



Unit Specification

1. Unit details

Unit Code	PHY7001
Unit Title	Research Methods in Health Science
Version number	1
Credit	Credits/ECTS: 20 CATS 10 ECTS
FHEQ Level	7
Semester taught in	Autumn Semester
HeCOS/JACS codes	100962 Research Skills
Course (s) for which unit is delivered <small>For multiple courses, please asterisk (*) the course which owns this unit</small>	MSc Physiotherapy (Pre-registration)
Pre-requisites Co-requisites	None
Where will the unit be taught?	AECC University College
Unit Leader name(s) and contact details	TBC

2. Unit aims and outline

This unit will develop your understanding of the principles and techniques of research methods typically used in the analysis of research. After exploring the philosophical underpinnings of research approaches, you will explore research design and data collection strategies through the contextualisation of the 'research process'. The detailed tools of both qualitative and quantitative design and data analysis will be explored and applied to the types of data typically collected in health science-focused research. You will also explore more advanced methodologies and analyses. In addition you will develop an understanding of and ethical considerations in conducting research and be able to identify and describe ethical challenges facing the postgraduate researcher.

3. Intended Learning outcomes

Having completed this unit you will be able to:

- Systematically explore the underlying philosophical underpinnings of different research approaches and methodologies.
- Critically articulate the research process - including research design and the application of ethical principles.

3. Intended Learning outcomes

- (c) Have a systematic understanding of key qualitative and quantitative research designs, methods and analyses.
- (d) Demonstrate advanced skills relating to data collection, analyse and interpretation for both qualitative and quantitative research designs.

4. Indicative content

- The philosophical underpinnings of research, reviewing the links between ontology, epistemology and methodology
- The scope of research design: exploring validity, reliability and single versus multi-method approaches including triangulation
- The research process
- Ethics, ethical procedures and research
- Research questions, hypotheses, data, sampling and participants
- Qualitative research methods, data analysis and interpretation
- Quantitative research methods, data analysis and interpretation

5. Indicative summary of teaching and learning methods and activities including contact hours

The unit will be delivered through a combination of lectures, tutorials, seminars and practical workshops/laboratory sessions. Learning will be encouraged through student centred activities including online materials, directed learning and experiential reflects.

The following information gives an indication of how much time you are likely to spend in different types of activities during this unit.

Indicative contact hours	48
Indicative guided non-contact hours	96
Indicative self-directed learning hours	56
<i>Contact hours</i> are scheduled learning sessions and may include: lectures, tutorials, seminars, and practical sessions.	
<i>Guided non-contact hours</i> may include directed reading, working through specific material on the virtual learning environment (VLE) in preparation for in-class discussions.	
<i>Non-contact hours</i> may include reading and researching, revision, preparing for and writing up coursework, practicing practical techniques (where applicable), and reflective e-portfolio development.	

6. Summary of assessment methods and activities

Formative assessment

Formative feedback will be provided both verbally and virtually by peers as part of group discussions both in the classroom and in virtual discussion groups.

Summative assessment

ILO (s) Assessed	Form of assessment	Percentage of overall assessment (total must be 100%)
A, B, C and D	Coursework: Portfolio	100%

Indicative assessment

In this unit you will complete a series of assessment tasks which will contribute to a 3000-word research methods portfolio. Specific tasks will include: Critical discussion of ontology, epistemology

and methodology; critical review of the research process as it might apply to a specific domain of interest; exploration of contemporary ethical challenges facing researchers in a specific domain of interest; qualitative data analysis and interpretation; quantitative data analysis and interpretation.

Indicative feedback methods

For formative tasks you will receive verbal feedback from peers as part of a 'peer review' process. Feedback on the final summative tasks will be written and returned electronically to you.

7. Indicative learning resources

Books

- Aveyard, H., (2014). *Doing a literature Review in Health and Social Care: A practical guide*. 3rd Edn. Open University Press: McGraw-Hill Education.
- Bowling, A. (2014). *Research Methods in Health* (4th Edition). Open University Press, Milton Keynes.
- Bruce, N., Pope, D. et al. (2018). *Quantitative Methods for Health research: A Practical interactive guide to epidemiology and statistics*. London: Wiley Blackwell.
- Denzin, N. K., & Lincoln, Y.S. (Eds.) (2017). *The Sage Handbook of Qualitative Research*. London: Sage Publications.
- Jadad, A. (2007). *Randomised Control Trials* (2nd edn). Chichester: Wiley-Blackwell
- Liamputtong., P. (2010). *Research Methods in Health: Foundations for Evidence-Based Practice*. Oxford Publications.
- Lune, H., Berg, B. L. (2016). *Qualitative Research Methods for the Social Sciences* (Sixth Edition). London: Allyn and Bacon.
- Mason, J. (2017). *Qualitative Researching* (Second Edition). London: Sage.
- Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (Fourth Edition). London: Sage Publications.
- Pope, C., May, S. N., & Popay, J. (2007). *Synthesizing qualitative and quantitative health evidence. A guide to methods*. Open University Press, Maidenhead.
- Torgerson, C. (2003). *Systematic Reviews*. London: Continuum International Publishing.

Journals

European Journal of Physiotherapy
International Journal of Physiotherapy
International Journal of Therapy and Rehabilitation
Journal of Applied Physiology
Journal of Physical Activity and Health
Journal of Physiotherapy
Musculoskeletal Science and Practice
Musculoskeletal Physiotherapy
Physiotherapy
Physiotherapy Journal

Web-based sources and access to electronic journals is available through the Institution's library. You will have access to library staff to support literature searches and access to electronic resources. The library provides links to all relevant databases, gateways and on-line journals.

The Institution's virtual learning environment provides you with electronic resources that support the delivery of each unit with regularly updated learning materials and interactive learning aids such as quizzes, videos, e-cases, e- lessons and other suitable tools.