

Graduate Research Training			
Skill/Concept	All HDSP students	All LS students	My students
<i>Please use the rating scale to the right to rate what level of exposure you think each group of students should have to each concept.</i>	<i>0=not necessary 1=familiarity 2=applied experience</i>	<i>0=not necessary 1=familiarity 2=applied experience</i>	<i>0=not necessary 1=familiarity 2=applied experience</i>
Theory/Philosophy of Science			
○ Epistemology			
○ Ontology			
○ Scientific method			
○ History of Science			
○ Research ethics			
○ Subjectivity/Objectivity			
Research Design/Methods			
○ Developmentally appropriate measurement			
○ Cultural appropriateness			
○ Designs			
○ Case study			
○ Ethnography			
○ Correlational			
○ Experimental			
○ Natural experiment			
○ Quasi-experiment			
○ True (random assignment) experiment			

○ Developmental designs			
○ cross-sectional			
○ longitudinal			
○ panel			
○ microgenetic			
○ Regression to the mean			
○ Validity – general concept			
○ Validity – subtypes (e.g. internal, external, face, convergent, divergent)			
○ Reliability – general concept			
○ Reliability – subtypes (e.g. test-retest, split-half, interrater)			
Data Collection			
○ Sampling			
○ Survey/questionnaire design			
○ response options			
○ item analysis			
○ internal consistency			
○ validity/lie scales			
○ Ethnography			
○ participant observation/fieldnotes			
○ ethnographic interviews			
○ Researcher positionality			
○ Life history approach			
○ Narrative approach			
○ Simulations/modeling			
○ Diary methods – time diary, ESM			

○ Interview methods			
○ Structured			
○ Semi-structured			
○ Clinical/open			
○ Systematic Observation			
○ structured/lab			
○ unstructured/naturalistic			
○ interobserver reliability			
○ observer bias/influence			
○ Physiological measurement techniques			
Data Analysis			
○ Descriptive Statistics			
○ Distributions/transformations			
○ Bivariate statistics			
○ Correlation			
○ T-test			
○ Chi-squared test of independence			
Multivariate statistics			
○ General linear model			
○ ANOVA			
○ MANOVA			
○ ANCOVA, MANCOVA			
○ OLS linear regression			
○ LOGISTIC regression			
○ LOGIT, PROBIT			
○ Path analysis			
○ Structural equation modeling			

○ Hierarchical linear modeling			
○ Econometric methods			
○ Selection effects			
○ Fixed-effects models			
○ Two-stage least squares			
○ Instrumental variables			
○ Longitudinal data analysis			
○ Growth curve analysis			
○ Time-series analysis			
○ Survival analysis			
○ Data reduction/grouping techniques			
○ Factor analysis			
○ Cluster analysis			
○ Discriminant function analysis			
○ Weighting			
QUALITATIVE ANALYSES			
---Coding:			
-inductive			
-deductive			
---Domain analyses			
---Constant Comparative Method			
---Analytical Induction			
---Discourse analysis			
-- Critical Discourse Analysis			
---Conversational Analysis			
--Video analyses			

Writing/Presenting/Professional Development Skills			
○ Manuscript/abstract writing			
• APA style			
• Chicago style			
○ Paper submission/revision process			
○ Grant writing/submission process			
○ Writing scientific reviews			
○ Conference submissions/presentations			
• Using Powerpoint			
• Poster presentations			
• Paper/symposium presentations			
○ Job search process			
• CV writing			
• Job talks			
• Interviewing			
• Negotiating your first job			
Please add and rate any major concepts we've missed....			

Thank you! Do you have any additional comments about this form or about SESP graduate methods training? Add them below.