EER - EDUCATIONAL EVALUATION AND RESEARCH

EER 4501 Quantitative and Qualitative Research, Measurement, and Program Evaluation Cr. 3
Provides an introduction to systematic disciplined inquiry and program evaluation. Topics in quantitative methods to be covered include: experimental, quasi-experimental, and survey research; instrument reliability and validity; descriptive and inferential statistics. Topics in qualitative methods to be covered include: grounded theory, ethnography, case study; trustworthiness, coding, and data networks/displays. Offered Fall, Winter.

EER 7610 Evaluation and Measurement Cr. 2-3
Restriction(s): Enrollment is limited to Graduate level students.

EER 7630 Fundamentals of Statistics Cr. 3
Restriction(s): Enrollment is limited to Graduate level students.

EER 7640 Fundamentals of Quantitative Research Cr. 3
Basic skills in educational research; nomenclature, problem, theory, hypothesis formulation; bibliographical and documentary techniques; retrieval systems; development of data-gathering instrumentation; computer orientation and research uses; collection and organization of data; manuscript development; report writing; techniques, methodologies for descriptive and experimental inquiry. Offered Every Term.
Restriction(s): Enrollment is limited to Graduate level students.

EER 7650 Computer Use in Research Cr. 3
Introduction to computer use in educational research with emphasis on using statistical packages (MIDAS and SPSS, BASIC programming language); writing statistical programs. Offered Every Term.
Prerequisite: EER 7630, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 7870 Fundamentals of Qualitative Research Cr. 3
Fundamentals of epistemological issues, educational perspectives of qualitative research and research design. Readings in qualitative research. Conducting the case study, personal history, and cognitive study. Overview of methods for analyzing talk, text, and interaction. Offered Fall, Winter.
Restriction(s): Enrollment is limited to Graduate level students.

EER 7880 Fundamentals of Ethnographic Research Cr. 3
Collecting, analyzing, and writing up findings from ethnographic data (participant-observation field notes, interviews, and artifacts); issues of rigor in naturalistic research in education. Offered Fall, Winter.
Prerequisite: EER 7870, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8700 Advanced Qualitative Evaluation: Theory and Practice Cr. 4
Major paradigms of qualitative evaluation, strategies of inquiry, methods of collecting and analyzing materials, the art of interpretation. Analysis of real data, including pattern coding, data displays, checklist matrices, transcription, explanation prediction within-case vs cross-case displays, ethical issues in evaluation. Computer use in qualitative evaluation. Offered Winter.
Prerequisite: EER 7870, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8710 Advanced Ethnographic Research Cr. 4
Use of fieldwork to learn group interview, video collection and analysis, ethnographic survey, narrative and poetic analysis; deepening the understandings about culturally-sensitive research, rigor, and the politics of representation. Offered Winter.
Prerequisite: EER 7880, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8720 Advanced Quantitative Program Evaluation Cr. 3
Educational and school program evaluation: alternative approaches; students propose theory-based designs and strategies. Offered Winter.
Restriction(s): Enrollment is limited to Graduate level students.

EER 8760 Advanced Measurement I Cr. 3
Prerequisite: EER 7610, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8770 Advanced Measurement II Cr. 4
Modern measurement theory. Item response theory, including one and three parameter models, detecting item bias, multi-dimensional scaling. Offered Winter.
Prerequisite: EER 8760, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8800 Variance and Covariance Analysis Cr. 4
Multiple, partial, canonical correlation: variance and covariance analysis; Models I and II. Statistical analysis in experimental designs; Random Blocks, Latin Squares, Greco-Latin Squares, simple and complex factorials, confounding, fractional and split-plot designs. Supporting topics and techniques; missing observations; adjustment of means; probing the homogeneity of means and variances; study of contrasts; orthogonal polynomials and computer usage. Offered Yearly.
Prerequisite: EER 7630, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8820 Multivariate Analysis Cr. 4
Discriminant analysis, profile analysis; placement and classification problems; component and factor analysis. Supporting topics and techniques; transformation of variables, computer usage. Offered Yearly.
Prerequisite: EER 8800, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8840 Structural Equation Modeling Cr. 4
Application of structural equation methods to applied educational psychology research. Model specification, estimation, and fit. Confirmatory factor analysis and correlation. Offered Yearly.
Prerequisite: EER 8820, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.
EER 8860 Nonparametric, Permutation, Exact, and Robust Methods Cr. 4
Application of nonparametric, permutation, exact and robust methods to
social and behavioral science data. Techniques of estimation, location,
and association for discrete and continuous data. Offered Fall, Winter.
Prerequisite: EER 7630, with a minimum grade of C; EER 8800, with a
minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8880 Monte Carlo Methods Cr. 1
FORTRAN 77/90/95 applied to Monte Carlo Methods for the development
of new statistics and procedures and the comparison of existing
methodologies. Solving data analysis problems via simulation
techniques. Offered Fall, Winter.
Prerequisite: EER 7630, with a minimum grade of C; EER 8800, with a
minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8900 Qualitative Design for School Research Cr. 3
Field Placement. Integration of theory with practice for conducting,
analyzing, and reporting qualitative research or evaluation in the schools.
Offered Fall.
Prerequisite: EER 8700, with a minimum grade of C; EER 8710, with a
minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.

EER 8910 Practicum in Evaluation Cr. 2-6
Qualitative methods for action research in schools, including interviewing,
field observation, life histories, visual records, and document analysis.
Offered Every Term.
Prerequisite: EER 8700, with a minimum grade of C; EER 8710, with a
minimum grade of C
Restriction(s): Enrollment is limited to students with a major in Education
Evaluation & Research, enrollment is limited to Graduate level students.

EER 8992 Research and Experimental Design Cr. 3-4
Design of empirical research for students possessing basic knowledge
of statistics. Topics include hypothesis construction, sampling theory,
experimental and quasi-experimental designs, selection of statistical
procedure, and construction of data gathering instruments. Offered Fall,
Winter.
Prerequisite: EER 7630, with a minimum grade of C
Restriction(s): Enrollment is limited to Graduate level students.