

Instructions to Computer Based Assessment Homework

Paper Release: Wed 17 July 2024.

Submission Due: Mon 22 July 2024, 2330 hrs (+ 30 mins grace period).

1. The estimated duration of this homework assignment is **3 hrs**¹. The actual hours will depend on your familiarity of the concepts and coding. You are allowed internet research but quote your source and cite properly.
2. Late submission penalty starts after the Submission Due + grace period. 10 marks will be deducted for each 24 hours of late submission. The max marks is 100.
3. Type all your answers (including software output screenshots and code where necessary) into the CBA Submission word document template provided. All answers must be fully contained inside the word document provided. i.e. do not ask examiner to refer to any other sources or file to see your answers. Save and rename the word document file with your full name as part of the filename.
4. This is an open-book individual homework assignment.
5. If you use someone else's work or opinion, quote and cite properly². Read Appendix A and Appendix B in this document.
6. You are allowed to use the following software to answer the questions:
 - R and RStudio
 - Python.
 - Microsoft Excel
 - Microsoft Word
7. Your submission will be graded on the assessment rubrics, compliance to instructions and presentation. Label your answers in the word document to correspond to the question number/part. Many questions are designed to be open-ended and have several correct answers or ways to express your answer. Strive to be concise and precise in your answers. Excessive words or quotes will be penalized. You are not expected to write essay and excessive words signal that you do not know what is important.
8. You may use more than one page per question, if necessary, but start each new question number on a new page.

¹ An average student should be able to complete this assignment within 3 hrs with a B grade.

² You are expected and encouraged to copy and modify code (R or/and Python) to suit your purpose. This is why the software is open source and free. Just remember to cite your source.

9. You will only consider models taught in this course. Other models are out-of-syllabus and need not be considered, used or explained.
10. There are at least 3 files to be submitted. Do not zip or password protect the files. Submit as separate files:
 - a. Word document (including your Declaration of Academic Integrity in the cover page).
 - b. PDF file of the same Word document listed above.
 - c. If you use R, submit one Rscript or Rmarkdown file with your name as prefix e.g. Tony Stark.R
 - d. If you use Python, submit one Python script or notebook with your name as prefix e.g. Tony Stark.py
11. Upload all submission files into **NTULearn Class Site > CBA Submission** link via Attach Files > Browse Local Files. You are allowed to submit maximum 3 times before due date but only the latest submission will be graded. Check and submit the correct files.
12. If you need clarifications on the question or could not comply with any instructions, check with your instructor before submission due.
13. As this is a graded assignment, your instructor cannot comment on your solution or approach before deadline.
14. This assignment is intentionally open ended with several valid approaches and answers. You are encouraged to think, experiment, and research to find your own approach and solution.

Appendix A: Academic Integrity Reminder from Admin to Students

Dear all Students:

As we are nearing the period where most course assessment items are falling due, including the written assignments and tests, you are gently reminded of NTU's Academic Integrity policy.

Please note carefully that the university takes a very serious view of any form of breach of academic integrity, including but not limited to: plagiarism, ghost-writing, obtaining prohibited assistance and advantages, accessing restricted assessment materials (for any closed book or restricted assessment). The penalties for these, depending on the circumstances and the degree of dishonesty involved, may include failure for the whole course and even suspension or expulsion.

You are reminded that in assignments all sources formal and informal **(including borrowing of substantial ideas from fellow students)** must be acknowledged and citations for published sources must be provided. Hence, careful citation noting and referencing is a must. This is out of respect for all authors and creators and because of the academic value of providing references for verification and simply basic honesty. In particular, you are warned against using words and non-commonplace ideas of others as if they were your own (plagiarism) or getting others to write part or all your submissions for you (ghost-writing - cheating).

If you know directly and specifically of fellow students committing these or other academic integrity infringements, it is your duty to report that knowledge to your instructor, and any assistance towards committing them or covering them up would also be an academic infringement.

We are confident that our students can be expected to uphold the highest standards of integrity in all matters and are issuing this reminder out of an abundance of caution lest that a few should slip these standards to the sorrow of all.

Our best wishes to all of you with encouragement to treat these assessments as an opportunity to enjoy exercising your skills and knowledge, and to simply do your best.

Appendix B: Academic Integrity Policy

1. Introduction

The Student Academic Integrity Policy supports the University in the “pursuit of truth which depends on absolute integrity of conduct among all members of the community” and in creating “a climate of respect for the individual, and encourages self-respect which makes an individual worthy of trust”.³ All members of the NTU community are responsible for upholding the values of academic integrity in all academic undertakings.

2. Objective

This policy is to reinforce the University’s commitment to maintain integrity and honesty in all academic activities of the University community. It applies to all undergraduates of the University in all programmes of study, including non-graduating students.

3. Definitions

The following are defined as acts of academic dishonesty in the context of this policy:

(a) Plagiarism

NTU Honour Code currently defines ‘plagiarism’ as ‘to use or pass off as one’s own, writings or ideas of another, without acknowledging or crediting the source from which the ideas are taken’. This includes:

- The use of words, images, diagrams, graphs or ideas derived from books, journals, magazines, visual media, and the internet without proper acknowledgement;
- Copying of work from the internet or any other sources and presenting as one’s own; and
- Submitting the same piece of work for different courses or to different journals and publications.⁴

³ Enshrined in the NTU Honour Code

⁴ In the event that the same piece of work is re-used in a different context, full acknowledgements with quotation marks and citations are required.

(b) Academic Fraud

Academic fraud is a form of academic dishonesty involving cheating, lying and stealing. This includes:

- Cheating - Bringing or having access to unauthorised books or materials during an examination or assessment, or in any work to be used by the lecturer, tutor, instructor or examiner as a basis of grading.⁵
- Collusion - Copying the work of another student, having another person write one's assignments, or allowing another student to borrow one's work.
- Falsification of Data – Fabrication or alteration of data to mislead such as changing data to get better experiment results.
- False Citation – Citing a source that was never utilised or attributing work to a source from which the referenced material was not obtained.

(c) Facilitating Academic Dishonesty

This includes allowing another student to copy an assignment that is supposed to be done individually, allowing another student to copy answers during an examination/assessment and taking an examination/assessment or doing an assignment for another student.

4. Policy

- 4.1 The foundation of good academic work is honesty. Maintaining academic integrity upholds the standards of the University.
- 4.2 The responsibility for maintaining integrity in all the activities of the academic community lies with the students as well as the faculty and the University. Everyone in this community must work together to ensure that the values of truth, trust and justice are upheld.
- 4.3 Academic dishonesty affects the University's reputation and devalues the degrees offered.
- 4.4 The University will impose serious penalties on students who are found to have violated this Policy. The following penalties may be imposed:
 - expulsion;
 - suspension;
 - zero mark/fail grade;

⁵ As defined in the NTU Honour Code

- marking down;
- re-doing/re-submitting of assignments or reports; and
- verbal or written warning.