

## Statistics Assignment

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This handout gives further details about the statistics group project. This project will count for 20% of your module mark.

**Topic:** You will need to work together as a group to create a poster about *one* of these three topics. Your first task as a group will be to decide which topic.

- Make a poster tracing the development of the graphical representation of *circular data*, including the impact of the work of Florence Nightingale.
- Make a poster explaining John Snow's statistical work in response to the 1854 Broad Street cholera outbreak, and its influence on medical statistics.
- Make a poster describing some ways in which probabilistic or statistical modelling has been important in the history of finance.

**Groups:** You can find out which group you are in from the tables on the following pages, or from the "Users and Groups" tab in Minerva. I think that you can also email your fellow group members from the "Users and Group" tab. I encourage you to get in contact with each other straight away.

*If you think I've failed to allocate you to a group, you need to let me know **immediately**.*

**Deadline:** The deadline is **11:59pm on Friday 27 March 2020**. Your group's poster must be submitted electronically via Minerva.

**Format:** I strongly recommend submitting your poster in PDF format. PowerPoint, Word, or other common formats will probably be fine, but I can't guarantee your poster will look identical on my computer as it did on yours. You may use any program to design your poster; LaTeX (try the "beamerposter" package) and PowerPoint are particularly recommended, and almost all programs can export to PDF format.

The School of Mathematics will print your poster at A1 size (594 × 841 mm), which can be either portrait or landscape. I recommend designing your poster at A1 size too, so that you can make sure the design style, font size, and so on, are appropriate.

Your poster should display your names and your group number. The group number should be clear within two seconds of looking at the poster.

**Tips and hints:** Some helpful hints on creating good posters can be found, for example, on the websites <http://colinpurrington.com/tips/poster-design> and <http://www.ncsu.edu/project/posters/>. You can find more excellent advice using your favourite search engine.

**Why the group project?** One of the objectives of MATH3015 is that it should develop transferable skills, including skills valued in the workplace. The group project will give you some experience of teamwork, the challenge to organize yourselves, and to overcome any difficulties. Being able to create a presentation is a useful skill – so while you may decide to split the researching, writing and designing sides of the assignment, I hope you will each feel ownership of the finished poster.

**Marking:** Each group's poster will be awarded a mark out of 20. An individual mark out of 20 will be calculated by adjusting the group's mark up or down, depending on individual contributions.

- **Group mark – module leader:** I will award each poster a mark out of 15.
- **Group mark – peer assessment:** Each of you will be allocated two posters to grade. Your colleagues' marks of your group's poster will be aggregated into a mark out of 5. (Further details on the peer assessment will follow nearer the time.)
- **Group mark – total:** The group mark out of 20 is the sum of the module leader's mark and the peer assessment mark.

To assess individual contributions, your group will be asked to submit an "individual contribution" form, where your group decides by consensus how large a contribution each group member has made. (Further details on the "individual contribution" form will follow later.)

Most individual marks will be very close to the group mark, but the mark will be slightly increased for members who made a particularly strong contribution, of slightly reduced for group members who worked less than their share.

**Assessment criteria:** Your poster will be marked primarily on the quality of the historical and mathematical content, including the originality of the work – that is, the evidence of reading and sourcing of material – and the clarity of the exposition. Also important is the presentation of the poster: the visual appeal, the use of graphics, how clearly your poster can be understood from a distance, etc.

**Referencing:** It's important that your poster acknowledges the primary and secondary sources you use, but it's up to you how you choose to present this. It's not necessary to follow any particular referencing style.

### **Timeline:**

- **From Monday 9 March:** Work on your poster, together with your group.
  - **By Friday 27 March:** Submit the group's poster, along with the "individual contribution" form.
  - **Monday 27 April – Friday 1 May:** Posters are displayed in the School of Mathematics; posters are marked, including peer assessment.
  - **Friday 8 May:** Marks returned.

<p><b>Group 1</b></p> <p>Bruce, Alice Goraya, Jeevan Cameron Singh Marshall, Arran Robinson, Thomas Shaw, Gemma-Louise</p>	<p><b>Group 2</b></p> <p>Bouzenada, Hana Clayton, Molly Holtom, George Hughes, Molly Kingett, Elizabeth</p>	<p><b>Group 3</b></p> <p>Brown, Nicholas Chen, Jiyuan Chen, Yameng Lin, Yangxu Marshall, Rebecca</p>
<p><b>Group 4</b></p> <p>Burney, Sera Nuttall, Gemma Rigby, Katy Schenkelberg, Jessica Slater, Katie</p>	<p><b>Group 5</b></p> <p>Badderley, Sophie Barker, Alice Broomhead, Steph Curley, Ben Tarbotton, Martha</p>	<p><b>Group 6</b></p> <p>Cox, Ellie Habbershaw, Chloe Morley, Molly Shambrook, Ashleigh Simmons, Beatrice</p>
<p><b>Group 7</b></p> <p>Bhattacharya, Apoorva Folcik, Dean Kirby, Shannan Reader, Catherine Young, Derry</p>	<p><b>Group 8</b></p> <p>Bowden, Emily Davison, Sophie Harker, Katie Kang, Francesca Mansaf, Louisa</p>	<p><b>Group 9</b></p> <p>Evans, Patrick Ludd, Kit Seager, Georgia Stevenson, Luke Welch, Matthew</p>
<p><b>Group 10</b></p> <p>Burns, William Childs, Harry Grigg, Eleanor Jones, Christopher Wilson, Emily</p>	<p><b>Group 11</b></p> <p>Arthurs, Lucy Gheewala, Abdulsamad Houstoun, Callum Turner, James Woods, Benjamin</p>	<p><b>Group 12</b></p> <p>Carpenter, Fiona Ebo, Matthew Ferguson, Joshua Flower, Zoe King, Matthew</p>
<p><b>Group 13</b></p> <p>Anderton, Kate Chiuchiolo, Raffaele Cody, Catriona Miah, Chema Ravikumar, Shreya</p>	<p><b>Group 14</b></p> <p>Donnell, Kathryn Guilherme, Jacob Khan, Mohammed McGeachie, Rachel Pinnock, Iman</p>	<p><b>Group 15</b></p> <p>Dosani, Salman Hutchings, Amy Itco, Alex Ranee, Nadia</p>
<p><b>Group 16</b></p> <p>Cheam, Kha-Yu Singh, Ranveer Willcox, Kathleen Wormald, Maya</p>	<p><b>Group 17</b></p> <p>Ahmed, Zahra Barker, Samuel MacKay, James Roy, Abhishek</p>	