Proficiency Exams

EDP 380C.2 Fundamental Statistics is a required prerequisite course for all EDP graduate students (with the exception of Counselor Education master's students, and Quantitative Methods doctoral students). EDP offers a Statistics Proficiency Exam during EDP New Student Orientation - a passing score on the exam allows students to skip EDP 380C.2 Fundamental Statistics. Students must either pass the Proficiency Exam OR complete the course - no waivers are allowed for this course. While the exam is optional, students who have taken a statistics course at the college level are highly encouraged to attempt it, as the exam is free, the score is not recorded on transcripts, and passing it allows a student to skip an otherwise required course.

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Proficiency Exam in Statistics

All Educational Psychology students (with the exception of Counselor Education master's students and QM doctoral students) must pass the Statistics proficiency exam OR take EDP 380C.2 Fundamental Statistics.

Exam Info

Proficiency exams take place during New EDP Student Orientation in August. Because our programs have many course requirements, we highly encourage you to take the proficiency exam to see if you really need the prerequisite course. If you have completed a statistics course at the college level, you are likely to have acquired the knowledge essential for the exam. A review of what you learned, as well as of the material indicated in our reading list below, is likely to go a long way as a refresher of your existing knowledge.

The exam is multiple choice. Calculators are not permitted in the exam; little-to-no calculation is required for the exam.

Exam Topics & Resources

The topics to be covered in the statistics prerequisite course, and to which students should direct their attention in preparing for the proficiency exams, are listed below:

1. Standard notation and review of basic algebra
   - Summation notation
   - Basic algebra

2. Scales of Measurement
   - Nominal, ordinal, interval, and ratio levels

3. Measures of central tendency and variability
   - Mean, median, and mode
   - Variance and standard deviation
   - Standard (z) scores
   - Quartiles

4. Statistical inference
   - Basic concepts
   - Normal curve
   - Sampling distributions and their characteristics
   - Standard error
   - Confidence interval estimation and interpretation

5. Hypothesis testing
   - Logic of hypothesis testing
   - Significance levels
   - One- and two-tailed tests
   - Type I and II errors
   - Power – factors influencing power
   - p-values

6. Inferential statistics (Use of, calculation of, interpretation of, and link between research question and selection of appropriate statistic below as well as their associated assumptions)
• One-sample z- and t-tests
• t-test of independent- and related-samples
• Chi-square goodness of fit
• Chi-square test of independence
• One-way ANOVA
• Simple correlation (Pearson r)
• Simple regression
  • Homoscedasticity
  • Standard error of estimate

Some suggested resources for review are listed below:


Exam Accommodations

Any student with a documented disability (physical or cognitive) who requires academic accommodations should contact Services for Students with Disabilities in the Office of the Dean of Students at 512-471-6259 (voice) or 512-410-6644 (videophone) as soon as possible to request an official letter outlining authorized accommodations.

Proficiency Exam in Measurement & Evaluation

⚠️ Notice: as of May 2018 the Measurement & Evaluation Proficiency Exam is no longer offered.