POU77004: Applied Statistical Analysis II

Group paper assignment guidelines

Length
Your group paper should be a maximum of **3,000 words**.

Motivation
The paper is designed to assess your achievements in attaining learning outcomes 1-4:

- Understand the different methods available for modelling outcomes in the social sciences, including their limitations.
- Identify the appropriate model for different kinds of data and research question.
- Correctly apply these methods, including diagnosing potential errors and interpreting results.
- Use the statistical programming language R to carry out quantitative research and effectively communicate outcomes.

Design
Your paper should present the outcome of a small research project. A successful research project will include:
- A **research question**.
  - Within the context of the assignment you have to pose an explanatory research question.
  - Clearly state the model you are testing.
- A **review of the academic literature** relevant to that question.
- A **theory** which proposes to answer that question. This could be:
  - A new theory which you develop;
  - An existing theory you seek to test;
  - A replication of an existing study using new data or a new method of analysis.
- **Data analysis**, using a method capable of supporting or refuting your theory.
- The presentation and diagnosis of **results**.

Structure
Your final paper should consist of the following sections:
- An **abstract**: a very concise summary of the paper which outlines the research question, theory, methodology and results. This should be no more than 200 words long, and is not included in the overall word count.
- An **introduction**: you should present the research question and why it should be studied (academic and "real world" relevance). Does it fill a gap in the literature? Challenge existing findings? Or provide a replication of existing findings based on new data? (+/- 300 words)
- A short discussion of the **relevant literature**: you should refer to at least ten academic publications, but only discuss works that are directly relevant to your study and research question. (+/-500 words)
- An outline of your **theoretical argument**. Discuss the main concepts in your study. The theory section should include at least one hypothesis (+/- 500 words)

- A short **methodology** section, including the overall design of the study, data sources, empirical operationalization of variables, and strategy for analysis (+/- 600 words)
- The **results** of the study, presented in properly formatted tables and/or graphs. You should not just present the results but also explain what you found. Be sure to discuss the direction and size of effects, and any checks you made to ensure assumptions relating to the method were not violated. (+/-700 words)
- A short **discussion/conclusion** in which you reflect on your findings: are they according to your expectations? If not, can you explain? What further research is necessary? Are there any other variables that you would need to control for in your research design? (+/- 400 words)
- In a short **appendix**, include a bibliography and briefly indicate how each of you has contributed to the final paper (not included in word count).

Note: in-text references and bibliography should be correctly formatted in a standard social science style (examples include APA, AAA, APSA, ASA, Chicago, CSE, Harvard: there are many applications that offer automated formatting options). If you use footnotes/endnotes these must be included in the final wordcount.

Additional requirements and recommendations

When working on your project, you should take the following into account:
- This is a short paper, and there are limitations on what you will be able to do, so make sure your research question is **feasible**.
- You should be able to answer your question based on **existing data**. This data should be freely accessible. Do not attempt to collect your own data.
- Aim to be creative and insightful. This does not necessarily mean that you have to do something entirely new: it can be valuable to replicate an existing study using new cases, better measurements or different analysis techniques.
- Your research should be an **empirical study**, not just a literature review. The goal of the assignment is to allow you to demonstrate the range of methodological skills (particularly quantitative skills) you have learned throughout the module.
- Observe standard requirements for the presentation of your paper, as stated in the module syllabus.
- The word count for this paper is low, so make sure that your writing style is very concise.
- If you are unsure whether a certain research question or design would be feasible, consult with your teaching assistant during tutorial or visit Dr Egan's office hours. **Do not wait too long to do this, as it is very hard to change a research project at the last minute.**
- If attending office hours, you will be expected to have already attempted a literature search in your area of interest.

Submission

All assignment should be submitted to Turnitin via Blackboard. Do not forget to include your names, details and the name of the course, and the departmental [assignment submission form](). Please only submit one paper for each group. For information regarding late penalties, extensions and plagiarism, please see the Blackboard module site or the module syllabus.