Research area: Mathematical Logic
October 28, 2008

Background material

- the predicate calculus
- theories and definability
- computability and unsolvability
- elements of axiomatic set theory

These background topics are DEFINITELY NOT COVERED in our qualifying exams. They are however included in MATH 557 and MATH 558.

Core courses

- **MATH 557: Mathematical Logic.** The predicate calculus. Completeness and compactness. Gödel’s first and second incompleteness theorems. Introduction to model theory. Introduction to proof theory.


Additional courses

Beyond the core courses listed above, a Ph.D. student in mathematical logic ought to take approximately three advanced or topics courses in mathematical logic. In the recent past, topics courses in mathematical logic have been offered as MATH 574 or MATH 597.