PBHL20002 *Systems Thinking in Public Health*
Term 2 - 2023

Profile information current as at 12/10/2024 02:39 pm

All details in this unit profile for PBHL20002 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student).The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview
Our health is an outcome of a complex social-ecological system of variables including individual characteristics, social factors and environmental drivers. Such systems, by nature, incorporate elements that are uncertain, unpredictable and co-occurring at the same time across different levels and scales. In this unit, you will be introduced to the concept of complex adaptive systems and learn how to apply systems thinking to identify ways in which changes can be made to social and environmental determinants to influence health outcomes at community and population levels. You will also learn to use participatory methods to anticipate alternate futures as a tool for improving public health planning and building resilience.

Details
Career Level: *Postgraduate*
Unit Level: *Level 8*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites
There are no requisites for this unit.
Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 2 - 2023

- Melbourne
- Online
- Sydney

Attendance Requirements
All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

Website
This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.

Class and Assessment Overview

Recommended Student Time Commitment

Each 6-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

Class Timetable

Regional Campuses
Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses
Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Group Work**
Weighting: 50%
2. **Written Assessment**
Weighting: 50%

Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the University's Grades and Results Policy for more details of interim results and final grades.

CQUniversity Policies

All University policies are available on the CQUniversity Policy site.
You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the CQUniversity Policy site.

Previous Student Feedback

Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

Feedback from Student evaluation of unit

Feedback

Lectures should be made available in MP4 form, rather than recorded Powerpoint presentations.

Recommendation

MP4 recordings of lectures should be provided alongside the Powerpoint presentations.

Unit Learning Outcomes

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

1. Explain how complex adaptive systems thinking is used in public health to better understand entrenched health issues related to colonisation, population pressure, climate and environmental changes
2. Distinguish between different scales and domains identified within complex adaptive systems thinking relevant to public health
3. Apply complex adaptive systems thinking to public health issues relating to social and environmental determinants of health
4. Analyse participatory and relational approaches to addressing complex adaptive system challenges in public health
5. Reflect on and discuss the impact of social practices related to power, leadership and trust on public health from a complex adaptive systems perspective
6. Determine how complex adaptive systems thinking informs practical and sustainable interventions across scales and domains using asset-based community development and disease prevention models
7. Evaluate how complex adaptive systems thinking influences approaches to evidence and practice in public health.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level | • Introductory Level | • Intermediate Level | • Graduate Level | ∘ Professional Level | ∘ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Group Work - 50%	•	•	•	•	•	•	•
2 - Written Assessment - 50%	•	•	•	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
1 - Knowledge	∘	∘	∘			∘	∘
2 - Communication	∘				∘		
3 - Cognitive, technical and creative skills		∘		∘			∘
4 - Research						∘	
5 - Self-management					∘		
6 - Ethical and Professional Responsibility					∘		
7 - Leadership				∘		∘	∘
8 - Aboriginal and Torres Strait Islander Cultures							

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes							
	1	2	3	4	5	6	7	8
1 - Group Work - 50%	∘	∘	∘	∘	∘	∘	∘	
2 - Written Assessment - 50%	∘	∘	∘			∘	∘	

Textbooks and Resources

Textbooks

There are no required textbooks.

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

Referencing Style

All submissions for this unit must use the referencing style: Harvard (author-date)
For further information, see the Assessment Tasks.

Teaching Contacts

Rebecca Fanany Unit Coordinator
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Schedule

Week 1 - 10 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Systems Thinking	Cabrera, D., Cabrera, L. and Powers, E., 2015. A unifying theory of systems thinking with psychosocial applications. Systems Research and Behavioral Science, 32(5), pp.534-545.	

Week 2 - 17 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Complex Adaptive Systems	**Chan, S., 2001, October. Complex adaptive systems. In ESD. 83 research seminar in engineering systems 31: 1-19**	

Week 3 - 24 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Organisms and Organism Interactions	Lang, J. M. & Benbow, M. E. (2013) Species Interactions and Competition. Nature Education Knowledge 4(4):8	

Week 4 - 31 Jul 2023

Module/Topic	Chapter	Events and Submissions/Topic
Living Environments	Frumkin, H (2016) Introduction to Environmental Health. In Frumkin, H (ed.) Environmental Health: From Global to Local (3rd Edition), John Wiley and Sons, United States.	

Week 5 - 07 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic

Hazards and Risk	Sheehan, MC, Lam, J, and Burke, TA (2016) Risk Assessment in Environmental Health. In Frumkin, H (ed.) Environmental Health: From Global to Local (3rd Edition), John Wiley and Sons, United States.	

Vacation Week - 14 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 21 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic
Occupational Health and Safety	Yost, MG and Ryan, PB (2016) Exposure Science, Industrial Hygiene, and Exposure Assessment. In Frumkin, H (ed.) Environmental Health: From Global to Local (3rd Edition), John Wiley and Sons, United States.	Assessment 1 Due: Friday, 25 August 2023, 11:59pm. **Poster Presentation** Due: Week 6 Friday (25 Aug 2023) 11:59 pm AEST

Week 7 - 28 Aug 2023

Module/Topic	Chapter	Events and Submissions/Topic
Environmental Psychology	Bechtel, R.B., 2010. Environmental psychology. The Corsini Encyclopedia of Psychology, pp.1-3.	

Week 8 - 04 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Large-Scale Physical Systems and Health	"Framework for Linkages Between Health, Environment, and Development", in Health in Sustainable Development Planning: The Role of Indicators, WHO, Geneva.	

Week 9 - 11 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Social Systems and Health	Friel, S, Pescud, M, Malbon, E, Lee, A, Carter, R, Greenfield, J, Cobcroft, M, Potter, J, Rychetnik, L, Meertens, B (2017) Using systems science to understand the determinants of inequities in healthy eating. Plos One Vol. 12 No. 11.	

Week 10 - 18 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Systems Approaches in Health Promotion	Zurcher, KA, Jensen, J, and Mansfield, A (2018) Using a Systems Approach to Achieve Impact and Sustain Results. Health Promotion Practice 19 (1_suppl), 15S-23S.	

Week 11 - 25 Sep 2023

Module/Topic	Chapter	Events and Submissions/Topic
Systems Approaches in Politics and Policy	Walker, B (2014) Understanding Resilience and Reducing Future Vulnerabilities in Social-Ecological Systems, in J Boston, J Wanna, V Lipski, and J Pritchard (eds) Future-Proofing the State: Managing Risks, Responding to Crises and Building Resilience, ANU Press, Canberra.	

Week 12 - 02 Oct 2023

Module/Topic	Chapter	Events and Submissions/Topic
Review		Assessment 2 Due: Friday, 6 October, 11:59pm. **Case Study Analysis** Due: Week 12 Friday (6 Oct 2023) 11:59 pm AEST
Review/Exam Week - 09 Oct 2023		
Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 16 Oct 2023		
Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Poster Presentation

Assessment Type
Group Work

Task Description
The aim of your poster is to answer a question that will be assigned to you. You are required to develop a conceptual model to illustrate the systems interactions that influence that issue.
The poster must be usable and understandable by a general audience, and make use of the principles of systems analysis and causal loops that you have learned in class. Specifically, your group needs to:

- describe the public health issue with minimal technical language and a brief overview of its nature
- identify relevant components and the interactions between some of these components
- perform a systems analysis, making use of some or all of the DSRP principles and suitable diagrams and illustrations, of the variables, driving forces and relationships relating to the public health issue
- discuss ways in which changes to some of the variables can affect public health outcomes

The poster presentation has both group and individual assessment components. Each group member will take responsibility for one section of the poster presentation. The indicated section will be used for the purposes of the individual component of assessment.
You must pass this assessment to pass the unit.

Assessment Due Date
Week 6 Friday (25 Aug 2023) 11:59 pm AEST

Return Date to Students

Weighting
50%

Minimum mark or grade
50%

Assessment Criteria
Identification and description of relevant components and variables and construction of conceptual model (30%)
Identification and description of relevant driving forces and interactions between components (30%)
Identification and description of relevant leverage points and the possible impacts of interventions (25%)
Organization and language use (10%)
Individual contribution to group presentation (5%)

Referencing Style

- Harvard (author-date)

Submission
Online Group

Submission Instructions
Must be submitted to Moodle in an appropriate file format

assessmentOutcome

- Explain how complex adaptive systems thinking is used in public health to better understand entrenched health issues related to colonisation, population pressure, climate and environmental changes
- Distinguish between different scales and domains identified within complex adaptive systems thinking relevant to public health
- Apply complex adaptive systems thinking to public health issues relating to social and environmental determinants of health
- Analyse participatory and relational approaches to addressing complex adaptive system challenges in public health
- Reflect on and discuss the impact of social practices related to power, leadership and trust on public health from a complex adaptive systems perspective
- Determine how complex adaptive systems thinking informs practical and sustainable interventions across scales and domains using asset-based community development and disease prevention models
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assessmentGradAttribute

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management
- Ethical and Professional Responsibility
- Leadership

2 Case Study Analysis

Assessment Type
Written Assessment

Task Description
This assignment is based on a real-world scenario with public health relevance. The instructions are in a file on this page, along with three scholarly articles you can use as background and information. You will use this material to perform an analysis of the systems interactions relevant to the scenario. Specifically,

- identify significant components of the system that leads to the observed scenario
- identify and explain driving forces and relationships between these components that impact upon public health outcomes
- explain how specific elements and relationships in the system can be used to inform public policy/public health interventions

Your response to the assignment questions should be not more than about 1500 words, and follow all usual rules about referencing.
You must pass this assessment to pass the unit.

Assessment Due Date
Week 12 Friday (6 Oct 2023) 11:59 pm AEST

Return Date to Students

Weighting
50%

Minimum mark or grade
50%

Assessment Criteria
Identification and description of relevant components (20%)
Analysis of systemic driving forces and interactions (20%)
Placement of interventions and leverage points in public health context (20%)

Discussion of implications for public health policy (20%)
Use of clear, concise language and logical development of content (10%)
All work reflects student's own thinking and references are accurately cited (10%)

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Must be submitted to Moodle as an MS Word file

assessmentOutcome

- Explain how complex adaptive systems thinking is used in public health to better understand entrenched health issues related to colonisation, population pressure, climate and environmental changes
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assessmentGradAttribute

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Ethical and Professional Responsibility
- Leadership

Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the **Student Academic Integrity Policy and Procedure**. This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

What is a breach of academic integrity?
A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

Why is academic integrity important?
A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

Where can I get assistance?
For academic advice and guidance, the Academic Learning Centre (ALC) can support you in becoming confident in completing assessments with integrity and of high standard.

What can you do to act with integrity?

Be Honest
If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

Seek Help
If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

Produce Original Work
Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem