

## Minor in Quantitative Methodology

Students pursuing a graduate degree (MS and/or PhD) within the major of Psychology may obtain a Minor in Quantitative Methodology.

### Students wishing to earn a Minor in Quantitative Methodology should do the following:

1. Email the Chair of the Quantitative Minor Committee and cc your faculty mentor to indicate that you intend to complete the minor. In this email, outline how you have completed or plan to complete the requirements (A through E) listed below.
2. At least 1 semester before you plan to graduate, complete [this survey](#) to obtain final approval for the Quantitative Minor.

### Requirements:

Approval to pursue the Minor is contingent on:

- A. Being a student pursuing a graduate degree in Psychology in good standing. Written approval of the student's primary advisor.
- B. Completion of the standard 2-course sequence in graduate statistics in the Department with a grade of B+ or higher, or an approved waiver of this criterion based on equivalent prior coursework. The two required courses are Statistical Analysis 1 (PSY 2005) and Statistical Analysis 2 (PSY 2010).
- C. Completion of 3 additional courses in advanced quantitative methods with a grade of B+ or higher. These courses may be completed within or outside of the Department of Psychology. The psychology department offers advanced quantitative methodological courses (e.g., Structural Equation Modeling PSY 2090 and Mixed Effects Models, PSY 2035). In addition, students may take advanced quantitative courses in other departments in the college (e.g., Department of Statistics, Department of Political Science), or outside of the college (e.g., School of Education, Carnegie Mellon University Machine Learning program). A list of previously approved courses can be found on KennyNet (Psychology KennyNet > Programs > Quant minor > QuantPublic (open to all)). Additional courses can be proposed by trainees and will be approved on an ad hoc basis following a review of the syllabus by the committee.
- D. Enrollment in (1 credit) and attendance of at least one semester's worth (6 lectures) of the [Community for Advanced Methodological Learning \(CAMEL\)](#) series, including a presentation of one lecture on a topic approved by the CAMEL organization committee. Please refer to the [CAMEL Student Presentation Guidelines](#) on KennyNet when preparing your presentation.
- E. Demonstration of mastery of quantitative methodology through the inclusion of an advanced technique as part of a milestone project (not proposal) or a first-authored or co-

authored project, which has been approved by one of the affiliated quantitative faculty. A co-authored project is acceptable if the student led the quantitative analysis and can identify and detail their contributions as such.

**Evaluation of each of the proposed requirements are as follows:**

1. For academic requirements B and C above, successful completion of the coursework with a grade of B+ or higher in each of the 5 courses will be evaluated by a review of the trainee's transcript.
2. For academic requirement D, confirmation of attendance to CAMEL will be ascertained by review of the sign-in sheets collected at each meeting, and satisfactory presentation will be judged by one of the quantitative faculty in attendance on the date of the student's presentation.
3. Finally, successful completion of requirement E, inclusion of an advanced methodological technique in a milestone project (i.e., Master's Thesis, Comprehensive Exam, or Doctoral Dissertation) or independent project, will be evaluated by one committee member. The criterion for satisfactory completion will be commensurate with the requirements associated with the milestone project (i.e., the technique would need to be judged to be acceptable for satisfactory completion of the milestone project) or consistent with expected publication standards in the field, should the student choose to pursue an independent project. A committee member is not required to be part of the milestone project committee, and in the case that there is not an affiliated faculty member on the committee an independent evaluation of the application of the advanced statistical technique will be performed.

**Quantitative Minor Committee:**

For the purposes of evaluation, the following faculty below will constitute the Quantitative Minor committee. This committee will be expanded or modified as needed moving forward and contingent on the availability of faculty with adequate expertise.

Drs. Scott Fraundorf, Marquis Hawkins, **Rebecca Reed (chair)**, and Colin Vize