DEPARTMENT OF MATHEMATICS
http://www.math.ucsb.edu
College of Letters and Science
University of California, Santa Barbara

Student Name:_____ Perm: _____

Ph.D. – MATHEMATICS – 2022-23

In addition to departmental requirements, candidates for graduate degrees must fulfill University requirements described in the "Graduate Education" section of the UCSB General Catalog.

*A total of **72.0 units** of 200 level courses offered by the Mathematics Department are required for the Ph.D. program, with a grade of at least B or S in each course. Courses fulfilling area requirements (48 units) require a grade average of A- or higher for each sequence. Please refer to the Mathematics Department Graduate Program Handbook for details.*

Time-to-degree: 4 years to advance to candidacy, 6 years to complete the Ph.D.

CORE SEQUENCE COURSE REQUIREMENTS (minimum of 36.0 units)			
Students are required to complete **three** of the following course sequences. A grade average of A- or better is required in each course sequence.			
COURSE #	COURSE NAME	UNITS	GRADES F/W/S
MATH 201A-B-C	Real Analysis	12.0	
MATH 202A-B-C	Complex Analysis	12.0	
MATH 206A-B-C-D	Numerical Analysis	12.0	
MATH 220A-B-C	Modern Algebra	12.0	
MATH 221A-B-C	Topology	12.0	
MATH 240A-B-C	Differential Geometry	12.0	
MATH 243A-B-C	Ordinary Differential Equations	12.0	
MATH 246A-B-C	Partial Differential Equations	12.0	
ELECTIVES (additional units toward the 72.0 minimum required)			
MATH 225A-B-C	Number Theory	12.0	
MATH 227A-B-C	Topics in Topology	12.0	
MATH 228A-B	Functional Analysis	8.0	
MATH 231A-B	Lie Groups and Lie Algebras	8.0	
MATH 232A-B-C	Algebraic Topology	12.0	
MATH 236A-B	Homological Algebra	8.0	
MATH 237A-B	Algebraic Geometry	4.0	
MATH 241A-B-C	Topics in Differential Geometry	12.0	
Courses approved by Exception			
MATH 260	Seminars in Mathematics	4.0	

Area Requirements

All students are required to pass three written Qualifying Examinations and three corresponding course sequences. Please refer to the Mathematics Department Graduate Program Handbook for descriptions of the exams.

Qualifying Exam 1: _____ Course Sequence: _____

Passed on: _____ Area Requirement Completed: _____
Month/Day/Year Month/Year

Qualifying Exam 2: _____ Course Sequence: _____

Passed on: _____ Area Requirement Completed: _____
Month/Day/Year Month/Year

Qualifying Exam 3: _____ Course Sequence: _____

Passed on: _____ Area Requirement Completed: _____
Month/Day/Year Month/Year

Oral Advancement to Candidacy Exam

All students are required to pass an Oral Advancement to Candidacy Exam after completing the Area Requirements.

Dissertation Committee Members:

Chair: _____

Member: _____

Member: _____

Member: _____

Member: _____

Advancement Exam Date: _____

Dissertation Defense: All students must complete the requirements for the Ph.D. with an oral dissertation defense to their Doctoral Committee. This requirement is not waived. Please refer to the Mathematics Department Graduate Program Handbook for details.

Final defense passed on (date) _____

PH.D. DEGREE REQUIREMENTS SATISFIED: _____
Quarter/Year