How To Make Math Count

K-8 Conference

presented by

Nassau County Math Teachers Association & Nassau County Association of Math Supervisors

Thursday, January 9, 2020
Molloy College

Nassau County Mathematics Teachers Association
Nassau County Association of Math Supervisors

Present a K-8 Math Conference

HOW TO MAKE MATH COUNT

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Thursday, January 9, 2020 8:00 A.M. – 2:35 P.M.

We are pleased to announce that NCMTA and NCAMS will sponsor ***The How To Make Math Count K-8*** conference, held at Molloy College, Rockville Centre, NY, on **Thursday, January 9, 2020**. Join us for this special day, designed to meet the curriculum and assessment concerns of elementary and middle school teachers. Workshops include teacher-tested ideas, models, demonstrations, techniques, and hands-on activities that can be used in the classroom the very next day. We are fortunate to again have exhibitors so you will have an opportunity to speak with vendors and peruse materials.

This year we are thrilled to have leading mathematics educator **Diana Kolhoff** delivering the keynote address. Diana Kolhoff is a Mathematics Educational Consultant and K-12 Instructional Coach serving teachers from coast to coast. She has taught in multiple states and many different contexts, and she brings that diverse experience to her work on equitable mathematics education. Her work in districts across the country is raising both expectations and performance outcomes of our growing diverse populations.

We are happy to offer online registration and payment. The cost is $50, (full-time students or student teachers, $30), which includes a continental breakfast, and lunch.

To Register with a Purchase or Credit Card please use this link

ncmta.memberclicks.net

If paying by a credit card please submit NA for any purchase order fields. You will receive immediate confirmation of your registration. Online Registration will close on January 3, 2020. You will receive an email reminder by January 6, 2020. **If you do not receive a confirmation by January 6 2020, make sure to contact us at make-mathcount@aol.com**. **Your schedule for the day will be waiting for you at the registration desk in the lobby of Wilbur Arts Center on January 9**.

Participants will be scheduled for the keynote address, three out of four sessions, lunch and time to visit the exhibit area. ***Lunch is included in the cost of the conference***. If you have any questions about the program or registration, call Suzanne Golder at 516-662-8378 after 3:15 pm or email makemathcount@aol.com.

CONFERENCE TIME SCHEDULE			
Registration, Coffee, Commercial Exhibits	8:00	-	9:00
Keynote Address	9:10	-	10:10
Session 1	10:25	-	11:20
Session 2 or Lunch and Commercial Exhibits	11:30	-	12:25
Session 3 or Lunch and Commercial Exhibits	12:35	-	1:30
Session 4	1:40	-	2:35

In case of snow and school closing please check our website Ncmta.memberclicks.net

COLUMN A (SESSIONS I & II)

1. ***First Year Teaching 101*** – This is an exciting time to be a teacher. Along with all the many rewards come numerous challenges. Practical information will be presented in this session including advice on getting a teaching job, ways to establish positive relationships with parents and administrators, the importance of participating in various professional development opportunities, importance of staying organized, time-management ideas and creating a relevant professional portfolio. **Grace Parisi**, Long Beach Schools, Pre-Service

2. ***Systematic Use of Ten Frames Develops Children's Visualization of Numbers to 20!*** – Learn how the ten frame develops children's mental images of quantities, anchors numbers to 5 and 10, builds part-whole understanding (cardinality), and fosters connections among modalities. Activities and games build this foundation for mental math. Come learn a method that strategically develops children's visualization skills in a way that builds a foundation for later fact fluency. **Mary Leer**, East West Math, and **Makoto Yoshida**, AMTNJ, Gr K-1.

3. ***Let the Games Begin!*** – Invite your students to participate mathematic games in a safe, fun way. Give your students the opportunity to become cognitively engaged in mathematical thinking. **Audrey Bellovin**, Garden City Schools, Gr K-2.

4. ***Guided Math Groups*** – Learn how to implement guided math group rotations in your classroom TOMORROW. Use guided math groups to better facilitate ANY math curriculum, know your students better, and have fun with math! **Cyndi Nichols**, Commack Schools, Gr K-2.

5. ***Building Fluency with a Deck of Cards*** – Learn a variety of math games using a deck of cards to build fluency across the grades. **Sue Mehr**, Deer Park Schools, Gr K-2.

6. ***Jump Start Your Math Class with Math Stations K-2!*** - Let's "Jump Start" your math class by incorporating fun and engaging math activities that you will make and take with you. Teachers will engage in the math station rotation and actually "do the math." Additional resources will be provided to bring your math class to life! Participants will be able to use materials the very next day with their students. **Christine Lofaro and Leticia Cuthbertson,** Huntington Schools, Gr K-2.

7. ***Learning Hallways*** – Many schools are looking for ways to create additional learning spaces, brighten up their hallways, increase daily physical activity in order to meet state mandates, and increase student learning throughout the school day. Hallway stickers offer multi-sensory learning opportunities and create easy-to-implement active learning spaces! Participants will learn how kinesthetic strategies strengthen learning. They will also participate in some of the activities to get a first-hand experience of active learning! They will understand how easy it is to add kinesthetic strategies to every part of the school day, thus increasing student success and wellness! All participants will receive the Math & Movement Training Manual e-book, and six digital skip counting banners. **Ron Reinken**, Math and Movement, Gr PreK-5.

8. ***Developing Number Sense using Number Talks***– If you implement one type of activity into your class routine, Number Talks might be the most bang for your buck. Number Talks are short, daily exercises designed to build number sense through fluency activities. Students who have strong number sense solve problems in more than one way and check that their answers make sense. You will learn how to use Number Talks to support students as they look for and make numerical relationships to develop flexible computation strategies. **Denise Simone**, Valley Stream 13 Schools, Gr K-6.

9. ***Neuroscience, Mindset and Discourse*** – The Neuroscience, Mindset and Discourse workshop is an innovative approach to math that uses neuroscience evidence with a mindset approach to encourage mathematical discourse. When students are engaged in meaningful conversations it allows students to initiate, deepen and expand their understanding of mathematical concepts. The presented activities

encompass all of the Mathematical Practices and immerse students in learning so they may better achieve the goals of the Next Generation Standards. **Diane Cecere**, Carle Place Schools, Gr K-6.

10. ***Inquiry Based Learning to Enhance the Mathematical Experience for All Learners*** – This workshop will provide insight on an inquiry-based model for teaching mathematical concepts in elementary school. Participants will have an opportunity to engage in this model and learn the impact this structure can have on all students. **Christopher Onorato**, Valley Stream District 30 Schools, Gr K-6.

11. ***Cha-Ching! Classroom Economy in the Elementary Classroom*** – Are you looking for a way to engage your students, promote responsibility, and increase classroom management? A classroom economy allows teachers to establish rules, and award bonuses for specific behaviors. During this workshop, I will share ways how I implement this in my classroom. Teachers will walk away with tools they can use to start their own classroom economy. This type of program can be designed so that it can be implemented at any grade level in the elementary setting–with the experiences getting more involved as students get older. **Shari Bowes,** Lynbrook Schools, Gr K-8.

12. ***Math Routines*** – In this workshop we will go over various math routines that can be used for number talks. Each routine will be described and then participants will go through an example to get a feel for how it works. The content in this workshop will cover all grades K-8, but once you learn the routine you can customize the content for the grade that you teach. **Elana Reiser,** St Joseph's College, Gr K-8.

13. ***Engagement Through Cooperative Strategies*** – Cooperative Learning is NOT group work. More often than not, people think that what they are implementing is cooperative learning, when, in fact, it is merely group work. Studies show that group work is NOT an effective tool for instruction. BUT, true Cooperative Learning is one of the most effective ways to increase student engagement, participation, understanding, and achievement. In addition to the core curricula, schools have to teach the "soft" skills of communicating and working cooperatively. Too often cooperative learning leaves some students doing all the work and others doing nothing. Come learn how to incorporate engagement strategies that will have all students participating and being responsible to the group. These strategies can be used in any subject area at any grade level. We will learn and utilize the strategies across multiple disciplines and grade levels. **Mindy LiBiassi**, Western Suffolk BOCES, Gr K-8.

14. ***Math - Traveling the Distance***– Combining geography and measurement, learn about how to convert units of measure in real world examples. Travel the world using word problems. **Nicole Simon and Theresa Vecchiarelli**, Nassau Community College, Gr 1-5.
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15. ***Differentiated Math Rotations*** – Are you looking for exciting math rotations to engage all of your second grade students? Then this is the workshop for you! We will show you how to create interesting games to meet the needs of your diverse populations. **Christina Moser**, North Merrick Schools and **Jennifer Anderson,** Island Trees Schools, Gr 2.

16. ***Teacher's Tool-Box Kit for Math*** – Strategies and techniques used throughout the comprehensive units of mathematics will be presented. Discussion will be raised on how to use "workshop model" and a daily math journal, to drive inquiry and student directed lessons. Creative ways to use various technology apps will also be shared. **Tia Albig**, Garden City Schools, Gr 3-5.

17. ***Teaching Math Concepts Through Sports***– This workshop will explore the connections that can be made between Math and the sports world. Using a "Math is everywhere" mindset, sample questions will be examined and discussed. **Charles Angeli**, East Meadow Schools, Gr 3-5.

18. ***Strategic Thinking that Develops Multiplication and Division Fluency!*** – Students learn multiplication and division strategies to tackle a variety of computation situations. These strategies empower students to be flexible in their thinking. Explore these strategies along with powerful visual models to support the generalizable thinking needed for stronger number and operation sense. **Rob Nickerson**, Origo Education, Gr 3-5.

19. ***Math Movement!*** – If you are looking for how to integrate multi-sensory activities into your math block, look no further! This workshop focuses on how to engage students using math manipulatives and games to allow students to EXPERIENCE math. **Jessica Ryan**, Lynbrook Schools and Molloy College, and **Lauren Maywald**, Baldwin Schools, Gr. 3-5.

20. ***Actions with Fractions!*** – We will investigate how to use egg cartons to teach fractions and operations conceptually. We will focus on fractions as a quantity and naming and renaming, as well as exploring the rules of adding and subtracting fractions and then multiplying and dividing fractions. We will also investigate the similarities with whole number structures, such as place value concepts and fractions. You will be able to implement these ideas and practices in your classroom immediately. **Cornelis de Groot** and **Nicole Hershey**, University of Rhode Island,
Gr 3-6.

21. ***Tricks are NOT for Kids! Shifting from 'Answer-Getting' to Thinking and Understanding***– Ready to ditch the tricks but need to know the fixes? This session will explore common tricks and how to replace them with sound instruction. Learn how to make concepts stick through sense-making, tools and connections! Say buh-bye to rounding riddles, key words, and butterflies and hello to a world where decimal points don't move (because they don't). **Allison Mello**, Foxborough Schools, MA, Gr 3-8.

22. ***How to Have a Math Fight*** – Discover how the use of open-ended questions and math talk to start a math fight in your classroom. **Diane Viola**, and **Lynn Marie Flynn**, East Williston Schools, Gr 4-6.

23. ***Teaching Visual Algebra to Pre-Algebra and struggling Algebra I students***– Visual Algebra is a powerful way to look at algebraic ideas using the CPA approach (concrete, pictorial, abstract). This workshop will walk teachers through how to get pre-algebra and struggling algebra I students to show algebra visually using a model, describe verbally the meaning of each step and connect this symbolically to standard algebraic algorithms and procedures. Using this approach, students will be able to think deeply about algebraic topics and not rely on rote memorization or rules. **Nancy Lin,** Nassau BOCES, Gr 6-8.

24. ***Number Talks in Middle School***– We will be exploring the hows and whys of number talks in middle school and how they support ALL learners, especially those with special needs and English Language Learners. **Dara Koza**, NYCDOE -PS84, Gr 6-8.

25. ***Equitable Mathematics Acceleration***– Our keynote speaker will expand on how exactly we slow down the pace of instruction to allow students the time to gain a strong conceptual foundation, develop their collaboration and communication skills and still offer access to AP math classes in high school Participants will leave with a clear vision of what the Next Generation of Mathematics Education looks like, where ALL students have access to advanced mathematics in high school without compacting critical foundational content in the middle school and allowing time for a different approach to teaching and learning. **Diana Kolhoff**, ESBOCES, Consultant, Gr 6-8.

26. ***Formative Assessment with Mobile Devices***– In this interactive session you will learn about various ways mobile technology can be used to support students' mathematics learning through free APPs and internet-based tools for mobile devices. *Bring your own mobile device*. **Irina Lyublinskaya,** Teachers College, Columbia University, Gr 6-8.

27. ***Cultivate a Mathematical Mindset*** – Explore the meaning of growth mindset and how it inspires academic achievement for all types of learners. Through activities, we will discuss techniques that promote a positive mathematical environment. Participants will also assess their own mindset. **Marissa Mauro,** Jericho Schools and Molloy College, Gr 6-8.

28. ***Excite While You Enrich – Challenge All Your Students with These Problems*** – Problem solving can bring excitement to your classes. All students can contribute toward solving these problems and benefit from the experience. **Dennis Mulhearn**, Retired, Valley Stream Schools, MOEMS, Gr 6-8.

COLUMN B (SESSIONS III & IV)

29. ***Games for the Next Generation Standards***– Learn about the key changes to NYS Math Standards. Hands-on math games and center activities will be provided that support the Next Generation Standards. You will be able to easily and quickly implement these in your own classroom. **Millie Joyce and Valerie Gossett** Garden City Schools, Gr K-1.

30. ***The Beauty of a Visual Ten-Frame Fact Mastery System***– Use a fact mastery method with ten frames to build students' strategy-rich understanding for calculations to 20. By strategically using and sequencing fact clusters, students learn confidently and joyfully. You will also learn how to assess your students. Participants will receive a color-coded grid of fact clusters and an assessment tool for collecting data that tracks individual student progress within the system. **Makoto Yoshida**, AMTNJ, and **Mary Leer,** East West Math, Gr K-2.

31. ***Guided Math Centers*** – Learn how to facilitate guided math groups successfully in the classroom. Teachers will explore how to teach guided math centers in a multi-grade/level classroom successfully and stress free. **Lisa Mauro**, New Suffolk Common School, Gr preK-2.

32. ***Stepping Towards Computational Fluency in Addition and Subtraction*** – Students learn addition and subtraction strategies to tackle a variety of computation situations. These strategies assist them in being flexible, accurate and efficient during their process. Explore the progression moving students from counting in Kindergarten to reasoning by the end of grade 2. **Rob Nickerson**, Origo Education, Gr K-2.

33. ***Math Talks K-2***– Incorporating math talks in the primary grades. Teachers will learn how to engage their students in conversations around math topics. Best practices will be shared regarding strategies on how to implement math talks into the classroom. You will learn how simple activities can facilitate conversation around math. **Katie Pulvidente**, Valley Stream District 13 Schools, Gr K-2.

34. ***Math Magic and More Returns*** – Are you looking for ways to make math fun for students? In this workshop, you will play a variety of games. These games can be used to supplement or differentiate instruction, as well as be used for math centers. You will leave with a packet of materials to use in your classroom. New games and resources will be shared during this workshop. **Laura Marks**, Island Trees Schools, Gr K-4.

35. ***Come Code*** – Learn the basics of coding and its application in the PreK-12 classroom. No prior knowledge needed. Whatever your tech skill level is, there will be something for you. Come ready to learn and have fun. We will begin with an introduction to coding followed by how you can use it in the PreK-12 classroom. You will also engage in hands on stations. **Rickey Moroney and Francine Wisenewsski,** Molloy College, Gr PreK-8.

36. ***Conversations in the Discourse-Driven Math Classroom*** – This session will focus on strategies for facilitating and enhancing mathematical discussions in the classroom. It will also encourage students to own their learning, build a growth mindset and develop deeper conceptual understanding to prepare them for the next gen standards. **Tyrone Holmes** Curriculum Associates, K-8.

37. ***MATH Rotations***– Participants will explore an exciting way to engage students in math curriculum. This model of teaching involves four different "stations." Throughout the session, we will unpack each station and share ways in which this model can be implemented into individual classrooms. **Alyssa Moirano and Lindsay Cafiero,** East Williston Schools, Gr 1-4.

38. ***Using Origami to Introduce the Properties of a Square!*** – We will use the ancient art of Japanese paper folding (origami) to discover and prove the properties of a square by using origami paper (which is always a square), pencils, markers, rulers, and pipe cleaners. The properties of a square will be written on the origami in the phases of the project. **Helen Rodney,** UFT Math Teachers Committee, Gr 1-8.

39. ***Building Number Sense Through Number Lines*** – Explore strategies and applications for using the number line as a tool to help develop number sense in your classroom. **Linda Burke,** Garden City Schools, Gr 2-5.

40. ***Jump Start Your Math Class with Math Stations 3-5! -*** Let's "Jump Start" your math class by incorporating fun and engaging math activities that you will make and take with you. Teachers will engage in the math station rotation and actually "do the math." Additional resources will be provided to bring your math class to life! Participants will be able to use materials the very next day with their students. **Christine Lofaro and Colleen Mahoney,** Huntington Schools, Gr 3-5.

41. ***Games, Games, Games!*** Do you and your students love to play games? In this workshop many different types of math games will be introduced that will deepen your students' mathematical understanding in a wide variety of areas. Your students will be actively engaged, motivated to learn and have fun!
Maria Castle and Judith Rothman, North Merrick Schools, Gr 3-5.

42. ***Reinforcing Fluencies in Grades 3-5*** – We will share various activities/games/templates that can be used to reinforce and strengthen grade level fluencies in grades 3-5. Activities will be easy to implement and can be reused over and over. Skills addressed will be computation, basic facts and place value. **Jean Scavella and Natalie Rakamaric**, Massapequa Schools, Gr 3-5.

43. ***No Multiplication Without Representation -*** By using a visual strategy to develop a clear understanding of the multiplication of whole numbers, students will be more successful when performing multiplication of rational numbers. Students benefit from the use of the array model to develop basic competency to the area model for applying higher order multiplication. Materials will be provided for you to implement this strategy tomorrow. **Peter Garrity,** Teachers College Columbia University, Gr 3-6.

44. ***The Three Vehicles of Problem-Based Math*** – Math workshop engages students in creative problem-solving, increasing engagement and building lasting understanding. We explore how models, number sentences, and story problems can act as vehicles for turning any standard into a problem-based lesson.
Jeff Lisciandrello, Room to Discover, Gr 3-8.

45. ***The Sound of Fractions***– Some fractions have "boring" decimal equivalents while others are very interesting. In particular, a connection can be made to the notes of a musical scale. Are any of these pleasing musically? Please bring whatever calculator you use. **Roberta Eisenberg**, UFT Math Teachers Committee Gr 4-5.

46. ***Look Deeper into Concepts with Pattern Blocks*** – Algebra, geometry, fractions, symmetry and angles – solve problems with pattern blocks and explore these topics in a fun but challenging way! **Grace Quinlan**, NCMTA, Gr. 4-6.

47. ***Engage Students through In-Classroom Technology*** - The Microsoft Surface line of products have a variety of uses to assist the Mathematics Educator both in and out of the classroom. This technology provides a purposeful and meaningful delivery method for content that will engage students while in class as well as assist them with comprehension of content outside the classroom. **Joseph Bernat**, Nassau Community College, Gr 4-8.

48. ***Beyond Graphing: Make STEM a Reality in Your Classroom*** – Create a pathway towards STEM careers with classroom solutions from Texas Instruments. Learn how to code and get an intro to robotics. Free resources for attendees. **Dana Morse**, Texas Instruments, gr 5-9.

49. ***Puzzling Math*** – Who doesn't love a puzzle? This workshop will explore the benefits of using puzzles in math and provide various types of puzzles for you students to enjoy tomorrow! **Marguerite Spriggs,** East Meadow Schools, Gr 6-8.

50. ***Engaging Students in the Secondary Math Classroom***– This workshop will focus on incorporating Creativity, Collaboration, Critical Thinking and Communication in a 21st century learning environment in order to shift student learning from consumers of information to creators of information. Participants will be able to create a student-centered classroom utilizing apps and web applications which track student progress, inform instruction, and support all learners. **Lisa Downey**, Mineola Schools, Gr 6-8.

51. ***The Beauty of Harmonic Divisions of Golden Rectangle Designs***– The Golden Rectangle has been employed by artists from the Renaissance to Modern Times to convey depth and proportion. Participants will construct Golden Rectangles using the Desmos Calculator and GeoGebra. Diagonal lines drawn from vertices on rectangular grids will form beautiful symmetric designs in color which are suitable for spectacular electronic bulletin board displays. **Stephanie and Neil Cooperman**, AMTNJ, Gr 6-8.

52. ***Intervention Strategies for Struggling Learners in Middle School Mathematics***– In this interactive session participants will learn about specific research-based recommendations to address the needs of struggling learners through focused interventions; discuss how to carry out each recommendation and overcome potential roadblocks to implementing the recommendations; and review examples illustrating specific intervention strategies for different recommendations for teaching specific topics of middle school mathematics. **Irina Lyublinskaya,** Teachers College, Columbia University, Gr 6-8.

53. ***Fun with Functions*** – Use the CBR2 motion detector to replace "explain" with "explore". Through discovery students have fun developing the connection between rate of change and slope. See how creating a graph from a verbal description becomes an easy task. **JoAnn Miltenberg**, T3 National Instructor, Gr 8.

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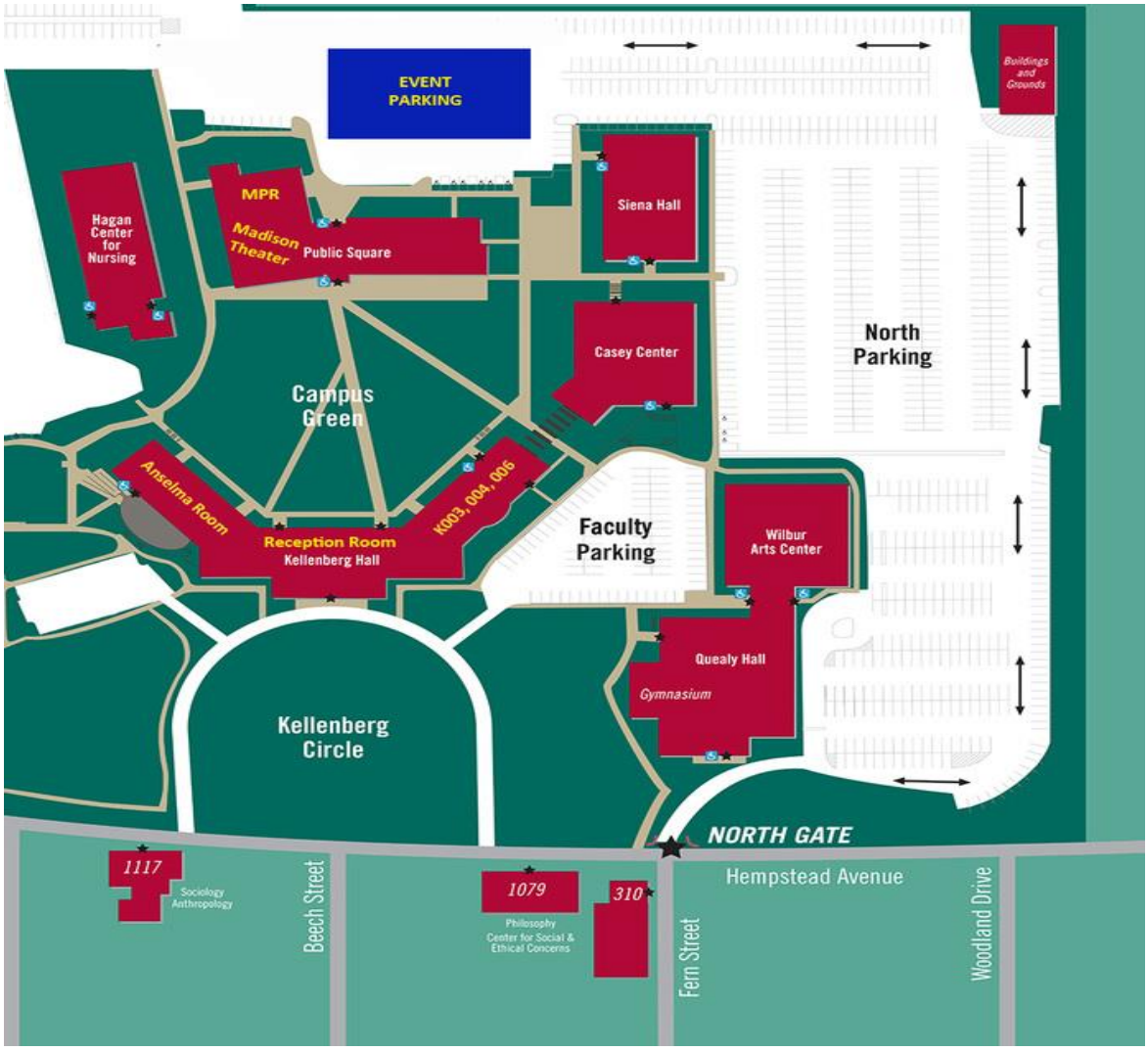
By Car: Take the Southern State Parkway (reached via the Cross-Island Parkway from the Whitestone and Throgs Neck Bridges, or via the Belt Parkway) to Exit 20 southbound. Go south on Grand Avenue to Georgia Street. Turn right on Georgia and continue approximately 1/2 mile. The street name changes to Beech and ends opposite the campus.

By Bus or Train: Take the Long Island Railroad Babylon line from Pennsylvania Station in Manhattan, Flatbush Avenue Station in Brooklyn, or other Babylon line stations to the Rockville Centre Station. (Eastbound travelers inquire for possible change at Jamaica Station.) taxi service is available to and from campus.