

JORDAN UNIVERSITY COLLEGE
QMS 101 — INTRODUCTORY STATISTICS
 Group Portfolio Project 2025/2026

PORTFOLIO TOPICS & RESEARCH QUESTIONS

Descriptive Statistics Level

Code & Colour	Programme	Groups	Colour	Total No. of Groups
BM	BBA — Marketing	BM1 – BM6	BM	6
BP&BE	BBA — Procurement & Entrepreneurship	BP&BE1 – BP&BE4	BP&BE	4
ED	BAED — Education	ED1	ED	1
AF	Accounting & Finance	AF1 – AF9	AF	9
EC	BAEC — Economics	EC1	EC	1
BL	BLRIM — Logistics / Records / Info Mgt	BL1 – BL8	BL	8
SO	BASO — Sociology	BS1 – BS9	SO	9
TOTAL	7 Programmes	38 groups total		38

Recommended 15-Week Timeline

Deadline	Activity	Deliverable
24.04.2026	Receive topic and research question. Design questionnaire or data sheet. Pilot on 5 people. Revise.	<i>Questionnaire/Observation check list</i>
30.04.2026	Collect data: minimum 30 respondents. Record all raw data in a clean table.	<i>Raw data table — all responses</i>
08.05.2026	Construct frequency distribution table (grouped). Add relative and cumulative columns.	<i>Completed frequency table</i>
08.05.2026	Draw histogram and ogive (or frequency polygon). Label all axes and add titles.	<i>Two correct, labelled graphs</i>

15.05.2026	Calculate arithmetic mean, median, mode. Apply grouped formulas if using a frequency table.	<i>Central tendency calculations with working</i>
21.05.2026	Calculate geometric mean and harmonic mean (where appropriate). Find Q1, Q2, Q3, D5, P25, P75.	<i>Quartiles and other positional measures</i>
26.05.2026	Calculate range, mean deviation, variance, SD, CV. Write one paragraph of interpretation for each measure.	<i>Dispersion measures with interpretations</i>
29.05.2026	Write /compile the full portfolio, review, proofread, bind, and submit.	<i>Bound portfolio submitted</i>

QMS 101 GROUP PORTFOLIO — REQUIREMENTS & MARKING GUIDE

Every group must submit a portfolio that follows the structure below. The portfolio demonstrates mastery of the statistical methods taught in QMS 101 applied to a real research question.

#	Portfolio Section	What Must Be Included	Marks (%)
1	Introduction & Research Design	State the research question precisely. Define the population and sample. Identify all variables. Describe and justify the data Method/Tool (required respondent/participant) chosen.	10%
2	Data Collection & Presentation	Present raw data in a clean, organised table. Construct a grouped or ungrouped frequency distribution table with: frequency, relative frequency, cumulative frequency, and cumulative relative frequency.	20%
3	Graphical Displays	Draw at least TWO graphs appropriate to your data type. Minimum: one histogram or bar chart AND one ogive or frequency polygon. All graphs must be correctly labelled with titles, axis labels, and units.	15%
4	Measures of Central Tendency	Calculate mean, median, and mode for your main quantitative variable (ungrouped or grouped formula as appropriate). For growth-rate or ratio data, also calculate geometric or harmonic mean. Discuss which measure best represents the data.	20%
5	Measures of Dispersion	Calculate range, mean deviation, variance, standard deviation, and coefficient of variation. If comparing two groups, use CV to compare relative variability. Interpret all measures in context of the research question.	20%

6	Conclusions & Recommendations	Answer your research question directly using your statistical findings. Acknowledge limitations of your study. Make at least TWO practical recommendations based on the evidence.	10%
	Appendices	Include a copy of the data collection instrument (questionnaire or checklist), pictures (if any), etc	05%

GROUP ASSIGNMENT CARDS — ALL 38 GROUPS

One card per group. Each card shows: the research question, exactly what data to collect, Method/Tool (required respondent/participant) and minimum number of participants.

GROUP BM1 | BBA — Marketing

Topic Area: *Daily spending habits of university students*

RESEARCH QUESTION
How much money do university students spend per day on food, transport, and airtime?

Data to Collect Daily spend on food (TZS), transport (TZS), airtime (TZS); total daily spend; gender; programme	Method/Tool (required respondent/participant) Questionnaire survey (min. 30 students)
---	---

GROUP BM2 | BBA — Marketing

Topic Area: *Student awareness of product brands on campus*

RESEARCH QUESTION
How many product brands can university students spontaneously recall from advertisements they have seen in the past week?

Data to Collect Number of brands recalled; advertising channel (social media/poster/TV/radio); product category; gender	Method/Tool (required respondent/participant) Questionnaire survey (min. 30 students)
---	---

GROUP BM3 | BBA — Marketing

Topic Area: *Student use of social media platforms*

RESEARCH QUESTION

How many hours per day do university students spend on each social media platform, and which platform is used most?

Data to Collect

Hours/day on: WhatsApp, Instagram, TikTok, Facebook, Twitter/X; most used platform; year of study

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BM4 | BBA — Marketing

Topic Area: *Student purchasing locations near campus*

RESEARCH QUESTION

Where do university students most frequently buy their daily necessities — campus canteen, nearby shops, or open market — and how much do they spend per week?

Data to Collect

Preferred buying location; weekly spending (TZS); product type purchased most; distance to shop (minutes)

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BM5 | BBA — Marketing

Topic Area: *Student mobile phone usage patterns*

RESEARCH QUESTION

How many hours per day do university students use their mobile phones, and for what purposes — calls, social media, study, entertainment — do they use them most?

Data to Collect

Total phone hours/day; hours by purpose; phone brand; monthly airtime expenditure (TZS)

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BM6 | BBA — Marketing

Topic Area: *Small businesses operated by students on campus*

RESEARCH QUESTION

How many university students run a small business on the side, what types of businesses are most common, and how much do they earn per month?

Data to Collect

Method/Tool (required respondent/participant)

Business ownership (yes/no); business type; monthly revenue (TZS); hours spent per week; year of study	Questionnaire survey (min. 30 students)
--	---

GROUP BP&BE1 | BBA — Procurement & Entrepreneurship

Topic Area: *Sources of goods supplied to student vendors near campus*

RESEARCH QUESTION
Where do student and small vendors near campus buy their goods, and how much do they spend on supplies per week?

Data to Collect Supply source (wholesale/retail/direct); weekly supply cost (TZS); product type sold; business location	Method/Tool (required respondent/participant) Questionnaire + brief interview (min. 20 vendors)
---	---

GROUP BP&BE2 | BBA — Procurement & Entrepreneurship

Topic Area: *Prices of basic goods sold near campus*

RESEARCH QUESTION
What are the current prices of selected basic commodities — rice (per kg), cooking oil (per litre), bread (per loaf), and water (per bottle) — at shops near campus, and how do prices vary between shops?

Data to Collect Price per item (TZS) at each shop; shop name/location; date of price check; product brand	Method/Tool (required respondent/participant) Price observation / market survey (min. 5 shops, 4 items each)
---	--

GROUP BP&BE3 | BBA — Procurement & Entrepreneurship

Topic Area: *Student enterprise costs and monthly profits*

RESEARCH QUESTION
What is the average monthly revenue, total costs, and profit of student-run businesses on campus?

Data to Collect Monthly revenue (TZS); total monthly costs (TZS); profit (TZS); business type; months in operation	Method/Tool (required respondent/participant) Questionnaire survey (min. 20 student vendors)
--	--

GROUP BP&BE4 | BBA — Procurement & Entrepreneurship

Topic Area: *Stock-out experiences of campus vendors*

RESEARCH QUESTION

How many times per month do small vendors near campus run out of stock for their main product, and what is the estimated value of lost sales per stock-out?

Data to Collect

Stock-out frequency (times/month); main product sold; estimated lost sales per stock-out (TZS); reorder method

Method/Tool (required respondent/participant)

Questionnaire + observation (min. 20 vendors)

GROUP ED1 | BAED — Education

Topic Area: Student ratings of teaching methods used in their courses

RESEARCH QUESTION

How do first-year university students rate the teaching methods used in their courses — lecturing, group discussion, and use of examples — on a scale of 1 to 5?

Data to Collect

Rating (1–5) for: lecturing clarity, use of examples, group activities, use of visual aids; most preferred method; subject

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 first-year students)

GROUP AF1 | Accounting & Finance

Topic Area: Student monthly income and expenditure

RESEARCH QUESTION

How much money per month do university students receive, and how do they distribute it across food, rent, transport, airtime, and personal care?

Data to Collect

Monthly income (TZS); expenditure on food/rent/transport/airtime/personal care (TZS each); income source

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP AF2 | Accounting & Finance

Topic Area: Student saving behaviour and amounts

RESEARCH QUESTION

How much money per month do university students save, and where do they keep their savings — mobile money, bank, cash at home?

Data to Collect

Monthly savings amount (TZS); savings location; frequency of saving; income level (range); year of study

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP AF3 | Accounting & Finance

Topic Area: *Mobile money transaction volumes among students*

RESEARCH QUESTION

How many mobile money transactions do university students make per week, and what amounts are typically sent or received per transaction?

Data to Collect

Transactions per week; average amount per transaction (TZS); platform used; purpose (school fees/food/family/other)

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP AF4 | Accounting & Finance

Topic Area: *Student financial literacy knowledge*

RESEARCH QUESTION

How well do university students answer basic financial literacy questions — on interest, budgeting, inflation, and saving — and what is the typical score out of 10?

Data to Collect

Score on 10-item financial literacy quiz; programme; year; gender; access to financial education

Method/Tool (required respondent/participant)

Short quiz + questionnaire (min. 30 students)

GROUP AF5 | Accounting & Finance

Topic Area: *Student borrowing amounts and sources*

RESEARCH QUESTION

How much money have university students borrowed in the past three months, and from which sources — family, HESLB, friends, mobile loans?

Data to Collect

Amount borrowed (TZS); source of loan; purpose; repayment status; monthly income

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP AF6 | Accounting & Finance

Topic Area: *HESLB loan allocation by students*

RESEARCH QUESTION

How do university students who receive HESLB loans distribute the funds across rent, food, books, transport, and personal expenses?

Data to Collect

Loan amount received (TZS); amount spent on each category (TZS); month loan runs out; surplus/shortfall

Method/Tool (required respondent/participant)

Questionnaire survey (HESLB recipients only, min. 30)

GROUP AF7 | Accounting & Finance

Topic Area: *Bank account ownership and usage frequency*

RESEARCH QUESTION

What proportion of university students own an active bank account, and how many times per month do they visit a bank branch or use mobile banking?

Data to Collect

Bank account ownership (yes/no); bank name; visits per month; mobile banking use (yes/no); reason for no account (if unbanked)

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP AF8 | Accounting & Finance

Topic Area: *Student budgeting practices*

RESEARCH QUESTION

How many university students write a personal budget each month, and on average, by how much do they exceed or stay within their planned budget?

Data to Collect

Budget practice (yes/no/sometimes); planned monthly budget (TZS); actual spending (TZS); overspend amount; year of study

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP AF9 | Accounting & Finance

Topic Area: *Student awareness of investment options*

RESEARCH QUESTION

How many basic investment options — savings accounts, government bonds, shares, mobile savings — can university students correctly identify, and what is their average awareness score?

Data to Collect

Number of options correctly identified (out of 5); score; year of study; programme; prior financial education

Method/Tool (required respondent/participant)

Short quiz + questionnaire (min. 30 students)

GROUP EC1 | BAEC — Economics

Topic Area: *Price changes of basic goods near campus*

RESEARCH QUESTION

By how much have the prices of five selected basic goods — rice, cooking oil, bread, eggs, and transport fare — changed near campus over the past six months?

Data to Collect

Method/Tool (required respondent/participant)

Current price (TZS) and price 6 months ago (TZS) for each item; % change; source of price data; shop location	Price observation survey + secondary data (receipts or trader records)
---	--

GROUP BL1 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Library visits per week among students*

RESEARCH QUESTION
How many times per week do university students visit the campus library, and for what purposes — reading, borrowing books, printing, studying — do they go?

Data to Collect Library visits per week; main purpose; day of week most visited; distance to library (minutes walk); programme	Method/Tool (required respondent/participant) Questionnaire + library visitor log (min. 30 students)
--	--

GROUP BL2 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Sources of academic information used by students*

RESEARCH QUESTION
What academic information sources do university students use most frequently — textbooks, library books, internet, lecture notes, or classmates — and how many times per week is each source used?

Data to Collect Frequency of use per week for each source; most preferred source; internet quality rating; access to textbooks	Method/Tool (required respondent/participant) Questionnaire survey (min. 30 students)
--	---

GROUP BL3 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Student reading habits — digital versus print*

RESEARCH QUESTION
How many hours per week do university students spend reading academic materials in digital form versus in print form?

Data to Collect Digital reading hours/week; print reading hours/week; device used; number of books/articles read/week; programme	Method/Tool (required respondent/participant) Questionnaire survey (min. 30 students)
--	---

GROUP BL4 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *How students organise and store their academic documents*

RESEARCH QUESTION

What methods do university students use to organise their academic documents — physical files, phone, laptop, cloud storage — and how often do they report losing or misplacing important documents?

Data to Collect

Storage method used; document loss frequency (times/semester); type of document lost most; device owned

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BL5 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Student transport to campus — time and cost*

RESEARCH QUESTION

How long does it take and how much does it cost for university students to travel to campus each day?

Data to Collect

Daily travel time (minutes); daily transport cost (TZS); mode of transport; distance from home to campus (km); days per week travelling

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BL6 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Student use of parcel and delivery services*

RESEARCH QUESTION

How often do university students use parcel or delivery services per month, and how much do they pay per delivery on average?

Data to Collect

Deliveries received per month; cost per delivery (TZS); provider used; delivery time satisfaction rating (1–5); purpose

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BL7 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Digital tool usage for academic tasks*

RESEARCH QUESTION

Which digital tools do university students use for academic tasks — WhatsApp, email, Google Docs, YouTube — and how many hours per week do they spend using each?

Data to Collect

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

Tools used; hours per week per tool; device type; internet quality; programme

GROUP BL8 | BLRIM — Logistics/Records/Info Mgt

Topic Area: *Waste disposal behaviour on campus*

RESEARCH QUESTION

How do university students dispose of their waste on campus, and how many times per day on average do they use a dustbin versus littering on the ground?

Data to Collect

Waste disposal method; frequency of using dustbin per day; frequency of littering; awareness of campus waste policy (yes/no)

Method/Tool (required respondent/participant)

Questionnaire + structured observation (min. 30 students observed)

GROUP BS1 | BASO — Sociology

Topic Area: *Student daily social media usage*

RESEARCH QUESTION

How many hours per day do university students spend on social media, and which platforms do they use most?

Data to Collect

Hours/day on social media; most used platform; time of day used most; year of study; gender

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS2 | BASO — Sociology

Topic Area: *Lecture attendance rates among students*

RESEARCH QUESTION

How many lectures per week do university students attend out of all scheduled lectures, and what are the most common reasons for missing a lecture?

Data to Collect

Lectures attended per week; total scheduled per week; main reason for absence; distance from campus; programme

Method/Tool (required respondent/participant)

Questionnaire + attendance register (min. 30 students)

GROUP BS3 | BASO — Sociology

Topic Area: *Student living conditions and accommodation*

RESEARCH QUESTION

What are the current living conditions of university students — what type of accommodation do they live in, how many people share a room, and how much do they pay per month?

Data to Collect

Accommodation type (hostel/rented room/family/own); monthly rent (TZS); number of roommates; distance from campus (km); satisfaction rating (1–5)

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS4 | BASO — Sociology

Topic Area: Student participation in campus clubs and social activities

RESEARCH QUESTION

How many university students belong to at least one campus club or student organisation, and how many hours per week do they spend on social and community activities?

Data to Collect

Club membership (yes/no); number of clubs; hours/week on social activities; type of club; year of study

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS5 | BASO — Sociology

Topic Area: Sleeping hours and patterns among students

RESEARCH QUESTION

How many hours of sleep per night do university students get, and at what times do they typically go to bed and wake up?

Data to Collect

Sleep hours per night; bedtime (hour); wake-up time (hour); sleep quality rating (1–5); gender; year of study

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS6 | BASO — Sociology

Topic Area: Student stress levels and academic workload

RESEARCH QUESTION

How stressed do university students feel during a typical study week, and how many hours of academic work — lectures plus self-study — do they complete per week?

Data to Collect

Self-rated stress level (1–5 scale); total academic hours per week; number of assignments due; sleep hours; gender

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS7 | BASO — Sociology

Topic Area: *Eating habits of university students*

RESEARCH QUESTION

How many meals per day do university students eat, and what is the typical daily food expenditure?

Data to Collect

Meals per day; daily food expenditure (TZS); meals from canteen vs. self-cooked vs. bought outside; skipped meals frequency; gender

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS8 | BASO — Sociology

Topic Area: *Student physical activity and exercise habits*

RESEARCH QUESTION

How many times per week do university students engage in physical exercise, and for how many minutes per session?

Data to Collect

Exercise sessions per week; duration per session (minutes); type of exercise; reason for not exercising (if applicable); gender

Method/Tool (required respondent/participant)

Questionnaire survey (min. 30 students)

GROUP BS9 | BASO — Sociology

Topic Area: *Time allocation across student daily activities*

RESEARCH QUESTION

How do university students divide their typical weekday among studying, classes, social activities, rest, and other activities?

Data to Collect

Hours per day on: lectures/classes; self-study; social media; socialising; sleep; travel; other activities; gender; programme

Method/Tool (required respondent/participant)

Questionnaire (24-hour time diary) — min. 30 students