

Summative Assignment

Module code and title	COMP3517 Computational Modelling in the Humanities and Social Sciences
Academic year	2025-26
Coursework title	Written Report
Coursework credits	10 credits
% of module's final mark	100%
Lecturer	Brian Bemman
Submission date*	Thursday, December 11, 2025 at 14:00
Estimated hours of work	20
Submission method	Ultra

Additional coursework files	N/A
Required submission items and formats	<ol style="list-style-type: none"> 1. a written report of no more than 3000 words excluding figure captions and references (*.PDF, A4, single-spaced, 12-point Times New Roman font, 1-inch margins) on one or more computational models either from, or closely related to those discussed in, the module; and 2. an archive (*.zip / *.tar.gz) containing the code for the implementation, including instructions for how to run it in a README.txt file. <p>Both items should be uploaded as a single *.ZIP file to the module Blackboard page.</p>

* This is the deadline for all submissions except where an approved extension is in place. For benchtests taking place in practical sessions, the given date is the Monday of the week in which the benchtests will take place.

Late submissions received within 5 working days of the deadline will be capped at 40%.

Late submissions received later than 5 days after the deadline will receive a mark of 0.

It is your responsibility to check that your submission has uploaded successfully and obtain a submission receipt.

Your work must be done by yourself (or your group, if there is an assigned groupwork component) and comply with the university rules about plagiarism and collusion. Students suspected of plagiarism, either of published or unpublished sources, including the work of other students, or of collusion will be dealt with according to University guidelines (<https://www.dur.ac.uk/learningandteaching.handbook/6/2/4/>).

COMP3517: Computational Modelling in the Humanities and Social Sciences
Summative Assignment (2025-2026)

Submission Deadline: See module Blackboard page.

Specification

In this assignment, you will develop and critically evaluate at least one computational model/method in addressing a humanities or social sciences problem of your choosing. You will submit a written report describing your problem, data, implementation, and results, along with documented code used to address your problem.

Instructions: Your submitted assignment consists of the following two items:

1. a written report of no more than 3000 words excluding figure captions and references (*.PDF, A4, single-spaced, 12-point Times New Roman font, 1-inch margins) on one or more computational models either from, or closely related to those discussed in, the module; and
2. an archive (*.zip / *.tar.gz) containing the code for the implementation, including instructions for how to run it in a README.txt file. If any data that your code relies on is over 10Mb in size, please include instructions in this file for how to obtain it rather than submitting the actual data. Your code is not marked separately but serves as supporting evidence for the criteria indicated in the marking scheme.

Your report should:

1. Begin with a title and introduction where you clearly state which model(s)/method(s) are used. No abstract is required.
2. Clearly state and motivate your chosen problem and research question(s). Provide sufficient background information to contextualize this problem for the reader.
3. Document how your data was collected, and briefly state any relevant libraries or toolkits that were used. Be sure that your dataset is appropriate for the given research question and sufficient for the model(s)/method(s) employed.
4. Describe the computational model(s)/method(s) and your implementation.
5. Summarize your results.
6. Critically evaluate the model(s)/method(s) and your approach. This should involve critical analysis of the adequacy of the modelling (e.g., what are the assumptions the models rely on, and do they all hold; are there factors or biases that might invalidate conclusions drawn, etc.), as well as comparison with external data and/or published research on the topic. Note that use of more than one model/method and their comparisons, as appropriately applied to your problem, will be more highly marked.
7. Discuss what conclusions can be drawn from the model.

Example Problem:

Based upon data from Wikidata, investigate the geographic distribution of places of birth of UK members of parliament over time, from the first Parliament of the United Kingdom (1801-1802) to the current parliament (2024-present). Use data obtained from Wikidata to investigate:

- Regional biases: are there particular places or regions in which members of parliament are more likely to have been born?
- Do these biases change in any interpretably meaningful ways over time?
- How adequate is the data collected from Wikidata for answering these questions?

In your assignment, please note that:

- You are allowed to reuse existing code, including open-source modules and toolkits, Stack Overflow responses, code described in online tutorials, etc., provided that whenever you do this, you clearly indicate what you have reused and where it came from (including a URL for an online source). You should document smaller instances of reuse (e.g., short code examples from Stack Overflow) as comments in your code, and longer ones both in your code and as citations to the source in your report. Marks will be awarded for the original parts of your work (i.e., your extensions to and adaptations or developments of any reused material).
- Copying any material (this includes code and text) in your submission from any source without clear acknowledgement may constitute plagiarism, which can have serious consequences as described in the Teaching and Learning Handbook:
<https://www.dur.ac.uk/learningandteaching.handbook/6/2/4/>
- Marks will not be awarded under the “Technical depth/clarity of implementation” sections for parts of your code that reimplement code available in widely used libraries or modules.
- You may use any programming language suitable for your given problem, however, use of Python is recommended.
- In writing your report, you should assume that the reader is you at the beginning of the module. Concepts and techniques important to your implementation which were not introduced during the module are encouraged but should be adequately explained.

Marks (total 100)

	Marks	Assessed by
1. Originality and appropriateness of problem and solution	10	Report and code
2. Technical depth of implementation	25	Report and code
3. Clarity of implementation	20	Report and code
4. Evaluation	20	Report and code
5. Conclusions	20	Report
6. Presentation (appropriate academic writing, structure, and referencing)	5	Report