Topology – MATH 290 A/B/C

Topics for 2025 Qualifying Exam

290A:

https://mathweb.ucsd.edu/~ssam/290A/notes-290A.pdf

290B

Chapter 3 on cohomology in Algebraic Topology, by Allen Hatcher
https://pi.math.cornell.edu/~hatcher/AT/AT.pdf

More specifically:
3.1 Cohomology groups
3.2 Cup products
3.3 Poincare duality

290C
Intersection theory on manifolds, basic homotopy theory up to and including Whitehead's theorem and the Hurewicz theorem