## PRESIDENT'S COLUMN

Maureen Woolhouse
As I enter the closing chapter of my term as NEMATYC President and I reflect over the past two years, I'm happy to report that my experience has been very positive. The only down aspect of the president's duties has been writing newsletter articles, a task that I have approached with fear and dread. Attempting a parallel with the David Letterman "Top Ten " and borrowing extensively from excuses I have heard my students list for not doing homework, I have created a "Top Five Excuses for Not Writing my Newsletter Article", a list which I would like to share with you.

- I could only get arbitrarily close to my desk, I couldn't actually reach it.
- I accidentally divided by zero and my paper burst into flames.
- I had the proof but there wasn't room to write it in this margin.
- I was watching the World Series and got tied up trying to prove that it converged.
- I had too much pi and got sick.

One of the best reasons that the two-year term of President has passed so quickly and happily is due to the cooperation and hard work of the members of the NEMATYC Board. It has been a privilege to have served in this capacity with the dedicated members of the Board and the mathematics community who constitute NEMATYC membership.

Continued on page 2

## NORTHEAST AMATYC VP

Jack Keating
I'm looking forward to seeing all of you at the Spring conference as we all continue to Climb New Heights. This is my last term as the Northeast VP. Good candidates are needed to run for this position. AMATYC has the Affiliate Web site director and Executive Director for External Relations positions open. More information can be obtained on the AMATYC web site. www.AMATYC.org

Two members from our region have assumed AMATYC positions. Kate Danforth has assumed the position of AMATYC Editing Director. Maryann Justinger has assumed the position of AMATYC Historian. Fred Peskoff from Borough of Manhattan CC was our regional winner of the 2003 AMATYC Teaching Excellence Award.

AMATYC--2004 will be held in Orlando from Nov. 18th-21st. What a great time to be in Florida: the week before Thanksgiving. Project Access: Advancing Community College Careers Education, Scholarship and Service, will be seeking applications in Spring 2004. This project is a mentoring and professional development initiative for two-year college faculty funded through a three-year grant from the fantastic Exxon Mobil Foundation. Project Access is a program for new faculty interested in advancing the teaching and learning of mathematics in twoyear colleges. Its goal is to develop a cadre of new two-year college faculty who are effective members of their profession. More information about this exciting opportunity may be found at: www.AMATYC.org/ProjectAccess

Continued on page 2

# NEMATYC 2004 CILIMIBIING NEEW HUEIIGHITIS Mount Wachusett Community College Gardner, MA April 2 \& 3, 2004 

## NEMATYC President's message (cont)

Life, however, is filled with passages and this spring will present yet another opportunity to deal with the challenges and excitement that change brings. NEMATYC will be losing a favorite son, John Jacobs. I'm sad to report that John is retiring both from Mass Bay Community College and NEMATYC. John has been the newsletter editor for the past four years and has made great sense out of our poor, grammar-riddled submissions. He was a member of the "Dirty Dozen" who made the Boston AMATYC Conference possible. Additionally, John has served as past President of NEMATYC as well as the host coordinator of not one, but two NEMATYC Conferences.

Staunching the wounds of John's departure is the return to increased local level participation on the part of Philip Mahler. Phil as you all know has just ended his commitment as AMATYC President and has agreed to assume responsibility for the NEMATYC newsletter position vacated by John Jacobs. We welcome the return of Phil to his local affiliate roots and know that we will all benefit greatly from the wisdom of his experience on a national level.

At the annual business meeting, following the Conference at Mount Wachusett Community College, Board elections will take place. The President, Vice-President, Secretary and Treasurer and one Member-At-Large will be elected. The Past President, Roberta Kieronski, has assembled a slate of candidates for these positions. Nominations from the floor will also be accepted. So please stay around after the conference to be a part of our meeting and to be eligible for some pretty nice door prizes that our host at Mount Wachusett have assembled.

In closing, I'd like to say thanks to all of you for making my short tenure as NEMATYC President so pleasant. I encourage you to become more active in this Association It does much to foster excellence in our profession and the Executive Committee jobs are more fun than taxing. See you at Mount Wachusett on April $\mathbf{2}^{\text {nd }} \boldsymbol{\&} \mathbf{3}^{\text {rd }}$.

MAUREEN

## AMATYC Vice President's message, continued

Please also check the AMATYC.ORG web site for summer institutes. This year they will be in: Outer Banks, NC, Hawaii and Enumclaw, WA Finally, I call on all AMATYC members to encourage colleagues to join. As one of my fellow VPs states: "Nothing can do more for your career than membership in AMATYC." If you need any more encouragement--talk to me in April $2 \& 3$ at the NEMATYC meeting. Have a great semester.
$J A C K$.

## NEMATYC EXECUTIVE COMMITTEE

## President

Maureen Woolhouse
Quinsigamond CC mwoolhouse@qcc.
mass.edu
(508) 854-2731

## Past-President

Roberta Kieronski
UNH Manchester
robertak@cisunix.unh.
edu 603-641-4180

## Vice-President

Elaine Previte
Quinsagamond CC
eprevite@qcc.mass.edu
508-854-4449

## Secretary

Rick Butterworth
Massasoit CC
rbutterworth@massasoit
.mass.edu
508-588-9100x1636

## Treasurer

Lois Martin Massasoit CC lamartin@adelphia.net 508-588-9100x1621

## At-Large

Bonnie Wicklund Mount Wachusett CC
Bwicklund@mwcc.mas
s.edu (978) 630-9306
At-Large
Tom Pandolfini
Johnson \& Wales Univ.
tpandolfini@jwu.edu
(401) 598-4780

Conference Co- Chair Bonnie Wicklund
Mount Wachusett CC
Bwicklund@mwcc.mas
s.edu (978) 630-9306

Conference Co-Chair
Paul Laverty
Mount Wachusett CC
Plaverty@mwcc.mass.e
du (978) 632-6600
Past Conference Chair
Tom Pandolfini
Johnson \& Wales Univ.
tpandolfini@jwu.edu
(401) 598-4780

Membership
Ted Panitz
Cape Cod CC
tpanitz@capecod.net
508-362-2131 x 4421
Membership
Sue Hoy
Bristol CC
shoy@bristol.mass.edu
508-678-2811 x2979

Webmaster
Rick Butterworth
Massasoit CC rbutterworth@massasoit .mass.edu
508-588-9100x1636

## Newsletter Editor:

John Jacobs
Mass. Bay CC
jjacobs@massbay.edu
508-270-4261
Production Editor:
Judy Carter
North Shore CC
jcarter@nscc.mass.edu
(978) 762-4000 x 6664

## Bridging the Gap between Mathematics and the Physical

Sciences by Tevian Dray and Corinne A. Manogue Oregon State University

The mathematics we teach has become increasingly focused on algebra. We argue that most scientists need geometry. It's the geometry of the dot and cross product which matters, not the formulas used to compute them. Trig is more than buttons on a calculator. And while mathematics is about functions, science is about things. The equation $y=x^{2}$ makes perfect mathematical sense, but is bad science -- you can't set a length equal to the square of a length. We're trying to change this, through the NSF-funded

Vector Calculus Bridge Project. At the heart of our approach is a single, geometric concept: infinitesimal displacement. Building on the Leibniz approach using differentials, and reflecting the way we believe most scientists actually use calculus, we have been able to unify a course traditionally viewed by students as an impossibly large collection of separate facts into a cohesive unit. We have developed group activities which emphasize geometric reasoning, and a detailed instructor's guide to accompany them. There will be a talk about the Bridge Project at the April NEMATYC Further details see: http://www.math. oregonstate.edu/bridge

NEMATYC 2004 - "Climbing New IHeighis"

## Registration Form / Membership Dues

$30^{\text {TH }}$ Annual Meeting of the New England Mathematical Association of Two Year Colleges<br>April 2 \& 3, 2004<br>MT. WACHUSETT COMMUNITY COLLEGE - 444 GREEN STREET - GARDNER, MA 01440

$$
\text { *** Can't attend? Please see page } 5 \text { (bottom) *** }
$$

Name: $\qquad$
Institution: $\qquad$
Institution Address: $\qquad$
Home Address: $\qquad$
Phone: (Work) $\qquad$ (Home) $\qquad$ Email: $\qquad$

| Presenter? | Yes | No | Will Attend Friday? | Yes | No | Will Attend Saturday? | Yes | No |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Presider? | Yes | No |  |  |  |  |  |  |

## Pre-register by March 5 and your name will be entered to win a $\$ 100$ gift certificate!

[^0]Saturday Luncheon (please check one): $\qquad$ Apple and Walnut Stuffed Chicken $\qquad$ Seafood Brochette

Friday Dinner: [[10e]] dollars at Wachusett Village Inn and Conference Center (you do the math!) (price includes dinner, beverage, dessert, coffee, tax and tip)
Please check one: $\qquad$ Broiled Swordfish with Pineapple-Macadamia Nut Chutney Honey Mustard Pork Chop with Cranberry-Orange Compote __Vegetarian
$\qquad$



Friday dinner\$ $\qquad$ For updated conference information, check NEMATYC's website: www.nematyc.org Questions?
bwicklund@mwcc.mass.edu 978-630-9306 plavery@mwcc.mass.edu 978-630-9213
$\qquad$
Make checks payable to NEMATYC 2004 and mail to:
Bonnie Wicklund
444 Green Street Mt. Wachusett CC
Gardner, MA. 01440
PLEASE RETURN REGISTRATION FORMS BY FRIDAY, MARCH 19

Editorial " 35 years of unparalleled fun" is what I put on my last professional teacher business card. I owe you, my colleagues from across New England thanks for every year of it. Your search for and sharing of the results in the improvement of the profession has kept the challenge going over the years. Because of your continuous supply of suggestions, I don't think I have ever taught the same course the same way the second, third, or $35^{\text {th }}$ time around. Whether it was a rigorous calculus course or teaching the Basic Math using colleague Jim Sullivan's "work in groups" text, no one could ever beat the joy of seeing a face light up and have the student exclaim "Is that all there is to it?" That gives confirmation to doing something right

In trying to come up with what, in thirty-five years, were the most significant things, I find three stand-outs. First would be NEMATYC and the professionals from across New England it gave me the opportunity with which to interact. It certainly seems to attract the intellectual, the activist and the eclectic. Second would be my ten (plus) years on the union dais when I worked with the Mass Teachers Assn and the MCCC that represents the faculty and professional staff in the Massachusetts Community Colleges, probably for the same reason. Thirdly was the job itself which surrounded me with colleagues from economics, history, literature, sciences, philosophy, etc. It has been a scholarly smorgasbord of significant proportions where one has always been invited for seconds. Bless the intellectual, the activist and the eclectic, they have made it 35 years of unparalleled fun. Thank you, one and all.

John Jacobs, Professor of Mathematics, MassBay Community College from September, 1969 to May, 2004

## ELECTIONS

The Executive Committee list on page 2 names those who are currently leading the NEMATYC organization. The list is about to change with elections at the spring business meeting at the end of the conference. The Past President forms a nominating committee by September 15 of every year and they seek out potential candidates for the upcoming election. This is usually a very tough sell in today's fast paced society. This year was a pleasant surprise as the candidates below came forward and approached the committee rather than the other way around. The open positions this coming April are: President, a 2 -year term, Vice President, a one-year term, Secretary, a two-year term, Treasurer, a three-year term and one Member-at-Large, a one year term. While nominations are accepted from the floor of our business meeting, those volunteering their names early get the advantage of the publication of a short biographical statement.

## For President: Elaine Previte from Quinsigamond CC

 Elaine has been involved with NEMATYC since 1988, and has spent several years on its Board. She hosted the 1996 NEMATYC conference at Dean College, and is a past president of the organization. Elaine has held the position of Associate Professor of Mathematics at Dean College in Franklin, MA and at Pine Manor College in Chestnut Hill. Presently, Elaine manages the Math Center at Quinsigamond Community College in Worcester, MA. She has had experience as an author of CLEARMath ${ }^{\mathrm{TM}}$, mathematics software for developmental college math students. Elaine holds a B.A. in Mathematics and Managerial Economics from Rhode Island College, an M.B.A. from the University of Texas, and an M.A. in Mathematics from Rhode Island College.For Vice President: Andrew Perry, Assistant Prof. of Mathematics, Springfield College. Andrew received his B.A. from Williams College in 1992, and his Ph.D. from Oklahoma State Univ. in 1999. Since then, he has been an Assistant Professor of Mathematics at Springfield College. Andrew is particularly interested in playing and designing mathematics games and other methods techniques to maintain an active
learning environment for students. He has presented twice at NEMTAYC meetings, once at AMATYC, and several times at other mathematical organizations. He is currently working with co-authors on a College Algebra textbook.

For Treasurer: Lois Martin, Professor of Mathematics at Massasoit Community College. Lois has been teaching at Massasoit since 1978. She is active in both NEMATYC and AMATYC, and has given presentations at conferences for both organizations. Currently the NEMATYC treasurer, she also acted as local treasurer for the two NEMATYC conferences held at Massasoit Community College in the 1990's. She recently served a three-year term on AMATYC's Program Committee and been a delegate at AMATYC conferences for several years. At Massasoit, she has received the NISOD Award for Teaching Excellence and the Governor's Pride in Performance Award.

For Secretary: James Sullivan, Professor of Mathematics at MassBay Community College. Jim received both his BA \& MA in Mathematics from Boston College. Come Fall ' 04 he becomes the most senior mathematics faculty at MassBay. He calls himself more a "coach" than a "professor." His "work in groups" approach to mathematics education has earned him high marks from students and colleagues. His book PreAlgebra: Journey into a Mathematical World, epitomizes the approach where students learn collaboratively. He has often been a presenter both at AMATYC and NEMATYC conferences and is looking forward to furthering the goals of both associations.

For Member-at-Large: Carol Hay, Professor of Mathematics at Middlesex CC (MA). She receive a BA in Math from Salem State College and an MS in Math from UMass Lowell. Carol has been at Middlesex for 11 years and spent four as department chair. Professor Hay was the NEMATYC conference co-chair in 2001.

Be sure to stay for the end of the conference and the business meeting and elections on April 3.

For updated conference information, check NEMATYC's website: www.nematyc.org Questions? bwicklund@mwcc.mass.edu or 978-630-9306 or plavery@mwcc.mass.edu or 978-630-9213

## Directions to Mount Wachusett Community College in Gardner, MA

Route 2 to Route 140 North (Exit 24) in Westminster. Exit sign reads " 140 North to Winchendon and Ashburnham." Proceed three miles on this route. You will pass through two traffic lights. Proceed one-half mile past the second light and take a left turn onto Matthews Street. The college entrance is one mile on the right.

## FRIDAY

Friday's activities will be held at the Wachusett Village Inn and Conference Center, 9 Village Inn Road Westminster, MA (800) 342-1905 reservations

## Directions to the Village Inn

From the South: Rt 146 North or I-84 East to I-90 (MassPike) to I-290 East to I-190 to Rt. 2
West. From the East: I-90 (MassPike) West to Rt. 128 (I-95) North to Rt. 2 East From the North: I-91 South to Rt. 10 East to Rt. 2 East From the North-East Rt 3 South or Rt. I-95 South to I-495 South to Rt. 2 East

Heading westbound on Rt 2: Take Rt. 2 West to Narrows/Depot Rd. exit (exit \#27). Turn left at the end of the exit. You will go over Rt. 2. Turn right onto Village Inn Rd. This will take you to the Inn.

Heading eastbound on Rt. 2: Take rt. 2 East to Willard/Village Inn Rd. exit (exit \# 26) and continue straight to the Inn.

## Friday's Schedule

$2-6 \mathrm{pm}$ Registration
2:45-3:30 Session I
3:45-4:30 Session II
4:45 Welcome
5-8 pm Check Inn
5:30-6:30 Social Hour
6:30-7:30 Dinner
7:30-8:30 Speakers
Tom and Brenda Malloy:
Murder in

## Friday Night Accommodations

Conference rates at the Village Inn are $\$ \ln \mathrm{e}^{65}$ PER ROOM (You do the math) !! Please mention NEMATYC to get this great rate. (800) 342-1905. Reservations must be made by March 3 (with Village Inn, not NEMATYC Reservations Phone: (800) 342-1905

## Can't attend, but would like to join or renew your membership?

Please complete and return with a check for $\$ 5 .{ }^{00}$ payable to NEMATYC. Send to Lois Martin, NEMATYC Treasurer, 25 Lydon Lane, Kingston, MA 02364


Email: $\qquad$

## FRIDAY

## 2:00 - 6:00 Registration, Refreshments and Exhibits <br> 2:45-4:30 Presentations

| $2: 45$ <br> to <br> $3: 00$ | New Probability Rules of Succession: an <br> Alternative Version of LaPlace's Rules | $100 \%$ Math Project-Targeting <br> Success | Reconciling the Abstract Definition of a <br> Limit with the Students' Concrete Intuition |
| :---: | :--- | :--- | :--- |
| $3: 45$ <br> to <br> $4: 30$ | Order and Disorder, Entropy in Nature, <br> Math and Science and the Arts | Psychology and Statistics: A <br> critical Partnership | Bridging the Gap between Mathematics and <br> the Physical Sciences |

## 4:45-5:00 Welcome

## EVENING

## 5:30-6:30 Social Hour

## 6:30-8:30 Dinner \& Speaker

## Murder in Massachusetts - its Written in Stone.

In many cases, epitaphs that document the cause of death as murder also noted the perpetrator(s) of the crime. The underlying theory is that the authors of murder epitaphs were ensuring that those responsible for such horrific acts would have their names literally "written in stone." This thesis will be demonstrated in a slide presentation of late $18^{\text {th }}$ and early $19^{\text {th }}$ century Massachusetts' gravestones that documented murder.

Tom Malloy is a Professor of History at MWCC and Brenda Malloy teaches $5^{\text {th }}$ Grade, Westminster, MA. Both have presented scholarly papers on cemeteries and grave markers at the Association for Gravestone Studies and the American culture Association

## SATURDAY <br> 8:00-9:45 Continental Breakfast 8:00-11:45 Registration and Exhibits

| $\begin{gathered} 9: 30 \\ \text { to } \\ 10: 15 \end{gathered}$ | Elementary Algebraic models in Our World: An | An Activity-Based, Context-Rich Approach to | Web based <br> Homework, <br> Quizzing and <br> Course <br> Management for <br> Mathematics | Mathematic, Art and the Renaissance World | Demonstration of Techniques for Customizing Classroom Interaction using a Tablet personal Computer | Joining Forces for Student success in Elementary Algebra |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 10: 30 \\ \text { to } \\ 11: 15 \end{gathered}$ | Alternative to College Algebra |  | Using Excel and the TI-83 Plus to Interpret the Central Limit Theorem | Applying the 7 <br> Principles of Good Undergraduate Education to Math Courses | New Online Math technology with Edu-Space, Powered by Blackboard | 35 years of Unparalleled Fun |

## 12:00 to 1:30 Lunch

| 1:45 <br> to |  | Exploring the use of <br> $2: 25$ | The Mathematical | Mathematica in a Precalculus | Have You Ever |
| :---: | :--- | :--- | :--- | :--- | :--- |
| Preparation of Future | Sourse | Adjuncts <br> Helping <br> Adjuncts | Keeping Your Class <br> in the Palm of Your <br> Hand |  |  |
| $2: 35$ <br> to <br> $3: 20$ | Elementary Teachers | Maintaining a Lively classroom <br> to Reduce Stress and enhance | Industrial Strength <br> mathematics | Improving Student Success in <br> Intermediate Algebra |  |

## BRIEF SYNOPSIS OF THE PRESENTATIONS

Friday 2:45-3:00
New Probability Rules of Succession: An Alternative Version of LaPlace's Rule Eiki Satake, Ed.D. \& Philip P. Amato, Ph.D. Mathematics Program, Emerson College This paper presents a probability model originally developed by the Marquis de Laplace. His theory involves looking at "inference from effects to causes." The authors will present a model, known as "Inverse Bayesian Inference," that yields an interesting proof of Laplace's Rule, using some relevant examples.

Reconciling the Abstract Definition of a Limit with the Students' Concrete Intuition Professor Kathleen Peters, Manchester Community College (CT) A demonstration of techniques for Calculus students to use when encountering a "limit". The examples are taken from a workbook on limits which I am authoring. The overall intent is to help students take the rigorous view that the notion of a limit is a dynamic one and is the fundamental concept in Calculus

100\% Math Project-Targeting Success Professor Linda Murphy, Northern Essex CC. The Massachusetts Community Colleges 100\% Math program targets the single most important problem facing American higher education, the failure rates in developmental mathematics. The goal is to develop and implement innovative student placement, instructional content, faculty professional development, and program effectiveness evaluation that significantly increases student success in developmental mathematics.

Friday 3:45-4:30
Order and Disorder, Entropy in Nature, Math, Science and the Arts. Dr. Sol Neeman and Frank Tweedie Johnson \& Wales University. This talk examines some of the manifestations and implications of order and disorder in the fields of physics, mathematics, information theory, nature and the arts. In Physics, there is Entropy. The balance between the regular, irregular, expected and unexpected intensifies art. Disorder poses an intriguing question when we consider biological systems.

Psychology and Statistics: A Critical Partnership - Tom Pondofini \& Cheri Almeida , Johnson \& Wales University. Many psychology students find it difficult to accept the merits of statistically-sound psychological theories. This presentation will describe various psychological studies and illustrate the role that correlation has played in drawing relevant conclusions. The presenters will analyze results taken from surveys administered to their students that you can replicate.

Bridging the Gap between Mathematics and the Physical Sciences Gregory Quinell, Mt. Holyoke College. The Vector Calculus Bridge Project offers materials and faculty workshops that seek to bridge the gap between the traditional teaching of algebraic manipulations and the geometric reasoning often used in the physical sciences. This talk illustrates some language differences between mathematicians and other scientists, and demonstrates some of the materials.

## Saturday 9:30-11:15 Long Sessions

Elementary Algebraic Models in Our World: An Alternative Approach to College Algebra Jen Tyne, Bob Franzosa, Todd Zoroya, University of Maine. We developed Elementary Algebraic Models in Our World as an alternative to College Algebra. The goal was improving student's attitudes about and understanding of simple algebraic models. With a successful mathematics experience, we want students to be able to recognize, interpret, and understand simple algebraic models they encounter outside the classroom.

An Activity-Based, Context-Rich Approach to Developmental Mathematics Gary Simundza Wentworth Institute of Technology Students in developmental mathematics have a greater chance of succeeding if they see mathematics as relevant to their world. The presenter has developed a context-rich, applications-based curriculum for the elementary and intermediate algebra levels. Both mathematical topics and pedagogical issues will be addressed as we explore activities from the curriculum.

## Saturday 9:30-10:15

Web based Homework, Quizzing and Course Management for Mathematics A commercial presentation by Addison Wesley. MathXL and MyMathLab are web-based resources offered with Addison Wesley math texts. MathXL is a powerful online homework, tutorial, and assessment system. MyMathLab powered by CourseCompay (Blackboard based CMS) and MathXL is a series of text-specific online courses. It is an easily customized course management tool.

Mathematics, Art, and the Renaissance World. Thomas Pandolfini and Joseph Delaney Johnson \& Wales University. Add a little culture to your math classes! This presentation will address the role of mathematics in the creation of classic works of Renaissance art and architecture. The Last Supper and The School of Athens will be used to show mathematical principles of perspective, proportionality, and the Golden Mean.

Demonstration of Techniques for Customizing Classroom Interaction using a Tablet Personal Computer Lyn L. Benton, Dean College, The Tablet PC replaces and integrates both overhead projectors and PowerPoint presentations. The instructor can customize the material interactively including student participation with a permanent record available to the students. Content can be traditional hand writing, equations, graphs using multi-colors, and pre-defined content that can be marked during the class.

For updated conference information, check NEMATYC's website: www.nematyc.org
Questions? bwicklund@mwcc.mass.edu or 978-630-9306 or plavery@mwcc.mass.edu or 978-630-9213

Saturday 9:30-10:15 (Continued)
Joining Forces for Student Success in Elementary Algebra. Professors Mary Horan and Sally Lesik Central Connecticut State University Student success in Elementary Algebra at CCSU has improved significantly over the past five years (from $50 \%$ to $80 \%$ ). Two main contributing factors that influencing this increase in success are professional development for instructors and a continuous collaboration between the Learning Center and the Department of Mathematical Sciences

Saturday 10:30-11:15
Using Excel and the TI-83 Plus to Interpret the Central Limit Theorem Dr. Emmett Dennis, Southern Connecticut State University. A simulation study will be presented to test the validity of the Central Limit Theorem using the Excel spreadsheet and the TI-93 Plus. Students can visualize the results of the Central Limit Theorem and their understanding is enhanced.

Applying the 7 Principles of Good Undergraduate Education to Math Courses Ted Panitz ,Cape Cod Community College We will explore how the 7 Principles of Good Undergraduate Education developed by the American Association of Higher Education may be used for increasing student performance and retention. The 7 Principles serve as a guide for focusing attention on students and student learning and call for student centered learning including cooperation.

New Online Math technology with Edu-Space, Powered by Blackboard A commercial presentation by Houghton Mifflin. New interactive tutorials will include text, images, interactive activities, and examples using video, audio and animation. They have been carefully authored to engage students and guide them through specific learning objectives. The tutorials, corresponding to Houghton Mifflin texts, are integrated into the new version of Houghton Mifflin's online course platform: EduSpace, powered by Blackboard.

35 years of Unparalleled Fun John Jacobs MassBay CC This is my last semester I will summarize fun things encountered in the 35 years as a math teacher!. Participants will be invited to tell their bad math jokes provided the presenter doesn't tell it first. Prizes will be given to those who can answer useless trivia.

## Saturday 1:45-3:30 Long Session

The Mathematical Preparation of Future Elementary Teachers Dr. Brian Beaudrie and Dr. Barbara Boschmans Plymouth State University We will begin with a discussion of the mathematical content typically covered in courses designed to prepare future elementary teachers in mathematics. Also, activities used to teach mathematical concepts to the students in these courses will be demonstrated. Audience discussion on mathematical education of prospective elementary teachers will be encouraged.

## Saturday 1:45-2:25

Exploring the use of Mathematica in a Precalculus Course Yoav Elinevsky, University of Massachusetts We will discuss the benefits and problems of using Mathematica from the instructor and students' view. It allows for creativity and variety that can meet the specific needs of different learners. Mathematica can be used to create a Power Point presentations or as an interactive Computer Algebra System.

Have You Ever Seen a Number? Herb Gross Professor Emeritus Bunker Hill CC Think of numbers as nouns. I will show how the number "adjective/noun" allows us to replace problems involving fractions with an equivalent problem that uses wholes. By choosing the noun a number modifies, we can simplify arithmetical algorithms and supply a vehicle whereby mathematics can be presented in a seamless transition.

Adjuncts Helping Adjuncts Adjuncts from everywhere. A round-robin discussion on employment, tricks of the trade, and a complete a list as we can get of who hires whom at different colleges. An attempt will be made at obtaining an up-to-date list of publisher contacts.

Keeping Your Class in the Palm of your Hand Mark D. Duston Johnson \& Wales University. HP palmtop PC's were distributed to faculty with a diverse computing background. Docking stations and synchronization software were supplied including EXCEL templates for record keeping. The software was able to synchronize and update contact lists and calendars with MS Outlook. Instructor experiences and student reactions will be presented

## Saturday 2:35-3:20

Maintaining a Lively Classroom to Reduce Stress and Enhance Student Learning, Gary R. Tataronis, Massachusetts College of Pharmacy and Health Sciences. The use of humor as a way to reduce stress and enhance student learning in the mathematics classroom will be discussed. In addition, specific examples (including impersonations and sound effects) utilized in Algebra, Calculus and Statistics courses will be presented. Attendees should have a sense of humor.

For updated conference information, check NEMATYC's website: www.nematyc.org
Questions? bwicklund@mwcc.mass.edu or 978-630-9306 or plavery@mwcc.mass.edu or 978-630-9213

Saturday 2:35-3:20 (Continued)
Industrial Strength Mathematics P. Brady Townsend ,Wachusett Regional High School \& Worcester Polytechnic Institute The Math in Industries Institute at WPI develops applications that can be used in the classroom to excite students. They give students satisfying answers to the eternal question: When are we ever going to use this stuff? Solutions to open ended questions reflect the insights and perspectives of the engaged students.

Improving Student Success in Intermediate Algebra Elaine Previte, Quinsigamond Community Quinsigamond Community College has been working to improve the success of its developmental students in Reading, Writing, and Mathematics through its Title III grant. The presenter has piloted a unified course in Intermediate Algebra and the data show that student performance is on the rise! Materials and data will be shared with participants.

Saturday 3:30
NEW ENGLAND MATHEMATICAL ASSOCIATION OF TWO YEAR COLLEGES annual meeting. Election of officers, presentation of the current budget, minutes, and door prizes.

Note to presenters from the Editor. Many of you submitted considerably longer, more complete and eloquent descriptions of your presentations than was printed above. The RFP requested fifty words and I had to play aggressive editor to pare longer pieces. I only hope I didn't change the intent of your original wording too much. If I did, attack the next editor! JCJ

NEMATYC Executive Board met on January 9, 2004 at MassBay CC. Those present were Roberta Kieronski, Susan Hoy, Paul Laverty, Lois Martin, Elaine Previte, John Jacobs, and Maureen Woolhouse. Passed minutes and the Treasurer's report were reviewed and accepted. Two schools voted to pay NEMATYC dues and Quinsigamund will pay adjuncts fees for the April conference. The April conference was discussed at length as well as the possibility of setting up a scholarship fund. Any scholarship fund will require considerable IRS paperwork. Adjunct membership is growing.

BUNKER HILL IN 2005? Bunker Hill Community College in Charlestown, MA is vying to host the 2005 NEMATYC conference. Professor Geri Curley reports administrative enthusiasm and the Mathematics Department is looking forward to the possibility. The conference location gets voted upon during the annual meeting.

Southern New Hampshire University in 2006? Alex Ingraham of Southern New Hampshire University reports there has been a general interest among the mathematics faculty at SNHU in hosting the 2006 NEMATYC Conference. "Although we have not discussed it since last spring, when the weather was much more pleasant, I doubt that the faculty's interest has waned.. I think it is safe to say that SNHU should remain under consideration as a potential site for the 2006 conference."

NEMATYC Scholarship The NEMATYC Board has decided to create a subcommittee to investigate the creation of a NEMATYC Scholarship. If you would like to volunteer to serve on this committee, please email Roberta Kieronski at robertak@cisunix.unh.edu and let her know of your interest. If you cannot serve but have ideas, please email her any information that you have on scholarships.

Stick with it. Students invariably leave off the "(x)"on functions when they are first learned. Tell them that without the " $(x)$ ", $\log (x)$ is just a stick of wood!

Picture this: The two young boys in the cartoon strip Fox Trot were calling signals to hike the football. " $\sqrt{ }$ Hut, Hut, Hut." Naturally, they thought the entire game was irrational. If they left out the square root of two, they could have had a transcendental experience!

Mixed Up Math Tu-Dogs gives Knowledge Probe's Mixed Up Math s 4 dogs. http://www.kprobe.com/kprobe/mu.htm: A wonderful fun but educational math game and logic puzzle from Knowledge Probe. Can be played at all levels. Fun for the developmental classes and a good time waster for the instructors as the player moves numbers around to get the correct solution. Some of the numbers are in the correct place indicated by color. Colors turn green when correctly placed. There are several different lay-outs. Free download.


For updated conference information, check NEMATYC's website: www.nematyc.org Questions? bwicklund@mwcc.mass.edu or 978-630-9306 or plavery@mwcc.mass.edu or 978-630-9213

# NEMATYC NEWSLETTER 

John Jacobs, Editor

Judy Carter, Publisher
North Shore Community College
1 Ferncroft Road
P. O. Box 3340

Danvers, MA 01923-0840

# NEMATYC 2004 <br> CLIMMBING NEW HIEIGHITS Mount Wachusett Community College Gardner, MA Abril 2 \& 3. 2004 

## Join or Renew your Membership

If you are unable to attend NEMATYC 2004: Climbing New Hfeightis, you can still start or renew or maintain your membership. This will ensure you will receive the Newsletter and notification of future NEMATYC meetings. Please send your name, preferred mailing address and the $\$ 5.00$ membership fee to Lois Martin, NEMATYC Treasurer, 25 Lydon Lane, Kingston, MA 02364


[^0]:    *Registration Fee: includes refreshments, Saturday breakfast and lunch, and NEMATYC dues
    $\$ 45$ if sent by March 19; $\$ 50$ at the door
    $\$ 25$ for students \& adjunct faculty
    *Registration fee is waived for ONE presenter per session.
    Registration begins at $\mathbf{2}$ p.m. on Friday and 8:00 a.m. on Saturday

