The books below have been recommended by past DRP mentors or are taken from the DRP Network's list. Some books could fit in multiple disciplines, so check around. We hope that this list will continue to grow. Please send any comments or additions to drp at math.utexas.edu.

Algebra / Number Theory:
- Ideals, Varieties, and Alogrithms by Cox, Little, & O'Shea
- Rational Points on Elliptic Curves by Silverman & Tate
- An Introduction to Homological Algebra by Charles A. Weibel
- Categories for the Working Mathematician by Saunders Mac Lane
- Abstract Algebra by David Dummit and Richard Foote
- Lie Groups, Lie Algebras, and Representations by Brian Hall
- Lie Algebras in Particle Physics by Howard Georgi
- An Introduction to Lie Groups and Lie Algebras by Alexander Kirillov Jr.
- Introduction to Representation Theory by Pavel Etingof, Oleg Golberg, Sebastian Hensel, Tiankai Liu, and Alex Schwendner

Statistics / Probability / Computer Science:
- Heads or Tails: An Introduction to Limit Theorems in Probability by Lesigne
- All of Statistics by Wasserman
- Machine Learning: A Probabilistic Perspective by Murphy
- Machine Learning by Mitchell
- An Introduction to Mathematical Cryptography by J.H. Silverman, Jill Pipher, and Jeffrey Hoffstein
- The Elements of Statistical Learning by Trevor Hastie, Robert Tibshirani, and Jerome Friedman
- An Introduction to Statistical Learning by Gareth James, Daniela Witten, Trevor Hastie, and Robert Tibshirani

Topology:
- Galois' Dream: Group Theory and Differential Equations by Kuga
- Mostly Surfaces by Schwartz
- Basic Topology by M.A. Armstrong
- Knots and Links by Peter R. Cromwell
- Elementary Applied Topology by Robert Ghrist
- Infinite Loop Spaces by John Frank Adams (advanced)
- Topology from the Differentiable Viewpoint by John W. Milnor
- Calculus on Manifolds by Michael Spivak
- An Introduction to Knot Theory by W.B. Raymond Lickorish (advanced)
- The Knot Book by Colin Adams (basic)
- Differential Topology by Guilleman & Pollack
- Topology by James Munkres

Geometry:

An Invitation to Algebraic Geometry by Karen E. Smith, Lauri Kahanpää, Pekka Kekäläinen, and William Traves

- Low Dimensional Topology by Bonahon
- Office Hours with a Geometric Group Theorist by Matt Clay and Dan Margalit (good introduction)

Algebraic Topology:

- Algebraic Topology by Allen Hatcher
- A Concise Course in Algebraic Topology by J.P. May
- Category Theory in Context by Riehl

Graph Theory / Combinatorics:

- Computing the Continuous Discretely by Beck & Robins
- Introductory Combinatorics by Richard A. Brualdi
- Introduction to Graph Theory by Richard J. Trudeau
- Random Graphs and Complex Networks by Remco van der Hofstad
- Random Graph Dynamics by Rick Durrett (recommended as supplement to Hofstad)

Financial Mathematics:

- Arbitrage Theory in Continuous Time by Tomas Björk
- The Concepts and Practice of Mathematical Finance by Mark S. Joshi
- Stochastic Calculus for Finance I: The Binomial Asset Pricing Model by Steven Shreve

Dynamical Systems:

- Introduction to the Modern Theory of Dynamical Systems by Katok & Hasselblatt
- Markov Chains and Mixing Times by Levin, Peres, and Wilmer
- Nonlinear Dynamics and Chaos by Strogatz
- Dynamical Systems: An Introduction by Barreira
- A First Course in Dynamics by Boris Hasselblatt and Anatole Katok

Analysis:

- Space-Filling Curves by Hans Sagan
- The Banach-Tarski Paradox by Tomkowicz & Wagon
- Real Mathematical Analysis by Pugh
- Fractal Geometry: Mathematical Foundations by Falconer

Set Theory:

- Set Theory and Metric Spaces by Kaplansky