

Nursing Students as Partners

Tailored Workshops for Pathophysiology Writing Skills



Image created using UNE Madgwick

Dr Mansi Dass Singh



Acknowledgement of Country

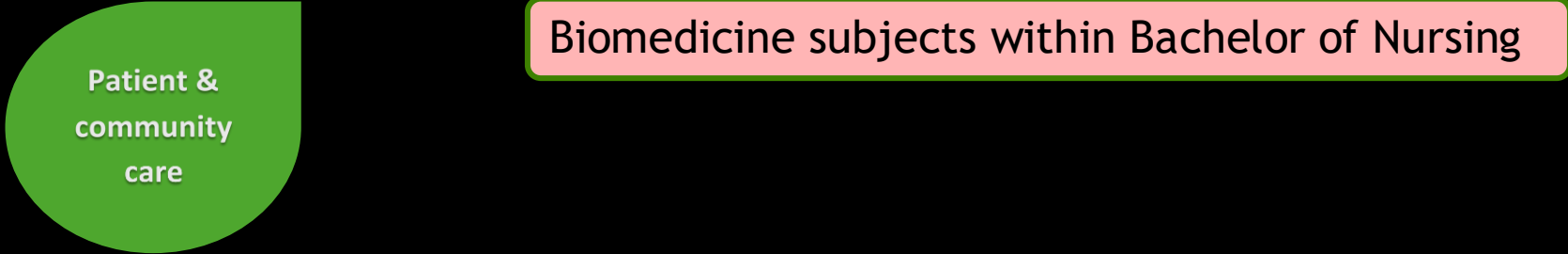
The University of New England respects and acknowledges that its people, courses and facilities are built on land, and surrounded by a sense of belonging, both ancient and contemporary, of the world's oldest living culture. In doing so, UNE values and respects Indigenous knowledge systems as a vital part of the knowledge capital of Australia.

We recognise the strength, resilience and capacity of the Aboriginal community and pay our respects to the Elders past, present and future.



Pictured: **Warwick Keen** "Always was, always will be" 2008
Gifted by the artist to UNE in 2008

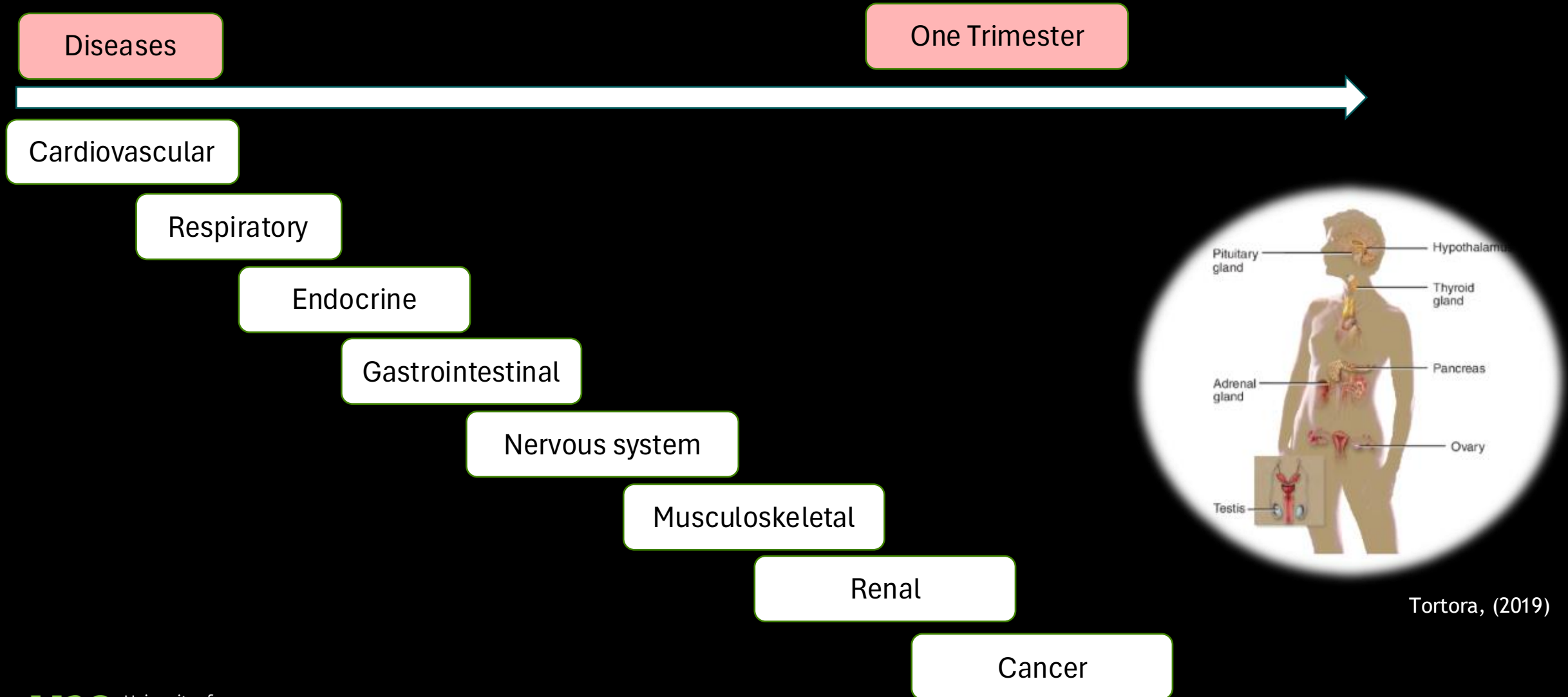
Context



Patient &
community
care

Biomedicine subjects within Bachelor of Nursing

Content covered in Integrating science for nurses-2nd Year



Tortora, (2019)

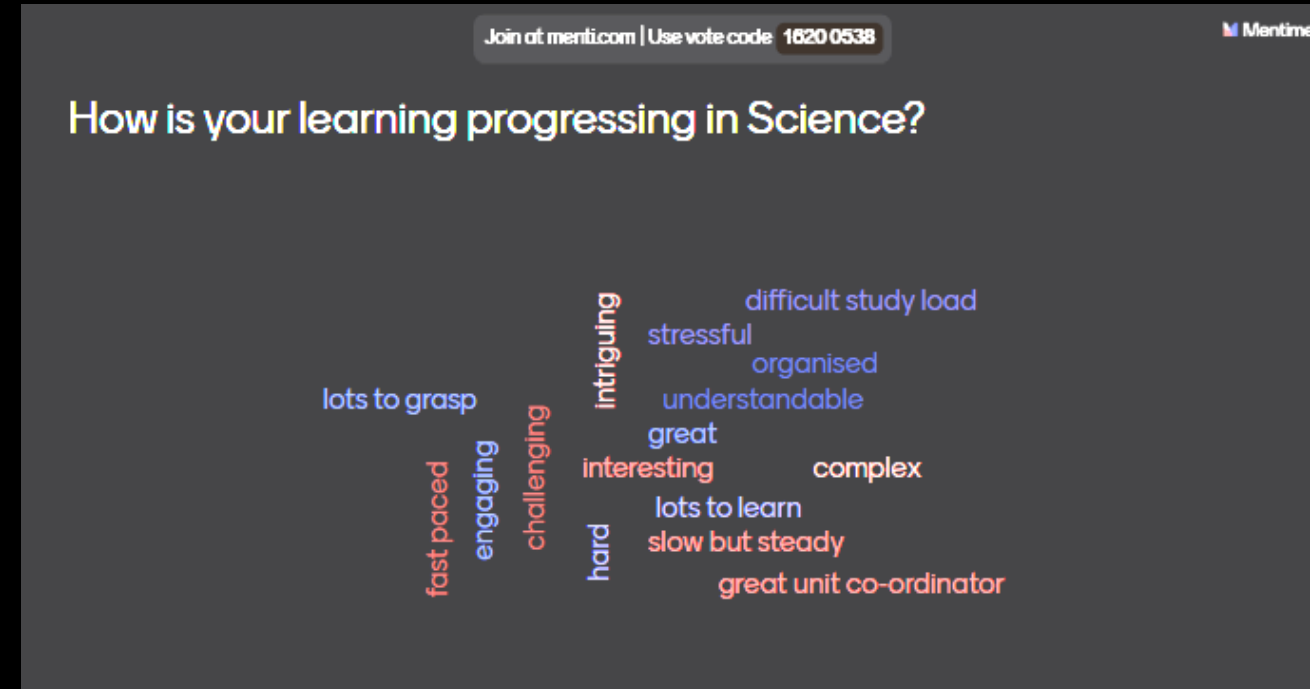
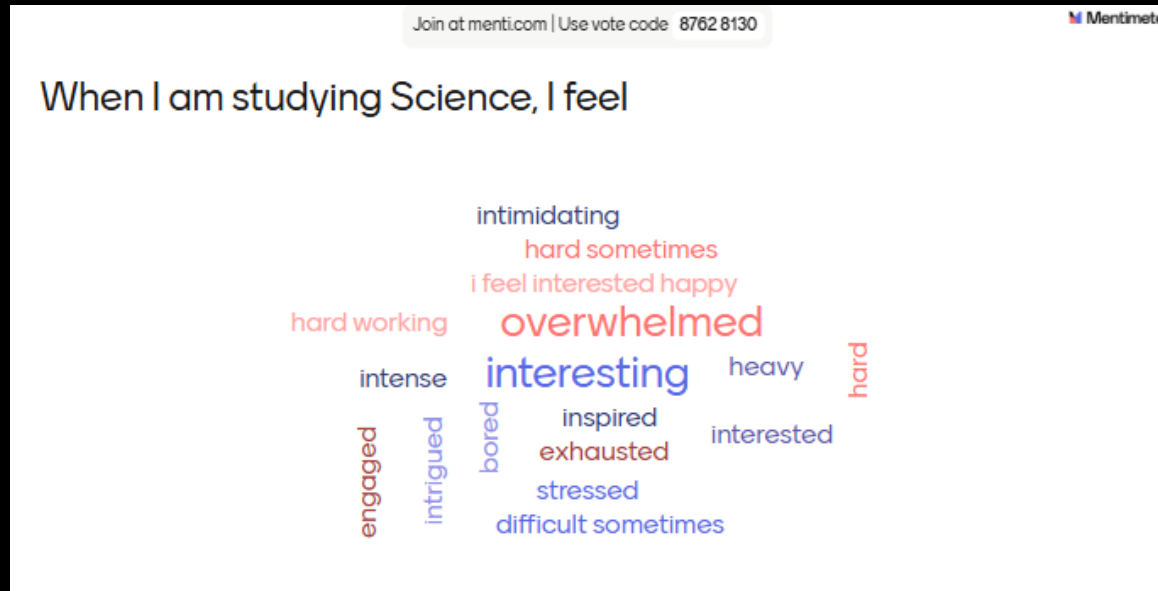
Assessments

An online
quiz (20%)

Video
presentation
(30%)

Summative, proctored,
online Exam (50%)

Learner's perspective



Instructive

Structured

Behaviourist

(Binks, 2018)

Barriers in Teaching and learning process

- Diversity of learners
- 'Biomedicine problem' among the nursing students
- Low motivation and engagement with content
- Poor memory recall during the exams
- Anxiety and stress of the final exam
- International students (n=230)



(Binks, 2018; National Academies of Sciences, 2021)

Cognitive theory for learning



Cognitive load

Memory recall

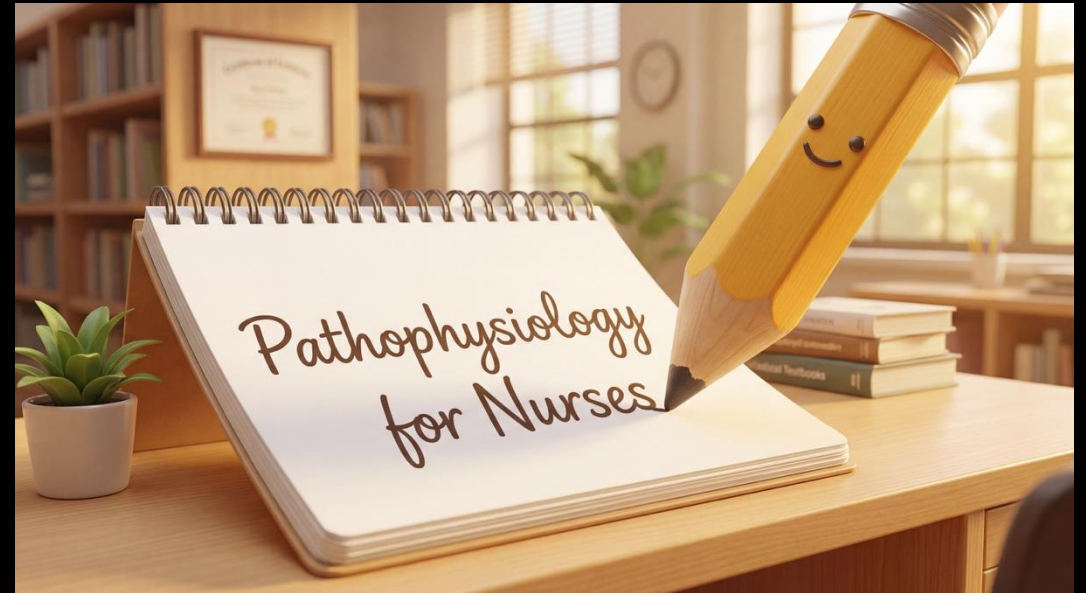
Practical Tools/skills



(Badyal & Singh, 2017; Camp et al., 2021; Mayer, 2024)

Note taking skill to foster concept retention

- ✓ An active and multifaceted skill that requires academic listening to attend to a speaker purposefully
- ✓ Working memory to hold and organize information taken in visually or aurally
- ✓ Ability to record pertinent ideas quickly.



Note taking skill

- ✓ Fewer distractions
- ✓ Shown to enhance comprehension
- ✓ Improve memory retention,
- ✓ Facilitate a more personalized style of notation
- ✓ Provides students with a visual guide that may aid their understanding
- ✓ Proactive impact on cognitive domains, including attention, executive functions, processing speed, and cognitive inhibition.



(Mueller et al. 2014)

Note taking skill is beneficial for student success

➤ [BMC Med Educ.](#) 2025 Aug 28;25(1):1218. doi: 10.1186/s12909-025-07593-x.

Exploring the impact of note taking methods on cognitive function among university students

Alham Al-Sharman ^{1 2 3 4}, Reime Jamal Shalash ⁵, Taif A M Omran ^{5 6},
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Affiliations [+ expand](#)

PMID: 40877847 PMCID: [PMC12392625](#) DOI: [10.1186/s12909-025-07593-x](#) 

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ACTIONS

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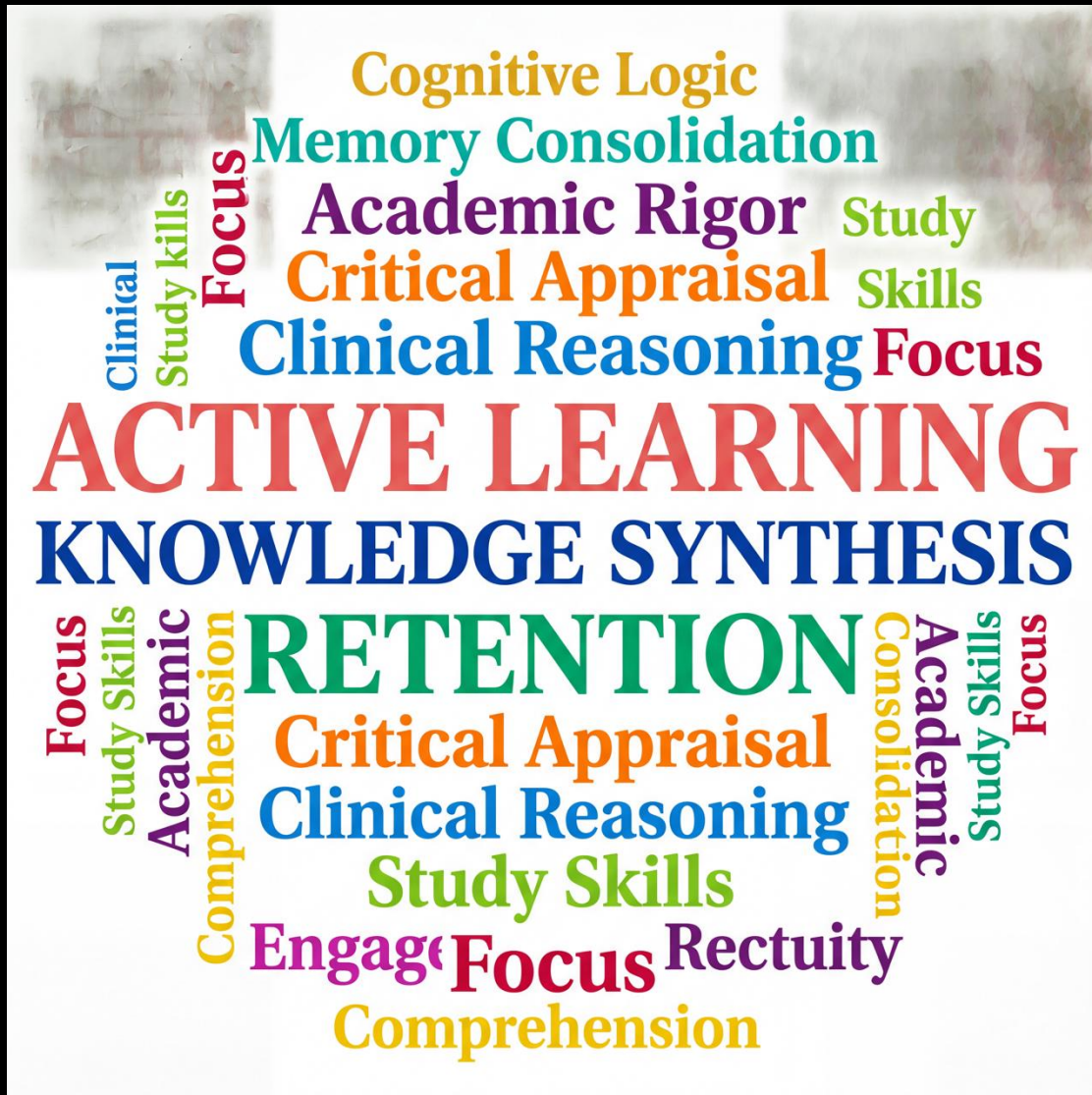
 **Collections**

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PAGE NAVIGATION

- ✓ A cross-sectional study involved 100 university students in the UAE- Students practicing longhand note-taking achieved significantly higher overall cognitive scores and demonstrated superior information processing speed, working memory, and visual memory compared to stylus users using digital styluses on tablets.

(Al-Sharman et al., 2025)



(Image created using UNE AI Madgwick)

Note taking skill is
beneficial for student
success

(Salame & Thompson, 2020; Zhou et al., 2024; Hrbáčková et al., 2012; Valera, 2019; Sulaiman et al., 2023).

Aims

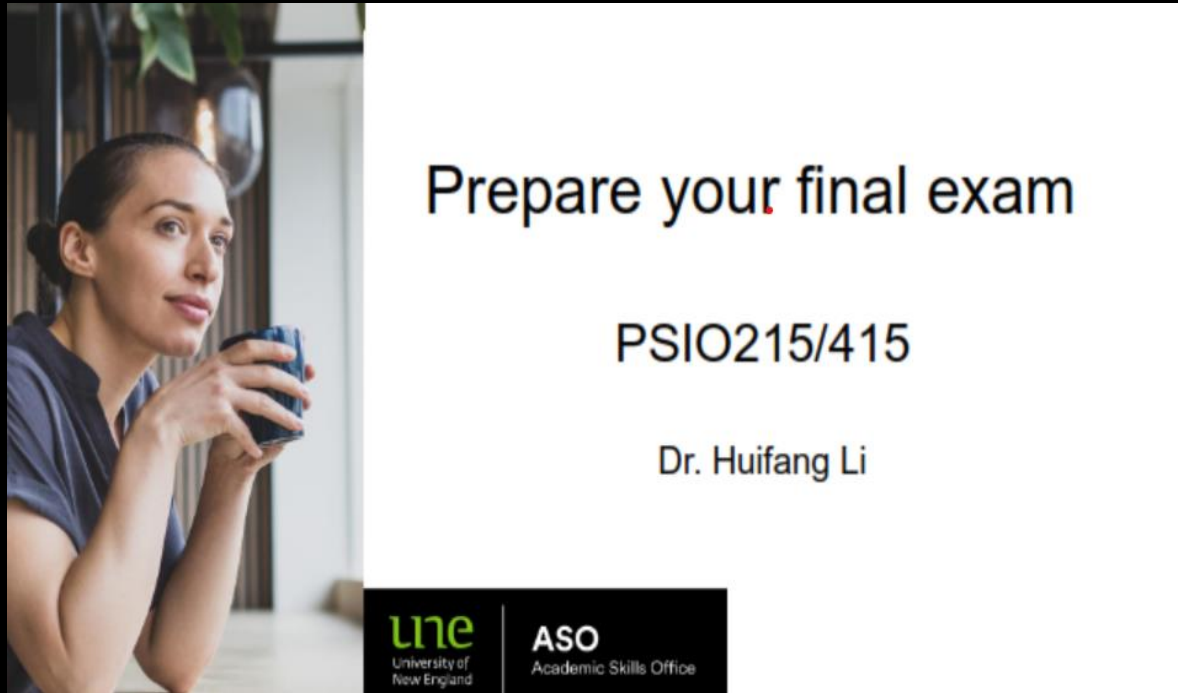
Students report specific constraints in writing short and long answer questions (SAQs and LAQs) warranting a tailored academic intervention.

- ✓ To design and deliver personalised writing workshops involving exemplar from ex students
- ✓ To collaborate with Academic skill office in this implementation
- ✓ To examine the impact of workshops on exam results.



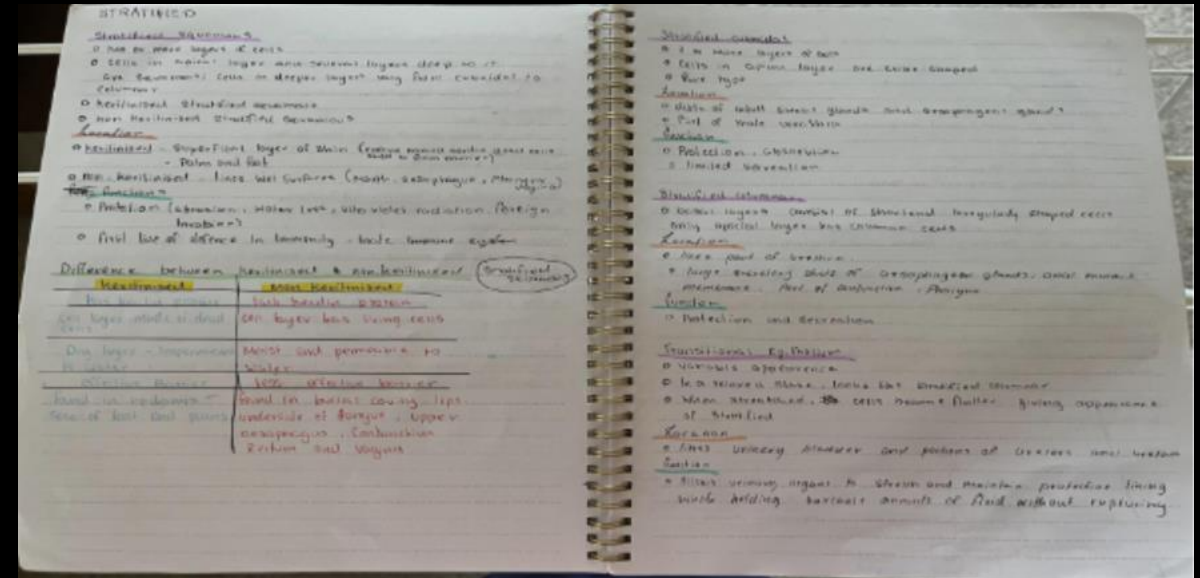
Dr Huifang Li

Academic Intervention-1st workshop



- ✓ Science and education academics collaborated and designed two one-hour workshops-delivered in Week 2 and Week 10 of a 13-week trimester.
- ✓ The first workshop discussed exam expectations, learning outcomes and exam structure.
- ✓ And introduced essentials and benefits of notetaking with the help of videos and images of real examples from past students.

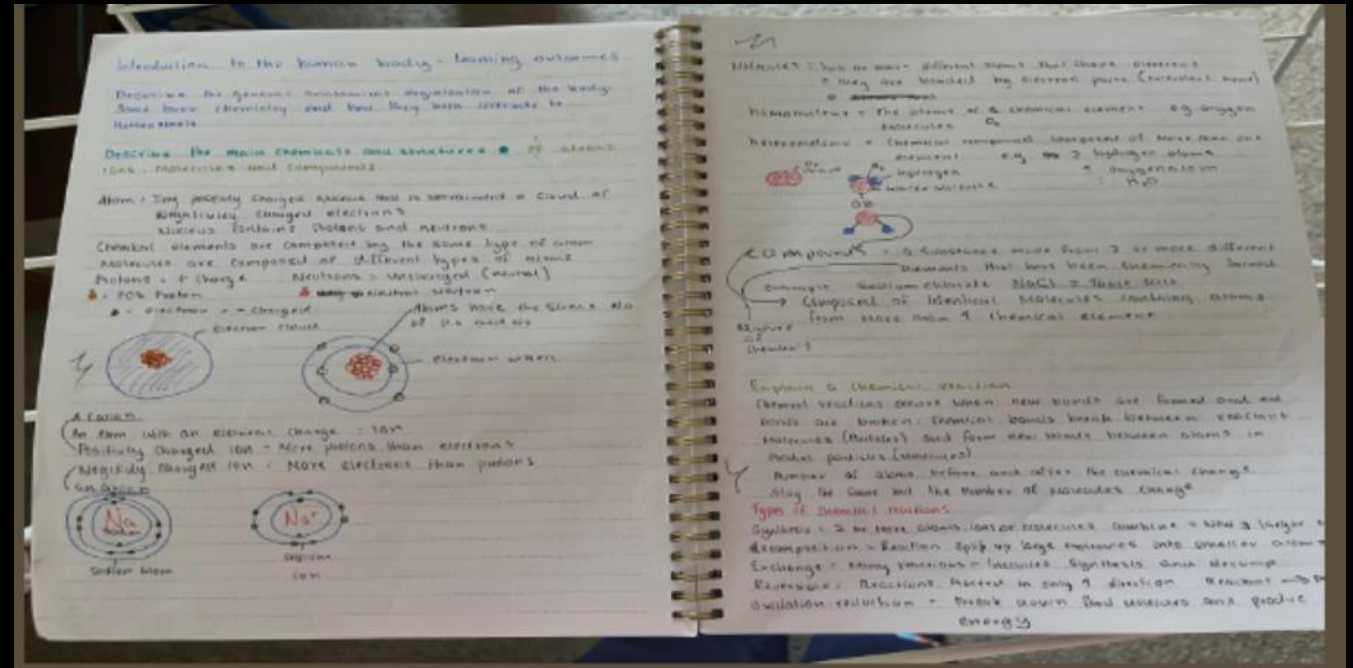
Academic Intervention-1st workshop



Ms Ruby Geddes

PSIO215- 2025

Academic Intervention-1st workshop



Ms Ash Horsburgh

PSIO215 2025

Academic Intervention-1st workshop

Pen/paper vs. a laptop



Pros	Cons
You can capture more information since it is quicker	Often less synthesis of information
Easier to store and retrieve, anywhere or anytime, search for keywords	Studies show that students sometimes write word for word the info shared
Some great note taking programs you can use to suit your style	Certain note taking programs may be difficult to navigate
More easily edit after class	
Environmentally more friendly??	

Academic Intervention-1st workshop

Note-making

Why make notes?

- Aid concentration, focus, understanding & recall
- Identify patterns, structures and relationships in the material
- Enable later reference for exams or assignments

What is involved?

- Read & listen critically
- Relate ideas to other information, your questions & purpose for reading
- Decide how to select, summarise, categorise & use information

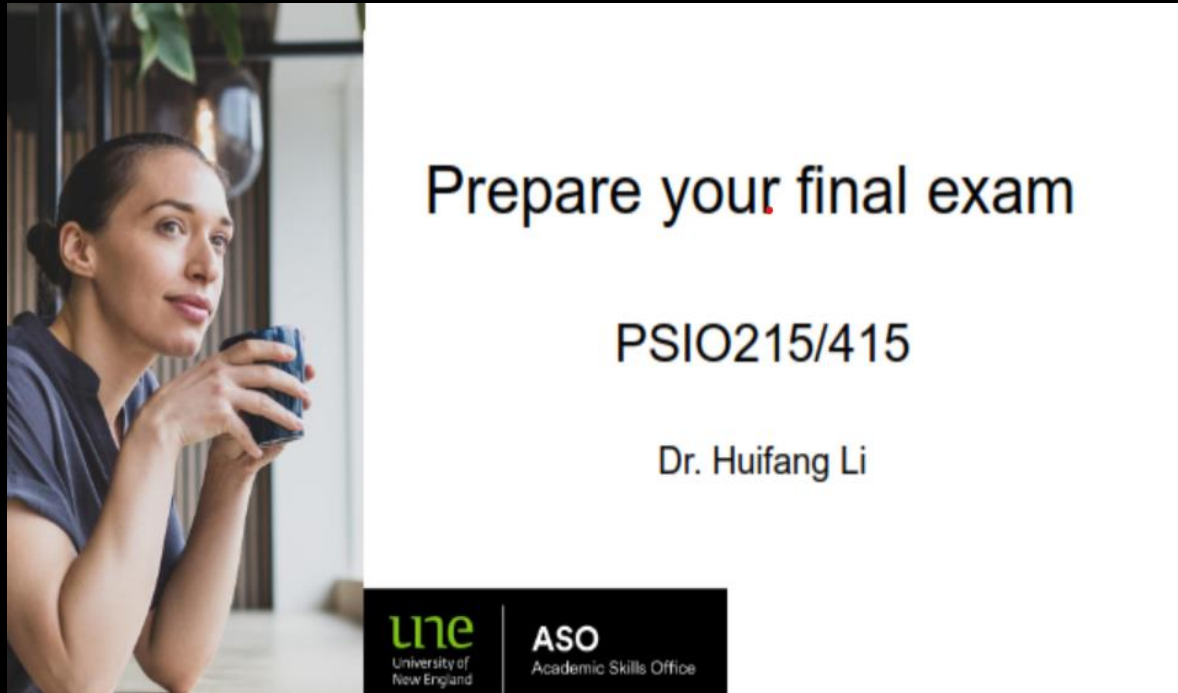
What to note

- Keywords: thesis, major characters & main idea(s)
- Important details or facts
- Things to follow up: questions, references & further links

Suggestions for making notes

- Leave plenty of space - don't crowd the page
- Devise a logical and memorable way to set out notes to aid recall
- Use letters, abbreviations & acronyms, numbers, bullets, highlighting, colour, underlining, indentation, columns, diagrams, headings & subheadings

Academic Intervention-2nd workshop



- ✓ The second workshop targeted strategies to answer SAQs and LAQs, including question analyses, expectations, and real time practice with practice questions in a breakout room.

Academic Intervention-2nd workshop

- Reinforce making notes
- Exam stress-good vs Bad
- Adaptive approaches to exam



Academic Intervention-2nd workshop



- Pomodoro technique
- SMART Goals
- Positive head talk
- Revision strategy
- Scheduled break
- Practice with specific SAQ in break out room

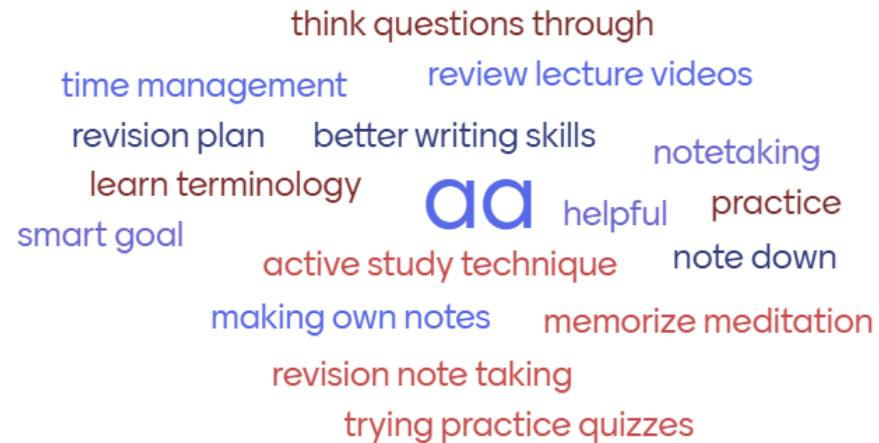
Results

- The First workshop was attended by 40 students. It was recorded and at the end of trimester had 193 views.
- The second workshop had 46 attendees and 40 views.



Results

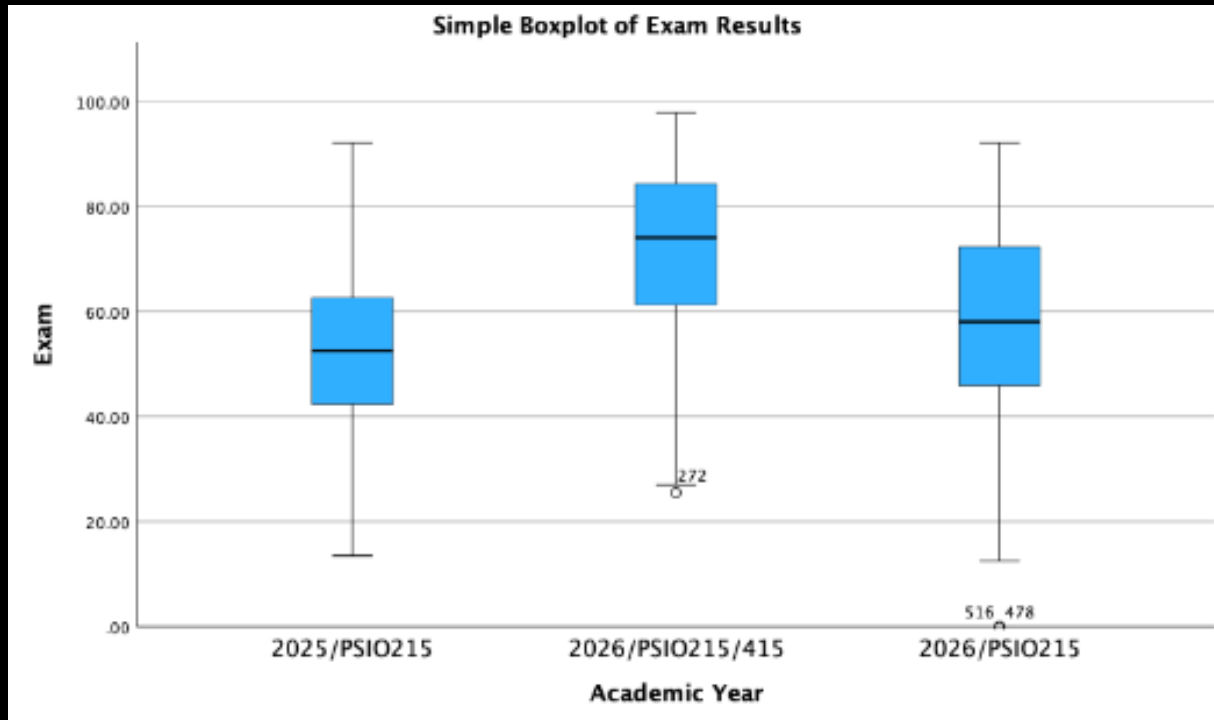
Share Three Strategies You'll Apply for PSIO215/415 Exam preparation!"



A word cloud of study strategies for exam preparation. The words are arranged in a roughly circular pattern, with some words appearing more frequently or in larger fonts than others. The colors of the words are primarily blue, red, and green.

think questions through
time management review lecture videos
revision plan better writing skills notetaking
learn terminology **aa** helpful practice
smart goal active study technique note down
making own notes memorize meditation
revision note taking
trying practice quizzes

Results



- Compared the exam results for students enrolled in 2025 (with no intervention) vs 2026 using independent T test.
- Exam scores of 2026 cohort were significantly improved when compared to 2025 cohort, $t = 429$, $p < .001$ (two-tailed).

Concluding remarks

- Interactive workshops using authentic student exemplars and targeted preparation strategies creates opportunities for nursing students to learn and acquire writing skills.
- Interdisciplinary academic support focusing on writing the short and long answers in a high-stake assurance exam of a second-year pathophysiology unit, significantly elevates nursing student performance.
- Work to be continued-student feedback, conduct workshops on campus, second workshop to be delivered before week 10.

Thank you



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