

Modelling support for a COVID-19 exit strategy

Brief: Provide a technical report for government that outlines a potential exit strategy for COVID-19 under a scenario of your choice.

Your report should include:

- An executive summary
- An introduction that outlines your chosen scenario and appropriate background
- A non-technical model description
- Results, including one key graph that could be distributed to a wider audience
- Discussion and conclusion
- A technical appendix that gives model details and makes the work reproducible

Possible scenarios could be

- No vaccine becomes available but we reopen the borders
- Only an ineffective vaccine is available
- A good vaccine is available but distribution is very slow
- A good vaccine is available but it only provides immunity for a short period

Points to remember:

- A good report will likely concentrate on one small aspect in detail rather than trying to do everything badly!
- The total report should be less than 6 pages plus a cover sheet if needed.
- A very good assignment will have content beyond that covered in the lectures and use methods not given in the example code.

Example Marking Scheme

Exec summary: 3 marks Does it cover all the key points of the report? Is it understandable to a lay person?

Introduction: 3 marks Does it cover all the background material and describe the chosen scenario? Are appropriate references included?

Methods: 4 marks Can someone with a general scientific background (but minimal maths) understand the model. Have all the key assumptions been stated.

Results: 4 marks Are the results easy to read, well-presented and in a logical order? Are all figures well-explained and described.

Discussion/Conclusions: 2 marks Have the key results been re-iterated and put into context?

Technical appendix: 5 marks Is the work reproducible from this section? Is it easy to follow?

Additional content: 4 marks Has the report included something beyond the lecture material?