

Socio-Informatics 348 Study Guide 2025

This guide provides a detailed overview of the lecture content, textbook chapters, and practicals for each week of the module. The course consists of 35 lectures and 10 practicals.

The module will use (parts of) four textbooks (see the table below). All four books are available for free online on the authors' websites (links available in the module framework).

It is expected that you will need to put in considerable self-study time practicing the techniques, seeking additional exercises, and working through the material outside of class. This is a very practical module.

There are three formal assessments (A1, A2, and A3) as well as further formative and summative assessments. Students must complete any **two** of the A1, A2 and A3; and **all** of the AF components to complete the module. Students must have completed the AF assessment to gain entry into the A2 and A3. Students may also not complete the A3 assessment if they have already completed both the A1 and A2. There are no additional assessment opportunities available other than those listed. **Students are strongly encouraged to complete the A1 and A2, leaving the A3 as an option in case of illness or other cases.**

	Date/Time	%
A1	4 Sep 17:40–19:40	35
A2	4 Nov 09:00–11:00	35
A3	28 Nov 09:00–11:00	35
Formal Assessments		70
Practicals		10
Assignment	Due 10 Oct, 23:59	20
TOTAL		100

10x Practical: 10% (1% per practical)

- Submission of a completed (i.e., at least 80% of exercises attempted) practical file as student_number.qmd (e.g., 123456789.qmd) to the relevant link on SUNLearn by the deadline will earn you 1% as part of the AF assessment.
- These submissions will not be marked for correctness, only for completeness.
- The solutions to these exercises are available online, so this is primarily an exercise in self-study and practice. You will only be cheating yourself if you use any online solutions or anyone else's answers. This will come back to impact you in the tests which will be conducted under exam conditions. I encourage you to take the time to carefully work through each exercise, in conjunction with the relevant chapters in the textbook, to understand the content, and help yourself to understand the material and techniques.
- Each student is able to attend three hours of practical time each week (out of the nine hours scheduled) in which dedicated tutors will be available to provide support and guidance with the questions. I strongly encourage you to attend these sessions to get the help that you might need with the exercises.
 - o Gr 1: Mon (10h10 - 12h00); Fri (08h10 - 09h00)
 - o Gr 2: Tues (10h10 - 12h00); Fri (09h10 - 10h00)
 - o Gr 3: Wed (08h10 - 10h00); Thurs (15h10 - 16h00)
- **An attendance register will be recorded during these sessions and attendance during at least 1 session is required to earn the 1% for the practical submission.**

Week	Lecture	Day	Date	Content	Chapters	Practical
1	1	M	21-Jul	Module introduction	Salganik: 1, 2; R4DS: intro R4DS: 2, 4, 6, 8, 28	
	2	W	23-Jul	Computational social science and the data analysis process		
	3	F	25-Jul	Intro to R, Workflows, and Quarto		
2	1	M	28-Jul	NO CLASS		Prac 0
	2	W	30-Jul			
	3	F	01-Aug			
3	1	M	04-Aug	Data visualisation	R4DS: 1	
	2	W	06-Aug	Data visualisation	R4DS: 1	
	3	F	8-Aug	Data transformation	R4DS: 3	
4	1	M	11-Aug	Data transformation	R4DS: 3	Prac 1
	2	W	13-Aug	Data tidying	R4DS: 5	
	3	F	15-Aug	Data importing	R4DS: 7	
5	1	M	18-Aug	Visualise - Layers	R4DS: 9	Prac 2
	2	W	20-Aug	Visualise - Exploratory data analysis	R4DS: 10	
	3	F	22-Aug	Visualise - Exploratory data analysis	R4DS: 10	
6	1	M	25-Aug	Visualise - Communication	R4DS: 11	Prac 3
	2	W	27-Aug	Transform - Logical vectors	R4DS: 12	
	3	F	29-Aug	Transform - Numbers	R4DS: 13	
7	1	M	01-Sep	Transform - Strings	R4DS: 14	Prac 4
	2	W	03-Sep	Revision A1	(A1 scope = R4DS: ch 1 - 14; Salganik: 1, 2)	
	3	F	05-Sep	A1 Assessment Assignment Instructions		
8	1	M	08-Sep	RECESS		
	2	W	10-Sep			
	3	F	12-Sep			

Week	Lecture	Day	Date	Content	Chapters	Practical
9	1	M	15-Sep	Transform - Regex	R4DS: 15	Prac 5
	2	W	17-Sep	Transform - Factors	R4DS: 16	
	3	F	19-Sep	Transform - Dates and Times	R4DS: 17	
10	1	M	22-Sep	Transform - Missing values	R4DS: 18	Prac 6
	2	W	24-Sep	Public Holiday		
	3	F	26-Sep	Transform - Joins	R4DS: 19	
11	1	M	29-Sep	Import - Databases	R4DS: 21	Prac 7
	2	W	01-Oct	Import - Web scraping	R4DS: 24	
	3	F	03-Oct	Import		
12	1	M	06-Oct	Program - Functions	R4DS: 25	Prac 8
	2	W	08-Oct	Program - Iterations	R4DS: 26	
	3	F	10-Oct	Modelling overview Assignment Due	van Atteveldt 8.1, 8.2	
13	1	M	13-Oct	Text analysis - Intro	Silge: 1	Prac 9
	2	W	15-Oct	Text analysis - Sentiment analysis	Silge: 2	
	3	F	17-Oct	Text analysis - Word/doc frequency	Silge: 3	
14	1	M	20-Oct	Text analysis - Relations between words	Silge: 4,5	Prac 10
	2	W	22-Oct	Text analysis - Topic modelling	Silge: 6	
	3	F	24-Oct	Ethics in Computational Social Science	Salganik: 6	
END OF SEMESTER						
Tuesday 4 Nov				A2 Assessment	Scope = Everything	
Friday 28 Nov				A3 Assessment	Scope = Everything	