Research Methods Courses	
ACCTG 501	**Research Methods in Accounting**
ADTED 550	**Qualitative Research in Adult Ed** (Introduction to the theory, principles, and practice of qualitative research)
ADTED 551	**Qualitative Data Analysis** (Students learn to analyze data qualitatively by engaging in, and continuously reflecting on the process)
A ED 502	**Research in Art Education** (Examination of past and present research in art education, an introduction to general methods of research, and critical evaluation of research in art education)
AEE 520	**Scientific Method in the Study of Ag & Extension Ed** (Methods of procedure in investigation and experimentation in education, accompanied by a critical examination of studies made in agricultural education)
AEE 521	**Basic Applied Data Analysis in Ag & Extension Ed** (Continuation of AEE 520; emphasis upon stat techniques)
AEREC 510	**Econometric I** (General linear model, multicolinearity, specification error, autocorrelation, heteroskedasticity, restricted least squares, functional form, dummy variables, limited dependent variables.
AEREC 511	**Econometric II** (Stochastic regressors, distributed lag models, pooling cross-section and time- series data, simultaneous equation models)
ANTH 509	**Research Design in Anthropological Fieldwork-**A survey of research design, sampling strategies, potential biases, confounding problems, and the limits of inference in anthropological fieldwork.
APLNG 581	**Discourse Analysis** (CAS 581; Overview of theories and approaches to the analysis of spoken and/or written discourse)
BB H 505	**Behavioral Health Research Strategies** (Research strategies in behavioral health investigations are examined. Designs and data analytic models relevant to biobehavioral research are included.)
CAS 507	**Issues in Rhetorical Theory** (Theoretical, analytical, philosophical, and critical problems in human communication, with application of humanistic and social scientific research framework)

C I 502	**Qualitative Research in Curriculum & Instruction I** (Presentation of theoretical and practical issues related to designing and proposing qualitative research concerning curriculum, teaching and/or learning.)
C I 503	**Qualitative Research in Curriculum & Instruction II** (Considers forms of qualitative data, data analyses, procedures to generate data relationships, interpretation, and presentation of data)
COMM 506	**Introduction to Mass Communications Research** (The scientific method; survey of basic concepts of theoretical and empirical research; variety of methodology; criteria for adequate research.)
COMM 511	**Mass Communications Research Methods II** (Problems of bibliographical research; evaluation of sources and materials in mass communications history, biography, structure, ethics, and other areas).
COMM 516	**Introduction to Data Analysis in Communications** (To understand and be able to use data analysis techniques common to research in communications.)
COMM 517	**Psychological Aspects of Communication Technology** (Investigation of psychological aspects of human-computer interaction (HCI) and computer-mediated communication (CMC).
CSE 543	**Computer Security** (Specification and design of secure systems; security models, architectural issues, verification and validation, and applications in secure database management systems.)
CSE 565	**Algorithm Design & Analysis** (An introduction to algorithmic design and analysis.)
CSE 586	**Topics in Computer Vision** (Discussion of recent advances and current research trends in computer vision theory, algorithms, and their applications.)
EDLDR 586	**Qualitative Methods in Education Research** (EDTHP 586/HI ED 586; Exploration of the theoretical framework undergirding qualitative research and its attendant practices and techniques.
EDLDR 588	**Qualitative Methods in Educational Research II** (Advanced study of methods involved in executing and analyzing qualitative research in education)
EDPSY 576	**Research Methods in Teacher Education** (A basis in theory, findings from research, research design, and methodologies related to teacher education)
IE 511	**Experimental Design in Engineering** (Statistical design and analysis of experiments in engineering; experimental models and experimental designs using the analysis of variance)
IE 512	**Graph Theory and Networks in Management** (Graph and network theory; application to problems of flows in networks, transportation and assignment problems, pert/CPM, facilities planning)

IE 516	**Applied Stochastic Processes** (Study of stochastic processes and their applications to engineering and supply chain and information systems.)
IE 520	**Multiple Criteria Optimization** (Study of concepts and methods in analysis of systems involving multiple objectives with applications to engineering, economic, and environmental systems)
IE 558	**Engineering of Cognitive Work** (Information processing and decision making models of the human in the modern workplace, emphasizing visual inspection and other industrial applications.)
IST 525	**Computer-Supported Cooperative Work** (Introduces theories, empirical findings, evaluation methods, and design frameworks in computer-supported cooperative work)
IST 541	**Research Qualitative in IST** (Assists IST researchers in their efforts to learn about and employ appropriate qualitative methods in their research.
IST 557	**Data Mining: Techniques and Applications** (Introduction of data mining field, including why data mining, what is data mining, what kinds of data can be mined, what kinds of patterns can be mined, an overview of technologies, the major issues in data mining, and a brief history of data mining community.)
LING 525	**Experimental Research Methods in Psycholinguistics** (Consideration of theoretical and research issues relevant to psychological aspects of language sounds, syntax and semantics, and other cognitive support).
MGMT 538	**Seminar in Organization Theory** (Current theoretical and research issues applicable to the study of design and management of complex organizations)
MGMT 591	**Organizational Research Design** (Experience in designing research for organizational science, to maximize the validity of eventual conclusions; methodological choices, constraints, and compromises (tradeoffs).
MGMT 592	**Qualitative Research Methods** (Provides students with an introduction to and experience with qualitative research methods employed in organizational) contexts
NURS 585	**Qualitative Methods in Health Research** (Provides an overview of advanced qualitative research methodologies useful in the conduct of social and behavioral health research)
PL SC 502	**Statistical Methods for Political Research** (Basic concepts of statistics and their use in political research; data analysis, casual inference, regression analysis, computer applications).
SOC 513	**Sociological Research Methods** (Critical review of methodological issues; research designs; analysis and interpretation of findings)

SOC 518	**Survey Methods I: Survey Design** (Research design for social, behavioral and health surveys)
STAT 500	**Applied Statistics** (Descriptive statistics, hypothesis testing, power, estimation, confidence intervals, regression, one- and 2-way ANOVA, Chi-square tests, diagnostics)
STAT 501	**Regression Methods** (Analysis of research data through simple and multiple regression and correlation; polynomial models; indicator variables; step-wise, piece-wise, and logistic regression)
STAT 502	**Analysis of Variance & Design of Experiments** (Analysis of variance and design concepts; factorial, nested, and unbalanced data; ANCOVA; blocked, Latin square, split-plot, repeated measures designs)
STAT 503	**Design of Experiments** (Design principles; optimality; confounding in split-plot, repeated measures, fractional factorial, response surface, and balanced/partially balanced incomplete block designs)
STAT 504	**Analysis of Discrete Data** (Models for frequency arrays; goodness-of-fit tests; two-, three-, and higher-way tables; latent and logistic models)
STAT 506	**Sampling Theory & Methods** (Theory and application of sampling from finite populations)
STAT 507	**Epidemiologic Research Methods** (Research and quantitative methods for analysis of epidemiologic observational studies. Non-randomized, intervention studies for human health, and disease treatment)
STAT 512	**Design and Analysis of Experiments** (AOV, unbalanced, nested factors; CRD, RCBD, Latin squares, split-plot, and repeated measures; incomplete block, fractional factorial, response surface designs; confounding)
STAT 513	**Theory of Statistics I** (Probability models, random variables, expectation, generating functions, distribution theory, limit theorems, parametric families, exponential families, sampling distributions)
STAT 514	**Theory of Statistics II** (Sufficiency, completeness, likelihood, estimation, testing, decision theory, Bayesian inference, sequential procedures, multivariate distributions and inference, nonparametric inference)
STAT 518	**Probability Theory** (Measure theoretic foundation of probability, distribution functions and laws, types of convergence, central limit problem, conditional probability, special topics)

STAT 557	**Data Mining I** (This course introduces data mining and statistical/machine learning, and their applications in information retrieval, database management, and image analysis)
STAT 561	**Statistical Inference** I (Classical optimal hypothesis test and confidence regions, Bayesian inference, Bayesian computation, large sample relationship between Bayesian and classical procedures)
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