Mathematics Doctoral Program Overview

This sheet offers a snapshot overview of the typical five-year program. Detailed descriptions and exceptions are available on the Graduate Program website. The forms accompanying some of the benchmarks (denoted by (*)) can be found at http://gradschool.vanderbilt.edu/academics/steps_to_graduation.php.

First Year:

Adviser:	Director of Graduate Studies
Course Work:	The first semester of the three core courses (9 hrs) in topology, algebra and real analysis in the fall and the second semester (9 hrs) of these courses in the spring
Teaching:	Teacher training consists of proctoring a 2-hr calculus study hall once a week and, in the spring, attending a weekly teaching seminar
Benchmarks:	The six core courses must be passed with a grade of B or better
Summer:	Study for two of the three preliminary examinations (in topology, algebra and analysis) given in the week before fall classes begin

Second Year:

Adviser:	Director of Graduate Studies
Course Work:	Three courses (9 hrs) taken in the fall and three courses (9 hrs) taken in the spring (one of these six classes must include a course in complex analysis)
Teaching:	1. attend a new TA orientation session with the Center for Teaching before the beginning of the fall semester 2. serve as a TA for a first-year calculus class
Benchmarks:	1. decide on an area of mathematics to specialize and choose an adviser to supervise research 2. pass two of the three preliminary exams by January
Summer:	1. work on qualifying examination 2. read papers 3. attend conferences

Third Year:

Adviser:	Research Adviser
Course Work:	Three courses (9 hrs) taken in the fall and three courses (9 hrs) taken in the spring (may include Math 9999 for students who have completed at least 36 non-Math 9999 hrs and passed the qualifying exam)
Teaching:	Serve as a TA for a first-year calculus class
Benchmarks:	1. form a doctoral committee within the first two weeks of this year (*) 2. pass the qualifying examination (either a two-hour oral examination or the presentation of a qualifying paper) (*)
Summer:	1. begin working on dissertation 2. attend and present at conferences

Fourth Year:

Adviser:	Research Adviser
Course Work:	Three courses (9 hrs) taken in the fall and three courses (9 hrs) taken in the spring (may include Math 9999)
Teaching:	Serve as the lead instructor of a first-year calculus class with a mentor
Expectations:	1. apply for dissertation enhancement award (*) 2. work on dissertation 3. participate in conferences and seminars 4. publish results

Fifth Year:

Adviser:	Research Adviser
Course Work:	Register for 0 hrs in the fall and 0 hrs in the spring of Math 9999
Teaching:	Serve as a lead instructor of a first-year calculus class
Benchmarks and Expectations:	1. finish dissertation 2. apply for jobs 3. file intent to graduate by Feb. 2 and defend dissertation by mid-April (*) 4. continue to participate in conferences and seminars and publish