MODULE REPORT

Module	CS2109S - INTRODUCTION TO AI AND MACHINE LEARNING
Academic Year/Sem	2021/2022 - Sem 2
Department	COMPUTER SCIENCE
Faculty	SCHOOL OF COMPUTING

Note: Class Size = Invited; Response Size = Responded; Response Rate = Response Ratio

Raters	Student
Responded	42
Invited	66
Response Ratio	64%

1. Overall opinion of the module

Distribution of Responses

What is your overall opinion of the module?

Very good (8) 19%
Good (23) 55%
Average (6) 14%
Poor (5) 12%
Very poor (0) 0%
[Total (42)]

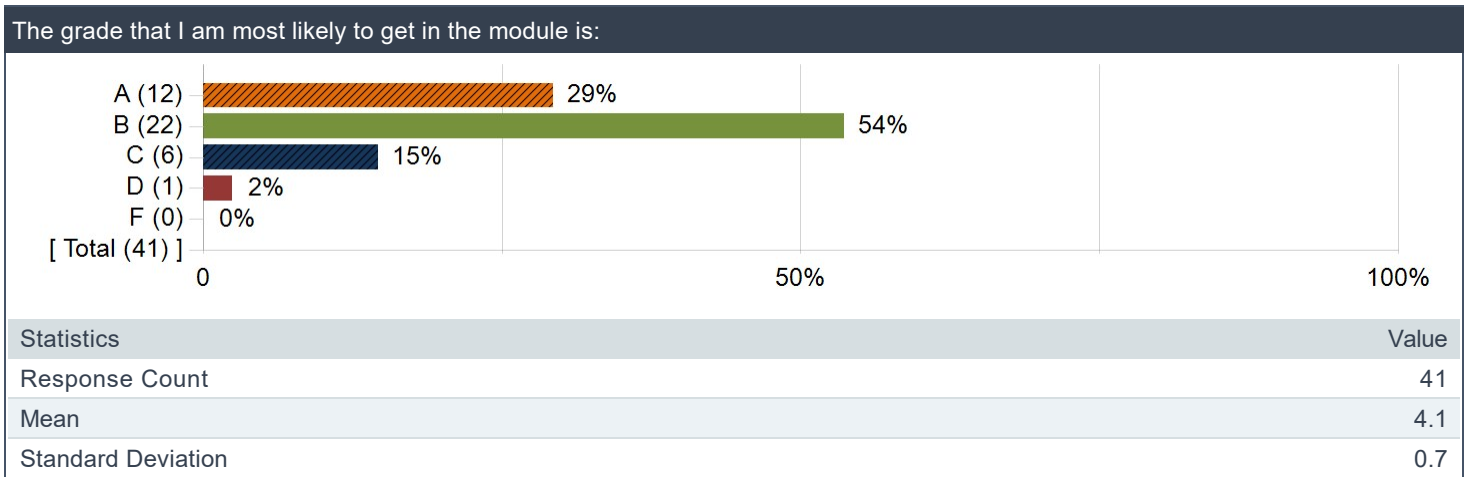| Statistics	Value
Response Count	42
Mean	3.8
Median	4.0
Mode	4
Standard Deviation	0.9
Positive Feedback	74%

Rating Scores

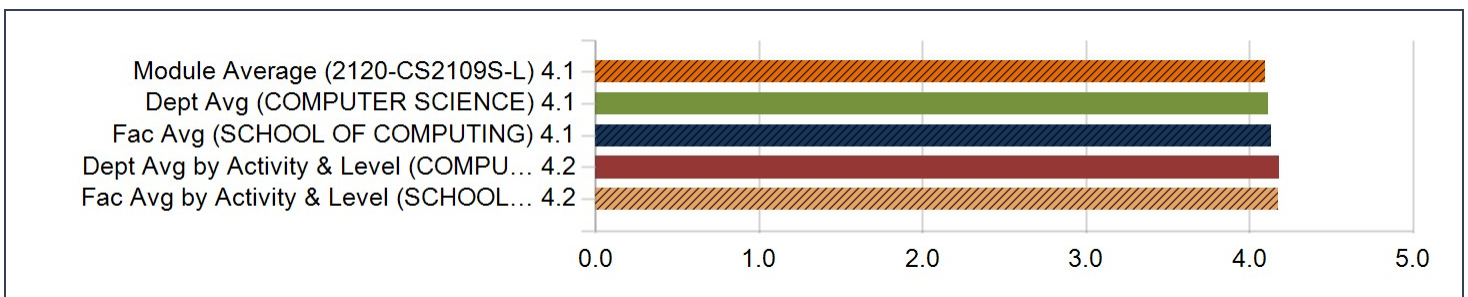| Question	Module Average (2120-CS2109S-L)		Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 2000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 2000))	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
What is your overall opinion of the module?	3.8	0.9	3.9	0.9	3.8	1.0	4.0	0.8	3.9	0.9

Module Average (2120-CS2109S-L)	3.8
Dept Avg (COMPUTER SCIENCE)	3.9
Fac Avg (SCHOOL OF COMPUTING)	3.8
Dept Avg by Activity & Level (COMPU…	4.0
Fac Avg by Activity & Level (SCHOOL…	3.9
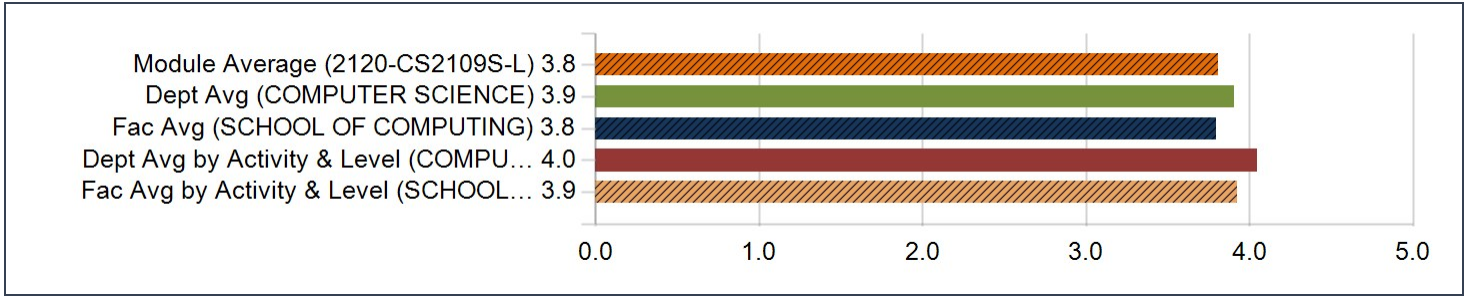
2. Expected Grade

Distribution of Responses

The grade that I am most likely to get in the module is:

A (12)	29%
B (22)	54%
C (6)	15%
D (1)	2%
F (0)	0%
[Total (41)]	

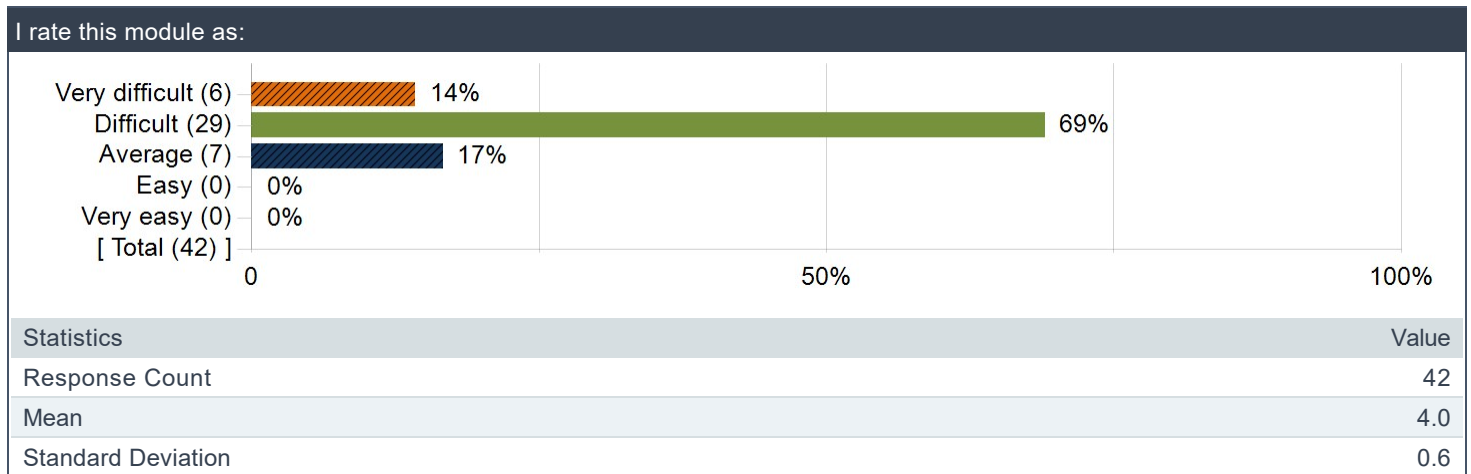| Statistics	Value
Response Count	41
Mean	4.1
Standard Deviation	0.7

Rating Scores

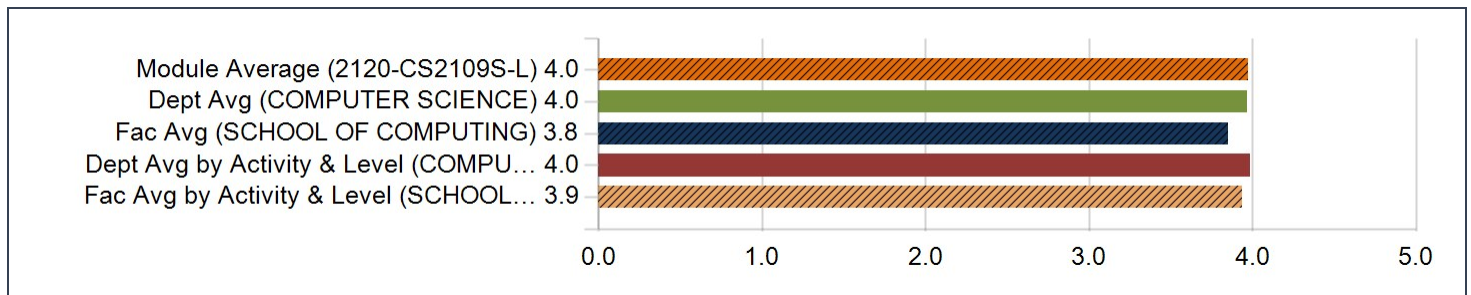| Question	Module Average (2120-CS2109S-L)		Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 2000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 2000))	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The grade that I am most likely to get in the module is:	4.1	0.7	4.1	0.8	4.1	0.7	4.2	0.7	4.2	0.7

Module Average (2120-CS2109S-L)	4.1
Dept Avg (COMPUTER SCIENCE)	4.1
Fac Avg (SCHOOL OF COMPUTING)	4.1
Dept Avg by Activity & Level (COMPU…	4.2
Fac Avg by Activity & Level (SCHOOL…	4.2

3. Difficulty Level of the module

Distribution of Responses

I rate this module as:

Very difficult (6)	14%
Difficult (29)	69%
Average (7)	17%
Easy (0)	0%
Very easy (0)	0%
[Total (42)]	

Statistics	Value
Response Count	42
Mean	4.0
Standard Deviation	0.6

Rating Scores

Question	Module Average (2120-CS2109S-L)		Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 2000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 2000))	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
I rate this module as:	4.0	0.6	4.0	0.8	3.8	0.8	4.0	0.7	3.9	0.8

Module Average (2120-CS2109S-L) 4.0	
Dept Avg (COMPUTER SCIENCE) 4.0	
Fac Avg (SCHOOL OF COMPUTING) 3.8	
Dept Avg by Activity & Level (COMPU... 4.0	
Fac Avg by Activity & Level (SCHOOL... 3.9	

WHAT I LIKE / DISLIKE ABOUT THE MODULE

What I liked about the module:

Comments
Very hands on, all the concepts are being practiced in problem set. semester unlike what others have mentioned. It is good that this module to be felt as a front heavy module, due to the fact that there is other modules who like to dump projects on week 10 and expect students to submit by week 12. This is due the fact that the project is due after recess week. Which will entice students to take it when they have alot of team project modules.
I liked how the focus was more on broader ideas which allows for more time for interesting topics to be pursued.
I enjoy the various problem sets that have been crafted. I found them to be enjoyable as it has real life context. Overall, the workload distribution of the class was also well allocated. While it differs from individual, I found that the workload of the module for the first half of the semester was slightly more than that of the second half. This is due to the mini project and AI problem sets which at times required more experimentation. Having the workload to be front heavy allowed it the balance with other modules which mostly tend to be back heavy.
Provides hands–on on different ML and AI algorithms and how to apply them.
Fun, wide.
It is a broad introduction to AI and ML concepts, and it is quite interesting. The assignments and tutorials are well designed and helps in understanding of how the concepts can be used and applied. The teaching staff is also very responsive.
The substantial amount of problem sets was helpful for practical learning and understanding certain theoretical concepts. Tutorials are also well–structured where questions are designed to achieve the clear objectives set.
problem sets and tutorials were well designed and helped me gain a better understanding from the module
I like that this module teaches the foundations of AI and ML in a simple manner that can be applied in the real world already. I also liked how problem sets will teach us more things compared to lectures.
Not a lot of math.
The topics.
Cover a lot of topics in AI/ML with a lot of hands on practice for students

What I did not like about the module:

Comments
ps6 and ps7 is too rush such that students are unable to fully benefit from it. Probably shift the content forward so that ps could be earlier too. Students tend to have more time in the beginning of the semester, it will be better if ps7 will end by week 12 after 2 weeks of duration or week 13 after adding the 'welfare' of students. Felt that the workload is heavy and consistent across the whole semester unlike what others have mentioned. Probably felt that week 2 lecture on recap of algorithm could be shortened, as students by then will have taken cs2040s. I believe more time could be used to cover more interesting stuff like bayesian algorithms. The problem with students after taking cs2109s is that we are unable to take modules that has cs3243 and cs3244 as prereq and we are unable to take cs3243 and cs3244, which trapped us in middle of no where. Are we able to take modules that require those as prereq of cs3243 such as cs4246? Or do we have to wait until the parent module of cs2109s to exist one year later? Being a year 2 student, it felt more restrictive after taking the module.....
The tutorials for the module tend to be a little short which might not be sufficient to discuss some of the problems at times.
Sometimes the workload is too heavy.
Difficulty curve throughout is kinda wack. AI part felt like 2040, but ML part was really a breeze for me in terms of how much thought/effort needed to be put to know of the ans to the problem sets. The problem sets need some cleanup (mainly ipynb documentation to align with what is expected).
Some training materials seem to be made in a haste. However, this is tolerable as the module is brand new and it doesn't seem to significantly hinder anyone.
There was quite a lot of content cramped into the module. On top of that, the number of assignments are very high, a total of 8 assignments and 1 mini project. The time to do the assignments is sufficient, but it is a lot for a 2k, 4mc module.
The assessments (mid–term & finals) are too challenging for me :/
The mini–project
The lectures in the middle of the semester can be hard to follow, as I felt the math was not properly explained. More math should be included to explain concepts clearly. Also, there are a lot of errors in lecture notes, problem sets etc.
A final project could have been added; it certainly seemed interesting.
Problem Set 2 to program Wordle can be done without AI. The workload. It can't be helped.