

HLTH 7025 HEALTHCARE DATA FOR DECISION-MAKING

Credit Points 10

Legacy Code 401365

Coordinator Kingsley Agho (https://directory.westernsydney.edu.au/search/name/Kingsley_Agho/)

Description Most professions in the health sciences need to read and interpret data relating to individual health status, interpret health risks in communities, and engage in the evaluation of interventions, or impact of health policies or programs. Many public health practitioners are actively involved in surveillance, quantitative research and/or evaluation. This unit provides an opportunity to learn about making health service decisions using appropriate data. Students learn how to explore and use data that are assembled to replicate real patient data to both generate and answer questions. The focus may be managerial or clinical, or an integration of these. Students analyse the assembled patient dataset to generate and interpret health statistics, and translate them into health information and knowledge for decision-making. Students completing this subject develop the ability to explore health data and provide recommendations based on the findings.

School Health Sciences

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 7 subject

Restrictions Students must be enrolled in a postgraduate program.

Assumed Knowledge

Competent use of Microsoft Excel, and high school mathematics (arithmetic, formulas and algebra, reading graphs).

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Explore and organise data in order to generate reports and make recommendations
2. Identify and compare the relationship between data, information, knowledge and wisdom and how these elements inform practice, management, and policy
3. Explain data elements in contemporary health data terminologies

Subject Content

1. Health informatics
2. Describing and visualising health data using appropriate software e.g. Microsoft Excel and SPSS
3. Determining relationships between variables
4. Limitations of the data and analysis and risks of misinterpretation
5. Administrative Data and Clinical Data
6. Demography and Health Indicators
7. Working with Excel - Survival Analysis
8. Interpreting data to determine health service needs
9. Communication and dissemination of health information data to key stakeholders
10. Working in Excel (II): Time Series Analysis
3. Determining relationships between variables through data linkage
5. Unintended errors in technology

6. Standardisation of data

7. Privacy, security and confidentiality

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Item	Length	Percent	Threshold	Individual/Group Task
Short-answer Workbook exercise	500 words	25	N	Individual
Case Study Report: Analysis of Patient Data	1,000 words	35	N	Individual
	2,500 words	40	N	Individual

Prescribed Texts

- McFedries, P. (2019). Excel data analysis for dummies (4th ed.). John Wiley.
- Davis, N. A., & Shiland, B. J. (2015). Statistics & Data Analytics for Health Data Management. Elsevier Health Sciences.
- Kros, J. F., & Rosenthal, D. A. (2016). Statistics for Health Care Management and Administration: Working with Excel. John Wiley & Sons.

Teaching Periods

2022 Semester 1

Online

Online

Subject Contact Kingsley Agho (https://directory.westernsydney.edu.au/search/name/Kingsley_Agho/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=HLTH7025_22-AUT_ON_O#subjects)

Parramatta - Victoria Rd

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=HLTH7025_22-AUT_PS_D#subjects)

2022 Trimester 1

Sydney City

Day

Subject Contact Andrey Zheluk (https://directory.westernsydney.edu.au/search/name/Andrey_Zheluk/) Andrey Zheluk (https://directory.westernsydney.edu.au/search/name/Andrey_Zheluk/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=HLTH7025_22-SC1_SC_D#subjects)

2022 Semester 2

Online

Online

Subject Contact Kingsley Agho ([https://directory.westernsydney.edu.au/search/name/Kingsley Agho/](https://directory.westernsydney.edu.au/search/name/Kingsley%20Agho/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=HLTH7025_22-SPR_ON_O#subjects)

Parramatta - Victoria Rd

Day

Subject Contact Kingsley Agho ([https://directory.westernsydney.edu.au/search/name/Kingsley Agho/](https://directory.westernsydney.edu.au/search/name/Kingsley%20Agho/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=HLTH7025_22-SPR_PS_D#subjects)