

CURRICULUM VITAE

CHARLES KOPPELMAN SENIOR LECTURER OF MATHEMATICS

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EDUCATION

1972 M.A. – Brooklyn College, City University of New York – Brooklyn, N.Y. – Mathematics

1968 B.S. – Brooklyn College, City University of New York – Brooklyn, N.Y. – Mathematics

PROFESSIONAL EXPERIENCE

- 2005 – Present Mathematics Instructor/Lecturer – Kennesaw State University
- 2000 – 2005 Secondary Mathematics Instructional and Curriculum Specialist – Howard County (Maryland) Public Schools
Responsible for observing and providing feedback to non-tenured and tenured mathematics teachers in 32 middle schools and high schools; presenting model lessons; providing training in effective instructional practices, integrating instructional technology and resources to implement county mathematics curriculum; serving as liaison to mathematics education programs at area colleges and to the state department of education; planning and conducting ongoing staff development; interviewing prospective secondary mathematics teachers
- 2002 – 2005 Master Teacher, Summer Institute for Mathematics Teachers (funded by National Security Agency)
Responsible for providing training in instructional technology to high school teachers from Maryland, Virginia, Delaware, and Washington, D.C.
- 1997 – 2000 Adjunct Instructor – University of Maryland, Baltimore County
- 1982 – 2000 Mathematics Teacher and Department Chairman – Wilde Lake High School (Columbia, MD)
Responsible for teaching all levels of high school mathematics up through Calculus III, developing teaching schedules for math teachers, developing curriculum, purchasing textbooks and supplies
- 1985 – 1995 Mathematics Teacher – Howard County After-School Gifted and Talented Math Program
Responsible for teaching Calculus III to mathematically gifted high school students
- 1986 Mathematics Teacher – Johns Hopkins University Center for Talented Youth (CTY) Young Children's Math Program
Responsible for teaching Algebra to mathematically gifted elementary school students
- 1980 – 1984 Adjunct Instructor – Howard Community College (Maryland)
- 1973 – 1982 Mathematics Teacher and Department Chairman – Largo High School (Maryland)
Responsible for teaching all levels of high school mathematics up through Calculus, developing teaching schedules for math teachers, developing curriculum, purchasing textbooks and supplies
- 1978 Adjunct Instructor – Prince George's Community College (Maryland)
- 1968 – 1973 Mathematics Teacher – Far Rockaway High School (N.Y.C.)
Responsible for teaching high school mathematics courses
- 1972 – 1973 Adjunct Instructor – New York City Community College

MEMBERSHIP IN PROFESSIONAL ORGANIZATIONS

- National Council of Teachers of Mathematics (NCTM)
- Georgia Council of Teachers of Mathematics (GCTM)
- Council of Presidential Award Winners for Mathematics (CPAM)

HONORS AND AWARDS

National

- Edyth May Sliffe Award for Distinguished High School Mathematics Teaching (third place nationally), 1995
- Presidential Award for Excellence in Mathematics Teaching for the State of Maryland, 1994
- Massachusetts Institute of Technology Excellence in Teaching Award, 1992 (named by at least one incoming freshman at M.I.T. each year since 1986, as the “secondary school teacher who has been especially influential in his/her education”)
- Samuel Greitzer Outstanding Coach Award from the American Regions Math League (ARML), 1991

State

- Outstanding Teacher Award, University of Maryland Celebrating Teachers, 2002
- Semifinalist: Presidential Award for Excellence in Mathematics Teaching for the State of Maryland, 1987
- Semifinalist: Presidential Award for Excellence in Mathematics Teaching for the State of Maryland, 1985

Local

- Teacher of the Year, Wilde Lake High School (chosen by the senior class), 2000
- Howard Community College Teaching Excellence Award, 1987
- Howard County Chamber of Commerce Excellence in Teaching Award, 1986

TEACHING, SUPERVISION AND MENTORING

COURSES TAUGHT AT KENNESAW STATE UNIVERSITY

MATH 1101, Mathematical Modeling, taught 45 times
MATH 1111, College Algebra, taught 1 time
MATH 3317, Critical Content of ECE Math III, taught 2 times
MATH 3395, Geometry, taught 9 times
MATH 7714, Geometry from Multiple Perspectives, taught 2 times
MAED 4475, Student Teaching, taught 1 time
MATH 4490/7900, Special Topics: Introduction to Non-Euclidean Geometry, taught 1 time

COURSES TAUGHT AT OTHER INSTITUTIONS OF HIGHER LEARNING

Non-Euclidean Geometry, taught 2 times at University of Maryland, Baltimore County
College Algebra, taught 8 times at Howard Community College
Business Mathematics, taught 2 times at Prince Georges Community College
Geometry, taught 2 times at New York City Community College

STUDENT SUPERVISION AT KSU

Directed study capstone projects

- Uhler, Steven *A Parallel World without Rectangles: The Discovery and Development of Non-Euclidean Geometry* (Fall, 2010)
- LaReau, Brad *The Development of Non-Euclidean Geometry* (Spring, 2011)

Faculty Advisor, KSU Chapter of Unite for Sight: KSU student volunteers worked with eye clinics to provide eye care in the community; student volunteers helped at a very successful vision screening event at a Cobb County Elementary School (Fall, 2007).

PROFESSIONAL SERVICE

KENNESAW STATE UNIVERSITY

- 2006 – Present Developed, Implemented, and Coordinated the Kennesaw State University Annual High School Mathematics Competition Program
Advertised the competition to all public and private high schools in Georgia, created competition questions (for both rounds), scored student papers for first round, communicated results to schools, collaborated with members of the Department of Mathematics and Statistics to score student responses to second round
- 2010, 2011 Coordinated MathFest in conjunction with faculty and students from Walton High School 50-75 mathematically gifted high school students, 20-30 of parents, teachers, and school administrators came to the KSU campus for a math contest, math games, multiple presentations by KSU math faculty, a luncheon, and awards ceremony.
- 2006 – Present Coordinated Mathematics Competition awards ceremony and luncheon reception
Held each spring and attended by highest scoring students, their parents, math teachers, school principals, and mathematics faculty from KSU, collaborated with Department of Mathematics and Statistics faculty to provide presentations for guests
- 2006 – Present Collaborated with Dr. Katherine Kinnick (Director of Pre-College Programs at KSU)
Sent letters and brochures to high scoring students from the competition explaining opportunities for joint enrollment at KSU and inviting the students to apply
- 2007 – Present Collaborated with Dr. Ana-Maria Croicu (Department of Mathematics and Statistics at KSU)
Wrote letters of support for an NSF grant to provide scholarships for competition participants, sent brochures to all schools participating in the competition advertising the NSF funded Scholarship Program in Science and Mathematics at KSU

THE PROFESSION

SERVICE TO PROFESSIONAL ASSOCIATIONS:

- 2000 – 2005 Coordinator: Howard County Mathematics/Science Professional Development Conferences, providing wide-ranging professional development for middle and high school mathematics and science teachers
- 1998 – 2002 Member: Steering Committee for the Tri-County Consortium - Regional Professional Development
Network grant funded workshops for mathematics teachers from three Maryland counties (Howard, Montgomery, and Carroll) for technology infusion in instruction and assessment in middle and high school
- 2001 – 2005 Coordinator: Teacher Certification Cohort Program, jointly sponsored by the Howard County Office of Mathematics and Howard Community College
- 2004 Member: Maryland State Department of Education Range-Finding Committee for Geometry Maryland School Assessment
- 2003 Member: Maryland State Department of Education Content Review Committee for Algebra/Data Analysis High School Assessment
- 2001 Chairman: Vendors Committee, MCTM/MAST State Mathematics and Science Teachers Joint Conference – contracted with over 100 vendors of mathematics and science educational materials
- 1991 – 1994 Chairman: Contest Committee, Maryland Council of Teachers of Mathematics; (member, 1991-1997)

THE COMMUNITY

PROFESSIONALLY-RELATED SERVICE TO THE COMMUNITY:

- 2005 – 2007 Coach: Georgia State High School Math Team – mentored team members at practices and accompanied team to national mathematics competition
- 2000 – 2005 Coordinator: Howard County Mathematics League – conducted ongoing competitions involving more than 300 students from 11 Howard County High Schools, wrote the questions for the competitions
- 2000 – 2005 Coordinator: Howard County Mathematics Advisory Committee, organized and held meetings for

- committee composed of citizens and mathematics supervisors to discuss strategies for improving mathematics education in Howard County, Maryland
- 1986 – 2005 Creator and Organizer: Annual Howard County Student/Citizen/Alumni Math Competition [competition between 30-35 members of All-County Math Team, 20-25 college students (math team alumni), and 25-30 mathematicians and other math related professionals from the community]
- 1995 – 1996 Coordinator: Capitol Area Mathematics Competition (two simultaneous competitions, one for middle school students and one for high school students)
- 1991 – 1994 Coordinator: Maryland Council of Teachers of Mathematics (MCTM) Statewide High School Mathematics Contest (approximately 500 students from 50 high schools competed simultaneously at eight regional sites statewide)
- 1982 – 2000 Coach: Howard County's All-County Math Team – conducted weekly practices for 30-35 students selected from all Howard County high schools, accompanied the All-County Math Team to the Capitol Area Math Meet, and to the American Regions Math League Competition at Penn State University each year

SCHOLARSHIP OF TEACHING

PUBLICATIONS

- *Geometry Technology Activities*, Howard County (MD) Geometry Resource Guides for Teachers, 2000 – 2005
- *At the Circus*, Collected Learning Units, NSA Summer Institute for Mathematics Teachers, 2002
- *The Balancing Act*, Collected Learning Units, NSA Summer Institute for Mathematics Teachers, 1995
- Contributing Author: Inaugural edition of Public Broadcasting Service MATHLINE Project's Website Math Challenge
- Articles published in *The Banner*, magazine of the Maryland Council of Teachers of Mathematics, 1985, 1992, and 1993

PRESENTATIONS

- *Teaching Geometry through Discovery with Geometer's Sketchpad* - GCTM Georgia Mathematics Conference, 2013
- *Non-Euclidean Geometry – A Strange Universe* – Math Talks at Kennesaw State University, 2013
- *Mathematics Competitions and the Graphing Calculator* - GCTM Georgia Mathematics Conference, 2012
- *Are You Smarter than a 12th Grader?* – *The Kennesaw State University Mathematics Competition* – Math Talks at Kennesaw State University, 2010
- *Geometer's Sketchpad* – Workshop for Kennesaw State University math faculty and students, 2009
- *Investigating Geometric Curiosities with Technology* – Math Talks at Kennesaw State University, 2009
- *Teaching with Geometer's Sketchpad* – Workshops for Cobb County (GA) middle school teachers, 2008
- *Implementing the Georgia Performance Standards for Geometry with Geometer's Sketchpad* – Workshops for secondary mathematics teachers in the Cobb County (GA) Public School System, 2006
- *Mathematical Curiosities* –
 - NCTM Annual Meeting and Exposition, 2007
 - GCTM Georgia Mathematics Conference, 2007
 - Keynote presentation, Summer Institute for Mathematics Teachers, 2004
- *Using the TI-Voyage 200 Calculator: The Burning House Problem* – GCTM Georgia Mathematics Conference, 2006
- *Make Your Geometry Instruction Dynamic with Cabri Geometry II Plus* – T³ International Conference, 2005
- *Differentiating Geometry Instruction Through Technology with Cabri Jr. and Math ClassTools* – Howard County Mathematics and Science Teachers Conference, 2004, 2005
- *Simulation on the TI-83+/TI-84+ Calculator* – Mathematics Symposium for Middle & High School Mathematics Teachers, (sponsored by the Baltimore-Washington Chamber of Commerce), 2003, 2004
- *Geometry Investigation with Geometer's Sketchpad* – Howard County Mathematics and Science Teachers Conference, 2002, 2003
- *Burning Houses: Using the TI-92 Calculator to Investigate The Burning House Problem* –
 - Frostburg State University Mathematics Symposium, 2001
 - Eisenhower Professional Staff Development State Conference, 1999, 2001
 - MCTM State Mathematics Teachers Conference, 2000
 - Howard County Mathematics and Science Teachers Conference 1999, 2000
 - Mathematics Symposium for Middle & High School Mathematics Teachers, 1999, 2002
 - MCTM State Math Teachers Conference, 1999
- *Visualizing One Variable Data Using the TI-83 Calculator* – Tri-County Consortium Conference, 1999
- *The Balancing Act and the Inclined Plane* – Maryland Association of Science Teachers State Conference, 1996

- *Statistics Save Lives, a Powerful Statistical Application* –
 - NCTM Southeast Regional Conference, 1996
 - MCTM State Mathematics Teachers Conference, 1995
- *Performance Assessment Activities for Precalculus Mathematics* –
 - NCTM Southeast Regional Conference, 1996
 - Dwight D. Eisenhower Professional Development State Conference, 1996
 - MCTM State Mathematics Teachers Conference, 1993, 1994, 1995
 - “Connect Four” State Mathematics/Science Teachers Conference, 1992
- *Physics, Mathematics, and Technology in the Mathematics Classroom* – Dwight D. Eisenhower Professional Development State Conference, 1996
- *Data Organization and Infant Mortality* –
 - “The Year 2000 and Beyond” State Mathematics/Science Teachers Conference, 1992
 - NCTM Southeast Regional Conference, 1991
 - MCTM State Mathematics Teachers Conferences, 1986, 1987

GRANTS

- Special Projects Grant from the Georgia Council of Teachers of Mathematics (2011) for \$2,150 for the Kennesaw State University Mathematics Competition and MathFest 2011
- Special Projects Grant from the Georgia Council of Teachers of Mathematics (2012) for \$2,050 for the Kennesaw State University Mathematics Competition
- Special Projects Grant from the Georgia Council of Teachers of Mathematics (2013) for \$2,050 for the Kennesaw State University Mathematics Competition