Analysis Courses

Introductory Analysis 1

Term: AU '16 Sem. **Class:** MATH 5201 **School:** The Ohio State University
Grade: A (A-E/F) **Cr.:** (Underg.) **Instr.:** Daniel Thompson

Text: Basic Analysis-Jiri Lebl [Chapters 1-6]

Topics: *Sequences, limits, continuity, differentiation, Riemann integral, sequences and series of functions, Taylor series, improper integrals*

Complex Analysis

Term: SP '16 Sem. **Class:** MATH 4552 **School:** The Ohio State University
Grade: A- (A-E/F) **Cr.:** (Underg.) **Instr.:** Christopher Miller

Text: Complex Analysis And Applications-H. Pathak [Chapters 2-5]

Topics: *analytic functions of complex variables, integral theorems, power series, residues, conformal mapping*

Algebra Courses

Applied Algebraic Topology

Term: AU '17 Sem. **Class:** MATH 4570 **School:** The Ohio State University
Grade: B+ (A+-E/F) **Cr.:** (Underg.) **Instr.:** Ernest Fontes

Text: Algebraic Topology-Robert Switzer [Chapters 1-10]

Topics: *Persistent homology of point clouds for applications to data analysis, real-world applications to data analysis*

Abstract Algebra 1

Term: AU '17 Sem. **Class:** MATH 5111 **School:** The Ohio State University
Grade: A- (A-E/F) **Cr.:** (Underg.) **Instr.:** Silvia Onofrei

Text: Abstract Algebra-Thomas Hungerford [Chapters 1-6]

Topics: *number theory, group theory, vector spaces, linear transformations, field theory, field extensions*

Abstract Algebra 2

Term: SP '17 Sem. **Class:** MATH 5112 **School:** The Ohio State University
Grade: A (A-E/F) **Cr.:** (Underg.) **Instr.:** James Cogdell

Text: Abstract Algebra-Thomas Hungerford [Chapters 7-12]

Topics: *number theory, group theory, vector spaces, linear transformations, field theory, field extensions*

Differential Equations Courses

Partial Differential Equations

Term: AU '18 Sem. **Class:** MATH 4557 **School:** The Ohio State University
Grade: B (A-E/F) **Cr.:** (Underg.) **Instr.:** Yuji Kodama

Text: Partial Differential Equations-M. Gockenbach [Chapters 1-5]

Topics: *1st and 2nd order PDE's, initial & boundary value problems, Fourier series, Green's functions, wave, heat, and Laplace equations, nonlinear PDE's*

Statistics Courses

Bayesian Analysis And Statistical Decision

Term: SP '18 Sem. **Class:** STAT 3303 **School:** The Ohio State University
Grade: A (A-E/F) **Cr.:** (Underg.) **Instr.:** Oxana Chkrebtii

Text: Statistical Decision Making-Ming-hui Chen [Chapters 1-9]

Topics: *formulation of decision problems & quantification of their components, unknown features of a decision problem based on data from Bayesian analysis, characterizing & finding optimal decisions*