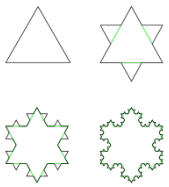
Recent Revevant Courses.



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February 2022

Theoretical Real Analysis (Jan-May 2022)

From website: "We will first review properties of sets and basic logic. Then we will cover the real number system, sequences of numbers, basic topology in the set of real numbers, metric spaces, continuity, differentiability, integration, series, and series and sequences of functions."

Course text: Real Analysis (Silva) Reference: Real Analysis (Rudin)

Astronomical Observing/Data Analysis (Jan-May 2022)

From website: "Throughout the course, students will use computational techniques to work with real astronomical data, taken with our 24 telescope and from data archives." Course includes introduction to computation python techniques and improves understanding of astronomical phenomena

Course texts: Assorted

A, Linear Algebra (Sep-Dec 2021)

From website: "This course develops the theoretical structure underlying answers to these and other questions and includes the study of matrices, vector spaces, linear independence and bases, linear transformations, determinants and inner products."

Course text: Linear Algebra with Applications (Leon)

A-, Modern Physics (Sep-Dec 2021)

From website: "Quantum mechanics successfully describes atoms, molecules, and solids while at the same time calling into question our notions of what can be predicted by a physical theory. Statistical physics reveals new behaviors that emerge when many particles are present in a system." Course covers an introduction to special relativity and four vectors in first half of semester, and quantum mechanics in the second half of the semester

Course text: Assorted

High School

Completed senior year independent study with professor on fundamental concepts in linear and abstract algebra. Two year participant in AwesomeMath summer program. Took summer courses in counting, projective geometry, elementary number theory, olympiad number theory. Was a participant in AoPS AMC 10 problem solving, AoPS olympiad geometry, and a AoPS olympiad training class.