

NEMATYC NEWS

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Newsletter of the New England Mathematical Association of Two-Year Colleges

Spring, 2009

NEMATYC 2009

35th Annual Meeting

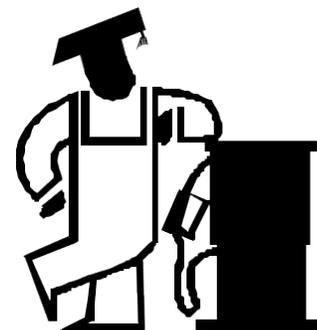
FILL UP YOUR MATH TANK

Southern New Hampshire University

Manchester, NH

Friday and Saturday

April 24-25, 2009



Featured Friday Evening Event—Dinner and McAuliffe Planetarium Show!

Featured Saturday Luncheon Speaker—Kevin Short, Grammy Award Winner, Professor of Mathematics at the University of New Hampshire, will discuss his Award winning work on music restoration, including notable work on a “lost” Woody Guthrie concert.

NEMATYC 2009: Fill Up Your Math Tank

Program and Details Inside

Greetings from your Conference Chairs

By David Cox and Alec Ingraham, NEMATYC 2009 Co-Chairs

Greetings from your conference chairs! The preliminary program for the April 2009 conference can be found in this issue. As you can see, there are a wide variety of topics, everything from making videos to tablet PC's.

We are very excited to offer you a visit to the McAuliffe Planetarium on Friday night. They are in the midst of a major expansion, which will be completed by the time of our conference. After dinner, the planetarium has a show at 7 pm, and then time to visit the exhibits.

Great news - the Saturday lunch speaker is back for NEMATYC 2009! Dr. Kevin Short from the University of New Hampshire will discuss, among other things, his Grammy Award winning work on a Woody Guthrie

Continued on page 2



Co-chairs **David Cox** and **Alec Ingraham**, receive attendees at NEMATYC 2006, also held at Southern New Hampshire University. See the history link at www.NEMATYC.org for highlights of that conference.

NEMATYC EXECUTIVE COMMITTEE 2007-2009

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Visit the NEMATYC website!

At <http://www.nematyc.org>

Webmaster: Rick Butterworth, Massasoit CC

Read this newsletter in color at the website.

Conference Chairs Greeting—Continued

release. There is a short bio of Kevin elsewhere in the newsletter.

We know that economic times are tough, but we hope you can join us April 24/25. Your money will be well spent since the knowledge you gain will stay with you for years. That's just pennies a day to **Fill Up Your Math Tank!** Have a great spring semester, and we are looking forward to seeing you at the conference.

David Cox
Alec Ingraham

Quiz—Which of the following songs did Woody Guthrie compose?

1. Roll On, Columbia
2. So Long It's Been Good To Know Yuh
3. This Land Is Your Land
4. Worried Man
5. Grand Coulee Dam
6. Union Maid
7. Nine Hundred Miles

Answer on page 4.

Carol Henry NEMATYC President

Greetings!

The start of a new semester provides an opportunity for teachers to begin anew, to revitalize our classroom techniques and to spur on a new group of students to aspire and achieve their educational goals. The start of the Spring semester of 2009 is much more than this. As our nation's forty-fourth President takes office, we are a nation of people who are beginning a new semester. Just as a student looks towards a teacher to help guide him through the complexities of the course material, we all are looking expectantly at our new Leader to guide us through these difficult times. In Barak Obama's inaugural address he stated:

We will restore science to its rightful place, and wield technology's wonders to raise health care's quality and lower its cost. We will harness the sun and the winds and the soil to fuel our cars and run our factories. And we will transform our schools and colleges and universities to meet the demands of a new age. All this we can do. All this we will do.

To accomplish all of these goals, our nation needs to have well educated people who have strong science and mathematical skills. Our nation needs a legion of educators who can prepare our youth to meet these challenges.

So, how does this pertain to NEMATYC? Each of us has joined NEMATYC with our own goals in mind. Whether we joined this organization to make new friends, or to network seeking a new job, or to have a forum where we can discuss what happens in our classroom, the one commonality that does bring us together is a love of learning and a desire to be the best teacher that we can be. One way in which we can do all of these things is by attending NEMATYC and AMATYC sponsored conferences, workshops, and special programs where you can share your ideas with others and take their good ideas back to your classroom. This spring there are a number of wonderful opportunities in which you will want to participate.

- *Fill Up Your Math Tank* at our annual Spring conference
April 24 – 25, 2009, Southern New Hampshire University, Manchester, NH
- *Math Across the Curriculum*
Middlesex Community College will hold a workshop this May so that you and a non-math colleague can work together to create projects/lessons that incorporate mathematics into other disciplines.
- *Beyond Crossroad Summer Workshop*
June 11 -12, 2009, Cape Cod, MA

Learn how you can embrace change and improve instruction through implementation of the AMATYC *Beyond Crossroads* standards.

Both are continued on the next page



JANE TANNER AMATYC NORTHEAST REGION VICE PRESIDENT

NEMATYC Colleagues:

I hope everyone is off to a productive semester! I haven't figured out why this time of year is called the "Spring Semester" when I see five foot banks of snow out my window as I write this article.

AMATYC's 2008 Conference in Washington, DC is now over. It was great seeing so many NEMATYC members in attendance. I enjoyed speaking with those of you that I have known for years as well as those who I just met at last spring's NEMATYC conference. If you did not attend, please find someone who did and find out what wonderful things happened. After that, I am sure that you will want to make plans to attend the 35th Annual Conference in Las Vegas on November 12-15, 2009. You will find that there is more to do in Las Vegas than gambling! In fact, be on the look out for several new initiatives. More about that in my next column!

Unfortunately, the economic woes may prevent some of you from attending our Las Vegas conference. But, there are several ways you can still enjoy the professional development opportunities that are available to you. AMATYC is very excited to be collaborating with ASA to offer the first AMATYC webinar on February 26th. Bob delMas will be facilitating this workshop entitled *Emphasizing Conceptual Understanding of Statistics*. More information is available at www.amstat.org/education/amatyc_asa/

Did you know that you can bring workshops to you? Travel funds are getting harder to come by, so why not consider hosting a traveling workshop on one of the following topics: *Beyond Crossroads*, *College Algebra (The Right Stuff)*, *Statistics, Mathematics Across the Community College Curriculum (MAC³)*, *Teacher Preparation*, and *Technology*. These workshops are developed to meet your needs and are cost effective because they come to you. For more information, contact Patrick Averbeck, the Traveling Workshop Coordinator, at Patrick.averbeck@edcc.edu.

There are also Summer Workshops for you to become involved in. One is quite close to home – *The Beyond Crossroads Summer Workshop "The BC Way: Embracing Change for Continuous Improvement"* will be June 11-12 at Cape Cod. If you need travel plans



I would like to mention a few things about this year's Conference registration form. Each year our conference chairs strive to put together this program at as low a cost as possible. Our membership dues have remained at the bargain price of \$5.00 for a number of years. While we have tried to keep your costs stagnant, the organization's expenses have been rising. So, as of this year, the dues have been raised to \$10. A portion of this increase is going towards the Student Math League Awards that are given each year. It is wonderful to see how many more students/schools are participating in these competitions and we would like to recognize the top scoring student from each participating school in NEMATYC's service area. (The service area consists of those New England States that are not represented by their own AMATYC affiliate.) Please make note of the registration dates! You will notice that you can save money by registering early.

As a cost saving measure, the Executive Committee has also made the decision to discontinue the Fall Dinner meetings. Three years ago we held our first Fall Dinner Meeting. This year's meeting was held at the Papa Razzi Restaurant in Wellesley. After a delicious dinner, Dr. H.W. Straley, from the Math Department at Wheaton College, entertained and enlightened us with his dramatic lecture about Sir Isaac Newton. Each of the three meetings that have been held have been well received by those who attended. However, the number of people who have attended the dinners is not sufficient to justify the cost and effort of putting together this event. If you would like to have us continue to offer these Fall Dinner meetings, contact me with your suggestions for increasing attendance and controlling costs.

I look forward to seeing you at Southern New Hampshire University in April!

Carol

A shepherd sent his collie out to count the sheep at the end of the day to be sure they are all there. The collie returns, and says, "We have 40 sheep!" The shepherd says, "We are only supposed to have 38." The collie replies, "I know, I rounded them up."

for July, "GAISEing Beyond the Crossroads: Improving Instruction in Introductory Statistics - a CAUSEway Workshop" will be held in Boulder, CO July 6-10. You can go right from Colorado to Wyoming and attend a MAC³ Summer Institute in Lander, hosted by Central Wyoming College and Sinks Canyon Center. Information about these three workshops is also available at www.amatyc.org/Events/summer-institutes.htm. Another way to become more involved in AMATYC is to belong to a committee. They are:

- Innovative Teaching and Learning (formerly Innovative Pedagogy Strategies)
- Division/Department Issues
- Placement/Assessment
- Teacher Preparation
- Mathematics for AAS Programs
- Developmental Mathematics
- Mathematics Intensive/College Mathematics
- Research in Mathematics at Two-Year Colleges (this is new!)

A lot of these committees have discussion forums available. They are also involved with developing position papers for AMATYC. This is one place where your expertise is needed. More information, including a description and the committee chair, is available at www.amatyc.org under committees.

You may have been wondering what happened to AMATYC's journal, *The AMATYC Review*. The board voted to retire this journal and replace it with something more colorful and pertinent to two-year college math instruction. You may also recall there was a "Name That Journal" contest held during the month of November. The AMATYC Board has given the new journal its name – *MathAMATYC Educator* – after reviewing over 100 suggested names. This first issue of *MathAMATYC Educator* should be available in September. Editor Pete Wildman has been doing a great job tackling this project. He will be joined by the newly appointed Production Manager Jim Roznowski.

Finally, I am looking forward to "Filling Up My Math Tank" during NEMATYC's annual conference. I hope to see you there on April 24-25.

Happy semester!
Jane

Woody Guthrie wrote all of them! ... and lots more.

Born July 14, 1912 in Okemah, Oklahoma. He suffered personal tragedies with the accidental death of his older sister, and family financial ruin in the boom and bust of the Oklahoma oilfields. He married in 1933 and had three children. He hit the road, alone, looking for a way to support his family in the Great Depression.

Woody got a job singing "old time" traditional songs, as well as some original songs, at KFVD radio station in Los Angeles.

He developed a style of social criticism through his music, and identified with the many out of work victims of the dust bowl and depression.



NEMATYC STUDENT MATH LEAGUE RECOGNITION AWARD PROGRAM

The purpose of the NEMATYC Student Math League Recognition Award Program is to foster extracurricular mathematics learning opportunities for students through participation in the AMATYC Student Mathematics League (SML). Annually, the top-placing student in the AMATYC SML Competition in each participating school in NEMATYC's service area will receive a \$100 Recognition Award. (The service area consists of those New England States that are not represented by their own AMATYC affiliate.) In order to receive the award, the student must have competed in both Rounds 1 and 2 of the 2 competition.

NEMATYC encourages you to consider joining the AMATYC SML and participating in this NEMATYC program. Your involvement can be as simple as advertising and conducting a one-hour testing session each semester. It can include pre-test study sessions, or even a campus mathematics club. It may be noted that AMATYC is a sponsor of Mu Alpha Theta, a national mathematics honor society primarily for high school students but which supports two-year college chapters as well. Information on both the SML and Mu Alpha Theta is at the AMATYC web site, www.AMATYC.org.

NEMATYC Student Math League Recognition Award Program 2008-2009

Last year NEMATYC presented its second \$100 Student Math League Recognition Awards at the annual conference at Springfield Technical Community College. Consider bringing your school's award winner to the conference at Southern New Hampshire University this year to receive the award in person.

This year's first round scores were somewhat lower than last year's (was the test harder??). New York schools are leading the pack, with Springfield Technical Community the top school in New England. Congratulations STCC! NEMATYC schools and their rankings in the Northeast Region after Round One are:

3	Springfield Technical CC*	90.0
5	Massasoit CC	75.5
7	Cape Cod CC	60.5
8	Southern Maine CC	58.5
9	Bristol CC	57.0
10	Holyoke CC	51.5
11	Middlesex CC	49.0
12	North Shore CC	48.0
15	Mt. Wachusett CC	25.5

*Watch out STCC, Massasoit isn't far behind!

In the Round One Individual Standings, STCC has two students in the top five in the Northeast. NEMATYC students listed in the Individual Standing for the Northeast Region are:

1	Brian Cowles	Springfield Technical CC	28.5
4	Matthias Galvin	Springfield Technical CC	23.0
9	Quang Nguyem	Southern Maine CC	19.0
9 (tie)	Runfeng Chen	Bristol CC	19.0
11	David Denny	Massasoit CC	18.5
13	John Harper	Middlesex CC (MA)	18.0
19	Michelle Chrisman	Massasoit CC	15.5
19 (tie)	Christopher Clough-Segall	Springfield Technical CC	15.5

The Round Two test of the 2007-2008 competition will be given in late February/early March. It's not too late to join the lively and collegial rivalry among the participating NEMATYC schools. Your students will thank you for giving them the opportunity to compete at the regional and national level.

By Lois Martin, NEMATYC SML Coordinator

NOMINATING COMMITTEE REPORT

The NEMATYC Nominating Committee is pleased to present the following slate of officers for election at the annual business meeting in April.

VICE-PRESIDENT ONE YEAR TERM

Judy King Judy King, adjunct instructor at New Hampshire Technical Institute since 1998 and Granite State College since 2000, joined the NEMATYC board in an at-large position last year. She has been a NEMATYC member, frequent AMATYC presenter, and presenter at ICTM3 in Istanbul, Turkey, the 3rd International Conference on Teaching Mathematics at the undergraduate level, held during the summer of 2006.

MEMBER-AT-LARGE Two Year Term

(two to be elected)

David Henry Dave Henry is an Instructor of Developmental Mathematics at Bristol Community College. Prior to his current position, he worked as an adjunct faculty member at Massasoit Community College and helped pioneer Massasoit's involvement in the Connecticut Distance Learning Consortium. He earned a B.A. from the University of Michigan, a M.P.A from Framingham State College and M.S. in Mathematics from Salem State College.

Mary Keyhoe Moynihan Mary Kehoe Moynihan has taught mathematics and computer science at Cape Cod CC since 1978. She hosted the 2008 AMATYC Statistics Summer Institute "GAISEing Beyond the Crossroads" and is hosting the 2009 AMATYC *Beyond Crossroads* workshop on Cape Cod.

Eike Satake Eike Satake of Emerson College has been teaching mathematics in Massachusetts for over twenty years, and teaches many of the courses taught in the first two years of college. Additionally, his research interests include statistics, and he has published many articles and texts on the subject.

Nominations will also be accepted and welcomed from the floor prior to the election.

NEMATYC's 3rd Annual Fall Dinner Meeting

A Presentation by Sir Isaac Newton on his Life and Work

On Friday September 26, 2008, amidst the winds and rain of a distant hurricane, Sir Isaac Newton addressed a distinguished body of math educators known as NEMATYC. Sir Isaac talked about his life and his work, taking questions afterwards.

There were some who noted the striking resemblance of Sir Isaac to Professor **Harrison Straley**, a member of the Wheaton College Mathematics and Computer Science Department, who has taught for over forty years at most grade levels from kindergarten through graduate school.

Chuck Straley's research interests include mathematics education, especially discovery learning and mathematics history.



Sir Isaac makes the acquaintance of NEMATYC President Carol Henry.

NEMATYC Members at AMATYC 2008 - Washington DC



That's **Mary Sullivan** (Massasoit), **Meredith Watts** (MassBay), both NEMATYC Executive Committee members, with **Kate Danforth** of NYSMATYC



NEMATYC Vice President **Judy King**, (NHTI), **Phyllis Lurvey** and **Lynne DeSantis** (Hesser College)

NEWS FROM THE CAMPUSES

Benjamin Franklin Institute of Technology

James Giumarra reports that BFIT received an NSF ATE mini-grant that we are administering this academic year and next. We are adapting and implementing an integrated project-based learning model called Technology Gateway designed by the South Carolina Advanced Technological Education (SCATE) center of excellence. Student teams are introduced to a problem scenario and the math, science, and communications are taught when the students discover that they need to know more about a particular topic to develop a unique solution to the problem. Each team writes a report and presents their solution to the class, instructors, and visitors. Two of the four Co-PI's that wrote the grant proposal were Project ACCESS fellows. Contact Jim for further information—jgiumarra@bfit.edu. (Note: to see the grant abstract and a sample project, go to the website www.nematyc.org and look for the Spring 2009 Newsletter Addendum.)

University of New Hampshire—Manchester

Roberta Kieronski reports that she and **Betty Erickson** wrote a Mathematics/Science Partnership Grant entitled Leaders In Mathematics Education (LIME) last summer which was funded by the NHDOE. Twenty one K-6 teachers came to UNHM in July for a one week course in data analysis, statistics, and probability. The course was taught by Professor Kieronski and Professor Erickson. The 21 teachers from the course gave a conference on Jan. 13th from 4-8pm to 74 teachers on what they learned in the course and how they have used this knowledge in their classrooms. The group will meet once more in April to evaluate the course and the success of the grant. Roberta would be happy to talk to anyone who is considering writing a grant. robertak@unh.edu

Middlesex Community College—Connecticut

Peripatetic **Steve Krevisky** reports on recent travels. Steve attended the annual meeting of SABR (the Society for American Baseball Research) in Cleveland where he did a poster presentation on a pitcher named George Uhle, then on to Monterrey, Mexico for the International Congress on Math Education (ICME), his 5th congress! He gave a math and baseball paper, as an example of a best practices application in our classes.

Steve chairs the AMATYC A-NET special interest group on international math education. After Mexico he spent some time in Texas, especially enjoying the friendliness and scenery of the Texas Hill country, centered in Fredericksburg! Next, a math and baseball paper at the AMTNYS NY state math teacher's conference in Syracuse, NY. On to visit the Woodstock site in Bethel, NY, which was a real treat! (Ed: Shades of our Saturday luncheon speaker!) Steve continues to be active as President of the CT SABR Smoky Joe Wood chapter, and we have regular meetings and activities for us baseball junkies. (For Steve's full report go to the website www.nematyc.org and look for the Spring 2009 Newsletter Addendum.)



Emerson College

Eiki Satake reports that he conducted a two-hour research seminar, entitled "Statistics for Clinicians : Current Issues and Their Solutions", at the annual American Speech Language Hearing Association conference, held in Chicago, IL, November 19-21, 2008.

Holyoke Community College

James Morgan reports that Last fall his department welcomed its newest full-time member, **Cathy Dillard**. They have continued to administer the AMATYC Student Math League tests twice per year, and are in their third year of offering this competition. **Aaron Levin**, developmental mathematics coordinator, has been the campus coordinator for a universal design study administered by Landmark College in Vermont. This study focuses on internet technology as it relates to developmental algebra, and it has received good support from both full-time and adjunct faculty on the campus. They have recently received a modest developmental math grant this semester through their campus grant manager. Lastly, **Aaron Levin** and the representatives to their Developmental Education Forum have created and implemented a series of developmental mathematics workshops for faculty teaching these math courses. So far they have offered workshops on assessment and learning disabilities in the DE classroom, and the spring workshops are currently being discussed.

Massasoit Community College

Lois Martin reports that Professor **Mary Sullivan** of the Massasoit Community College Mathematics Department has been chosen to receive the 2009 NISOD Teaching Excellence Award. In only her second year at Massasoit, this outstanding faculty member was nominated and selected by her peers. Mary will be honored at this year's annual Retirement/Recognition event to be held at the Massasoit Conference Center on Friday, April 24, 2009. She'll be sharing the spotlight with fellow mathematics faculty **Sally Barney** and **Lois Martin** who are retiring at the end of the Spring semester.



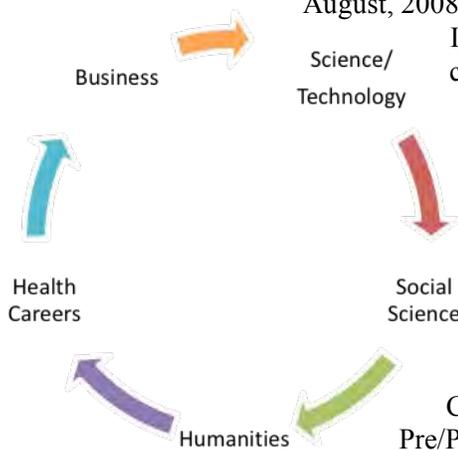
Announcement



Mathematics Across the Curriculum Summer Institute May 18-20, 2009

The Mathematics Department at Middlesex Community College has received an NSF grant to support a Mathematics Across the Curriculum (MAC) initiative. The purpose of this Institute is to provide faculty with time and assistance to develop mathematics across the curriculum activities and assessments. The Institute, modeled after other national MAC programs, offers an overview of the numerous and diverse ways mathematics can be integrated with other disciplines.

ABOUT: In conjunction with this grant, faculty teams from Middlesex attended a three-day Institute in August, 2008. This year's Institute will be expanded to include faculty from other



Institutions as well as Middlesex—8 to 12 teams from 4-year colleges, community colleges and/or high schools. Each team will consist of a Mathematics instructor and at least one instructor from another discipline, who will work together to develop interdisciplinary modules. The purpose of these modules is to make connections for students between Mathematics and other disciplines, to show them an immediate and useful application of the Mathematics and in some cases to unify the methods and language used in the Mathematics and non-mathematics classes. Examples from the 2008 Institute will be presented at this Institute.

Other possible sessions might include: MOD Squad at Middlesex, Quantitative Literacy/Reasoning, MAC and Civic Engagement, Learning Communities Modules, Math Anxiety, Developing Learning Outcomes and Pre/Post Assessment. In addition, the Institute will provide extensive time for Faculty teams to plan together and work with the Facilitator and Evaluator, as well as to share ideas with one another.

FACILITATOR: Deann Leoni, Ph.D, Professor of Mathematics at Edmonds Community College in Washington. Co-PI on the Edmonds Community College/ Seattle Central Community College NSF-sponsored MAC³ Initiative.

LOCATION: to be determined. Some possible sites are Essex Street Inn, Newburyport, MA; Endicott College, Ipswich, MA; Essex Conference Center, Essex, MA.

STIPEND: Participants receive \$60/day to attend the Institute and \$500 after completion, implementation and assessment of their projects. Transportation costs to and from the Institute site are the responsibility of the participants.

INFORMATION AND APPLICATION: For additional information, please contact: Carol Hay, Mathematics Department Chair, PI and Jessie Klein, Associate Dean. Co-PI at: MAC@middlesex.mass.edu .



2008 Institute Participants.

ANNOUNCEMENT

Beyond Crossroads **Summer Workshop** **Cape Cod, MA** **June 11-12, 2009**



The BC Way: Embracing Change for Continuous Improvement

Full implementation of the standards outlined in *Beyond Crossroads* includes making a commitment to continuous improvement in instruction. Come to beautiful Cape Cod to deepen that commitment.

This two-day workshop will have multiple sessions from which to choose. Faculty teams are encouraged to attend, but individuals are welcome as well.

Goals for attendees

- Engage in discussions of the messages of *Beyond Crossroads* and attend sessions that illustrate implementation of *Beyond Crossroads* recommendations.
- Discuss assessment strategies at the class, course, and programs levels which support the Scholarship of Teaching.
- Use one of the *Beyond Crossroads* Implementation Cycles to create an implementation plan for a project of choice.
- Participate in a workshop web site to follow-up and collaborate on the participant's project.

Conference Site and Lodging

The conference will take place on scenic Cape Cod, Massachusetts. With its quaint small-town atmosphere, long sandy beaches, scenic harbors, and fried clams and lobster specialties, "the Cape" is a world famous tourist destination.

The workshop will be held on the campus of Cape Cod Community College. Lodging will be at a beach front resort motel. Attendees can lengthen their stay before and after the workshop.

Participants should make hotel reservations at The Corsair & Cross Rip Oceanfront, 41 Chase Ave. Dennisport, MA 02639, Call 508-398-2279 or Toll Free 1-800-345-5140 for reservations or e-mail: info@corsaircrossrip.com. For general information, visit <http://www.corsaircrossrip.com>. A block of rooms have been reserved for workshop participants. Rooms will be reserved with a deposit for each room of the first night rate, \$104.22, or \$126.16 for guaranteed ocean view room. These prices include taxes.

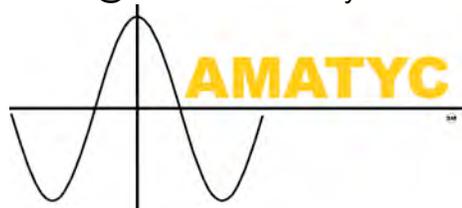


Speakers and Agenda

Keynote speakers will include Pat McKeague, noted speaker and author; Rikki Blair, AMATYC President; Rob Farinelli, AMATYC President-Elect; and other session speakers. In addition to work sessions to create an implementation plan for a project of choice, discussions will focus on planning and implementing change, technology, and assessment.

Registration Information and Timeline

Online registration materials are, or will shortly be, available at <http://www.amatyc.org/CapeCod/>. Registration and hotel reservations must be submitted by May 1, 2009. Contact Rob Farinelli at rfarinelli@csm.edu or Mary Kehoe Moynihan at mymoynihan@capecod.edu for more information.



AMERICAN MATHEMATICAL ASSOCIATION
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The *Beyond Crossroads* Summer Workshops are partially funded by NSF Grant DUE7428-0410842.

CONFERENCE 2009

INTRODUCTION TO THE FRIDAY EVENING EVENT

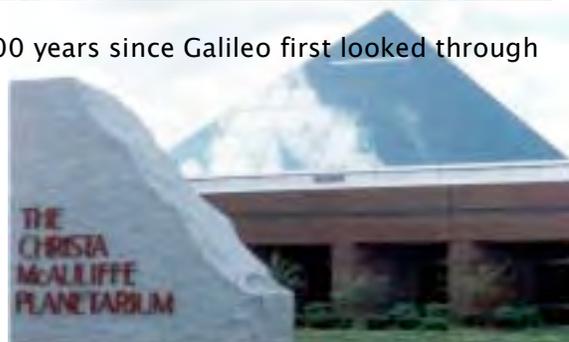


International Year of Astronomy 2009

This is the International Year of Astronomy, celebrating 400 years since Galileo first looked through a telescope and discovered new celestial wonders. The Christa McAuliffe Planetarium is celebrating the year with themed programs.

NOTE: It is too early to tell what the program will be, but you can be sure it will be a stellar experience!

Visit the Planetarium's web site at <http://www.starhop.com>.



INTRODUCTION TO THE CONFERENCE LUNCHEON SPEAKER

Kevin Short, Professor of Mathematics at the University of New Hampshire, is also the founder of Groove Mobile (formerly known as Chaoticom), where he served as CTO and Member of the Board from the infancy of the company through the first year of the Sprint Music Store. Groove Mobile was purchased by NMS Communications and transformed into Live Wire Mobile. The company now runs the music download stores for major telecommunication companies throughout the world. In the summer of 2006 he returned full-time to UNH, where he continues to do research on signal processing, media compression and chaotic dynamics. In June 2008, the University of New Hampshire conferred on him the title University Professor.

Since returning to UNH, he began to do research into music restoration with a company called Plangent Processes. One of their projects was a restoration of a 50-year old wire recording of a live concert by Woody Guthrie, who is acclaimed as the father of folk music and was a primary inspiration for Bob Dylan. This work led to the release of the album, *The Live Wire*, by the Woody Guthrie Society. The album was well-received and Short was lucky enough to be included in the group that won a Grammy award for this work.



Photo by Douglas Prince, UNH Photo Services

Dr. Kevin Short, professor of mathematics at UNH, won a Grammy award Feb. 10 for his role in restoring an antique recording of a Woody Guthrie concert. Here he holds the cover for the CD and book, "The Live Wire: Woody Guthrie in Performance 1949," and the medallion he received as a Grammy award nominee.

CONFERENCE 2009

Preliminary Program – NEMATYC 2009 Southern New Hampshire University

Friday – April 24			
2:30 – 4:30	Registration, Refreshments		
3:30 – 4:15	What’s Puzzling You???	Impact of Tablet PC on Student Learning	Introduction to Factor Analysis
4:30 – 5:15	Massachusetts Mathematics (PK-12) Curriculum Framework Revision	Math 101 – Improving Students’ Math Skills	
6:00 – 9:00	Buffet dinner and show at McAuliffe Planetarium		

Saturday – April 25					
8:00 – 12:00 Registration, Exhibits, and Continental Breakfast until 10:00					
9:00 – 9:30 Welcome					
9:30 – 10:15	Math Across the Curriculum	Something That Works	JMP – A Stats Demonstration	MathXL, MyMathLab, and MyMathTest	All Math Software is not created equal
10:30 – 11:15	Tablet PC’s in the Math Class	Cengage Learning Technology	Add Visual Tools to your Math Tank	Mathematical Anxiety	Evolution of Mathematics Education in America
11:15 – 11:45 Visit the exhibits					
11:45 – 1:30 Lunch with featured speaker Dr. Kevin Short					
1:30 – 2:15	Game On: Qwizdom	Do You Need That Developmental Course?	Developing a Single Core Mathematics Program	Math Success Learning Community	The Key to Success: Interactive Technology in the Classroom
2:30 – 3:15	Jury Decision Making and Bayes Rule	You Too Can Youtube!	Fill Up Your Tank with the Pythagorean Projection	Implementing an integrated project-based approach in a developmental program using the SCATE technology gateway curriculum	
3:30 – 4:30 Business Meeting, Elections, and Door Prizes					

CONFERENCE 2009

Conference Refund Policy: A refund of 100% of your advanced registration fees less the dues amount will be given upon receipt of a written request postmarked no later than two weeks prior to the conference. However, all refund requests for the Friday dinner must be postmarked by April 10. A 50% refund less the dues amount will be given if a written request is postmarked within the two weeks prior to the conference. A refund for the Friday night dinner will be given dependent upon restaurant policy. No refunds for non-attendance will be given for requests postmarked after the date of the conference. All requests should be sent to the NEMATYC Conference Chairperson. Refunds will be processed approximately four to six weeks after the conference.

DIRECTIONS

Note: Go to <http://www.nematyc.org> and click on “NEMATYC 2009 Conference” to download extensive directions, maps, and addresses.

Lodging at the Fairfield Inn

We have arranged for a special discounted room rate of \$70 per night at the Fairfield Inn of Manchester. To get this special rate tell them you are with the SNHU Math Conference when making your reservation. The phone number for the hotel is 1-603-625-2020, and the address is 860 Porter Street. This is the same hotel we used in 2006. It is in the heart of Manchester’s “miracle mile” shopping district!

Directions to the Fairfield Inn

We are going to assume you can make it to the Manchester area and can get yourself to Interstate 293! Please note if you come up the Everett Turnpike (Route 3) from Massachusetts, take I-293 south to reach the Fairfield Inn. The included map of the Manchester area will help you. From I-293, take exit 1, the South Willow Street exit, and head north, toward downtown Manchester (and away from the Mall of New Hampshire). Porter Street is the first traffic light after the interstate exits, and it is also just before Dobles Chevrolet/Buick. Turn right onto Porter Street, the hotel is right behind Dobles.

Directions to Southern New Hampshire University

We are going to assume you can make it to the Manchester area and can get yourself to Interstate 93! Please note if you come up the Everett Turnpike (Route 3) from Massachusetts, take I-293 south to reach I-93, where you will take I-93 north. From I-93, take exit 9N, the Route 3/28 north exit (you can only go one direction at the end of the ramp), and at the first traffic light, turn left. This is W. Alice Avenue. Soon the road will make an abrupt left turn and become Donati Drive. Follow this road to the next stop sign and turn right onto Bicentennial Drive. Follow it to the next stop sign, which is North River Road. Turn right, cross over the interstate, and SNHU will be on the left. Turn left into the first SNHU entrance available, it will be right after the tennis courts. Pass the guard house and turn right. Pass by the first parking lot, pass by Robert Frost Hall (it has three stories with a clock on the front) and park in the lot on the right just past Robert Frost Hall. Registration will be in the front lobby of Robert Frost Hall.

Directions to Southern New Hampshire University from the Fairfield Inn

Turn left onto South Willow Street from Porter Street. Cross over the interstate and make a left onto Interstate 293 south. It will merge with I-93, take I-93 North to exit 9N and follow the directions above.

Directions to the McAuliffe Planetarium from Southern New Hampshire University

Leave campus and go south on N. River Road (toward Manchester). Cross over I-93, and turn left onto Bicentennial Drive. After about one-half mile, turn left onto Donati Drive. Donati Drive will make a sharp right turn and become W. Alice Avenue. At the first stop light, which is Daniel Webster Highway (a.k.a. Routes 3/28), turn right and the I-93 north ramp will be right there. After roughly 15 miles on I-93, take exit 15E (Routes 393 & 4 east). Take exit 1 off Route 393 and follow the signs through the NHTI campus to the planetarium.

CONFERENCE 2009

CONFERENCE PRESENTATION ABSTRACTS

Friday 3:30 – 4:15

Jane Tanner, Onondaga Community College

What's Puzzling You?

Everyone is now familiar with Sudoku. But just what else is out there in terms of mathematical and logic puzzles? This talk will make everyone aware of other challenging types of puzzles that exist. Be prepared to spend more time with puzzles and less time sleeping!

Ruth Heath, New Hampshire Technical Institute

The Impact of Faculty Tablet PC Usage Upon Student Learning and Faculty Teaching

This session will present the experiences from NHTI's Tablet PC Pilot Project in Mathematics, Physics and Information Technology. As an application of Universal Design for Learning, Tablet PC usage by faculty was selected to provide digitized classroom notes and an unrestricted view of the screen to support students such as those with disabilities who may struggle with taking notes. A faculty member involved in the project will demonstrate her revised lesson on quadratic equations. Presenters will share results of evaluations which highlighted effects on faculty teaching and student motivation and learning and unexpected benefits. Attendees will be encouraged to imagine how this technology might be used in writing and reading courses.

Eike Satake, Philip Amato, Emerson College (90 minutes)

Introduction to Factor Analysis

Factor analysis is a mathematical tool which can be used to examine a wide range of data sets. It has been used in disciplines as diverse as education, sociology, economics, psychology and the analysis of the performance of all sports. This tutorial seminar is designed to provide a basic understanding of the principles underlying factor analysis with a relevant example to mathematics educators. The focus of the presentation is the analysis of "factor loading" and its "identification". Our primary intention is to introduce the mathematics educators to the basic concept of factor analysis and to demonstrate, using the statistical software package SPSS, how factor analysis can be used in mathematics education research.

Friday 4:30 – 5:15

Jozef Sliwkowski, Massachusetts Bay Community College

Math 101- A View From The Bleachers

With anecdotal evidence as the catalyst, a pilot program, **miniMAC**, was implemented to ascertain the feasible range of improvement in students' basic math skills. The program is: by invitation-only, basic-math intensive using Pearson's MyMathLab as the cornerstone. Outcomes, course structure and recommendations for future program development will be presented.

Carol Hay, Middlesex Community College, Sharyn Sweeney, Department of Education

Massachusetts Mathematics (PK-12) Curriculum Framework Revision

In the spring of 2008 the Massachusetts Department of Elementary and Secondary Education began the process of revising the 2000 Mathematics Curriculum Framework. The Mathematics Framework Revision Panel has been meeting regularly since April 2008. In February 2009, the suggestions for revision were presented to the Board and the revisions began. The panel members would like to reach out to key mathematics professional organizations and associations to keep everyone updated as well as to hear ongoing feedback about the revision process and the panel's work to date.

Saturday 9:30 – 10:15

Kevin O'Brien, Pearson (Commercial Presentation)

MathXL, MyMathLab, and now, MyMathTest

The Pearson technology Specialist will give an overview of MathXL and MyMathLab, with typical and unique examples of how they are used. He will then review customization options for MathXL and MyMathLab, both as a way to reduce cost to the student, and as a way to better reflect the content needs for a particular school. He will then demonstrate MyMathTest, a non text-specific derivative of the MathXL platform that offers schools and math departments the opportunity to use the MathXL quizzing features and Study Plan to deliver pre and/or post tests with customized study plans and tutorials all at a reduced price. MyMathTest is currently being used in several settings as a low cost online prep solution for students taking the Accuplacer or Compass placement tests. This presentation will be appropriate for both those using MyMathLab and MathXL and those interested in using it in the future. MyMathTest is a new product based on the MathXL platform and will be of interest to anyone interested in issues regarding placement tests and/or exit testing

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Carol Hay, Middlesex Community College

Mathematics Across The Curriculum (MAC)

The Math department at Middlesex Community College has received an NSF grant to support a Mathematics Across the Curriculum Initiative. In conjunction with this grant, faculty teams attended a three-day Institute in August, 2008, during which they began to develop interdisciplinary modules to use in their classrooms. Examples of these modules will be presented.

Marsha Pease, Anne O'Shea, North Shore Community College

Something That Works

Presenters will discuss their experiences as past ACCESS fellows and the benefits of Project ACCESS for new community college mathematics instructors. Presenters will share lessons and quick activities compiled during their participation in Project ACCESS sharing sessions with other fellows during the AMATYC conferences from 2004-2008. Lessons and activities range from developmental mathematics to calculus and from low-tech to high-tech. Many of the activities involve few materials and minimal preparation time. Those in attendance will take home a packet of activities; some may even be used in your next class.

Barry Woods, Unity College

JMP – A Stats Demonstration

JMP – statistics software from SAS – will be demonstrated showing both descriptive and inferential statistics. Data sets from the *Triola Statistics Series* will be used for the demonstrations. From daily Tips of the Day to online Tutorials, JMP is a complete statistics package for introductory, intermediate, and advanced statistical analyses.

Lisa Rickel, Hawkes Learning (Commercial Presentation)

All Math Software is not Created Equal: What's the Difference?

The use of technology has become increasingly implemented in Mathematics courses, but what makes one software system different from another? Hawkes Learning Systems (HLS) is a unique program that is proven to be more effective in improving student performance. Discover how HLS's differences make it the perfect solution for student success!

Saturday 10:30 – 11:15

Eiki Satake, Emerson College

Mathematical Anxiety: Is This A Universal Phenomenon?

This presentation will discuss the following educational issues, such as (1) the origin of "mathematics anxiety". (2) psychology behind "mathematics anxiety". (3) the relationship between mathematics anxiety and mathematics achievement, and (4) some useful guidelines and suggestions for mathematics teachers in helping students who exhibit a greater anxiety toward mathematics. The most recent research development and literatures on the subject will also be discussed. Educational and psychological aspects of teaching mathematics are strongly emphasized.

Jerry O'Malley, Cengage Learning (Commercial Presentation)

Incorporating Cengage Learning Technology Into Your Math Program

Cengage Learning's **Enhanced WebAssign**—the marriage of time-tested content and reliable web architecture—is truly an ideal solution to meet your homework management needs. Building upon the success of WebAssign (founded in 1997 by faculty for faculty), Brooks/Cole Cengage Learning has added its bestselling content to create the most robust, easy-to-use homework management system available. Used by over 1,200,000 students at more than 1,100 schools, WebAssign is reliable and versatile.

Robert Kowalczyk, Adam Hausknecht, University of Massachusetts - Dartmouth

Add Visual Tools To Your Math Tank

Today's students play and learn in the interactive animated visual worlds of the video iPod and iPhone. How can we, as teachers, bridge this gap between their dynamic worlds and the traditional calculus text? For many years now, we have devoted much of our research time to developing software tools that make calculus come alive for our students. In our presentation, we will demonstrate the use of new dynamic interactive visual tools that we have added to our software that help students to fully engage in learning key calculus concepts and proof. Our software includes visual tools for exploring the following mathematical concepts: limits, continuity, tangents (derivatives), integration, finding zeros of a function, arc length, fitting real-world data, solving applied problems, vector operations, velocity and tangent vectors, curvature, line integrals, first-order differential equations, and much more.

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Pamela Cohen, Southern New Hampshire University

Tablet PC's In The Math Class

In the on-ground classroom, Professor Cohen uses a tablet PC to project class lessons. For on-line classes, she grades assignments using annotation tools. This session will offer an introduction to tablet PC use. Topics include: tablet basics, Windows Journal, importing and exporting documents, ink annotations, and other tablet software.

Andrew Perry, Springfield College

Evolution of Mathematics Education in America

We will consider major trends in American math education, especially in the eighteenth and nineteenth centuries. Textbooks provide some of the most authentic and reliable clues as to how mathematics was taught. Some notable events include the publication of the first American math book in 1727 by Isaac Greenwood, and the mathematics education reform movement led by Warren Colburn in the early 19th century.

Saturday 1:30 – 2:15

Russell Rushmeier, United States Coast Guard Academy

Developing A Single Core Mathematics Program Serving Both Technical And Non-Technical Majors

Many undergraduate programs wrestle with the challenge of providing a resource efficient mathematics program that addresses the needs of a wide variety of majors. In this talk I will propose a program covering the first two years of mathematics that I hope will serve as a starting point for a lively discussion on the issues and trade-offs involved in any such program. I will start by reviewing some of the considerations that prompted me to develop a different approach to mathematics preparation. I will then present the key features of the proposed program. The design of the topics in the program allows for students to take 2, 3 or 4 of the courses depending on the nature of major and mathematics sophistication required. All the typical Calculus topics are mapped to the popular Anton text for discussion purposes. It is hoped that insights from the discussion can be incorporated in a possible test of this program at the Academy.

Meredith Watts, Robert Cantin, MassBay Community College

Math Success Learning Community

In this learning community, students examine math study skills strategies and apply them to content in the linked math course. In the study skills sessions, students will learn problem solving methods and apply them to the math curriculum, and will have the opportunity to prepare homework problems, projects, and tests. Specific math study skills such as math note-taking, math anxiety and math test-taking are addressed with the aim of increasing student performance in developmental math courses. Presenters will share the design, implementation and results of the pilot program during the fall 2008 semester.

Norma Bisulca, DeAnne AcAleer, University of Maine at Augusta

Does He/She REALLY Need To Take That Developmental Course? Maybe, Maybe Not

Learn how the University of Maine at Augusta has implemented a new program, MyMathTest, to give students an opportunity to improve mathematics skills before the semester starts. The presenters will discuss the Mathematics Department's rationale for implementing the program and the process by which the program was tailored to meet the objectives of the University's Developmental Mathematics courses. The presenters will also discuss how they partnered with the advising center to provide students with early access to the program. So is the program making a difference? View our data and you make the decision.

Kenneth Takvorian, Mount Wachusett Community College

Game On: Reviewing For Test With Qwizdom

Come relax, engage your trivia skills, and experience a personal response system by playing a series of interactive games answering trivia questions on a wide variety of topics from sports to math.

Carl Fetteroll, Springfield College

The Key to Success: Interactive Technology in the Classroom

Interactive software promotes increased retention and success for students in Mathematics courses. Students are engaged in learning in both the classroom and outside of class. The impact of software (including Hawkes Learning and MyMathLab) in the curriculum will be explored through discussions of implementation, software options, student feedback and comparisons of student performance.

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Saturday 2:30 – 3:15

James Giumarra, Benjamin Franklin Institute of Technology

Implementing An Integrated Project-based Approach in a Developmental Program Using the SCATE Technology Gateway Curriculum

This workshop focuses on the implementation of Technology Gateway, a curriculum using an interdisciplinary, project-based approach to teach developmental math and science while providing opportunities for students to develop communication skills. The presenters will address curriculum development, integrated teaching, student learning, assessment, and the values of project-based learning. The workshop includes an in-depth look at one of the projects.

Denise Robichaud, Quinsigamond Community College

You Too Can YouTube

Do you want to make online videos for your students, but worry it will be too complicated or expensive? Come see an inexpensive and easy solution. With just a webcam and a headset you can put your teaching videos on YouTube for free.

Steve Krevisky, Middlesex Community College

Fill Up Your Tank With The Pythagorean Projection!

Various statistics have been used to evaluate teams and their performances in baseball. We will look at Bill James' Pythagorean projection to see how Boston teams should have done, compared to what they actually did. We use the teams' runs scored and runs allowed to examine this, for Boston's best and worst teams since 1901. Intended for teachers of algebra, statistics and quantitative literacy.

Eike Satake, Philip Amato, Emerson College

Jury Decision Making: An Alternative Approach Of Teaching Conditional Probability And Bayes Rule

This paper presents an alternative approach to the teaching of conditional probability and Bayes' rule, within the context of a hypothetical legal scenario where the defendant is accused of burglarizing the apartment of his ex-girlfriend.

Expansion of conditional probability formula and Bayes' rule is illustrated to determine the probability of "legally guilty" following the presentation of several pieces of evidence by the prosecution and one rebuttal piece by the defense.

Secondary, we give a probabilistic interpretation of some key legal phrases such as (1) "beyond a reasonable doubt" and (2) "presumption of innocence". Lastly, the growing interest in probabilistic methodologies in recent years, rather than traditional inferential methodologies, among legal professionals, is discussed.

More NEMATYC members at AMATYC 2008



Denise Robichaud and Andreana Grimaldo (Quinsigamond), Carol Henry, NEMATYC President (Middlesex)

Lots more on the History link on the web site!

Join NEMATYC!

Can't attend the conference? We hope you'll support NEMATYC by renewing your membership. Please copy, complete, and return with a check for \$10 annual dues to

Lauren Brewer, NEMATYC Treasurer,
Springfield Technical Community College,
1 Armory Sq, Springfield, MA 01104

Name _____

Preferred Complete Mailing Address

e-mail Address _____

Institution _____

The philosopher and mathematician Rene Descartes was sitting in a bar having a few drinks. The bartender came over and asked Rene if he'd like another round, to which Rene responded, "I think not." He immediately disappeared.

Download this form at the
conference link at
www.nematyc.org!

CONFERENCE 2009

FILL UP YOUR MATH TANK

New England Mathematical Association of Two-Year Colleges

35nd Annual Meeting - April 24/25, 2009

Southern New Hampshire University, 2500 N. River Road, Manchester, NH 03106

Conference Registration Form – Mail by April 8th and save \$10

Name _____

Preferred Mailing Address _____

Phone Number _____

Email Address _____

Institution _____

Are you a presenter? Yes No

Will you serve as a presider? Yes No

Attending Friday? Yes No

Attending Saturday? Yes No

Conference Registration Fee*: \$60 if postmarked by April 8, \$70 after deadline and at the door.
\$35 for students and adjunct faculty if postmarked by April 8, \$45 after deadline and at the door.

\$ _____

* The registration fee covers admission to the conference, NEMATYC dues, and Saturday breakfast and lunch. *The registration fee will be waived for one presenter per session.*

Saturday lunch choice: Chicken _____ Vegetarian _____

Note: Late registrants cannot be guaranteed lunch, but we'll do our best.

Friday Buffet Dinner and Planetarium Show (\$50)

\$ _____

Total amount enclosed:

\$ _____

Make checks payable to **SNHU-NEMATYC 2009**
and mail registrations to:

Professor David Cox
Southern New Hampshire University
2500 N. River Road
Manchester, NH 03106

Questions? Email David Cox at d.cox@snhu.edu, or call 603-668-2211, extension 2223.

NEMATYC NEWSLETTER
Philip Mahler, Editor
Middlesex Community College
591 Springs Road
Bedford, MA 01730



NEMATYC 2009

35th Annual Meeting

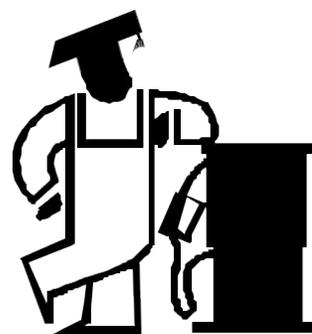
FILL UP YOUR MATH TANK

Southern New Hampshire University

Manchester, NH

Friday and Saturday

April 24-25, 2009



JOIN NEMATYC

Not a member of NEMATYC? We hope you'll join! See page 13.
Better yet, attend the conference this year! You'll have a great time