

CS112

2024

PRACTICAL ASSIGNMENT INSTRUCTION SHEET

Module Name	Information Systems Theory
Practical Number	1
Practical Name	Practical Assignment
Week starting	23 September 2024



RHODES UNIVERSITY

Prepared by:

Ms. L Salamntu

Read the entire Instruction Sheet BEFORE attempting this practical assignment.

IMPORTANT

Please note that you have until 11pm on the 6th of October 2024 to submit the practical assignment. You are to submit it via the Submission Link on Reconnected.

**DO NOT COPY OTHER
PEOPLE'S WORK**
You will get prosecuted!

PRACTICAL ASSIGNMENT HAND-IN SLIP

Course	CS112
Module Name	Information Systems Theory
Practical Number	1
Practical Name	PRACTICAL ASSIGNMENT

Hand in by 11pm on the 6th of October 2024 via RUConnected

Student's Surname and initials	
Practical Group Number	
Tutor's Name	
Student marker's name	
Date Handed In	

Marker's feedback:

**Mark
Awarded**
Official use only

Attach this slip securely to the front of your assignment.

Declaration:

1. I know that "plagiarism" means using another person's work and ideas without acknowledgement and pretending that it is one's own.
2. I am thoroughly familiar with the University's policy and the Department of Information Systems' guidelines on plagiarism.
3. I know that copying directly from printed or electronic sources and using this material in assignments is dishonest. Using another student's work and pretending it is my own is also wrong.
4. I have not allowed, and will not allow, anyone to copy my work with the intention of passing it off as his or her own work.
5. This assignment is my own work.
6. I am fully aware that departments compile a register of plagiarism offenders, which is circulated throughout the University.
7. I understand I can lose my DP if I plagiarise.

Signature: Date:

LEARNING OUTCOMES

The learning outcomes of this practical:

- Definition of information systems
- Understanding of what information systems theory is about
- Understanding of systems thinking
- Ability to differentiate between holism and reductionism approaches
- Understanding of information appropriation process
- Understanding of hard systems approach and its variants
- Ability to list, define and draw system components

PREAMBLE

Throughout the first week of Information Systems Theory lectures, you are expected to apply the knowledge gained to answer the following questions.

SUGGESTED APPROACH

Now that we have covered lectures 1-4, I recommend you start working on this practical assignment. This practical assignment mainly covers lectures 1-4 and an incremental approach should make the exercise easier to follow and complete.

ASSESSMENT

Your tutors will assess this practical in detail, and I will take a high-level approach to assess them to ensure everyone is progressing as expected. Please note that this assessment is summative. This means that the practical deliverable is for marks and examines your understanding of what has been covered thus far in lectures 1-4. This practical assignment is created to prepare you for tests and exams; therefore, not working through it only disadvantages you when it comes to the final summative assessment of the CS112 examinations.

RESOURCES

A large amount of help is available in the form of your lecture slides, TA and tutors.

FINAL SUBMISSION

You must upload an MS Word document with all your answers on RUConnected. Each practical assignment should be uploaded using the given link.

Please ensure that you fill out the plagiarism declaration section of this document.

Question	Question Type	Outcome Addressed	Marks Allocated
1	Theory	Information system, information systems theory, information system components (i.e. things a system should consider)	8
2	Theory	Hard systems approach	8
3	Theory	Definition of holism and how it is different from reductionism	4
4	Theory	Information appropriation process	10
5	Theory	System components	20

QUESTION 1

- a) In your own words define what information systems is? (1 Mark)
- b) Why is information system theory important? (1 Mark)
- c) Define a system thinking approach. (1 Mark)
- d) List five components of an information system. (5 Marks)

QUESTION 2

Explain how a particular problem can be solved using the hard system approach. Link discussions to the three hard systems variants. (8 Marks)

QUESTION 3

Explain the holism approach and discuss with examples how it is different from a reductionism approach (4 Marks)

QUESTION 4

Consider the following business scenario.

A company called Mobile Tech opened a branch in Grahamstown. About two weeks after their branch was opened, the Sales Rep received more than a usual calls from potential customers and all of these calls were inquiries about hardware related repairs. This is a service that the Mobile Tech company was not offering. However, after an additional week of inquiries pertaining to hardware related repairs, the Sales Rep thought that his branch could increase revenue by performing such services. But feels uncomfortable making this assumption without investigating it further, especially since he has made similar investment mistakes in the past which resulted in massive financial loss. As such, he decided to approach an experienced researcher to create and distribute a customer survey to people living in Grahamstown. Although the aforementioned researcher has done similar market research, the methods he usually employs are qualitative in nature. He nonetheless decides to accept the contract.

After a month the researcher completed and distributed the survey. Not having done this before the researcher decides to simply stick the survey on the windscreens of cars parked in the main road and some of the adjacent roads. After about two months the researcher has still not received any responses. The researcher was left frustrated, and the Sales Rep felt that he wasted company resources on this whole initiative.

Within the context of the Information Appropriation Process, answer the following questions:

3.1 Briefly define the Information Appropriation Process and also give an example from the scenario.

(4 Marks)

3.2 Within the context of this scenario, define the concept of data and information. Give one example for each, based on the scenario.

(4 Marks)

3.3 Was the Sales Rep able to offer hardware repairs and justify your answer.

(2 Marks)

QUESTION 5

Name, define, draw and give an example of any five components of a system (i.e., what a system consists of).

(20 Marks)

TOTAL = 50 MARKS