NRM-Nursing-Research Methods

NRM 750. Foundations of Quantitative Research. 3 Hours.
This course is a survey of quantitative research methods and the first required research core course in the PhD doctoral nursing program. The course is designed to prepare PhD doctoral nursing students with the research knowledge and skills to: (1) critically evaluate research; (2) use the process of research to examine questions identified in one's own nursing practice; and (3) contribute to expansion of nursing's knowledge base. This course will include integration of the following elements and/or activities: critical thinking, critique and synthesis of quantitative research literature in a focused area of interest, scholarly writing, scientific integrity and ethics, human diversity, and social issues. Students will apply criteria for the critique of research to assess the design, methods and validity of research findings. Students will be exposed to various critique frameworks for both quantitative and qualitative research. Strategies for conducting both systematic and integrated reviews will be addressed. The advanced practice role emphasis of this course is that of investigator, research collaborator, and content expert in a selected practice field.

NRM 752. Responsible Conduct of Research. 2 Hours.
This course will examine a wide range of historical and modern treatises that have shaped ethical practices and medical ethical theories both in the United States and globally. The course will emphasize comparing and contrasting various world views of ethical research practice from a cultural and global perspective. The content will focus on ethical principles such as respect for persons, autonomy, justice and rights-based codes. In addition, the expectations and regulations of Institutional Review Boards will be examined with an emphasis on developing effective strategies to expedite approval of student research applications. In addition, students will complete and provide proof of current completion of the UAB IRB training course as an initial pass/fail learning activity. This course will also include integration of the following elements and/or activities: critical thinking, informatics, collaboration, scholarly writing, preparing/giving professional presentations, theory evaluation and application, human diversity, cultural competence, global concerns and health disparity issues. The advanced role emphasis of this course is that of investigator, research collaborator, and content expert in a selected practice field.

NRM 761. Research in Children with Chronic Health Conditions. 3 Hours.
This course provides students with an understanding of the ethical developmental and regulatory considerations necessary for the responsible conduct of research in children with chronic illness. The focus of this course is on critical evaluation of published research in populations of children with chronic illness, understanding of scientific and methodological considerations necessary when conducting research involving children, and development of a mock research proposal focused on a question of importance to the field that addresses processes necessary to assure appropriate protection of pediatric research participants. Inter-professional enrollment on this course is encouraged.

NRM 770. Designs for Nursing Studies I. 3 Hours.
Designs For Nursing Studies I. In this course, special emphasis is placed upon the beginning phases of the research process, including formulation of research questions/aims, integration of theory and/or conceptual framework in the development of research, the critique and review of knowledge that support an identified area of research, and the discussion of the type of research design. Cultural implications and ethical standards for research will be addressed.

NRM 771. Methods/Measurement In Nursing Research. 3 Hours.
Instrumentation in nursing research involves measurement of biological, psychological and/or sociological aspects of human systems. This course is an overview of the theories, principles and techniques that yield reliable and valid measurement of human systems. Opportunities will be provided to evaluate the psychometric properties of selected measures and strategies. This course is designed to aid the student in writing the measurement section of a research proposal in the focal area.

NRM 772. Designs of Nursing Studies II. 3 Hours.
Designs for Nursing Studies II. This course focuses on sampling, collection of data, data analysis plans, presentation of findings, conclusions in various research designs and the reintegration of the findings into the body of knowledge in an identified area of research. Ethical and cultural issues related to the conduct of research will be addressed. Students will develop a research proposal.

NRM 773. Qualitative Research Methods. 4 Hours.
This core course focuses on sampling, design, analysis plans, presentation of results, findings, and conclusions in various research designs and the reintegration of the findings into the body of knowledge in an identified area of research. Ethical and cultural issues related to the conduct of research are also examined.

NRM 774. Designs and Methods for Research of Vulnerable Populations With Health Disparities. 3 Hours.
This course is designed for doctoral level students in nursing and other health-related disciplines. Special emphasis is placed on critical analysis of health disparities research, and the integration of theory and empirical evidence in designing studies of vulnerable populations such as minorities and other underserved populations. Issues of race, gender, age, ethnicity, social class and cultures are examined in relation to research design and successful implementation of research studies. Intervention approaches commonly used in health disparities research will be evaluated and ethical issues of relevance to vulnerable populations will be explored.

NRM 775. Research on Applied Cognitive Neuroscience for Health Professionals. 3 Hours.
This elective course for the PhD program provides the student with knowledge in the fundamentals of behavioral neuroscience and cognitive psychology as it relates to intervention studies and research designs. The student has an opportunity to practice cognitive assessment, develop behavioral intervention plans, and design research studies involving such knowledge.
NRM 777. Mixed Methods Research I: Introduction to the Field. 3 Hours.
The course will provide students with an introduction to the field of mixed methods research. The course will focus on understanding what constitutes mixed methods research, its fundamental principles, and the main trends, issues, and debates involved in the application of this research approach. Students will examine the process of mixed methods research, including its definition, rationale for using it, the key characteristics, major design applications, and means of assessing the quality of mixed methods inferences. In addition, students will learn how the mixed methods research process is shaped by personal, interpersonal, and social contexts and how mixed methods intersects with other quantitative and qualitative research approaches and designs.

NRM 778. Mixed Methods Research II: Designing and Conducting a Mixed Methods Study. 3 Hours.
Building on the foundation knowledge received in Mixed Methods Research I, the course will provide students with knowledge and skills of designing and conducting mixed methods studies in social and health sciences. The topics will include types of research problems addressed, specification of mixed methods purpose statements and research questions, types of mixed methods designs, data collection and analysis strategies within mixed methods designs, and procedures for reporting and evaluating mixed methods studies. Students will get applied knowledge of choosing an appropriate mixed methods design, following the steps in designing and conducting a mixed methods study, and visually presenting mixed methods procedures employed in the study. Students will develop a proposal for a mixed methods study with the major emphasis on the study methodology.

NRM 779. Mixed Methods Application in Community-Based Action Research. 3 Hours.
The course will provide students with a detailed overview of how mixed methods can be applied in designing and conducting community-based action research studies. The topics will include: community-based action research, its purposes and cross-disciplinary utilization; a mixed methods methodological framework for action research; steps in designing and conducting mixed methods action research studies in community settings; specific types of mixed methods action research designs; sampling, data collection, analysis, validation, and evaluation of mixed methods action research projects. Students will get applied knowledge of choosing an appropriate mixed methods action research design, of applying the steps to designing and conducting a mixed methods action research study, and visually presenting the procedures employed in the study. Students will develop a proposal for a mixed methods action research study with the major emphasis on the study methodology.

NRM 780. Quantitative Measurement in Research. 3 Hours.
The purpose of this course is to provide the student with the knowledge of how to best measure biological, psychological and/or sociological variables within individuals, families, and/or systems. This course includes an overview of the theories, principles and techniques that yield effective operationalization in order to obtain valid and reliable measurements.

Prerequisites: NRM 750 [Min Grade: B]

NRM 781. Application of Research Design Principles II. 3 Hours.
This course focuses on proposal development to include design, sampling, data collection, and data analysis plans for a focal area of interest. Ethical and cultural issues related to the conduct of research will be addressed.

Prerequisites: NRM 780 [Min Grade: B] and NRM 783 [Min Grade: B] and NST 778 [Min Grade: B] and NST 758 [Min Grade: B]

NRM 782. Application of Research Design Principles II. 3 Hours.
This course focuses on proposal development to include design, sampling, data collection, and data analysis plans for a focal area of interest. Ethical and cultural issues related to the conduct of research will be addressed.

Prerequisites: NRM 780 [Min Grade: B] and NRM 783 [Min Grade: B] and NST 778 [Min Grade: B] and NST 758 [Min Grade: B]

NRM 783. Foundations of Qualitative Research. 3 Hours.
The purpose of this course is to examine research traditions that guide the collection and analysis of qualitative data in the development of science. Included are naturalistic, conceptual, interpretive and analytical research methods such as phenomenology, grounded theory, ethnography, descriptive inquiry and narrative inquiry.

NRM 784. Qualitative Research: A Grounded Theory Approach. 3 Hours.
This course will provide students with in-depth knowledge of the historical origins, philosophical and theoretical foundations, methodological principles and applications of a grounded theory qualitative research approach. Students will explore types of research problems addressed, specification of the purpose statement and research questions, sampling, data collection and analysis strategies, establishing credibility and trustworthiness, and procedures for reporting a grounded theory study. The course will provide a structured field experience of designing and conducting a small-scale grounded theory study. The use of qualitative research software NVivo for data organization, management and analysis will be emphasized.

NRM 785. Qualitative Research: Analysis and Interpretation. 3 Hours.
The course will provide students with applied knowledge of data analysis and interpretation in qualitative inquiry. Students will understand the nature of qualitative data and explore different approaches to qualitative data analysis. The course will provide a structured experience of learning how to analyze, interpret, display and report qualitative data and results within five basic approaches to qualitative inquiry (narrative, case study, ethnography, grounded theory, and phenomenology). Students will develop basic skills in using qualitative research software NVivo for data organization, management and analysis.

NRM 786. Qualitative Research: Case Study and Ethnographic Approaches. 3 Hours.
The course will provide students with in-depth knowledge of the historical origins, philosophical and theoretical foundations, methodological principles and applications of case study and ethnographic qualitative research approaches. Students will explore types of research problems addressed, specification of the purpose statement and research questions, sampling data collection and analysis strategies, establishing credibility and trustworthiness, and procedures for reporting a case study and ethnography. The course will provide a structured field experience of designing and conducting a small-scale case study or an ethnographic study. The use of qualitative research software NVivo for data organization, management and analysis will be emphasized.
NRM 787. Qualitative Research: A Phenomenological Approach. 3 Hours.
The course will provide students with an in-depth knowledge of the historical origins, philosophical and theoretical foundations, methodological principles and applications of a phenomenological qualitative research approach. Students will explore types of research problems addressed, specification of the purpose statement and research questions, sampling, data collection and analysis strategies, establishing credibility and trustworthiness, and procedures for reporting a phenomenological study. The course will provide a structured field experience of designing and conducting a small scale phenomenological study. The use of qualitative research software NVivo for data organization, management and analysis will be emphasized.

NRM 798L. Research Immersion. 3-6 Hours.
The purpose of this course is to provide the student the opportunity to participate as a member of an established and funded research team. Research team members will mentor students taking part in relevant research experiences. Students will be expected to participate in various research activities including, but not limited to, research team meetings, consent of study participants, intervention implementation, data collection, data base management, data analysis, and manuscript preparation. Students will apply concepts and principles from research core courses in their research immersion experience. As part of an established funded research team, students will explore various research team roles and responsibilities. Additionally, students will take the opportunity to learn about and participate in various components of the UAB research enterprise. Through the research immersion experiences, students will learn about sources and mechanisms of research funding and strategies for dissemination of research findings. As appropriate, students will participate as a member of an established funded research team in preparation and dissemination of reports of research findings. Students will also have the opportunity to work with research team members in analysis, interpretation of findings and in the development manuscripts, research presentations and posters for dissemination.

Prerequisites: NRM 750 [Min Grade: B] and (NRM 752 [Min Grade: B] or NRM 780 [Min Grade: B])