

Basic Course Items and Foundational Concepts

EDP 612 Week 1

Dr. Abhik Roy

Welcome!

Introduction
to Research

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**EDP 612:
Introduction
to Research
Spring 2022**

 West Virginia University
DEPARTMENT OF COUNSELING AND LEARNING
SCIENCES

Your Teachers



Dr. Abhik Roy



Carinna Ferguson



Course Content



The purpose and nature of scientific research.

How knowledge gained from scientific research differs from other types of knowledge.

How to formulate and articulate research problems.

The different types and uses of variables in a research study.

The methods and techniques for establishing and evaluating reliability and validity.

How to critically access and review literature relevant to a particular research problem.

How to write a literature review.

The relationship between research questions and particular research designs.

The most common forms of quantitative and qualitative approaches to research in education and the social and behavioral sciences.

The strengths and shortcomings of these approaches to research.

Course Materials



- eCampus access: for submissions and grades only
- Materials and Extras pages
- Text: Leavy, P. (2017). *Research design: Quantitative, qualitative, mixed methods, arts-based, and community-based participatory research approaches* (1st ed.). The Guilford Press.



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Digital edition (very free)

Softcover edition (not legally free) - ISBN: 9781462514380

Type



In-class

- Lectures
- Activities
- Work
- Breaks
- No exams

Out-of-class

- Work
- Literature Review

What I expect

- Coming to Class
- Keeping an open line of communication
- Not staying quiet
- Asking questions
- Participating like crazy
- Coming to visit me on Zoom (and hopefully at some point in my office 5040 Allen Hall)

Assignments



| Percent | Task |
|---------|--------------------|
| 15 | Engagement |
| 35 | Literature Reviews |
| 15 | Presentation |
| 35 | Weeklies |

Grading



| Grade | Range |
|-------|---------|
| A | 90–100% |
| B | 80%-89% |
| C | 70–79% |
| D | 60–69% |
| F | < 60% |

Things We Don't Cover About Research



- Purpose
- Audience
- Guiding Questions
- Interpretation of Findings
- Reporting of Results
- Usage of Findings
- Professional Standards & Ethics

Things We Do Cover About Research



- (Some) Analyses
- Approaches
- Designs
- Data Collection
- Methodology
- Reliability
- Validity

Keep These in Mind

Research

- is a systematic process of collecting and logically analyzing information (data) for some purpose
- does not care about your feelings or views
- demands ethics and trust or we're all screwed

Types

- Descriptive
- Relational
- Causal

Purposes

- Theoretical
- Empirical
- Probabilistic
- Causational

Common Sense v. Science!

Common Sense - Grounded in how we come to know the world

- Subjective
- Objective

Science - Grounded in prominent theoretical constructs

- Epistemology
- Methodology

How do we know things?



- Beliefs
- Intuitions
- Logic
- Opinions of others
- Personal experiences
- Scientific method
- Sensory experiences
- Traditions
- Failures!

Human Nature v. Science!



Human Nature

- usually observations are inaccurate
- generalize from a few cases
- observe selectively to see what we're looking for
- make things up to fulfill gaps
- get personally and emotionally involved
- form views with little or no revisions and stick with them
- think we can figure out everything

Science

- ensure observations are accurate
- explicitly sample for generalizing
- consciously decide what and how to observe
- base conclusions on evidence alone
- respect scientific norms regardless of opinions
- constantly revise views
- accept that not everything is knowable

That's it. Questions?

