the content at this location.

6. You should now have a merged document. This document should be saved using the File -> Save features of the Preview app.