#### Series I 2025-2026

### MODULE 1: INTRODUCTION TO EDUCATIONAL RESEARCH DESIGN

#### Dates: 9/11, 9/25, 10/9

- Getting started: formulating research questions, deciding on quantitative, qualitative, or mixed methods
- Educational research design, constructs, and outcome measures
- 3. Identifying suitable quantitative and qualitative methods:
  A study design for your research question

# MODULE 2: SURVEY DESIGN & IMPLEMENTATION Dates: 10/23, 11/13, 11/20

- Fundamentals of survey design: steps in survey development; survey items, response types; measuring knowledge/attitudes/skills/behaviors
- 5. Evidence-based survey practices: survey flow, sampling, cognitive interviewing, pilot testing, creating survey items, choosing response scales
- Sources of bias in survey research; threats to validity; survey implementation & optimizing response rates

## MODULE 3: SURVEY DATA ANALYSIS & REPORTING Dates: 12/4, 12/18

- Statistics 101: variable types; analyzing survey data using statistical software
- 8. Statistics 101: Descriptive statistics; power & sample size determination; reporting results

# MODULE 4: QUALITATIVE RESEARCH DESIGN, IMPLEMENTATION, ANALYSIS, & REPORTING

#### Dates: 1/8, 1/22, 2/12, 2/26

- 9. Overview of different qualitative approaches in education research: grounded theory, phenomenology, ethnography, narrative approaches, & case studies
- Interview and focus groups; developing interview guides, conducting interviews & focus groups
- Choosing your analytic method for interview/focus group data; Introduction to content analysis & thematic analysis and deductive vs inductive coding
- 12. Qualitative validity and trustworthiness; writing up your qualitative analysis using reporting guides

### MODULE 5: EDUCATIONAL LEARNING THEORIES & METHODS

#### Dates: 3/12, 3/26, 4/9

- 13. Clinical reasoning skills and metacognition research
- 14. Learning with others: Learning environment research and social approaches to learning theories
- 15. Using AI in educational research and methods

#### **MODULE 6: WRITING IT UP**

#### Dates: 4/30, 5/14

- 16. Publishing your medical education scholarship
- 17. Writing workshop: Focus on titles, abstracts, and introductions

### Planned sessions for 2026-2027 (subject to change)

#### **MODULE 1: LAYING THE FOUNDATION**

- Conducting an efficient review of literature to inform your study design
- Designing your study to be high quality & produce valid inferences
- 3. Understanding elements of human subjects protection
- Navigating the HMS and BIDMC human subjects review process

### MODULE 2: COLLECTING HIGH QUALITY QUALITATIVE DATA

- Facilitating focus groups moderating groups in person & on Zoom
- 6. Collecting observational data creating data collection forms and conducting observations
- Conducting consensus research implementing Delphi studies

## MODULE 3: INCORPORATING THEORY INTO YOUR RESEARCH

- 8. Getting started with understanding theories: Learning theories and behavior change theories
- Incorporating some theoretical models into your study design and manuscript: some hands-on practice

#### **MODULE 4: MIXED METHODS RESEARCH**

- How, when, and why to use mixed methods (e.g., surveys and focus groups), crafting research questions for mixed methods studies
- 11. Understanding concurrent & sequential designs; analyzing mixed methods data and reporting findings

#### **MODULE 5: PROJECT SHARING AND FEEDBACK**

- 12. Opportunity to share your project and receive peer and instructor feedback on any aspect (e.g., study design, survey, focus group guide, manuscript). You can sign up in the fall to share your work in progress
- 13. Both sessions in Module 5 will be dedicated to project sharing and feedback. We will also schedule 1:1 consulting time for anyone interested in more individual feedback

### MODULE 6: INTRODUCTION TO CURRICULUM DESIGN & ASSESSMENT

- 14. Align objectives, instructional activities, and assessments to create cohesive learning experiences for adult learners
- 15. Map assessment methods to learning objectives
- 16. Learn to select the right evaluation model to match targeted program goals
- 17. Explore digital tools and approaches designed for common instructional needs in medical education