

## MODULE SPECIFICATION

### KEY FACTS

Module name	Foundations in Research Methods and Data Analysis
Module code	HRM020
School	School of Health Sciences
Department or equivalent	Health Services Research and Management
UK credits	15
ECTS	7.5
Level	7

### MODULE SUMMARY

#### Module outline and aims

The aim of this module is to provide you with basic research skills to enable you to access the evidence base and perform entry-level statistics.

You will learn about different research methodologies over a 10 week period, and be able to critique the literature. You will also gain working knowledge of the principles underlying statistics and have an introductory knowledge of a specialist statistical software package (SPSS). You will learn about qualitative methodology and analysis and be able to recognise techniques used in this type of research.

Equal emphasis is given to the teaching of qualitative and quantitative research methods and study designs. Importantly, you will be guided and supported to conduct research in practice by producing a research proposal and an analysis-based report which will form the basis of the module mark.

#### Content outline

The module covers the following:

- An introduction to research (problem statements, study designs)
- The research process (refining research questions, funding, how to plan and carry out a research project, getting research into practice)
- Searching for evidence (electronic databases, key words, inclusion and exclusion criteria)
- Critical appraisal skills (how to assess the quality of research)
- Writing a literature review
- Ethics of research/research governance (ethical issues, research ethics committees, research governance framework)
- Recognising and evaluating different study designs
- Choosing, interpreting and reporting analyses
- Basic quantitative statistics (Descriptive statistics, basic comparative parametric & non-parametric statistics, associative statistics)
- Qualitative methods (in-depth interviews and focus groups, using a topic guide, interview techniques, conducting an interview)

## WHAT WILL I BE EXPECTED TO ACHIEVE?

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

### Knowledge and understanding:

- Demonstrate critical awareness of methods and study designs
- Demonstrate confidence in formulating questions
- Understand the underlying principles of statistical research such as distributions, validity, reliability, probability
- Have knowledge of basic statistical tests relevant to your field

### Skills:

- Critically appraise the literature
- Design the search strategies and conduct systematic reviews
- Manage a research project in the “real world”
- Have a basic working knowledge of analysing quantitative and qualitative data
- Use specialist software (SPSS) to support a research project and analysis
- Be able to select the correct descriptive statistics and test for a given dataset
- Demonstrate the ability to enter data into SPSS and use the analysis tools appropriately

### Values and attitudes:

- Consider requirements for conducting rigorous research
- Have regard for ethical issues relating to research in health and social care settings

## HOW WILL I LEARN?

You will be taught through lectures and workshop activities, worksheets and mini-labs over 5 weeks: You will attend 10 x 3 hour lectures/workshops (2 each week on the same day e.g., 10-1 and 2-5) making 30 hours in total. This teaching will be supplemented by self-directed study using worksheets/exercises which will be made available via Moodle.

Teaching pattern:

Teaching component	Teaching type	Contact hours (scheduled)	Self-directed study hours (independent)	Placement hours	Total student learning hours
Introduction to Research Methods and Applied Data Analysis	Lecture	10	60		70
Introduction to Research Methods and Applied Data Analysis	Workshop	20	60		80
<b>Totals:</b>		30	120		150

## WHAT TYPES OF ASSESSMENT AND FEEDBACK CAN I EXPECT?

### Assessments

The assessments for this module are as follows:

1. A brief in-class assessment comprising short answers and multiple choice responses to cover basic knowledge across the range of topics taught. This will constitute 50% of your module mark.
2. A 'mini-lab' analysis-based assessment in which you must produce a report containing analyses of your choice based on data provided. This will constitute 50% of your module mark.

In order to pass the module you must achieve a mark of at least 50%.

### *Assessment pattern:*

<b>Assessment component</b>	<b>Assessment type</b>	<b>Weighting</b>	<b>Minimum qualifying mark</b>	<b>Pass/Fail?</b>
Analytic Minilab Report	Written Assessment	50%	50%	N/A
In-Class Test	Written Assessment	50%	50%	N/A

### Assessment criteria

Assessment Criteria and Grade-Related Criteria for module assessments will be made available prior to the assessment taking place. More information will be available from the module leader.

### Feedback on assessment

Following your assessment, marks and feedback will be provided in line with the Assessment Regulations and Policy. You will receive your mark and a summary of the group's performance (e.g. mean score and range) followed by your coursework with feedback sheet. Markers will be available to answer queries about the marks and feedback if these are not clear. A selection of all assessments will be internally moderated and sent to the external examiner. All initial marks will be therefore be provisional pending external examiner approval and assessment board.

More information on the timing and type of feedback that will be provided will be available from the module leader at the start of the module. Marks will usually be available within 3 weeks of hand in.

### Assessment Regulations

The Pass mark for the module is 50%. The Programme Specification contains information on what happens if you fail the assessment, but in the first instance you should contact the module leader.

## **INDICATIVE READING LIST**

### **Priority Reading**

Aveyard, H (2010) *Doing a Literature Review in Health and Social Care: A Practical Guide*, Second edition. Oxford, Oxford University Press.

Bowling A. (2009) *Research Methods in Health: Investigating Health and Health Services*. Third edition. Buckingham, Open University Press.

Pagano R. R. (2009) *Understanding statistics in the behavioural sciences*. (9th ed). Belmont, CA: Wadsworth/Cengage Learning.

Field, A. (2009) *Discovering Statistics using SPSS (3<sup>rd</sup> ed.)*. London: Sage Publications

Pallant, J. (2010) *SPSS Survival Manual: A step by step guide to data analysis using SPSS*. (4th ed.). Buckingham: Open University Press.

### **Recommended reading**

Aveyard, H. and Sharp, P. (2009) *A Beginner's Guide to Evidence Based Practice in Health and Social Care*. Oxford, Oxford University Press.

Bland, M. (2000) *An Introduction to Medical Statistics*. Oxford, Oxford University Press.

Bryman, A. (2008) *Social Research Methods*. Third edition. Oxford, Oxford University Press.

Burns, N and Grove, S. (2007). *The Practice of Nursing Research*. Fifth edition. Philadelphia: W.B. Saunders.

Cresswell, J.W. (2007) *Qualitative Inquiry and Research Design. Choosing Among Five Approaches*. Second edition. Thousand Oaks, California, Sage

Cresswell, J. (2008) *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Third edition. Thousand Oak, California, Sage.

Cresswell, J.W. and Plano Clark, V.L. (2011) *Designing and Conducting Mixed Methods Research*. Second edition. Thousand Oak, California, Sage.

Dawes, M. et al (2004) *Evidence-based Practice: A Primer for Health Professionals*. Oxford, Elsevier.

Denzin, N and Lincoln, Y. (eds) (2005) *Handbook of Qualitative Research*. Third edition. London, Sage.

De Vaus, D.A. (2002) *Surveys in Social Research*. London, Routledge.

LoBiondo-Wood, G. and Haber, J. (2009) *Nursing Research Methods, Critical Appraisal and Utilisation*. Seventh edition. London, Mosby

Melnyk BM and Fineout-Overholt E (2010) *Evidence-based Practice in Nursing and Healthcare. A Guide to Best Practice*. Second edition. Lippincott Williams and Wilkins, Philadelphia

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**Appendix:**

<b>CODES</b>		
<b>HESA Code</b>	<b>Description</b>	<b>Price Group</b>
103	Nursing and allied health professions	C2
<b>JACS Code</b>	<b>Description</b>	<b>Percentage (%)</b>
X210	Research Skills	100%