

MHN705 Healthy Brain Ageing

School: School of Health - Psychology

2025 | Semester 2

Online

ONLINE

You can do this course without coming onto campus, unless your program has specified a mandatory onsite requirement.

Please go to unisc.edu.au for up to date information on the teaching sessions and campuses where this course is usually offered.

1. What is this course about?

1.1. Description

Dementia is a major cause of disability among older people, with 10 million new cases per year, worldwide. Healthy ageing is accompanied by changes that impact cognition and behaviour. Thus, there is a spectrum of declining cognitive function, with normal ageing at one end and diseases such as mild cognitive impairment and then dementia at the severe end. In this course you will address the neurobiological changes in these diseases. Lifestyle factors can protect against dementia risk by up to 50 percent, so you will also learn how lifestyle interventions can prevent onset and progression.

1.2. How will this course be delivered?

| ACTIVITY | HOURS | BEGINNING WEEK | FREQUENCY |
|--|-------|----------------|-----------|
| ONLINE | | | |
| Online – The online activities will include a variety of asynchronous, interactive learning materials, and options for lecturer and peer to peer collaborations, and lecturer and peer zoom drop-ins. | 3hrs | Week 1 | 13 times |

1.3. Course Topics

- Healthy brain ageing including from normal to dementia
- The neurobiology of the ageing brain
- Dementia risk factors and the history of treatments to date
- Lifestyle factors and their impact on healthy brain ageing
- A multidisciplinary approach to healthy brain ageing
- Cognitive reserve

2. What level is this course?

700 Level (Specialised)

Demonstrating a specialised body of knowledge and set of skills for professional practice or further learning. Advanced application of knowledge and skills in unfamiliar contexts.

3. What is the unit value of this course?

12 units

4. How does this course contribute to my learning?

| COURSE LEARNING OUTCOMES | GRADUATE QUALITIES |
|--|--|
| On successful completion of this course, you should be able to... | Completing these tasks successfully will contribute to you becoming... |
| 1 Explain current processes in brain ageing in relation to physiological and neurobiological evidence, using most relevant academic literature. | Knowledgeable |
| 2 Evaluate and justify traditional and recent evidence-based approaches to improve brain health outcomes in a healthy ageing population including from an ethical perspective. | Ethical |
| 3 Model a multidisciplinary approach to healthy brain ageing and present to targeted specialist practitioners. | Empowered |
| 4 Apply advanced communication skills to targeted audiences, incorporating appropriate skills relevant to presentation genre. | Empowered |

5. Am I eligible to enrol in this course?

Refer to the [UniSC Glossary of terms](#) for definitions of “pre-requisites, co-requisites and anti-requisites”.

5.1. Pre-requisites

Enrolled in Program AR602, AR706, OR SC546

5.2. Co-requisites

Not applicable

5.3. Anti-requisites

Not applicable

5.4. Specific assumed prior knowledge and skills (where applicable)

Not applicable

5.5. Microcredential Information

Not applicable

6. How am I going to be assessed?

6.1. Grading Scale

Standard Grading (GRD)

High Distinction (HD), Distinction (DN), Credit (CR), Pass (PS), Fail (FL).

6.2. Details of early feedback on progress

You will be provided with multiple opportunities to gain early formative feedback relevant to your first assessment task by engaging with your learning materials. These include interactive self-check activities in the modules, posting responses to discussion forums and responding to your practice activities in the indicated manner.

6.3. Assessment tasks

| DELIVERY MODE | TASK NO. | ASSESSMENT PRODUCT | INDIVIDUAL OR GROUP | WEIGHTING % | WHAT IS THE DURATION / LENGTH? | WHEN SHOULD I SUBMIT? | WHERE SHOULD I SUBMIT IT? |
|---------------|----------|------------------------|---------------------|-------------|--------------------------------|-----------------------|--|
| All | 1 | Artefact - Creative | Individual | 20% | To fit on A3 size poster | Week 6 | Online Assignment Submission with plagiarism check |
| All | 2 | Oral and Written Piece | Individual | 40% | 20 minutes | Week 11 | Online Assignment Submission with plagiarism check |
| All | 3 | Written Piece | Individual | 40% | 3000 words | Exam Period | Online Assignment Submission with plagiarism check |

All - Assessment Task 1: Infographic style poster

| | | | |
|------------------------------|--|---|----------------------------------|
| GOAL: | The goal is to explain our current understanding of the processes involved in brain ageing to compare 'healthy' ageing versus other outcomes on the ageing spectrum. | | |
| PRODUCT: | Artefact - Creative | | |
| AUTHORSHIP STATEMENT: | | | |
| FORMAT: | You will design an infographic poster to inform the public on our current knowledge of healthy brain ageing and will be presented in an A3 poster size, following the guidelines provided. Your evaluation will include physiological and neurobiological evidence, to provide the basis for current approaches to promote healthy ageing. | | |
| CRITERIA: | No. | | Learning Outcome assessed |
| | 1 | Selection of the most relevant literature in relation physiological and neurobiological evidence. | 1 |
| | 2 | Explanation of current processes in brain ageing, along the ageing spectrum. | 1 |
| | 3 | Application of skills relevant for digital poster format. | 4 |
| GENERIC SKILLS: | Communication, Information literacy | | |

All - Assessment Task 2: Education session presentation

| GOAL: | The goal is to model a lifestyle-based intervention (multidisciplinary) recommended for an ageing population to improve brain health outcomes, justified by recent evidence. | | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---------------------------|--|---------------------------|---|---|---|---|--|---|---|---|---|---|--|---|---|--|---|--|
| PRODUCT: | Oral and Written Piece | | | | | | | | | | | | | | | | | | | |
| AUTHORSHIP STATEMENT: | | | | | | | | | | | | | | | | | | | | |
| FORMAT: | You will present an education session to a multidisciplinary audience of health practitioners who are involved in the care of the elderly population. You will develop a recorded presentation (slides and spoken audio), according to the guidelines provided, to present to this audience. You will present a model of a lifestyle-based intervention (based on more than one lifestyle approach) you have developed, and justify to your health practitioner audience the importance of a multidisciplinary approach. | | | | | | | | | | | | | | | | | | | |
| CRITERIA: | <table border="1"> <thead> <tr> <th>No.</th> <th></th> <th>Learning Outcome assessed</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Explanation of current processes in brain ageing using most relevant academic literature.</td> <td>1</td> </tr> <tr> <td>2</td> <td>Model a multidisciplinary approach (lifestyle-based interventions) to healthy brain ageing</td> <td>3</td> </tr> <tr> <td>3</td> <td>Evaluation of recent evidence-based lifestyle intervention approaches to improve brain health outcomes in an ageing population.</td> <td>2</td> </tr> <tr> <td>4</td> <td>Justification of recent evidence-based lifestyle intervention approaches to improve brain health outcomes in an ageing population.</td> <td>2</td> </tr> <tr> <td>5</td> <td>Application of advanced communication skills to target audience and appropriate skills relevant to presentation genre.</td> <td>4</td> </tr> </tbody> </table> | No. | | Learning Outcome assessed | 1 | Explanation of current processes in brain ageing using most relevant academic literature. | 1 | 2 | Model a multidisciplinary approach (lifestyle-based interventions) to healthy brain ageing | 3 | 3 | Evaluation of recent evidence-based lifestyle intervention approaches to improve brain health outcomes in an ageing population. | 2 | 4 | Justification of recent evidence-based lifestyle intervention approaches to improve brain health outcomes in an ageing population. | 2 | 5 | Application of advanced communication skills to target audience and appropriate skills relevant to presentation genre. | 4 | |
| No. | | Learning Outcome assessed | | | | | | | | | | | | | | | | | | |
| 1 | Explanation of current processes in brain ageing using most relevant academic literature. | 1 | | | | | | | | | | | | | | | | | | |
| 2 | Model a multidisciplinary approach (lifestyle-based interventions) to healthy brain ageing | 3 | | | | | | | | | | | | | | | | | | |
| 3 | Evaluation of recent evidence-based lifestyle intervention approaches to improve brain health outcomes in an ageing population. | 2 | | | | | | | | | | | | | | | | | | |
| 4 | Justification of recent evidence-based lifestyle intervention approaches to improve brain health outcomes in an ageing population. | 2 | | | | | | | | | | | | | | | | | | |
| 5 | Application of advanced communication skills to target audience and appropriate skills relevant to presentation genre. | 4 | | | | | | | | | | | | | | | | | | |
| GENERIC SKILLS: | Communication, Problem solving, Information literacy | | | | | | | | | | | | | | | | | | | |

All - Assessment Task 3: Critical essay

| GOAL: | The goal is to justify both traditional biomedical and recent multidisciplinary lifestyle evidence-based approaches to improve brain health outcomes in an ageing population, including from an ethical perspective. | | | | | | | | | | | | | | | | | | |
|------------------------------|---|---------------------------|--|---------------------------|---|---|---|---|--|---|---|--|---|---|--|---|---|--|---|
| PRODUCT: | Written Piece | | | | | | | | | | | | | | | | | | |
| AUTHORSHIP STATEMENT: | | | | | | | | | | | | | | | | | | | |
| FORMAT: | You will be asked to write a critical essay directed at a scientific or academic audience, according to guidelines provided. You will critically evaluate interventions and treatment approaches addressing age-related brain health changes, to justify the evidence-base for approaches from both a biomedical and multidisciplinary lifestyle basis. In doing so, you will be required to be sensitive to the ethical practices in these treatment approaches in an older population. | | | | | | | | | | | | | | | | | | |
| CRITERIA: | <table border="1"><thead><tr><th>No.</th><th></th><th>Learning Outcome assessed</th></tr></thead><tbody><tr><td>1</td><td>Evaluation of traditional biomedical and recent evidence-based multidisciplinary approaches to improve brain health outcomes in an ageing population.</td><td>2</td></tr><tr><td>2</td><td>Justification of traditional biomedical approaches to improve brain health outcomes in an ageing population.</td><td>2</td></tr><tr><td>3</td><td>Justification of multidisciplinary approaches to improve brain health outcomes in an ageing population</td><td>2</td></tr><tr><td>4</td><td>Justification of approaches from an ethical perspective.</td><td>2</td></tr><tr><td>5</td><td>Application of advanced communication skills to present a balanced argument, relevant to presentation genre of a debate.</td><td>4</td></tr></tbody></table> | No. | | Learning Outcome assessed | 1 | Evaluation of traditional biomedical and recent evidence-based multidisciplinary approaches to improve brain health outcomes in an ageing population. | 2 | 2 | Justification of traditional biomedical approaches to improve brain health outcomes in an ageing population. | 2 | 3 | Justification of multidisciplinary approaches to improve brain health outcomes in an ageing population | 2 | 4 | Justification of approaches from an ethical perspective. | 2 | 5 | Application of advanced communication skills to present a balanced argument, relevant to presentation genre of a debate. | 4 |
| No. | | Learning Outcome assessed | | | | | | | | | | | | | | | | | |
| 1 | Evaluation of traditional biomedical and recent evidence-based multidisciplinary approaches to improve brain health outcomes in an ageing population. | 2 | | | | | | | | | | | | | | | | | |
| 2 | Justification of traditional biomedical approaches to improve brain health outcomes in an ageing population. | 2 | | | | | | | | | | | | | | | | | |
| 3 | Justification of multidisciplinary approaches to improve brain health outcomes in an ageing population | 2 | | | | | | | | | | | | | | | | | |
| 4 | Justification of approaches from an ethical perspective. | 2 | | | | | | | | | | | | | | | | | |
| 5 | Application of advanced communication skills to present a balanced argument, relevant to presentation genre of a debate. | 4 | | | | | | | | | | | | | | | | | |
| GENERIC SKILLS: | Communication, Information literacy | | | | | | | | | | | | | | | | | | |

7. Directed study hours

A 12-unit course will have total of 150 learning hours which will include directed study hours (including online if required), self-directed learning and completion of assessable tasks. Student workload is calculated at 12.5 learning hours per one unit.

8. What resources do I need to undertake this course?

Please note: Course information, including specific information of recommended readings, learning activities, resources, weekly readings, etc. are available on the course Canvas site– Please log in as soon as possible.

8.1. Prescribed text(s) or course reader

There are no required/recommended resources for this course.

8.2. Specific requirements

All work submitted for assessment is to be word processed and submitted electronically. It is expected that students will have ready access to a computer with common productivity software and reliable Internet access. Students will be able to participate in video conferencing, and therefore it is recommended to have computer capabilities to join these sessions (e.g. webcam, microphone).

9. How are risks managed in this course?

Health and safety risks for this course have been assessed as low. It is your responsibility to review course material, search online, discuss with lecturers and peers and understand the health and safety risks associated with your specific course of study and to familiarise yourself with the University's general health and safety principles by reviewing the [online induction training for students](#), and following the instructions of the University staff.

10. What administrative information is relevant to this course?

10.1. Assessment: Academic Integrity

Academic integrity is the ethical standard of university participation. It ensures that students graduate as a result of proving they are competent in their discipline. This is integral in maintaining the value of academic qualifications. Each industry has expectations and standards of the skills and knowledge within that discipline and these are reflected in assessment.

Academic integrity means that you do not engage in any activity that is considered to be academic fraud; including plagiarism, collusion or outsourcing any part of any assessment item to any other person. You are expected to be honest and ethical by completing all work yourself and indicating in your work which ideas and information were developed by you and which were taken from others. You cannot provide your assessment work to others. You are also expected to provide evidence of wide and critical reading, usually by using appropriate academic references.

In order to minimise incidents of academic fraud, this course may require that some of its assessment tasks, when submitted to Canvas, are electronically checked through Turnitin. This software allows for text comparisons to be made between your submitted assessment item and all other work to which Turnitin has access.

10.2. Assessment: Additional Requirements

Eligibility for Supplementary Assessment

Your eligibility for supplementary assessment in a course is dependent of the following conditions applying:

- (a) The final mark is in the percentage range 47% to 49.4%; and
- (b) The course is graded using the Standard Grading scale

10.3. Assessment: Submission penalties

Late submissions may be penalised up to and including the following maximum percentage of the assessment task's identified value, with weekdays and weekends included in the calculation of days late:

- (a) One day: deduct 5%;
- (b) Two days: deduct 10%;
- (c) Three days: deduct 20%;
- (d) Four days: deduct 40%;
- (e) Five days: deduct 60%;
- (f) Six days: deduct 80%;
- (g) Seven days: A result of zero is awarded for the assessment task.

The following penalties will apply for a late submission for an online examination:

Less than 15 minutes: No penalty

From 15 minutes to 30 minutes: 20% penalty

More than 30 minutes: 100% penalty

10.4. Links to relevant University policy and procedures

For more information on Academic Learning & Teaching categories including:

- Assessment: Courses and Coursework Programs
- Review of Assessment and Final Grades
- Supplementary Assessment
- Central Examinations
- Deferred Examinations
- Student Conduct
- Students with a Disability

For more information, visit <https://www.usc.edu.au/explore/policies-and-procedures#academic-learning-and-teaching>

10.5. Student Charter

UniSC is committed to excellence in teaching, research and engagement in an environment that is inclusive, inspiring, safe and respectful. The [Student Charter](#) sets out what students can expect from the University, and what in turn is expected of students, to achieve these outcomes.

10.6. General Enquiries

In person:

- **UniSC Sunshine Coast** - Student Central, Ground Floor, Building C, 90 Sippy Downs Drive, Sippy Downs
- **UniSC Moreton Bay** - Service Centre, Ground Floor, Foundation Building, Gympie Road, Petrie
- **UniSC SouthBank** - Student Central, Building A4 (SW1), 52 Merivale Street, South Brisbane
- **UniSC Gympie** - Student Central, 71 Cartwright Road, Gympie
- **UniSC Fraser Coast** - Student Central, Student Central, Building A, 161 Old Maryborough Rd, Hervey Bay
- **UniSC Caboolture** - Student Central, Level 1 Building J, Cnr Manley and Tallon Street, Caboolture

Tel: +61 7 5430 2890

Email: studentcentral@usc.edu.au

