

# Mel and Enid Zuckerman College of Public Health University of Arizona

## EPID 673 Mixed Research Methods – Design, Conduct and Application in Health Research

**Catalog Description**: This is an advanced course on designing and conducting mixed methods research in human health-related studies. (3 units)

#### **Course Topics:**

- Mixed Methods Research (MMR)
- Complex Application of Core MMR Study Designs
- Recruitment Protocol

- Data Collection Protocol with Quality Control
- Validation Assessment
- Analyzing and Interpreting Data in MMR

### **Course Objectives:** During this courses students will:

- Gain knowledge on the nature and foundation of mixed methods research.
- Have a better understanding on the principle and theory guiding study design, data collection, data analysis and application of qualitative and quantitative research.
- Learn how to collect and analyze data from mixed methods with considerations on validity of the instruments, the quality of the research data and the integration of quantitative and qualitative research data.
- Become familiar with how to report findings from mixed methods research.
- Develop skills that are fundamental for conducting mixed methods research.
- Know about the complexity of applying mixed methods in health research and new advances in mixed methods research.

#### **Learning Outcomes (Competencies Obtained):** Upon completion of this course students will be able to:

- 1. Introduce and propose a research using core mixed methods designs and principles
- 2. Communicate with collaborators on the process and key issues related to data collection and data analysis including IRB application in mixed methods research
- 3. Synthesize findings from mixed methods to address significant health issues
- 4. Critically evaluate the design and conduct of a mixed methods research
- 5. Explain qualitative, quantitative, mixed methods and policy analysis research and evaluation methods to address health issues at multiple (individual, group, organization, community and population) levels
- 6. Design a qualitative, quantitative, mixed methods, policy analysis or evaluation project to address a public health issue
- 7. Apply descriptive and inferential methodologies according to the type of study design for answering a particular research question; b) Demonstrate the ability to identify, articulate and implement sound study design, methodological and computational strategies for addressing scientific questions
- 8. Prepare scientific research or program proposals that articulate specific aims, summarize appropriate background literature, describe study methodology and identify significance and limitations of the approach
- 9. Evaluate the integrity, comparability, and limitations of data to make inferences related to analyses and results
- 10. Articulate the importance of using multiple methodologies (that include qualitative and quantitative examples) in the study of a health behavior health promotion
- 11. Apply theories, frameworks, methods or paradigms to conduct health behavior health promotion research