

CASA mark scheme for Geographic Information Systems and Science, CASA0005

This mark scheme applicable to all students enrolled on the module. To gain a pass you must score at least 50% for the module.

Criterion	80-100% (A*)	70-79% (A)	60-69% (B)	50-59% (C)	40-49% (D)	1-39% (E)
Structure and presentation	Exceptional adaption of the standard model of the standard scientific investigation applicable to the research attempted. The superb narrative throughout seamlessly transitions the reader between perfectly balanced sections of the report. The presentation of the report and stylist choice are very professional and near publication quality.	Excellent awareness, implementation and balance of the elements within the standard model of scientific investigation in line with the research attempted. The linkage between sections is obvious and there is a strong narrative throughout. The report is professional presented with an excellent stylistic choice.	Clear and logical structure of the report following the standard model of scientific investigation. The balance, linkage and narrative between sections are evident, but could be improved upon considering the nuances of the topic. The report is well presented with good stylistic choice.	Good structure of the report following the standard model of scientific investigation. There is a narrative and linkage between sections but it is not directly obvious with some unbalance. The report is of an acceptable level of presentation with appropriate, but basic stylistic choice.	Poor report structure that vaguely follows the standard model of scientific investigation. There is no obvious linkage between sections, with little narrative throughout. The report is poorly presented with a somewhat inappropriate stylist choice.	Failure to use of the standard model of scientific investigation with a highly disorganised, illogical and unbalanced structure that obtains no narrative throughout. The presentation and style of the report are completely unsuitable.
Research problem framing	The research problem is globally pertinent or topical to a social, environmental, political or other context and has been framed at the optimal spatial scale. There is extensive background research evaluating multiple forms of	The research problem is highly pertinent or topical to a social, environmental, political or other context and has been framed at an appropriate spatial scale, based upon logical reasoning. There is a broad range	The research problem is pertinent or topical to a social, environmental, political or other context and has been framed at an appropriate spatial scale but with some assumptions and limited reasoning.	The research problem is somewhat pertinent or topical to a social, environmental, political or other context. However a more appropriate variation of the research problem to the specific discipline could have been	The research problem is vaguely pertinent or topical to a social, environmental, political or other context. The research problem and spatial scale should be completely reconsidered. There is limited background	The research problem is completely impertinent and/or untropical, having no relevance to any social, environmental, political or other context. The selected spatial scale is highly unsuitable. There is no evidence of

	credible sources to produce a compelling and coherent framing of the research question, presented in a concise and informative manner.	of background research evaluating multiple forms of credible sources to produce a convincing framing of the research question.	There is a range of background research evaluating multiple forms of credible sources to produce a legitimate framing of the research question.	proposed, possibly at an alternative spatial scale. The background research considers several credible sources to produce a plausible framing of the research question.	research considering few credible sources, producing an unreasonable and illogical framing of the research question.	background research to support the research question.
Data, methods, results and interpretation, reproducibility	Selected data and presented analytical methodology are able to perfectly solve the presented research question or the limitations are evidently understood and expertly expressed. The analysis is entirely appropriate to the problem. It demonstrates creativity, a comprehensive understanding of appropriate sophisticated techniques, exemplary technical proficiency and skills which are indicative of significant additional independent learning.	Selected data and presented analytical methodology are highly relevant to the presented research question. Limitations and presented and well expressed. The analysis is appropriate to the problem, demonstrating excellent understanding of appropriate sophisticated techniques, broad technical proficiency and skills which are indicative of additional independent learning. Interpretations of results are very well constructed, clear and focused with good linkage to literature	Selected data and presented analytical methodology are relevant to the presented research question. There might be several limitations that have been discussed. The analysis is appropriate to the problem, demonstrating a sound technical knowledge with some additional learning that could be built upon. Interpretations of results are logical and contain a well constructed discussion with linkage to literature and some critical reflection. Part of the analysis is published on an open-	Selected data and presented analytical methodology are adequate to the presented research question but better alternatives could have been sought. Limitations might have been only listed. The analysis might not be as efficient, creative and challenging as it could be. It demonstrates technical knowledge but may be limited to skills learned during the course. Interpretations of results are largely correct and there is some reference to relevant context or wider literature within	Selected data and presented analytical methodology are not sensible to answer the presented research question and have major flaws. Limitations are present but have little relevance to the datasets and/or analysis. An attempt at appropriate analysis is made but does not address the problem effectively and demonstrates that the material covered in class has not been understood correctly. Interpretations of results are invalid, containing vagueness and ambiguity. Critical reflections are limited	Selected data and presented analytical methodology are completely inappropriate to answer the presented research question. There is no consideration of any limitations. The analysis is absent or entirely inappropriate for the problem and lacks scientific integrity and quality. Results have not been interpreted critical reflection is absent. No attempt was made at publishing the analysis.

	Interpretations of results are exceptionally well constructed, clear and focused, with extensive linkage to literature forming a superb discussion that includes exemplar critical reflection. Analysis is published on an open-access online repository with an associated website that shows independent learning (e.g. bookdown).	forming a structured discussion, with critical reflection throughout. Analysis is published on an open-access online repository, with clear and appropriate commentary on an RMarkdown website (or similar).	access online repository, with limited commentary on a basic RPubs (or similar).	the discussion. Limited parts of the analysis are published on an online resource.	and completely inappropriate with no linkage to literature. An attempt was made at publishing parts of the analysis.	
Visualisation proficiency and communication	Figures, maps, and diagrams are entirely appropriate for the data and analysis. They are creative, well labelled and convey the intended information expertly. Maps demonstrate exemplary cartographic practice. The writing throughout is of exceptional quality, engaging and clear.	Figures, maps, and diagrams are appropriate for data the analysis being clear and well labelled. Maps effectively convey information and demonstrate excellent cartographic practice. The writing is of very high quality, engaging and clear.	Figures and diagrams are fairly appropriate but could be improved upon (e.g. unnecessarily complex / too much irrelevant detail) and may contain minor errors. Maps are cartographically sound. The writing is of adequate quality and clear.	Figures and diagrams are adequate but more appropriate visualisations could have been implemented. There might also be multiple errors that detract from their usefulness with acceptable cartographic practice. The writing quality is rather basic and mostly clear.	Figures and diagrams are poor and do not aid understanding in any way. Maps may lack even basic features such as legends. The writing is haphazard in places, has poor structure and lacks clarity.	Figures and diagrams are bad or missing entirely. Maps may be full of major problems. The writing is very illogical and difficult to understand.

Distribution of marks

This section outlines the percentages assignment to each of the marking criteria per part of the assessment:

- Structure and presentation: 5%
- Research problem framing: 30%
- Data, methods, results and interpretation, reproducibility: 35%
- Visualisation proficiency and communication: 30%

Please note, poor academic practice or academic misconduct will be reported to the Module Convenor in the first instance who will follow the relevant policies outlined in the UCL academic manual, [Chapter 6, section 9](#).