

# Curriculum Vitae

Michigan State University  
Department of Mathematics

temiztol@msu.edu  
tolgatemiz16@gmail.com

## Education

### Ph.D. - Michigan State University

- August 2023 -
- Ph.D. in Mathematics

### Master of Science - Koc University & Boğaziçi University\*

#### Koc University

- January 2020 - May 2022
- M.S. in Mathematics
- Advisor: Burak Özbağcı
- GPA: 4.0/4.0
- Thesis Area: Low-Dimensional Topology (various problems for 4-manifolds with boundary (such as exotica) via tools from knot theory)

#### \*Boğaziçi University

- I attended Boğaziçi University during my M.S. at Koc University for two terms. (**SPA:** 4.0/4.0)

### Undergraduate - Koc University & University of British Columbia\*

#### Koc University

- September 2016 - May 2020
- Bachelor of Science degree in Mathematics
- GPA: 3.97/4.0 (Summa Cum Laude)

#### \*University of British Columbia:

- I was an exchange student at UBC for one term (Winter 2018).
- SPA: 3.9/4.0.

## Awards and Honors

- Graduation: 2nd Place in the Department of Mathematics & 3rd Place in the Faculty of Science
- Vehbi Koç Scholar (2016-2019)
- TUBITAK 2205 - Undergraduate Scholarship Program (2016-2020)
- TUBITAK-2210/A National M.Sc Scholarship Program (2020-2022)

## Invited Talks

- *Exotic 4-Manifolds via Knot Traces* (Koc University - Graduate Student Seminars) 2022
- *Morse Homology* (Galatasaray University) 2022
- *Exotic Knot Traces* (Low Dimensional Top. Winter School - Alfréd Rényi Institute of Mathematics) 2023

## Research Interests

- Low-Dimensional Topology
- Knot Theory & Its Applications to low-dimensional topology
- Floer Homologies

## Attended Seminars/Workshops

- Tech Topology Summer School Summer 2021
- Mirror symmetry for Looijenga interiors and beyond Summer 2022
- Koc University Student Seminars Spring 2020-Present
- Singularities and Low-Dimensional Topology (Winter school) (Budapest) Fall 2022

## Teaching Experience

### Teaching Assistantship

MATH 101 - Finite Mathematics	Fall 2022
MATH 102 - Calculus for Social Sciences	Summer 2017
MATH 320 - Advanced Linear Algebra	Fall 2018 & Spring 2022 & Fall 2022
MATH 104 - Discrete Mathematics	Spring 2019
MATH 103 - Introduction to Abstract Mathematics	Fall 2019
MATH 208 - Advanced Calculus	Spring 2020
MATH 107 - Introduction to Linear Algebra	Fall 2021
MATH 405 - Differential Geometry	Spring 2022
MATH 401 - Complex Analysis	Spring 2023
MATH 203 - Multivariable Calculus	Spring 2023

## Tutoring

\* The tutoring jobs listed below were completed at KOLT (Koc University Office of Learning and Teaching)

**COMP 110 - Introduction to MATLAB**

Spring 2017

**MATH 107 - Introduction to Linear Algebra**

Fall 2017

**MATH 204 - Elementary Differential Equations**

Spring 2018

## Work Experience

- KOLT (Koc University Office of Learning and Teaching) (Fall 2017-Spring 2019): **Work-study student, tutor.**
- Unicourse ( Summer 2021-Present): **Head of the Mathematics Team & Mathematics instructor for service level mathematics courses:**

Unicourse (a distance learning company) is a start-up founded by some dedicated people who would like to provide undergraduate students with course resources. I have recorded video lectures for many of the service-level mathematics courses (linear algebra, calculus 1-2-3, differential equations) and courses such as Discrete Mathematics offered at Unicourse so far.

## Service - Mentoring

### During my master's years

- Lead an elementary number theory reading group for a group of high school students.
- Lead a Euclidean geometry reading group for a group of high school students.
- Lead a Calculus reading group for a group of high school students.

## Languages

Turkish, English

July 11, 2023