

HCT024/075 Research methods in Health and Social care

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| Module Code: | HCT 024 | | |
| Module Title: | Research methods in Health and SOCIAL CARE | | |
| Number of Credits: | 30 | | |
| Number of Semesters: | Semester*: | | |
| Number of Terms: | Term*: 2 | | |
| | Approximate dates when the module is to be taught: | | |
| Level*: | 1 | 2 | 3 <input checked="" type="radio"/> M <input type="radio"/> S |
| School Responsible: | School of Healthcare Studies (SOHCS) | | |
| Module Tutor: | Dr Monica Busse | | |
| External Subject Code: | | | |
| <u>Prerequisite Modules:</u> | <u>Code:</u> | <u>Title:</u> | |
| <u>Precursor Modules:</u> | <u>Code:</u> | <u>Title:</u> | |
| <u>Co-Requisite Modules:</u> | <u>Code:</u> | <u>Title:</u> | |
| <u>Other Prerequisites:</u> | All students must be in possession of a relevant qualification providing registration to practice as a health professional | | |
| <u>Programmes of Study For Which This Module Is Compulsory:</u> | <u>Years:</u> | <u>Programmes of Study For Which This Module Is Optional:</u> | <u>Years:</u> |
| MSc Physiotherapy | 1FT/2PT | | |
| MSc Sports Physiotherapy | 1FT/2PT | | |
| MSc Healthcare Sciences | 1FT/2PT | | |
| MSc Occupational Therapy | 1FT/2PT | | |
| MSc Neurorehabilitation | 1FT/2PT | | |
| MSc Radiography | 1FT/2PT | | |
| MSc Medical Illustration | 1FT/2PT | | |
| MSc in Surgical Care Practice | 1FT/2PT | | |
| MSc in Perioperative Practice | 1FT/2PT | | |
| <u>Module to be offered on a Free-Standing basis?</u> | Yes | | |
| <u>Please identify any additional restrictions to Free-Standing status:</u> | All students must possess an initial degree in a healthcare subject | | |

AIMS OF THE MODULE:

The aim of this module is to introduce students to, and develop their understanding of, research methods and their application in health and social care. This will include qualitative methods, survey methods and experimental methods. It will enable them to acquire the knowledge and skills necessary to be able to evaluate practice using a critical and problem-solving approach. Students will acquire a critical and practical understanding of the research process and refine skills in project planning, research proposal specification and techniques of scientific or research report writing.

LEARNING OUTCOMES OF THE MODULE

The following learning outcomes incorporate a combination of the key areas:

- Knowledge and Understanding [K]
- Intellectual Skills [S 1]
- Discipline Specific (including practical) Skills. [S 2]
- Transferable Skills [T]

At M level, these categories reflect components of competency and have therefore been integrated within each learning outcome including an additional component of behaviour [B].

On completion of the module a student should be able to:

1. Develop and use appropriate systematic search strategies that incorporate a variety of electronic databases and other information sources [S1, T]
2. Synthesise a selection of research papers, draw appropriate conclusions and make recommendations from others research [K, S1, T]
3. Evaluate the main research methods and justify their use for answering particular research questions [S1, T]
4. Define appropriate outcome measures and data requirements for specific research designs [K, T]
- Identify and explain different methods for the analysis of quantitative and qualitative data and appropriate contexts for their use [K, S1, S2, T]
5. Understand the principles of planning and organising a substantial piece of independent study [K, S1, S2, T]
6. Apply skills to project planning, research proposal specification and techniques of scientific or research report writing [K, S1, S2, T]
7. Identify the ethical issues likely to arise when planning or conducting research, particularly in their own professional field and devise solutions to overcome or minimise specific problems [K, S2, T]

METHODS OF TEACHING AND LEARNING:

Within the notional learning time of 300 hours, each student will receive 72 contact hours (12 days) with the college academic staff. These contact hours will be in the form of lectures, seminars and small group tutorials. Some areas of the syllabus will be introduced by a lecture and then followed up by a small group tutorial. Other areas of the syllabus will involve preparatory work followed by small group tutorials.

As well as the 72 contact hours, students will be expected to undertake approximately 228 hours of self study. This will be partly directed self study through the setting of certain research tasks and bibliography guidance but students will also be expected to identify and follow up their own learning needs. There will be 3 optional tutorial days offered.

ASSESSMENT:

(Description of how the assessment (both formative and summative) will enable a student to demonstrate achievement of learning outcomes)

Assessment procedures will consist of the following:

Assessment 1: The student will choose a clinical question relevant to his/her own area of work. A critical appraisal of limited relevant research will be presented in written form (2500 words maximum). Within the critical appraisal the student will be required to synthesise the selection of research papers and draw appropriate conclusions. Search strategies as well as inclusion and exclusion criteria must be documented. Students will be expected to justify their selection of the 3-4 papers included in their discussion.

Assessment 2: The student will plan a research study investigating an issue relevant to his/her own profession or workplace and present a written proposal (3000 words maximum). The planning and the written account should consider the background to the study, the research design, the data collection methods to be used, the methods of data analysis and the ethical issues involved and how they will be resolved.

Methods of Summative Assessment

| Type | % Contribution | Title | Duration (if app) |
|------|----------------|--------------------|-------------------|
| CW | 30 | Critical Appraisal | |
| CW | 70 | Research Proposal | |

SYLLABUS CONTENT:

Introduction

Information retrieval

The research process

Research methods and their appropriateness to particular types of research questions

Critical reading of research reports

Research methods

Approaches to research

The concepts of internal and external validity

Survey research

Strategies for qualitative inquiry

- ethnography
- case study
- participant research
- grounded theory

Experimental methods: True and quasi-experimental designs, Laboratory studies/Clinical trials, Correlation designs

Ethical issues associated with different methodologies

Methods of data collection

Qualitative and quantitative methods

Sampling

Questionnaire design and attitude measurement

Interviews and observation

Quantitative measurement theory

Reliability and validity in measurement

An introduction to quantitative data analysis

Descriptive statistics: Frequency distribution and graphical methods, measures of central tendency and dispersion

Inferential statistics: Testing hypotheses, the meaning of significance levels, parametric and non-parametric tests used to test significance, making inferences about the population – confidence intervals, tests for correlation and simple linear regression.

An introduction to the use of SPSS for data analysis

The adequacy of statistical information – statistical significance v clinical significance

An introduction to qualitative data analysis

Organising, cataloguing and indexing data, memoing in relation to data, drawing conclusions and interpretations from data, coding and categorising data, constant comparative analysis, grounded theory, analytic induction

The research process

Stages in the research process

Planning and costing research and writing a proposal

Writing research reports

Evaluating research proposals

Ethical issues in health and social care research

INDICATIVE READING LIST:

Bowling, A & Ebrahim, S (eds) (2005) *Handbook of Health Research Methods: Investigation, Measurement and Analysis*. Open University Press, Maidenhead, UK. ISBN 0-335-21460-6

Robson, C (2002) *Real World Research*. Blackwell Publishing. Oxford, UK. ISBN 0-631-21305-8

Field A (2005) *Discovering statistics using SPSS*. Sage Publications. ISBN 0-7619-4452-4

Potter, S (ed) (2006) *Doing Postgraduate Research* 2nd edition Sage Publications, London, UK. ISBN 1-4129-2405-7

Portney and Watkins (2000) *Foundations of Clinical Research. Applications to Practice*. 2nd edition. Prentice Hall. ISBN 0-8385-2695-0