



HSYP8105

Systems Science in Healthcare

Session 2, Special circumstance 2020

Medicine, Health and Human Sciences Faculty level units

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Notice

As part of [Phase 3 of our return to campus plan](#), most units will now run tutorials, seminars and other small group learning activities on campus for the second half-year, while keeping an online version available for those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face and online activities for your unit, please go to [timetable viewer](#). To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

General Information

Unit convenor and teaching staff

Unit Convenor

Yvonne Zurynski

yvonne.zurynski@mq.edu.au

Contact via yvonne.zurynski@mq.edu.au

75 Talavera Road

By appointment only

Credit points

10

Prerequisites

Admission to MPH or MPH(Res)

Corequisites

Co-badged status

Unit description

This unit provides you with a new way of looking at how health systems work together. Health care systems are complex consisting of many interacting components, people and perspectives. You will learn about systems theories (for example, resilience, consumer participation, and sociotechnical perspectives) and apply them to examine policy and practice underpinning public health problems. The unit is delivered by experts in health systems, including digital health informatics, safe systems and systems evaluation methods. You will learn through guest lectures, tutorials, online activities and assessments requiring you to analyse real-life case studies and evaluate health interventions.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Demonstrate an understanding of the current discipline of systems thinking and how it underpins healthcare

ULO2: Discuss the rationale for adopting a systems approach to address population health issues

ULO3: Examine the role of digital health and health informatics in systems thinking

ULO4: Analyse and apply a range of theoretical concepts related to systems thinking including resilience, sociotechnical systems, safe systems, consumer participation and systems evaluation methods to public health issues

ULO5: Examine the challenges of adopting a systems approach to public health

General Assessment Information

Information concerning Macquarie University's assessment policy is available at <https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/assessment>. Grade descriptors and other information concerning grading requirements are contained in Schedule 1 of the Macquarie University Assessment Policy.

To pass this unit, students must demonstrate sufficient evidence of achievement of the learning outcomes and attempt all assessment tasks.

Further details for each assessment task will be available on iLearn, including marking rubrics.

All final grades in the department of Health Systems and Populations are determined by a grading committee and are not the sole responsibility of the Unit Convenor.

Students will be awarded one of these grades plus a Standardised Numerical Grade (SNG). The SNG is not necessarily a summation of the individual assessment components. The final grade and SNG that are awarded reflect the corresponding grade descriptor in Schedule 1 of the Assessment Policy.

Extensions for Assessment tasks

Applications for assessment task extensions must be submitted via www.ask.mq.edu.au. For further details please refer to the Disruption to Studies Policy available at <https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policies/disruption-to-studies>.

Late Submission of Work

All assignments which are officially received after the due date, and where no extension has been granted by the course convenor or tutor, will incur a deduction of 5% for the first day including the actual day on which the work is received, and 5% for each subsequent day. Weekends and public holidays are included. Late penalty is capped at 50%. For example:

Due date	Received	Days late	Deduction	Raw mark	Final mark
Friday 14th	Saturday 15th	1	5%	75%	70%
Friday 14th	Monday 17th	3	15%	75%	60%

Friday 14th	Tuesday 25th	11	50% (capped)	75%	25%
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Assessment Tasks

Name	Weighting	Hurdle	Due
<u>Multiple choice questions and reflection</u>	20%	No	Week 4
<u>Analysis and response to a case study of an incident in health care</u>	40%	No	Week 8
<u>Planning for the evaluation of a health intervention</u>	40%	No	Week 14
<u>Reflective journal</u>	0%	No	Week 15

Multiple choice questions and reflection

Assessment Type ¹: Quiz/Test

Indicative Time on Task ²: 10 hours

Due: **Week 4**

Weighting: **20%**

A brief assessment on the learnings from the first 3 weeks and a personal reflection on the learning so far.

On successful completion you will be able to:

- Demonstrate an understanding of the current discipline of systems thinking and how it underpins healthcare
- Analyse and apply a range of theoretical concepts related to systems thinking including resilience, sociotechnical systems, safe systems, consumer participation and systems evaluation methods to public health issues

Analysis and response to a case study of an incident in health care

Assessment Type ¹: Case study/analysis

Indicative Time on Task ²: 40 hours

Due: **Week 8**

Weighting: **40%**

A case study analysis about an incident in healthcare taking a systems thinking approach.

On successful completion you will be able to:

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- Discuss the rationale for adopting a systems approach to address population health issues
- Examine the role of digital health and health informatics in systems thinking
- Analyse and apply a range of theoretical concepts related to systems thinking including resilience, sociotechnical systems, safe systems, consumer participation and systems evaluation methods to public health issues
- Examine the challenges of adopting a systems approach to public health

Planning for the evaluation of a health intervention

Assessment Type ¹: Presentation

Indicative Time on Task ²: 35 hours

Due: **Week 14**

Weighting: **40%**

A brief presentation describing the approach and plan for the evaluation of a public health intervention or program.

On successful completion you will be able to:

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- Analyse and apply a range of theoretical concepts related to systems thinking including resilience, sociotechnical systems, safe systems, consumer participation and systems evaluation methods to public health issues
- Examine the challenges of adopting a systems approach to public health

Reflective journal

Assessment Type ¹: Reflective Writing

Indicative Time on Task ²: 7 hours

Due: **Week 15**

Weighting: **0%**

A personal reflection journal on the learning journey each week. This assessment task is compulsory.

On successful completion you will be able to:

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- Discuss the rationale for adopting a systems approach to address population health issues
- Examine the role of digital health and health informatics in systems thinking
- Analyse and apply a range of theoretical concepts related to systems thinking including resilience, sociotechnical systems, safe systems, consumer participation and systems evaluation methods to public health issues
- Examine the challenges of adopting a systems approach to public health

¹ If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the [Writing Centre](#) for academic skills support.

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Delivery and Resources

Unit Organisation

This is a ten credit point unit run over a 13 week session. Further information is available via the HSY8105 online Learning Management System (LMS) iLearn <http://ilearn.mq.edu>.

Readings

The readings for each week will be listed in iLearn using the Leganto system. Leganto is the reading list management system, which you can access through your iLearn unit. More information on Leganto is available here: <http://libguides.mq.edu.au/leganto>

Readings marked as 'required' are essential for completion in the marked week. Some readings may be included that are marked as 'recommended' or 'secondary sources', these are additional

materials that may be of interest to you. Please use these at your discretion.

Technology and equipment

Off-campus

To study optimally when off campus you will need to have access to a reliable internet connection to retrieve unit information and at times to join interactive session (eg zoom) or submit assessment tasks via iLearn.

On-campus

Teaching rooms are equipped with state of art audio-visual and ICT equipment including internet connection, high quality video cameras and multiple LCD screens.

Unit Schedule

Week	Date	Topic
1	30-07-20	Introduction – What are systems?
2	6-08-20	Resilient Systems
3	13-8-20	Sociotechnical systems
4	20-8-20	Digital Health and Informatics I
5	27-8-20	Digital Health and Informatics II
6	3-9-20	Case study methodology in Health Systems
7	10-9-20	Safe Systems
	17-9-20 24-9-20	2 weeks recess
8	1-10-20	Systems Evaluation Methods I
9	08-10-20	Systems Evaluation Methods II
10	15-10-20	Consumer Participation
11	22-10-20	Changing Systems: implementation Science /Managing /Leading
12	29-10-20	Bringing it Together (Knowledge Translation & Policy to Practice)

Week	Date	Topic
13	5-11-20	Private Study

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

Students seeking more policy resources can visit the [Student Policy Gateway \(https://students.mq.edu.au/support/study/student-policy-gateway\)](https://students.mq.edu.au/support/study/student-policy-gateway). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central \(https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central\)](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/study/getting-started/student-conduct>

Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

Learning Skills

Learning Skills (mq.edu.au/learningskills) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

Student Services and Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

Student Enquiries

For all student enquiries, visit Student Connect at ask.mq.edu.au

If you are a Global MBA student contact globalmba.support@mq.edu.au

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.