### Due date: Friday Week 9, by 5pm

You must submit your assignment electronically and as a single file via the LMS page for this subject. Do not submit your assignment as a ZIP file. Note that this assignment is worth 10% of your overall mark for this subject.

In submitting your work, you are consenting that it may be copied and transmitted by the University for the detection of plagiarism. Please start with the following statement of originality, which must be included near the top of your submitted assignment:

"This is my own work. I have not copied any of it from anyone else."

## Overview

To prepare yourself for a career in data science, you will need to be creative, curious, cultivate a statistical mindset and be able to write, modify and break code. You will need strong communication skills, in order to convey your results in 'layman's terms' to work colleagues who may not be familiar with statistics terminology. You will also need to maintain and update your knowledge-base, by reviewing new papers in your specific fields of interest.

#### Your Task

In this article (click here) Jim Ridgway discusses modern developments in statistics and data science, and considers ways in which both students and educators can adapt to the data revolution.

Your task is to write a 600 to 800 word essay summarizing this article for someone who is not familiar with statistical terms. Note that:

- The word count limit includes everything, e.g. title, name, body of essay, bibliography. Please include the word count for your essay at the end of your submission file.
- Your essay should be prepared using MS Word or LaTeX. Handwritten assignments will not be accepted.

#### Sample outline for writing your essay

Included below is an example essay outline which you can follow. By following this outline, your essay should be well-structured and coherent.

- Introduction The introduction is used to establish the context of your essay, for the benefit of the reader. To establish the context, it is important to define the topic and provide any background information that helps your reader to understand the topic. Also it should outline which aspects of the article will be discussed.
- **Body** The body of your essay should focus on summarizing the article. Consider including:
  - Three to four paragraphs each summarizing one aspect or idea of the article.
  - One paragraph to point out the information that you found particularly important or interesting your future career.
- Conclusion This is the last paragraph of your essay. In this paragraph, it is important to concisely reiterate the main points in your essay.

You may also find this web page (click here) to be a helpful resource for guidance on writing a summary essay.

If you would like further assistance with essay writing, you can visit the Learning Hub or you can access help through 'Studiosity' on LMS.

# Marking Criteria

This assignment will be marked out of 100. The specific allocation of marks is as follows:

• Essay title (5 marks available): It is suggested to give a title to your writing after completing your essay. Give some thought to your title. A short, informative title that conveys the essence of your work is desirable - the title should have no more than 7 words (with 'statistics' and/or 'data science' likely to be some of these words). Marks will be deducted for excessively lengthy titles, and for titles which do not accurately reflect the content of the essay.

- Word count (5 marks available): If the total length of your essay is within the designated limits (600-800 words) then you will receive all 5 marks for this category. Otherwise you will receive 0 marks.
- Structure of essay (5 marks available): The structure of any piece of writing is important, in order to properly convey your views. Following the sample outline provided above (or something similar) is recommended.
- Academic language (20 marks available). Make sure that your essay is free of spelling and grammar mistakes, as they will detract from your work. 2 marks will be deducted for each mistake (up to a limit of 10 marks). Your writing should be appropriately formal. In the case of utilizing statistical terms, make sure you define them for the reader. Make sure you paraphrase and limit the use of quotes.
- Quality of content (60 marks available): Your writing should be clear and concise. Your summary should be accurate and convey that you both understand and have formed your own opinion on the content of the source article. The main aim of the exercise is to see what you, as a young, inquisitive data scientist, make of this article.

## Paper reference

Ridgway, J. 2016. Implications of the data revolution for statistics education, Int. Stat. Rev., 84(3), 528–549.