



# Joint Math Program with Voorhees School District

Rutgers-Camden
Department of Mathematical
Sciences





- Introduction
- Summer Program Details
- Admission and Logistics
- Academic Year Program (2023—24)
- Summary and Contact Information
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### Introduction

- Who We Are
- Summer Program Overview
- Program Goals and Objectives

- Department of Mathematical Sciences at Rutgers-Camden: home to world-class faculty active in diverse areas of research
- Provide undergraduate and graduate degrees in a variety of tracks and specializations
- Small class sizes and one-on-one interactions are regular features of our teaching



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- ➤ 30 students will be selected by the Voorhees team to participate in the program
- Students will participate in a fourday program hosted on Rutgers-Camden's campus
- Students will attend a short lecture based on relevant mathematical topics/ideas selected by the Voorhees team, then work on a project/presentation with their peers



### Introduction

Who We Are

- Summer Program Overview
- Program Goals and Objectives

- Cultivate and enhance the mathematical knowledge and experiences of interested students
- Promote a lasting partnership between the Voorhees School District and the Rutgers-Camden math department
- Promote the courses and opportunities provided by the Rutgers-Camden math department to the wider South Jersey region
- Help build the future generation of mathematicians!



- Duration
- Activities
- Curriculum
- Student Expectations

- Four days: June 26—29
- >7-hour days broken up into two sessions by lunch



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- ➤ An opening lecture by a Rutgers faculty member on a chosen topic (see next slide); not more than 30 minutes
- A small-group project related to the lecture topic
- Presentations by each group towards the end of each day



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- Sample daily schedule (summer program):
  - → 9—9:15 AM: Introduction and icebreakers (day 1 only)
  - → 9:15—9:45 AM: Lecture by Rutgers faculty member
  - → 9:45 AM—12 PM: Small group session 1 (supervised by graduate students)
  - ➤ 12—1 PM: Lunch
  - ➤ 1—3:20 PM: Small group session 2 (supervised by graduate students)
  - ➤ 3:20—3:50 PM: Student presentations
  - ➤ 4 PM: Students take the bus back to Voorhees/picked up parents/guardians



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#### Proposed topics:

- ➤ Joy of Math (Dr. Benedetto Piccoli): Explain mathematical ideas with abundance of examples, hands-on activities, images and clips.
- Math and Music (Dr. Siqi Fu): Introduce students to rich connections between mathematics and music.
- ➤ Geometry and Imagination (Dr. Haydee Herrera): Introduce students to the fascinating world of geometry with images.
- Financial Mathematics (Professors Chris Lim and Randy Merson): Introduce students to the mathematics behind investing, interest, saving for retirement, and more.



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- Regardless of topic, group activities and presentations will require students to embody Standards for Mathematical Practice:
  - 1. Make sense of problems and persevere in solving them.
  - 2. Reason abstractly and quantitatively.
  - 3. Construct viable arguments and critique the reasoning of others.
  - 4. Model with mathematics.
  - 5. Use appropriate tools strategically.
  - 6. Attend to precision.
  - Look for and make use of structure.
  - Look for and express regularity in repeated reasoning.



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- > Attend all four sessions
- Participate actively during the lectures and group activities
- Work cooperatively and show respect for fellow students, staff, and faculty
- Follow safety and security guidelines while on campus
- Bring a positive attitude!



### Admission and Logistics

- Eligibility
- Transportation

- ➤ 30 students will be selected based on the following criteria:
  - > 7<sup>th</sup> Grade iReady Math Scale score
  - > 6th Grade Math NJSLA score
  - > Grades in Advanced Math
  - > Attendance
- Students will need to submit an essay for application



### Admission and Logistics

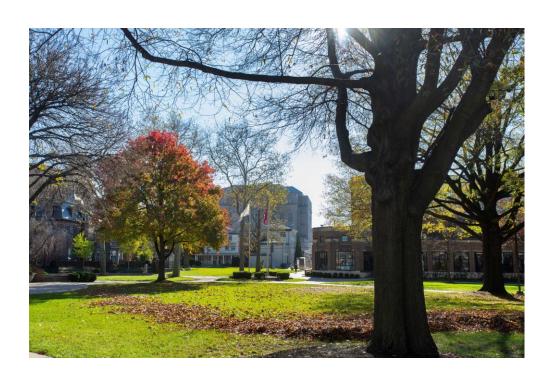
- Eligibility
- Transportation

- Transportation will be provided by the district
- School bus will depart from Voorhees Middle School at 8:15 AM and return at approximately 4:30 PM
- Students are not required to use school transportation; if parents/guardians will be providing transportation, a permission slip will be necessary
- School bus will leave Rutgers at 4 PM sharp—any students who have not been picked up will be required to take the bus back to Voorhees



### Academic Year Program

Program Overview



- October through April (7 sessions, 1 per month)
- Maximum 5 hour day (during school day)
- Transportation will be provided
- Detailed information forthcoming!



## **Summary and Contact Information**



- ➤ We hope to provide a program that is fun and relaxed, but that also pushes students' mathematical abilities.
- Feedback, questions, concerns? Please contact Chris Lim: <a href="mailto:chlim@camden.rutgers.edu">chlim@camden.rutgers.edu</a>
- Thank you for your participation!



# Q-&-A / Next Steps

