

Qualifying Examination Policy
Effective Fall 2020
Joint Program in Survey Methodology
Michigan Program in Survey and Data Science

1. Purpose

Students applying to the PhD program in survey methodology come from a variety of backgrounds. The purpose of the Qualifying Examination (QE) is to test students on their mastery of survey methodology at a level equivalent to that of the successful MS students from the Joint Program in Survey Methodology (JPSM) and the Michigan Program in Survey and Data Science (MPSDS). To assure that all PhD students are equally prepared for the next stages of their doctoral degree, they must pass the QE.

2. Format

The qualifying examination is an 8-hour, written examination. Examinations are administered in each student's home program office under supervision of faculty and/or staff of the Program. The examination typically will begin at 9AM and end at 5PM. Students should bring their lunch. While restroom breaks are allowed, students will otherwise not be able to leave the examination room until the exam is complete.

At the discretion of the Director, the examination may be done on departmental laptops (with no Internet connection). The examination is "closed-book"; that is, the student must complete the examination without the assistance of any notes, books, articles, personal contacts, cell phones, or other outside help. The use of calculators is permitted.

Questions on the QE will consist of material from the courses listed in Section 4 below. Students may be asked to:

- a. Provide an integrated summary of the research literature concerning a problem in survey methodology
- b. Solve a problem involving properties of statistical estimation
- c. Apply statistical analysis procedures to data
- d. Propose a research design that will address a specific question in survey methodology
- e. Critique approaches or hypotheses to research, based on the research literature
- f. Invent, justify, and critique alternative hypotheses about the causes of survey error

An example of the QE will be made available to the students.

3. Schedule

All PhD students must complete the qualifying exam within 12 months of their entry into the program. JPSM part-time students who are working full-time, must petition their Program director to be granted special permission to complete the exam within 24 months of their entry into the program. The exam will generally be offered the 4th Friday in May, which makes it possible for incoming students to take the exam before they formally begin the PhD program; incoming students must have the permission of the Director in order to take the QE prior to the start of their first term of doctoral studies. In unusual circumstances (e.g., illness or other severe personal emergency), exceptions to the required timing may be granted at the discretion of the Director of the program. Not completing the relevant courses mentioned in Section 4 will NOT be grounds for an exception.

4. Coverage of the Examination

There will be one exam for students consisting of material from courses in the MS in Survey and Data Science across all three emphases (Social and Psychological Science, Survey Statistics and Data Science). The qualifying examination will cover material from the following courses:

1. Fundamentals of Data Collection I (SURV 621/SurvMeth 621)
2. Fundamentals of Data Collection II (SURV 622/SurvMeth 622)
3. Fundamentals of Inference I (SURV 740/SurvMeth 740)
4. Fundamentals of Computing and Data Display I (SURV 627/SurvMeth 627)
5. Total Survey Quality I (SURV 720/SurvMeth 720)
6. A basic sequence in data analysis (e.g., SURV 615-616/SurvMeth 685-686 or corresponding Biostatistics sequence)
7. Applications of Statistical Modeling (SURV 617/SurvMeth 687)
8. Sampling Techniques: either Applied Sampling (Surv 625/SurvMeth 625) or Sampling Theory (Surv 440/SurvMeth 617)

Students will need to be well versed in the content of these courses to be prepared for the Qualifying Exam. Each student will develop a QE preparation plan with their academic advisor and in conjunction with the director of the program. It is assumed that a student with a degree from either JPSM or MPSDS has taken all required courses; preparation will consist largely of reviewing this material. A student who has not already earned an MS in Survey and Data Science from JPSM or MPSDS will prepare by reviewing material from similar graduate courses that they have successfully completed elsewhere and/or by taking JPSM/MPSDS MS courses from the list above, as needed. If the plan includes taking any of these courses, the student must take them for credit and receive a passing grade. The plan will list both courses taken previously and courses to be taken after starting the PhD program.

5. Grading of the Examination

The examination will be administered by members of a faculty QE Committee with grading being conducted by multiple faculty members. Each examination will be given an overall numerical score ranging from 0 to 100. Scores of 75 and above will be deemed **passing**; those of 59 or below will be deemed **unsatisfactory**. Those falling between 60 and 74 will be deemed to have **conditionally passed**.

A **passing** grade indicates mastery of the skills and knowledge expected of a high performing MS level student.

A **conditional pass** indicates that the student has demonstrated mastery of a portion of the tested material but not all. After deliberation of the QE Committee and in consultation with the Director and Associate Director of the student's program, the student will be given a specific set of tasks to perform (conditions), as a way of demonstrating mastery of the relevant areas. Upon fulfilling the conditions, the student will be re-evaluated by the Candidacy Committee to make a final pass/fail decision. If these tasks are performed to the satisfaction of the Committee, the student will be considered to have passed the qualifier. The students failing to meet the conditions will not be permitted to continue in the Ph.D. program.

An **unsatisfactory** grade means that the student has failed to demonstrate sufficient mastery of the research literature and practices of the field to permit continuation in the PhD program. Normally, students would not pursue the PhD further, given this grade. Students may petition the faculty to retake the examination at the next sitting. This will require a vote of the full Faculty. The vote will be the final decision of the Program. Students will be given only one additional chance to pass the qualifier; a minimum numerical score of 75 must be obtained on the second try.

For a student who elects to take the QE prior to the start of their doctoral program, if the result is unsatisfactory, they will be allowed to retake the exam in a year's time.

In order to be considered for candidacy, students must pass the QE unconditionally or satisfy all conditions established by the QE Committee.

Accommodations for Students with Disabilities

University of Michigan

If you think you need an accommodation for a disability, please contact Services for Students with Disabilities (SSD) office to help us determine appropriate academic accommodations. SSD (734-763-3000; <http://ssd.umich.edu>) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information you provide is private and confidential and will be treated that way.

University of Maryland

In order to receive services, you must contact the Accessibility and Disability Services (ADS) office to register in person for services. Please call the office to set up an appointment to register with a DSS counselor. Contact the DSS office at 301.314.7682; <https://www.counseling.umd.edu/ads/>