

## **COLLEGE OF GRADUATE STUDIES**REGIONAL RESEARCH TRAINING PROGRAMME (2019)

**DATES:** 12 April 2019-30 June 2019 **RSVP:** M&DRW@unisa.ac.za

3 Days	Day 1 (Honours)	Day 2	Day 3
08:00 -08:30	Arrive and register	Arrive and register	Arrive and register
08:30 - 09:30	Prof Ngulube Research literacy	Prof P Ngulube* and Prof Tabane Conceptualising research and Interdisciplinary research  Unisa M& D processes Scientific method Choosing a researchable topic and scanning the environment Developing a smart title Establishing feasibility of the study and permissions Concept mapping (Conceptual schema) Choosing the appropriate research methods Ethical issues	Prof P Ngulube Introduction to mixed methods designs  Differences between mixed methods (MM) and mixed methods research (MMR) Triangulation Evolving debates on MMR (e.g., language, sampling & use of theory) The purpose of using MMR Types of MMR designs Exemplars of the application of MMR designs Timing in MMR designs MMR decision trees
09:30-10:30	Prof T Taole Qualitative research methods  What is qualitative research?  What are the main types / methods?  How does it differ from quantitative research?  Which method do you choose?  When do we use qualitative research?  Qualitative research designs (brief introduction)  Formulating a qualitative purpose statement  Qualitative propositions (How different are they from research hypothesis?)  Sampling in qualitative research  Process of pretesting in qualitative research  Qualitative data collection methods  Types of qualitative data  Data collection methods  Key features in each method	Prof Ngulube Engaging with Research Information	Prof Ngulube Advanced mixed methods designs  Difference between simple and advanced designs Typology of complex designs Examples of the use of complex designs Timing in complex MMR designs
10:30 - 11:00	Break	Break	Break
11:00-12:00	Ms. S Muchengetwa Quantitative research methods  Terminology used in research Philosophical stances underpinning research Approach to theory development The three approaches to research	Prof R Tabane Review of scholarship      Steps in developing a literature review     Types of literature reviews     What is academic writing and how do we read it?     Academic writing at Masters level example	Prof R Tabane Proposal Writing – Synthesizing  Introduction and research background Purpose/ aim of the study Literature Review (what we know and what we do not know)

	<ul> <li>Conceptualisation between qualitative and quantitative research</li> <li>What is quantitative research?</li> <li>Types of quantitative research designs</li> <li>Formulating quantitative purpose statement, objectives and research questions/hypothesis</li> <li>Sampling and methods of data collection in quantitative research</li> <li>Use of Likert scale in quantitative analysis</li> <li>Pretesting the instrument and pilot testing</li> <li>Data collection, management, processing and analysis</li> </ul>	<ul> <li>Academic writing at PHD level example</li> <li>Identifying consistent and contradictory findings</li> <li>Using the literature and related research to refine the research problem and understanding it better</li> <li>Using the literature to establish a conceptual or theoretical framework</li> <li>Using the literature to identify methodological limitations</li> </ul>	<ul> <li>Research problem/ research questions / hypotheses (Difference of style due to qualitative and Quantitative)</li> <li>Research design(s) used to address/answer/test the research problem/ research questions / hypotheses</li> <li>Trustworthiness/ Validity/ Reliability</li> <li>Limitation and Assumption</li> <li>Significance of the study</li> </ul>
12:00-13:00	<ul> <li>Report writing and presentation of findings in quantitative research</li> <li>Professor P Ngulube</li> <li>Multimethods in Multi-Studies</li> <li>Definition</li> <li>Triangulation</li> <li>Types of triangulation</li> <li>Advantages of triangulating methods</li> <li>Criticism of triangulation</li> <li>Mixed methods</li> <li>Triangulation versus Mixed methods</li> <li>Triangulation and mixed methods in relation to study level (Masters &amp; Phd) brief introduction</li> </ul>	Prof P Ngulube Philosophical assumptions and theoretical frameworks  • Philosophical and theoretical assumptions as pillars of research • Differences between meta-theory and theory • Using theoretical frameworks appropriately • Differences between the conceptual framework and the theoretical framework • Application of theoretical and conceptual framework • Cognitive justice and the application of research frameworks	Ms. S Muchengetwa* Questionnaire design  Importance of a questionnaire in research General principles when writing questions Guestioning Types of questions Types of responses Attributes of a good questionnaire Levels of measurement Presentation of a standardised instrument in methodology Evaluation of a questionnaire Examples of good questionnaires Example of presentation of a standardised instrument in methodology
13:00-14:00	Lunch	Lunch	Lunch
14:00-15:00	Prof R Tabane*/ Ms. S Muchengetwa/ Prof T Taole  Generic components of a research proposal Abstract of the proposal The problem statement Literature review (what do we know) Conceptual model vs theoretical model Rationale of the research (what do we not know: the gaps in knowledge about the topic) Research methods Ethics in research	Ms. S Muchengetwa Introduction to quantitative research designs and data analysis  Importance of statistics in research Experimental versus non-experimental designs Types of descriptive research designs Descriptive research design: Steps in a survey research Experimental design logic Ex-post facto designs and factorial designs Data reliability and validity Quantitative research techniques and tools Relationship between instrument and analysis Type of analysis, tools and techniques Statistical techniques to explore relationships among variables Statistical techniques to compare groups Structural equation modelling Meta-analysis Recognise technical challenges associated with handling, analysing and interpreting research data Identify ways which data are not properly handled, analysed and interpreted	<ul> <li>Ms. S Muchengetwa</li> <li>Quantitative data analysis using SPSS</li> <li>Introduction to SPSS</li> <li>Observations made in research and use of SPSS</li> <li>Essential components for data analysis in SPSS</li> <li>Profile of the researcher, subject and application content</li> <li>Learning outcomes and course content</li> <li>Creating and manipulating data in SPSS</li> <li>Describing data in SPSS – methods and commands</li> <li>Exploring relationships and hypothesis testing in SPSS – methods and commands</li> <li>Comparing groups and hypothesis testing in SPSS – methods and commands</li> <li>Structural equation modelling in SPSS AMOS – methods and commands</li> </ul>
15:00-16:00	<ul> <li>Ms. S Muchengetwa</li> <li>Comparative analysis of quantitative and qualitative research methods         <ul> <li>Differences between qualitative and quantitative research methods in the research process</li> <li>Title formulation in qualitative and quantitative research</li> <li>Difference between qualitative and quantitative purpose statements</li> <li>Propositions versus hypothesis</li> <li>Qualitative sampling techniques versus quantitative sampling techniques</li> </ul> </li> <li>Comparative analysis of data collection in qualitative and quantitative research (what types of data are required to answer the research question)</li> <li>How will be data collected</li> <li>Type of data analysis in qualitative and quantitative</li> <li>Language used in qualitative and quantitative presentation of results and report writing</li> </ul>	Prof M Taole Introduction to qualitative research designs      Define qualitative research design     Discuss five different types of qualitative designs     Describe important features of each designs     Describe different techniques for collection of data in each design     Formulating purpose statement for each design Introduction to qualitative research data analysis     Define qualitative data analysis     Types of coding     Networking in qualitative data analysis     Presenting "good" qualitative results data     Mention features of qualitative data analysis     Have an understanding of the different data analysis methods	Ms. S Muchengetwa* /Prof M Taole Qualitative data analysis using Atlas ti  What is Atlas ti?  Atlas ti – The Knowledge Workbench  Sample project and starting Atlas ti  Creating a new project  Starting data analysis –  a) Organising project data b) Exploring the content of text documents c) Coding data  Working with comments and memos a) Creating memos  Code cooccurrence analysis - example a) Creating a smart code b) Running a code occurrence query  Working with networks and links

16:00-18:30	Presentations and consultations	Presentations and consultations	c) Exporting networks  • Creating reports  a) How to create user configurable reports  • Importing survey data  a) Preparing survey data for import  i) How to import survey data  ii) Inspecting imported data  iii) Working with survey data
	Choosing approach to use		a) Exploring network views     b) Creating own network view

<sup>\*</sup>denotes the leader of the session