

# Graduate Certificate in Applied Research Methods in the Human Sciences

## About

The Applied Research Certificate provides excellent methodological training for working professionals and graduate students seeking advanced study in quantitative or qualitative research techniques for the social or human sciences. This certificate program responds to the growing need for administrators and researchers in education and related fields to produce, analyze, and report data that can inform institutional and organization decision-making (e.g., policy development).

Holders of this certificate will be equipped to pursue further graduate studies (e.g., doctoral degree programs) and/or obtain senior administrative positions that require sophisticated research skills.

Applied Research Certificate courses are offered in both face-to-face on campus formats as well as online/distance education formats. The Certificate consists of a total of 15 credits; 12 credits accrued from coursework and an additional 3 credits from associated fieldwork. Students will have the option of concentrating on either quantitative or qualitative research methods.

## General Requirements

Students in the Applied Research Certificate program will complete a required core of fifteen credits (12 credits of coursework plus 3 credits in related fieldwork). A minimum of 9 credits must be earned at Iowa State University.

## Required coursework (12 credit hours) and fieldwork (3 credits)

**Designed for:** 1) current or future administrators in education, social service and non-profit institutions and organizations (e.g., institutional researchers) who wish to enhance their knowledge, skill sets, and employment possibilities by adding expertise in social science research methods, and 2) post-baccalaureate students in education and other fields in the broader social sciences (e.g., Human Development & Family Studies, Sociology, Women's Studies, Inter-departmental Graduate Studies) required to produce original social research.

**Purpose:** The Applied Research certificate is designed to equip students to perform basic and applied social research in education and other human science related institutions. The knowledge and skills gained from this certificate will benefit students in their professional work, whether in public or private sectors, and in any current or future academic goals (e.g., doctoral programs) where social research is required.

### Quantitative Option

- **ResEv 552.** Basic Educational Statistics (3 cr.) Statistical concepts and procedures for analyzing educational data; descriptive statistics, correlation, t tests, and chi square with computer applications. (Stat 401 may be substituted.)
- **ResEv 553.** Intermediate Educational Statistics (3 cr.) A continuation of statistical concepts and procedures for analyzing educational data, using multiple regression and logistic

### Qualitative Option

- **ResEv 580.** Introduction to Qualitative Research Methodology (3 cr.) Qualitative research in the human sciences, emphasizing education; principles of qualitative inquiry, including theoretical foundations, research design, and fieldwork. (HDFS 504 may be substituted.)
- **ResEv 680.** Critical Issues in Qualitative Inquiry (3 cr.) An intensive reading and discussion course focusing on contemporary methodological theory for qualitative inquiry; examines epistemological, ontological, axiological and theoretical assumptions and their consequences for qualitative inquiry in the human

regression. (Stat 404 may be substituted.)

- **ResEv 554.** Intermediate Research Methods (3 cr.) Intermediate quantitative research methodology in preparation for carrying out thesis and dissertation research, with an emphasis on the estimation of causal effects using observational data.
- **One additional methodology course** of at least 3 credits, as approved by a ResEv faculty member. Course may be either quantitative, qualitative, or related to evaluation/assessment. See list below.
- **ResEv 591 Fieldwork** (3 cr. minimum) The field experience will consist of **at least** one semester of applied research. The student will sign up for field work (ResEv 591) under the guidance of a ResEv faculty member. The exact work will be jointly determined by the ResEv faculty and the student.

sciences; interrogates core concepts of qualitative inquiry such as fieldwork, data, validity, and representation.

- **ResEv 681X.** Analytical Approaches in Qualitative Study (3 cr.) Conceptions of data and analysis in qualitative methodologies; Focus on applied topics in qualitative data analysis, such as narrative analysis, ethnographic analysis, life history analysis, postmodern analyses, discourse analysis, arts-based analytical strategies, constructing data; Combination format of reading and discussion seminars and classroom workshops focusing on individual research projects (not for thesis or dissertation).
- **One additional methodology course** of at least 3 credits, as approved by a ResEv faculty member. Course may be either quantitative, qualitative, or related to evaluation/assessment. See list below.
- **ResEv 591 Fieldwork** (3 cr. minimum) The field experience will consist of **at least** one semester of applied research. The student will sign up for field work (ResEv 591) under the guidance of a ResEv faculty member. The exact work will be jointly determined by the ResEv faculty and the student.

#### **Additional methodology courses**

- CI 534 Applied Measurement in Educational Psychology
- CI 536 Experimental Methods in Educational Interventions
- HDFS 603 Advanced Quantitative Methods
- HDFS 604 Advanced Qualitative Research
- HDFS 605 Multi-level Modeling for Social and Behavioral Sciences
- ResEv 570 Surveys in Educational Research
- ResEv 597 Program Assessment and Evaluation

***\*or other course as approved by the ResEv Program Coordinator***

**A maximum of six semester credits may be transferred in to ISU to meet the requirements of this certificate.**

#### **For more information, contact:**

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