FOR APPROVAL BY THE CURRICULUM COMMITTEE

Approve Data Literacy 101 for first-year students and new employees

The course team requests committee approval to launch Data Literacy 101: Making Sense of Data with Spreadsheets — a four-week, hands-on course in the spreadsheet skills students and staff use every day.

This proposal is Draft 2, prepared for discussion by the curriculum committee, and it is based only on the attached course design draft. Every figure, schedule item and design choice the committee will see comes from that document.

Course team · Draft 2 · Prepared for committee discussion

DRAFT 2

Course design draft, submitted for review and approval.

Decision sought

Approval to launch the course for first-year students and new employees.

Basis of review

The attached course design draft alone; no outside facts or figures are added.

What follows

The problem, the pilot evidence, the audience and goals, the syllabus, assessment, design changes, and the support and budget needed to launch.

Students and staff handle data daily but were never taught how

01 **Spreadsheets are part of the everyday job**

First-year students writing course reports and new employees writing weekly updates all have to organize and read spreadsheets — yet most were never taught how.

02 **Data is scattered and copied by hand**

Data sits in several files and gets copied by hand, so numbers drift and no one can trace where a figure came from.

03 **Charts get made, but nobody can say what they show**

Charts are produced routinely, yet the finding they are meant to carry goes unstated — the work is done, the message is lost.

THE SCOPE THIS SETS

The gap is not technical ambition but a missing everyday skill. This course therefore covers only the parts people use every day.

No programming. No statistics theory.

The campus pilot showed strong engagement and demand

21

Participants who completed every exercise

24

Participants in the campus pilot (last fall)

21 of 24 participants completed every exercise in last fall's campus pilot — near-complete completion in a real pilot, evidence that the hands-on format sustains engagement.

In the end-of-course survey, the favorite session was session 5 — subtotals and pivot tables — pointing to demand for exactly the applied, hands-on skills this course teaches.

Audience: first-year students or first-year employees, no prerequisites

AUDIENCE

Open to **first-year university students** or **employees in their first year on the job** — the two groups the course team identified as handling spreadsheets every day without ever being taught how.

CLASS SIZE

About 30

people per class

A class of about 30 people keeps the hands-on format workable: the instructor and a teaching assistant can walk around and help every participant during practice.

PREREQUISITES

Basic computer skills only — **no programming experience needed**. The course deliberately covers only everyday spreadsheet skills, so the entry bar stays as low as the problem it answers.

The low entry bar matches the course's everyday-skills scope: it serves exactly the population identified as underserved — people who must organize and read data for reports and weekly updates, but were never taught how.

Three goals: by the end of the course, students can clean data, answer questions and present one finding

1

By the end of the course, students can clean the data

Turn messy raw data into a clean, well-structured table — the foundation every later step depends on.

2

By the end of the course, students can answer the question

Sort, filter, subtotal and pivot tables to answer specific questions — the everyday tools of analysis.

3

By the end of the course, students can present one finding

Pick the right chart type and explain one finding with a one-page chart — the endpoint of the pipeline.

The three goals form a pipeline from raw data to a communicated finding. The eight-session syllabus on the next page follows this same sequence, so the schedule was built to serve the goals.

Four weeks, eight hands-on sessions building skill step by step

4 weeks
Course length

2 sessions a week
Session frequency

90 minutes
Each session

8 sessions
In total

Sessions 1–2
Understand and clean data

1
Where data comes from: rows, columns and data types

2
Cleaning data: duplicates, consistent formats, blanks

Sessions 3–5
Count and summarize

3
Sorting and filtering

4
Common functions: SUM, COUNT, AVERAGE, IF

5
Subtotals and pivot tables

Sessions 6–7
Chart and communicate

6
Picking a chart: bar, line and pie

7
One chart, one finding

Session 8
Present

8
Final group presentations and feedback

The eight sessions move in the same order as the three goals — from raw data, to answering questions, to one communicated finding — so the syllabus was built to serve the goals rather than the reverse.

Every session: short demo, then most time hands-on

Each of the eight 90-minute sessions follows the same rhythm: a brief explanation and demonstration at the start, then the clear majority of the time spent practising, with the instructor and a teaching assistant walking around to help as students work.



20
minutes of explanation and demo at the start

60
minutes of hands-on practice, instructor and TA walking around to help

10
minutes to wrap up and set the week's exercise

All practice data is made-up sample data prepared by the instructor; no real personal information is used.

Grading: exercises and final report carry the weight

Component	Detail	Weight
Attendance	Attending the eight sessions	10%
Weekly exercises	4 exercises, 10% each, due before the next session	40%
Final group report	Content 30% · Presentation 20%	50%

Final report format: groups of 3–4 pick a public dataset or one the instructor provides, write an analysis brief of no more than 5 pages, and present it for 8 minutes with 4 more minutes for questions in session 8.

TBD

of the grade sits in the weekly exercises (40%) and the final group report (50%)

Assessment rewards **doing and communicating data** — the same capabilities the course goals promise, from cleaning a table to explaining one finding with one chart.

Pilot feedback drove four concrete design changes

NO.	WHAT THE PILOT SHOWED	WHAT CHANGED IN DRAFT 2
1	Session 4 covered too many functions at once, and the back rows fell behind.	→ Functions are split into **four must-know ones** taught in class; the optional ones go on the cheat sheet and are not taught in class.
2	The practice data was too clean, so students froze when they met real data.	→ Every practice file now has **duplicate rows, blanks and dates in mixed formats** on purpose.
3	Final presentations were 6 minutes, and most groups ran over.	→ Presentations are now **8 minutes, plus 4 minutes for questions**.
4	Students asked for a summary of what each session covered.	→ Every handout now ends with a **summary page and one self-check question**.

Approve to launch; support and budget items listed below

The course team asks the committee to approve the launch of **Data Literacy 101**. Approval requires only two support commitments and confirmation of the budget line, so the committee can decide today with the resource picture fully on the table.

Category	Item	Detail
Support needed	A teaching assistant in every session to help answer questions	Every session
Support needed	The class list one week before the course starts, so groups can be set up in advance	1 week before
Resources	Any spreadsheet app (Excel, Google Sheets or Numbers)	—
Resources	Practice datasets prepared by the instructor, one per session	8 datasets
Resources	A handout for each session, plus a one-page cheat sheet of common functions	8 handouts + 1 cheat sheet
Budget	Not specified in the draft; to be confirmed with the committee	TBD