COURSE REPORT

Course	CS4248 - NATURAL LANGUAGE PROCESSING
Academic Year/Sem	2024/2025 - Sem 2
Department	COMPUTER SCIENCE
Faculty	SCHOOL OF COMPUTING

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

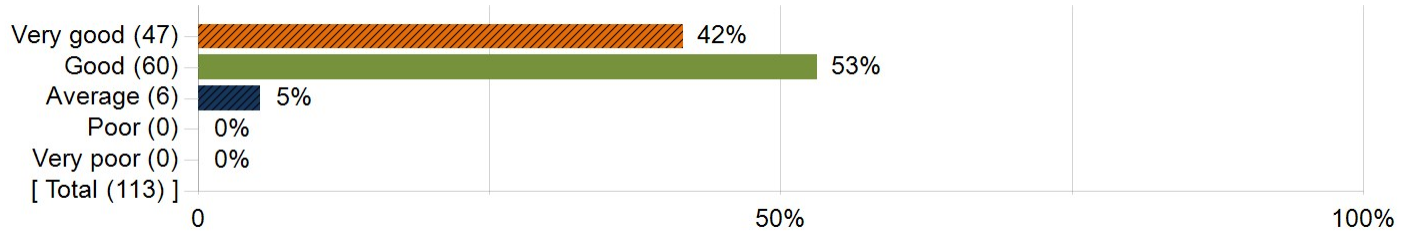
Raters	Student
Responded	113
Invited	215
Response Ratio	53%

Instructors of large courses (300+ students) can now benefit from an AI-powered tool developed by ODI in collaboration with PVO. This tool analyzes qualitative student feedback to provide quantitative summaries, offering valuable insights alongside the traditional reports. Access the summary here | details about the tool here. For inquiries or suggestions on improvement, please contact Ms ONG Mui Hong (Director TEL) at muihong@nus.edu.sg

1. Overall opinion of the course

Distribution of Responses

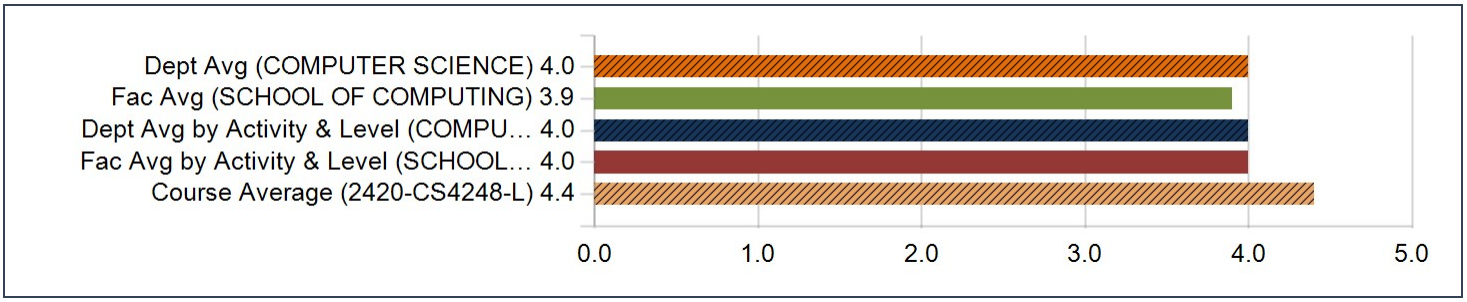
What is your overall opinion of the course?



Statistics	Value
Response Count	113
Mean	4.4
Median	4.0
Mode	4
Standard Deviation	0.6
Positive Feedback	95%

Rating Scores

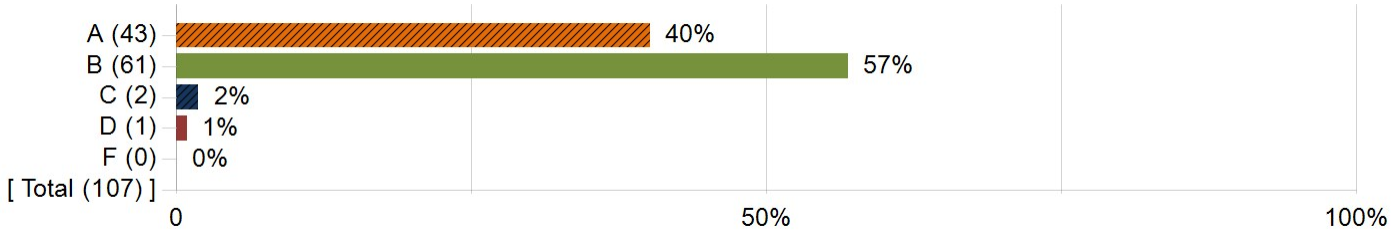
Question	Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 4000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 4000))		Course Average (2420-CS4248-L)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
What is your overall opinion of the course?	4.0	0.9	3.9	0.9	4.0	0.8	4.0	0.9	4.4	0.6



2. Expected Grade

Distribution of Responses

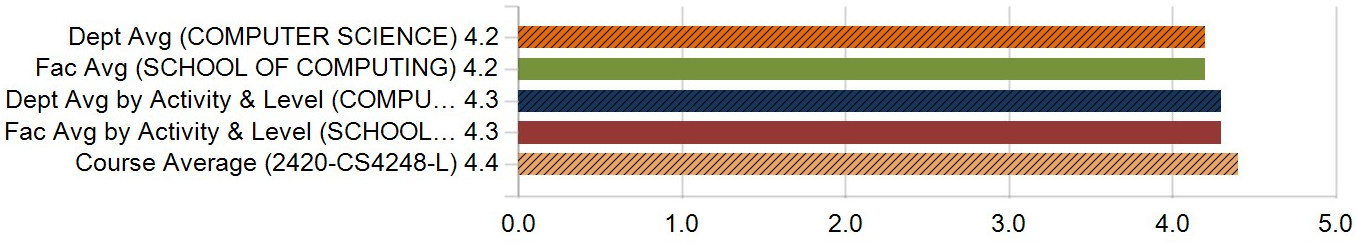
The grade that I am most likely to get in the course is:



Statistics	Value
Response Count	107
Mean	4.4
Standard Deviation	0.6

Rating Scores

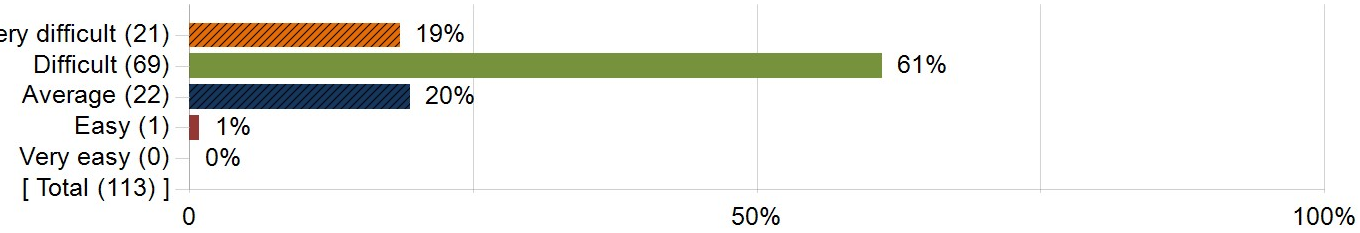
Question	Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 4000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 4000))		Course Average (2420-CS4248-L)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The grade that I am most likely to get in the course is:	4.2	0.7	4.2	0.7	4.3	0.6	4.3	0.6	4.4	0.6



3. Difficulty Level of the course

Distribution of Responses

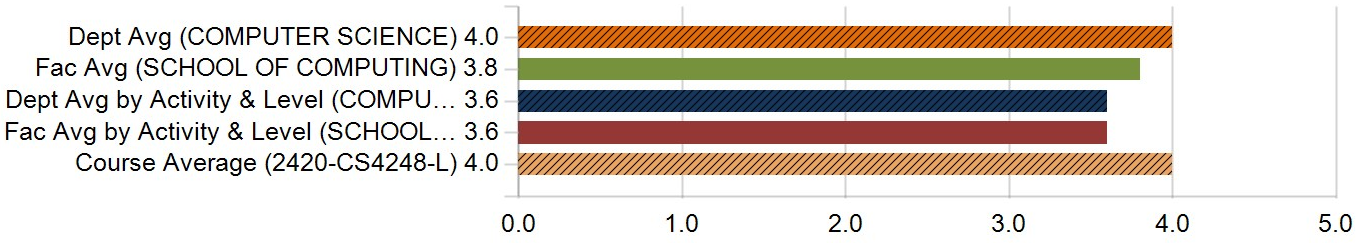
I rate this course as:



Statistics	Value
Response Count	113
Mean	4.0
Standard Deviation	0.6

Rating Scores

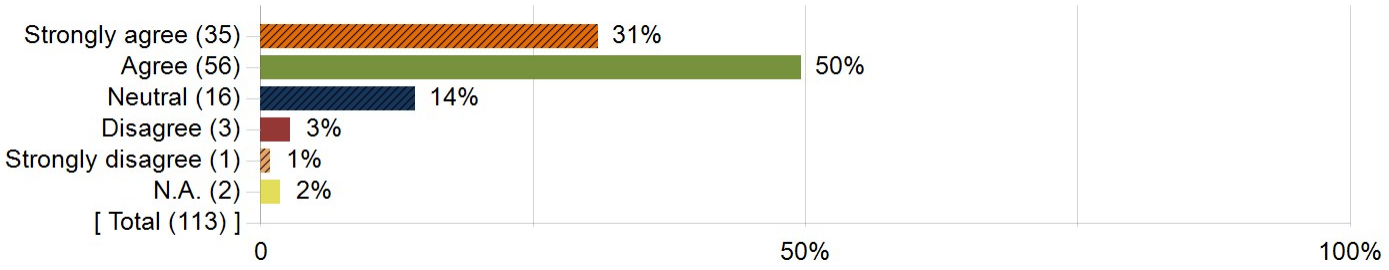
Question	Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 4000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 4000))		Course Average (2420-CS4248-L)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
I rate this course as:	4.0	0.8	3.8	0.8	3.6	0.8	3.6	0.8	4.0	0.6



4. Technology integration

Distribution of Responses

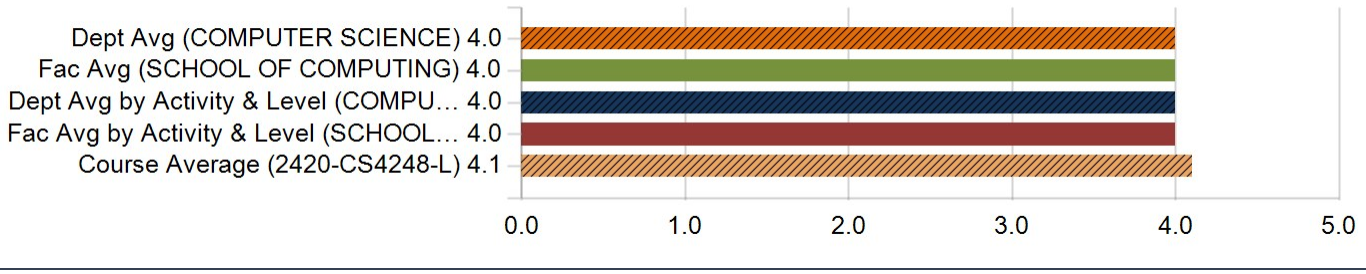
The integration of technology—blended learning, digital tools, AI, and online resources—has enhanced my learning experience.



Statistics	Value
Response Count	113
Mean	4.1
Standard Deviation	0.8

Rating Scores

Question	Dept Avg (COMPUTER SCIENCE)		Fac Avg (SCHOOL OF COMPUTING)		Dept Avg by Activity & Level (COMPUTER SCIENCE-LECTURE (Level 4000))		Fac Avg by Activity & Level (SCHOOL OF COMPUTING-LECTURE (Level 4000))		Course Average (2420-CS4248-L)	
	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation	Mean	Standard Deviation
The integration of technology—blended learning, digital tools, AI, and online resources—has enhanced my learning experience.	4.0	0.8	4.0	0.8	4.0	0.8	4.0	0.8	4.1	0.8



COURSE LEARNING OUTCOMES

1. Understand the core concepts in natural language processing (NLP), including language models, word embeddings, neural networks, sentence parsing, and semantic representations.

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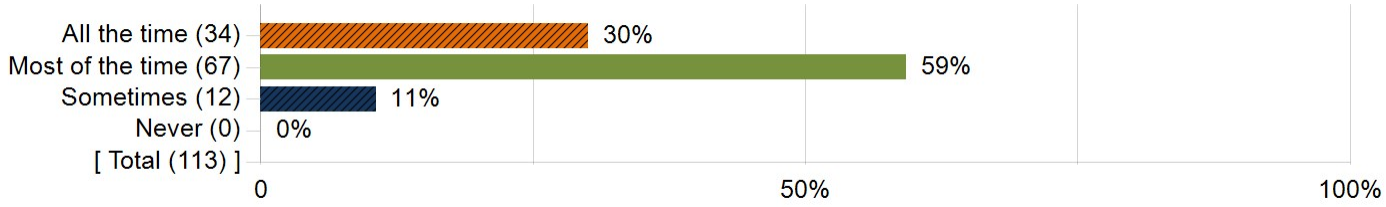
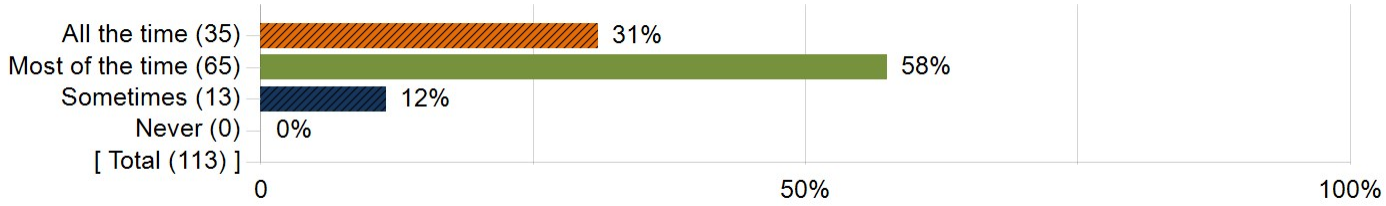


Statistics	Value
Response Count	113
Mean	3.2
Standard Deviation	0.6

2. Identify sources of ambiguity in NLP.

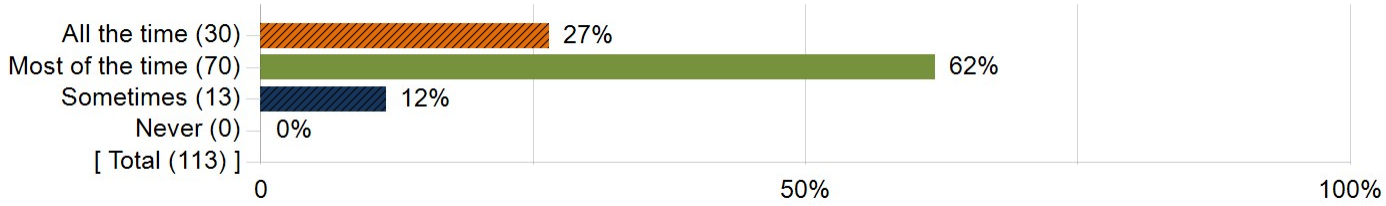
Identify sources of ambiguity in NLP.



Statistics	Value
Response Count	113
Mean	3.2
Standard Deviation	0.6

3. Select appropriate techniques to solve an NLP task.

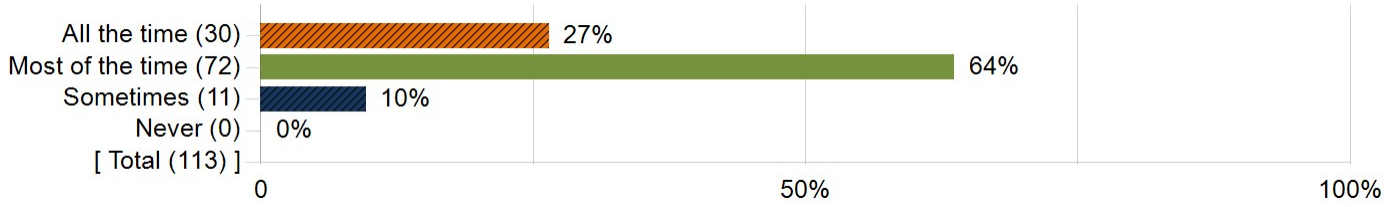
Select appropriate techniques to solve an NLP task.



Statistics	Value
Response Count	113
Mean	3.2
Standard Deviation	0.6

4. Evaluate and compare the performance of solutions to an NLP task.

Evaluate and compare the performance of solutions to an NLP task.



Statistics	Value
Response Count	113
Mean	3.2
Standard Deviation	0.6

WHAT I LIKE / DISLIKE ABOUT THE COURSE

What I liked about the course

Comments
Most well–organized course that I have taken in NUS
kan min yen
Interactivity Great visuals Interesting topics Syllabus organised in a very organic manner Kahoot tutorials!
Interesting syllabus and tasks that push students to discover more
I like the theory aspect, it is very interesting
–
Everything but the team formation
Content learned was useful and relevant to the real world
I like how it introduces all the fundamentals of NLP and provides us as much hands on experience as theory.
A great start for learning NLP.
Introduce to me the well structed world of NLP, from most basic word2vector to transformer
prof made it such an engaging class. the design of course provides not only fundamental knowledge but also blend in recent and cutting edge breakthrough like transformers and llm. so helpful
The project is very novel, for me to explore beyond what i know about NLP.
clear slides for revision
The teaching team is very dedicated. The content is interesting but difficult.
The course content and the learning notebooks
I don't like
teaches NLP, gives me experience in Kaggle and NLP projects
Content was great, professors were great, overall great course
Knowledge to transformers and nlp
This is a very well structured and conducted module. It enabled me to learn nlp from all perspectives, with very rich hands–on experience that I can grow into actual research work. I am really grateful that Prof Min and Prof Chris gave me such a chance.
interesting and engaging
– practical assignments that help us apply our knowledge
Good content
Receptive of feedback, In class quizzes
that i learn the full picture of NLP, from how it was first developed (n–grams) to current state of the art model architectures
1. the course has good coverage of related topics; 2. the course has practical assignments, which enhance our understanding;
Assignment 2 of the course was the most interesting one as it required us to try to make the most accurate text classifier and to explore the many different approaches to get there, it was thus very engaging and interesting. The tutorials questions were also very useful in understanding certain algorithms like HMM. Quizzes during lectures are a worthwhile addition to have between breaks to get students thinking, albeit often too difficult to get correct just from learning the concepts of the prior slides.
Technical depth, plentiful supplementary material to learn outside of lecture (SELENE, Course notebooks)
The course is interesting, a good introduction to the field of nlp.
Really up to date materials

What I disliked about the course

Comments
3 hour lectures are honestly hard to follow
too much content like sitting through 3 hour lectures is actually quite a tough task to do but i understand this topic has a lot of content
Project feels kinda disjointed from the rest of the module. It could perhaps be better integrated with some theory on how research is conducted?
use of ai LLMs was prohibited in the assignments, which is quite ridiculous for an NLP course
The work load is a bit heavy for new leaners.
Nil
I don't like the assignment1 which has ambiguity in marking and checking the code. I still don't know what is the correct implementation for my assignment. It would be great to have the correct answer for the assignment after it was graded too and also I want them to make more clear metrics for assignment.
Forming a group with another group of students…….
The learning curve is a little steep and some assignments were a little difficult
NA
lectures are way too long and content overload
None
the transformer part is too less and does not spend too much time
preparation part, in–class question may call students to answer but im kind of afraid of answering questions in class so thats just personal issue
There is no mid–term exam, so I am quite unsure what kind of questions will be tested in the finals.
I feel the grading for the first two assignments(especially the second) was extremely unfair. The TAs communicated really poorly and the reasons for cutting grades were vague(comments included "Did not like it" for cutting 2 marks??) and unprofessional.
Half–random assignment mode of the project.
too much useless things
too much content every lecture. have no idea how they are going to test them in a reasonable way
There could have been a bit more clear instructions with the assignments. I appreciated that they were open ended but it also is hard when you do not know what is to be expected.
Independent assignment with slightly vague problem description and grading scheme; Project with less proactive guide from teaching staff
The project did not seem useful. Another assignment about transformers/LLMs could have been more beneficial.
workload was a bit high at times
– feel the support can be lacking especially for students who are rather new in this subject
Nothing
Project – Hard and more or less unguided Assignments have wide discrepancy in difficulty – assignment 1 – moderate, assignment 2 is a contest (2nd biggest stressor after Team Project) assignment 3 – super easy Lectures were very dense.
the project can feel a bit too unstructured, a lot of time can be spent on deciding on the direction rather than actually doing the project
1. the tutorial schedule might be sometimes not well–strutured. it is best if tutorial can be directly after the lecture.
I found the lecture on context free grammars and parse trees harder to understand as it requires deep understanding of English as a language
The workload is a bit higher than expected.