



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

Introduction

- Who We Are
- Summer Program Overview
- Program Goals and Objectives
 - 30 students will be selected by the Voorhees team to participate in the program
 - Students will participate in a four-day 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!

Summer Program Details

- Duration
 - Four days: June 26—29
 - 7-hour days broken up into two sessions by lunch
- Activities
- Curriculum
- Student Expectations

Summer Program Details

- Duration
 - **Activities**
 - Curriculum
 - Student Expectations
- 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

Summer Program Details

- Duration
 - **Activities**
 - Curriculum
 - Student Expectations
- 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

Summer Program Details

- Duration
 - Activities
 - Curriculum
 - Student Expectations
- 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.

Summer Program Details

- Duration
 - Activities
 - Curriculum
 - Student Expectations
- 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.
 7. Look for and make use of structure.
 8. Look for and express regularity in repeated reasoning.

Summer Program Details

- Duration
- Activities
- Curriculum
- **Student Expectations**
 - 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:
 - 7th 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:
chlim@camden.rutgers.edu
- Thank you for your participation!

Q-&-A / Next Steps

