Fall 2021
Directed Reading Program
Student Talks

Thursday, December 2nd, 6:30-8:30 p.m.
Friday, December 3rd, 6:30-8:30 p.m.
Saturday, December 4th, 2-4 p.m.
Via Zoom

The Ohio State University
Columbus, Ohio

Thursday, December 2nd

"Matroids"
David Novikov (Mentor: Henry Tsang)

"Generatingfunctionology"
Nigel Krekeler (Mentor: Ian Cavey)

"Complex Analysis and Cauchy-Goursat Theorem"
Gene Tsubasa Harada (Mentor: Michael Lane)

"Non-standard analysis"
Kabir Belgikar (Mentor: Ivo Terek)

Friday, December 3rd

"A topological proof of the infinitude of primes"
Conner Heald (Mentor: Caleb Dilsavor)

"Toric Code"
Ziyao Su (Mentor: David Green)

"The Yoneda Lemma"
River Oxenreider (Mentor: Matt Carr)

"Quaternions for Computer Graphics"
Seth Blankenship (Mentor: Kyle Binder)

"Topological Data Analysis and The Premier League"
Umar Jara (Mentor: Scott Newton)

Saturday, December 4th

"Parrondo's Principle"
Gabby Krugman (Mentor: Amanda Pan)

"One-Dimensional Nonlinear Dynamics and Bifurcations"
Viktor Giordano (Mentor: Kriti Sehgal)

"RSA Encryption in Cryptography"
Rylan Roberts (Mentor: Mario Gomez)

"Speckled Butterflies: How a linear stability analysis predicts the survival of the fittest"
Elizabeth Arend and Athena Stamos (Mentor: Katelynn Huneycutt)

"Maximum Flow Problem"
Yifan Zhu (Mentor: Shreeya Behera)

"Local and global solutions to polynomials"
Yang Gao (Mentor: Bhawesh Mishra)

Directed Reading Program Organizing Committee

Ben Call
Shreeya Behera
Kyle Binder
Ivo Terek Couto
Paul Duncan
Katelynn Huneycutt
Scott Newton

The DRP Committee would like to thank all of the graduate student mentors for their work with their undergraduate students this semester.
We would also like to thank the DRP's advisor, Dr. Dan Thompson as well as the OSU Math Department for providing funding for this program.
Any graduate student who would like to serve on the committee may talk to a current committee member.
Any graduate or undergraduate students wishing to participate in the program in the spring may apply by visiting go.osu.edu/drp at the beginning of next semester.