The Ph.D. Program in Psychology Quantitative Concentration

Students in doctoral training-area areas in the Psychology program at the CUNY Graduate Center interested in pursuing a 'Quantitative concentration' can do so by completing the following requirements. The 'quantitative concentration' is administered by the Psychology doctoral program and therefore will not result in a demarcation on your diploma. Successful completion of the concentration, however, can be formally recognized on the student's CV and other professional documentation.

I. Required Courses (6 credits)

- o Statistical Methods In Psychology I (Psych 70500; CUNY)
- Statistical Methods In Psychology II (Psych 70600; CUNY)

II. Quantitative electives (9 credits)

Students must also complete at least three 'advanced' or 'upper-level' quantitatively oriented courses. The list below is not complete and other courses may fulfill the 'advanced courses' requirement. For example, students may fulfill some of these elective requirements via the CUNY consortium agreement. If students wish to take courses not listed below to fulfill this portion of the requirement, they must obtain approval from the BASP training area head *in advance* and/or *prior to registration*.

- o Mathematics for Social Scientists (Epsy 88000; CUNY)
- o Path Analysis, Factor Analysis, and Structural Equation Models (EPSY 83400; CUNY)
- o Multivariate Statistical Methods (PSYC 70700, CUNY)
- o Categorical data analysis (Epsy 83500; CUNY)
- o Hierarchical linear models ((PSYC 86002 or Epsy 84200; CUNY)
- o An introduction to psychometrics (PSYC 76000 or Epsy 73000; CUNY)
- o Advanced Psychometrics (PSY86000, CUNY)
- Introduction to Meta-analysis (PSYC 86003, CUNY)
- o The General Linear Model (EPSY 83300)
- Applications of Bayesian Decision Theory to Educational and Psychological Problems (EPSY 83600)
- o Statistical Analysis with Missing Data (EPSY 84100)
- o Methods of demographic analysis (Soc 81900; CUNY)
- *Methods for Analysis of Change (Psych 2248; NYU)*
- o Structural Equation Methods ((PSYC 86001 CUNY or Psych 2247; NYU)

NOTE: Students must obtain at least a 'B' in all required and elective courses to be eligible for the quantitative concentration.

- III. **Application**. In order to receive the quantitative concentration designation, students must also demonstrate an ability to correctly conduct an advanced quantitative analysis. Toward this end, the student must conduct, report, and be evaluated on set of 'advanced' analyses for a research project. The write-up of the advanced analyses make take the form of a published paper, an independent written 5-7 page report, or as a portion of the student's dissertation.
 - <u>Procedures.</u> Generally, there will be two major parts to the application stage: (1) pre-approval of 'application' proposal (BASP Quantitative Concentration Proposal Form) and (2) Evaluation/approval of quantitative concentration project (BASP Quantitative Concentration Completion Form).

BASP Quantitative Concentration Proposal Form. Students must complete the BASP Quantitative Concentration Proposal Form, prior to beginning there quantitative concentration project. Generally, there are four steps to the BASP Quantitative Concentration Proposal stage: (1) selection of a minimum of two faculty members' to evaluate the respective analyses (the Quantitative concentration committee), (2) write- up of one-page description (i.e., summary of research project, selection of advanced analyses, and rationale for analyses), and (3) pre-approval of selected 'advanced' analyses by quantitative concentration committee. Upon completion of the BASP Quantitative Concentration Proposal Form, students should submit the Concentration proposal form and the one-page write up to obtain (4) final approval by the training-area head of BASP.

At step one; the student must identify a minimum of two faculty members that are willing to evaluate the completed data analyses. The two faculty members will serve as the 'Quantitative concentration' committee. The faculty members may have specific quantitative expertise (i.e., is a 'quant.' person) *or* may have sufficient experience in the respective analyses that he or she qualifies to evaluate the analyses. The training area head must approve of the Quantitative Concentration committee.

BASP Quantitative Concentration Completion Form. Upon completion of the final report, students should submit materials to the quantitative concentration committee for evaluation. The review committee will independently evaluate the report and then meet to discuss decision ('Fail'; 'Revisions required'; 'Pass'). Students that receive approval from their committee should then complete the BASP Quantitative Completion Form. The form requires original signatures from both

committee members indicating completed evaluation, as well as approval of analyses/report.

Upon final approval, students should submit the BASP Quantitative Concentration Completion Form (with original signatures) and the full write-up of the report to the BASP-training area head.

IV. **Final Approval.** Upon completion of all required courses, advanced electives, submission of the Quantitative Concentration completion form to the BASP training-area head, the training area-head will provide final approval. Students that complete all of the above requirements and obtain BASP-training area head approval, can formally recognize the 'Quantitative concentration' on their CV/other professional documentation.

Formal designation is recognized on the student's CV/resume, under 'Education' and the 'PhD' section for BASP. The distinction, however, could also be listed in signature format, for example, as follows:

<u>J. Doe</u>
<u>Ph.D., Social Psychology</u>
Formal Concentration, Quantitative Psychology