

**Qualifying Examination Policy**  
**Effective Fall 2025**  
**Joint Program in Survey Methodology**  
**Michigan Program in Survey and Data Science**

**1. Purpose**

Students applying to the PhD program in survey and data science come from a variety of backgrounds. The purpose of the Qualifying Examination (QE) is to test students on their mastery of survey and data science 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 ensure 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 a set of two four-hour written examinations, scheduled on two days. The two examinations are administered in each student's home program office under the supervision of faculty and/or staff of the program. The examinations typically will begin at 1PM and end at 5PM on the Monday and Friday of the fourth week of May. 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 computers (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, personal laptops, or other outside help. The use of stand-alone 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 and data science;
- b. Solve a problem involving properties of survey and data science methods;
- c. Apply survey and data science methods to data;
- d. Propose a research design that will address a specific question in survey and data science;
- e. Critique research, data collection or dissemination approaches, tools, or hypotheses, based on the research literature; or
- f. Invent, justify, and critique alternative hypotheses about the factors that could prevent collecting high-quality data.

A sample QE will be made available to the students as part of their exam preparation.

### **3. Schedule**

All PhD students must complete the qualifying exam within twelve months of their entry into the program. The exam will be offered during the fourth week 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 of the students' program in order to take the QE prior to the start 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 listed in Section 4 will not be grounds for an exception to the required timing.

### **4. Course Coverage of the Examination**

The two exams will cover material from courses in the MS program in JPSM/MPSDS across all three emphases (Social and Psychological Science, Survey Statistics, and Data Science):

1. Fundamentals of Data Collection I (SURV 621/SurvMeth 621)
2. Fundamentals of Data Collection II (SURV 622/SurvMeth 622)
3. Fundamentals of Inference (SURV 740/SurvMeth 740)
4. Fundamentals of Computing and Data Display (SURV 727/SurvMeth 727)
5. Total Survey Quality (SURV 720/SurvMeth 720)
6. A basic sequence in data analysis (e.g., SURV 615-616/SurvMeth 685-686 or the 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 QE. 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 a degree from JPSM or MPSDS will prepare by reviewing material from similar graduate courses that they have successfully completed elsewhere if approved by their academic advisor and/or by taking JPSM/MPSDS MS courses from the list above, as needed, based on communications with their academic advisor. 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. Students will receive feedback on their performance in each course-specific area. Each examination will be given an overall

numerical score ranging from 0 to 100. The scores will be classified into the following grades:

- **Passing:** scores  $\geq 75$
- **Conditional passing:**  $60 \leq \text{scores} < 75$
- **Unsatisfactory:** scores  $< 60$

A **passing** grade indicates mastery of the skills and knowledge expected of a high-performing MS level student and fulfills one requirement for candidacy.

A **conditional pass** indicates that the student has demonstrated mastery of a portion of the tested material but not all. After deliberation by the QE Committee and in consultation with the director of the student's program, the student will be required to take a second closed book examination covering the designated list of courses. This exam will be administered on the second Monday of August, and a passing score of 75 or higher based on both the May and August examinations is required as conditions to demonstrate mastery of the relevant areas. Alternatively, if the student chooses (or is advised) to take or retake specific courses, they must sit for the second examination on the fourth Monday of the next May and must again achieve a score of 75 or higher based on the two exams. Upon completion of these conditions, the student will be re-evaluated by the QE Committee, which will make a final determination on whether the student has passed the QE. If the Committee is satisfied that all conditions have been met, the student will be considered to have passed. Normally, the students failing to meet the conditions will not be permitted to continue in the PhD program. Students may petition for an exception by submitting a letter of support from a JPSM/MPSDS faculty member who commits to advising them for the remainder of their program. The petition will be reviewed and require approval by a majority vote of all JPSM/MPSDS faculty. The faculty vote is final and there is no guarantee of a favorable outcome.

An **unsatisfactory** grade means that the student has failed to demonstrate sufficient mastery of the literature and practices of the field to permit continuation in the PhD program. Normally, given this grade, students will not be permitted to pursue the PhD further. Students may petition the faculty to retake the examination at the next sitting. There is no guarantee their petition will be successful. This will require approval by a majority vote of all the JPSM/MPSDS faculty. The vote will be the final decision of the program. Students can petition only one time to re-take the QE; a score of 75 or higher must be obtained on the second try in order to continue in the PhD program.

For a student who elects to take the QE prior to the start of their doctoral program, if the result is unsatisfactory on the first try, they will be allowed to retake the exam in a year's time. In this case, the student must obtain a grade of passing (scores 75 or higher) on the second try to continue in the PhD program. Students with a score lower than 75 on the second try will not be permitted to continue in the PhD program.

In order to be considered for candidacy (i.e., to present a candidacy paper developed during the doctoral seminar classes), students must have passed the QE unconditionally or satisfied all conditions established by the QE Committee.

## **6. Accommodations for Students with Disabilities**

### University of Michigan

Students who require an accommodation for a disability should contact Services for Students with Disabilities (SSD) office to help with determining an appropriate academic accommodation. SSD (734-763-3000; <http://ssd.umich.edu>) typically recommends accommodations through a Verified Individualized Services and Accommodations (VISA) form. Any information provided is private and confidential and will be treated that way.

### University of Maryland

In order to receive services, a student must contact the Disability Support Services (DSS) office to register in person for services. Students should contact the DSS office (301.314.7682; <http://www.counseling.umd.edu/DSS/>) to set up an appointment to register with a DSS counselor.