

BEE1029 – Economic Principles

Group Work Assignment Brief (Term 1)

Academic Year: 2020/21

Measuring Climate Change



Deadline: **End of week 8 of term 1**

Lecturers:

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1 - Introduction

We ask you to engage in group work in this module and although we understand this brings a number of challenges and creates a lot of additional work, we feel it is an extremely positive experience both in terms of developing your academic skills and to prepare you for the labour market.

Why Group Work?

Engaging in group work offers a wide range of benefits. The University of Exeter's Guidance for Group Work¹, for example, suggests the following educational benefits:

- a) Working collaboratively has been shown to enhance learning as it enables a variety of ideas to be discussed and encourages active learning.
- b) Enables students to develop a range of interpersonal skills including communication, negotiation and leadership. In turn this enables our students to become more employable as they can exhibit the skills required by employers.
- c) Research inspired and inquiry-led learning is at the heart of the University's approach to learning and teaching. Working collaboratively with both staff and students allows students to actively engage with current research.

I would also add that working in a group can promote the sharing of ideas and problem-solving skills, as some students might feel less intimidated and more willing to discuss work with their peers.

2 - Intended Learning Outcomes (ILOs)

Upon completion of this assessment, the learning outcomes you are expected to achieve are:

- Use charts and summary measures to discuss the extent of climate change and its possible causes.
- Use line charts to describe the behaviour of real-world variables over time.
- Summarize data in a frequency table and visualize distributions using? column charts.
- Describe a distribution using mean and variance.
- Use scatterplots and the correlation coefficient to assess the degree of association between two variables.
- Explain what correlation measures and what the limitations of correlation are.
- Prepare and organise work individually and in groups using a range of available technologies.
- Work positively and collaboratively in groups, managing any conflict that might arise.

3 - Instructions

This assignment has a group component (worth 80%) and an individual component (worth 20%). Each has to be submitted separately on the ELE page by the deadline.

¹ Full details can be found here: <https://as.exeter.ac.uk/academic-policy-standards/tqa-manual/lts/groupwork/>

A - Group component (One Excel spreadsheet plus one Word document, worth 80% of the mark)

This component of the assignment should take your group between 6h and 10h to complete – Please make sure you start working on this early on to avoid running out of time to complete it.

- Go to <https://www.core-econ.org/doing-economics/book/text/01-01.html> (alternatively search ‘Doing Economics’ and choose ‘Empirical project 1’)
- Select the Working in Excel section
- Your group will have to submit one Excel file and one Word document:
 - For the group Excel submission, answer each section in a separate tab/sheet in Excel, giving each tab the right title (e.g. NH.Ts+dSST, Part 1 section 1, part 1 section 2, CO2, and so on). If you do not know how to do this, please watch this short video: <https://youtu.be/nbnYQudqrW4>
 - For the group Word submission, include answers to all the ‘essay-type’ questions asked. Please answer these questions sequentially. You can paste pictures of graphs from your Excel file into your Word document - but only if it adds value to your answers.
 - You should name your Excel spreadsheet and the Word document with the Group number you were assigned (e.g. Group01.xlsx and Group01.docx)
- The ‘Excel Walk-Through’ sections expand (if you click on the ‘+’ sign) and explain how to complete the tasks if you do not know how to complete each part. I have prepared additional instructions for Mac users (see ELE page).
- Include the latest available data for each section (the dataset keeps being updated)
- When selecting the Excel files to download, depending on the browser (and whether you use Mac or PC) the way to download the file will be different. If clicking the link does not start the download of the files, use right button of the mouse on the link and select download file or save file. If this does not work, please try using a different browser.

Description of the Tasks to complete for the Group component

Part 1.1 - [The behaviour of average surface temperature over time](#)

- Click on the blue text ‘[Goddard Institute for Space Studies website](#)’.
- Under the subheading ‘Combined Land-Surface Air and Sea-Surface Water Temperature Anomalies’ (move down the page), select the CSV version of ‘**Northern Hemisphere-mean monthly, seasonal, and annual means 1880-present, updated through most recent month**’
- The default name of this file is NH.Ts+dSST.csv. This is the dataset you need for Parts 1.1 and 1.2. If the link above does not work in your browser, please Google ‘GISTEMP’ and find the link on that page for the data you need.
- **TASKS PART I: Answer questions 1-6. Complete all Excel tasks in the Excel file and all ‘essay’-type questions in your Word file. The answer to any individual ‘essay-type’ question (e.g. Q1) or sub-question (e.g. 4.b) in your Word document cannot exceed 100 words.**

Part 1.2 – [Variation in temperature over time](#)

- **TASKS PART II:** Answer questions 1-6. Complete all Excel tasks in the Excel file and all 'essay'-type questions in your Word file. The answer to any individual 'essay-type' question (e.g. Q4) or sub-question (e.g. 2.b) in your Word document cannot exceed 100 words.

Part 1.3 – [Carbon emissions and the environment](#)

- Clicking on the blue '[Excel spreadsheet](#)' of Part 1.3 should start the download of the dataset for this section. The default name is 1_CO2-data.xlsx. Once completed, copy the whole worksheet and paste it in another tab of the Excel file you created in Part 1.1. Name this tab 'CO2'.
- **TASKS PART III:** Answer questions 1-6. Complete all Excel tasks in the Excel file and all 'essay'-type questions in your Word file. The answer to any individual 'essay-type' question (e.g. Q1) or sub-question (e.g. 4.b) in your Word document cannot exceed 100 words.

B - Individual component (Learning Journal, worth 20% of the mark)

All members of your group also have to produce an individual Learning Journal of **up to 500 words** in a single file that you should give your group and student number as a name (e.g. group01_70000001.docx or group01_70000001.pdf)

- A learning journal is a collection of notes, observations, thoughts and other relevant materials built-up over the period of time it takes to complete the group work. Its purpose is to enhance your learning through the very process of writing and thinking about your learning experiences. Your learning journal is personal to you and will reflect your personality and experiences and it will not be shared with your group members.
- The learning journal should focus on your own personal responses, reactions and reflections to the process that lead to the group work 'product' (the two files described in Part A above). For example:
 - What new knowledge, skills or understanding have you gained during the process of completing the group work?
 - What were the main challenges you encountered and how did you overcome them?
 - What resources have helped you to understand and/or been interesting to use?
 - Have you changed your opinions or values during this process/experience?
 - How can you improve your learning, thinking and working in the future?
 - Have you identified the next step(s) for your further development?

When completed, the learning journal will have to be uploaded to the ELE before the deadline so do not leave this to the last minute. In fact, you should start writing your Journal when the group meets for the first time.

4 - Group Work Guidance

- Groups will be randomly assigned by the module lead, which means students cannot decide who they are grouped with. We understand that being assigned to a group which is not your choice might create tensions but we feel this is what tends to happen in the majority of workplaces and the ability for you to work with colleagues you did not choose is an important employability skill that you need to master.
- Each group will be composed of up to 5 students and these will be assigned as soon as it is possible at the start of Term 1.
- Each group will be assigned a number and you should use that number when contacting the academics if you need assistance or have questions.
- There is an expectation that all group members contribute equally to the common good. Free-riding is a common problem with group work and the way we deal with this is to not necessarily award the same mark to all students in a group. The mark you will be awarded for the group work is the sum of two components: a common mark for the 'product' your group submits (80%) and an individual mark (20%) for your Learning Journal. Students that do not contribute to the common good will be penalised (see marking grid below).

5 – Dealing with disagreements

Working in groups means that you will have to work closely and sometimes intensively with other students. This is not as natural as working on your own and it can sometimes lead to conflicts. This is natural and learning to deal with disagreements is part of this assessment and it is an important employability skill that you need to develop.

Address issues quickly

Most problems are easily resolved if dealt with immediately but become impossible to sort out if left unresolved. Problems and disagreements rarely, if ever, 'just go away' so burying your head in the sand is a bad idea. Bring the problems out into the open in a transparent manner.

Keep an open mind

You might think that a group member is not pulling their weight, or that you are being expected to do too much of the work because the others are less capable and willing than you. But if you look at the problem from someone else's point of view in the group we might see a different story emerging. The other members might come from a culture that deals with work in a different way or there might be valid reasons for the actions of a given student.

Call a meeting to try and sort things out

If a significant disagreement arises you should call a group meeting. Each member should be given a chance to raise their point of view. It is vital that minutes are taken for this meeting (or that the meeting is recorded).

Serious disagreements

If your group has held a meeting and are still unable to resolve the dispute, it is time to raise your concerns with the module lead or lecturer. The module lead or lecturer will arrange a time for a group arbitration meeting and act as a chairperson.

6 - Referencing Style and Guidance

The Business School has adopted the APA referencing style. The full guide can be found here: <https://vle.exeter.ac.uk/mod/resource/view.php?id=651524>

Plagiarism and academic misconduct is something we take very seriously. Please make sure you abide by the rules by consulting the Academic Honesty and Plagiarism Guidance here: <https://vle.exeter.ac.uk/mod/url/view.php?id=651526>

More general guidance in terms of Academic Development resources can be found here: <https://vle.exeter.ac.uk/course/view.php?id=6748§ion=2>

7 – Submission Method

As stated above, each group must submit an Excel file and a Word document. These will be submitted on the module page. Each individual student must also submit a learning journal on the module page. All these submission links will be found by following the 'Group Work' icon on the ELE page.

Each group must nominate one student to make the group submissions. Late submission penalties will apply to all students in the group, regardless of who was responsible for the submission of the group work. Late submissions of the Learning Journal will only apply to each of the individual students.

The University's guidelines about late submission can be found here: <http://as.exeter.ac.uk/academic-policy-standards/tqa-manual/aph/settingandsubmission/>

8 - Marking Criteria

The marking criteria for both the group work component and the individual Learning Journal component can be found in the Appendix. As stated above, the final mark will be found by adding the mark for the group component (worth 80%) to the individual Learning Journal (20%). This means that not all members of the group will necessarily get the same mark and that individual effort will be rewarded.

9 - Additional Support

Academic Development Resources: Access to workshops on essay writing, maths/stats help, one-to-one support and more - a fantastic underused resource! ELE page here: <https://vle.exeter.ac.uk/course/view.php?id=6748>

Studiosity is an additional support service we provide for students - you can submit a piece of work for written feedback (on writing clarity, argument, structure and so on) from a tutor within 24 hours. Students can access the link through the BSD1000 / BSD2000 / BSD3000 on ELE. To access go to: <https://vle.exeter.ac.uk/course/view.php?id=6746§ion=12>

10 - Appendix

The next two pages describe in detail the marking grid for both the group and individual components. We will use these grids to mark your assessments and provide you with feedback so please do spend some time reading it carefully.

Group Work Component Marking Grid (worth 80% of mark)

Marks	0-25 (Fail)	26-39 (Fail)	40-49 (3 rd)	50-59 (2.2)	60-69 (2.1)	
Assessment categories						
Knowledge & Understanding of Subject, including completion of Excel/R tasks (40%)	Major gaps in knowledge and understanding. Significant inaccuracies in the completion of the Excel/R tasks.	Gaps in knowledge and superficial understanding. Some inaccuracies in the completion of the Excel/R tasks.	Threshold level. Broadly accurate knowledge and understanding of the material. Some elements missing and flaws evident in the completion of the Excel/R tasks	Sound, routine knowledge and understanding of the material, main concepts and key theories. Some flaws may be evident in the completion of the Excel/R tasks	Good, consistent knowledge and understanding of the material, main concepts and key theories at this level. Very few flaws in the completion of the Excel/R tasks	Detailed understanding of the material, main concepts and key theories at this level. Evidence of awareness of the significance of the material.
Analysis, synthesis and logic; Organization and communication of ideas, and evidence, including the writing of the Word report (30%)	Brief and irrelevant. Descriptive. Only personal views offered. Unsubstantiated generalisations. Little or no attempt to draw conclusions.	For the most part descriptive. Views/ findings sometimes illogical or contradictory. Generalisations/ statements made with scant evidence. Conclusions lack relevance and/or validity.	Threshold level. Some awareness of issues. Sense of argument emerging though not completely coherent. Some evidence to support views, but not always consistent. Some relevant conclusions	Issues identified within given areas. An emerging awareness of different stances and ability to use evidence to support a coherent argument. Broadly valid conclusions.	Good analytical ability. Acknowledgement of views of others. Arguments generally logical, coherently expressed, well organised and supported. Sound conclusions.	Very good through persuasive within given stance articulated developed evidence
Use of Research-informed Literature (20%)	No evidence of reading. Views are unsupported and non- authoritative.	Evidence of little reading appropriate for the level of study, and/or indiscriminate use of sources.	Threshold level. Some evidence of reading, with superficial linking to given text(s).	Knowledge of literature beyond core text(s). Literature used accurately but descriptively.	Knowledge of the field of literature appropriately used to support views. Research-informed literature integrated into the work	Critical approach to knowledge informed in the work
Presentation skills; written, graphical and communication skills; including referencing, appropriate academic conventions and academic honesty (10%)	Little or no evidence of the required skills in any of the skills areas. Academic conventions largely ignored.	Limited evidence of skills in the range identified for the assessment at this level. Academic conventions used weakly.	Threshold level. Can communicate but with evident weaknesses. Some academic conventions evident and largely consistent, but with some weaknesses.	Can communicate effectively in a range of formats. Academic conventions applied generally well.	Can communicate well and consistently in a range of formats. Good use of academic conventions.	Can communicate effectively in a range of formats. Good use of academic conventions.

Individual Learning Journal Component Marking Grid (worth 20% of mark)

Marks							
Assessment categories	0-25 (Fail)	26-39 (Fail)	40-49 (3 rd)	50-59 (2.2)	60-69 (2.1)	70-85 (1 st)	86-100 (1 st)
Contribution to the 'Public Good' (70%)	Did not work effectively with others as a member of a group, and did not meet most obligations to peers.	Can work effectively with others as a member of a group, and meet most obligations to peers..	Can work very effectively with others as a member of a group, showing leadership skills where appropriate, and meet all obligations to peers.	Can work exceptionally well with others as a key member of a group, showing leadership skills where appropriate, negotiating and meeting all obligations to			
Self-evaluation and reflection (30%)	Unable to evaluate own strengths and weaknesses in relation to group work and practical skills identified by others.	Able to take initiative in evaluating own strengths and weaknesses in relation to group work and practical skills identified by others.	Able to show initiative, insight and autonomy in evaluating own strengths and weaknesses in relation to group work and practical skills identified by others. Some lessons learned for the future.	Able to show exceptional insight and autonomy in evaluating own strengths and weaknesses in relation to group work and practical skills identified by others. Clear lessons learned			