<u>Comprehensive Exam Policy for students whose catalog is before 2020-2021:</u>

The following discussion elaborates the catalog description of the <u>MS in Mathematics</u> degree program and the university's <u>comprehensive exam policies</u>.

Semester/Quarter: Except for students choosing to do a thesis, candidates for the MS degree in Mathematics must take comprehensive examinations. Students who joined the Math MS degree program before Fall 2016 may choose to follow the rules of the quarter system catalog or the semester system catalog. Students who joined the Math MS degree program in Fall 2016 or later must follow the rules of the semester system catalog.

Semester catalog students:

    Option 1 (General Math): Students in Option 1 must pass two exams:
    One of either Complex Analysis or Linear Analysis
    One of either Abstract Algebra or Topology

    Option 2 (Applied Mathematics): Students in Option 2 must pass two exams:
    One of either Complex Analysis or Linear Analysis
    One of either Numerical Analysis or Probability

Quarter catalog students:

    Option 1 (General Math): Students in Option 1 must pass two of the following three exams:
    Topology, Abstract Algebra, Complex Analysis

    Option 2 (Applied Math): Students in Option 2 must pass two of the following three exams:
    Applied Linear Analysis, Complex Analysis, Numerical Analysis.

Prerequisites: Students taking comprehensive exams must be advanced to candidacy and have a current GPA of at least 3.0 on their program. A student taking comprehensive exams can have at most one course remaining on his/her degree program, not counting those being taken in the same semester as the comprehensive exam.

Registration: Students must register in Math 5960 in any semester they intend to take comprehensive examinations. This course is restricted and authorization must be obtained from the graduate advisor prior to registering. Registering in Math 5960 is otherwise subject to the same deadlines and rules as for other classes. Students may attempt one, two or more comprehensive exams in any semester.

Re-examination: A student may attempt any number of exams in each of, at most, 3 semesters. (In other words, a student may register for MATH 5960 a maximum of 3 times.)

No Shows: Any semester in which a student registers in Math 5960 (and does not withdraw within the usual deadline or by the exam date) counts as an attempt at the comprehensive exams - even if the student does not show up for the exams.

Special cases: Matriculated students who are not otherwise taking classes must pay the Comprehensive Exam Fee (currently $10) at the cashier's office before registering for Math 5960. These students do not need to pay any other fees since Math 5960 is a zero unit class. Non-matriculated students (students who haven't taken courses for a prolonged period and cannot enroll in courses) must apply for readmission to the university. This will require meeting the application deadline and paying the application fee. After being readmitted, such students are matriculated and register for Math 5960 as above.

Frequency: Comprehensive exams are given in all areas, assuming demand, each Fall and Spring semester. The exams are near the end of the semester. The exact time and date of each exam is set and posted by the graduate advisor.

Exam Committees: The exam committee for each exam is set and posted by the graduate advisor. Each exam committee has at least two, and normally three, members.

Content: The graduate advisor and Graduate Studies Committee maintain and review comprehensive exam syllabi. Each provides a list of topics for the given area and a list of reference texts. These syllabi, as well as copies of recent exams, are available on the department web site.

Grading: Each exam is graded A, B, C, D or F by the committee which prepared it. Student names do not appear on examination papers; code numbers are used instead. The committees report their grades by code number to the graduate advisor, who then advises the students of the results.

Passing: A student has passed the comprehensive exams if he/she achieves a B average in two exams (complying with the subject area restrictions for the option) with at least C in each. The semester(s), and the order, in which the exams are taken does not matter.

Comprehensive Exams vs. Thesis: Once a student has attempted a comprehensive exam, it is no longer possible to switch to the thesis option.

Recommended Courses: See below for courses that are recommended as preparation for each of the comprehensive exams. Exam syllabi can be found at the Math Department website.

- Probability: Math 4740 and Math 5740
- Applied Linear Analysis: Math 5021 and Math 5022
- Complex Analysis: Math 4680 and Math 5680
- Algebra: Math 5401 and Math 5402
- Numerical Analysis: Math 5700 and Math 5710
- Topology: Math 4690 and Math 5690

Records: The graduate advisor maintains copies of all comprehensive exams in accordance with the record retention policy of Cal State LA.