



# GMATYC News

A Publication of the Georgia Mathematical Association of Two-Year Colleges

## President's Corner

**Donna Saye, GMATYC President**  
Georgia Southern University

Summer vacation has ended and Fall Semester 2005 is here. I hope everyone is excited about being back in the classroom and looking forward to a very successful 2005 school year! Our GMATYC focus this Fall, as always, is on membership. I would like to thank all of you who are members for your active participation in GMATYC last year. Thanks for saying "yes" when asked to serve GMATYC! I encourage each of you to speak often (*and speak positively*) about our organization to your colleagues at your particular college or university and invite them to join.

GMATYC had its first meeting in 1987 at DeKalb College (now Georgia Perimeter College)--Clarkston Campus. Since its beginning, membership has included faculty from

both public and private two-year colleges, four-year colleges, and universities as well as technical schools throughout the state of Georgia. Members of GMATYC have always been devoted to providing a forum for the improvement of teaching mathematics to students in their first two years of college. Our organization serves as a network for communication among educators in Georgia. Through GMATYC, mathematics faculty share methods and techniques that enhance the teaching of mathematics. GMATYC also offers a venue for professional development for college and university mathematics teachers in the state of Georgia. I ask each of you to be actively involved in GMATYC this year, and to help us in our endeavor to increase membership. A

greater membership will provide more voices networking and greater opportunities to learn techniques for improving the teaching of mathematics.

GMATYC is an affiliate of AMATYC, and I would also like to take this opportunity to encourage each of you to join AMATYC. The AMATYC annual conference will be held November 10-13 in San Diego, California this year. For more information about AMATYC and the conference visit the AMATYC website at [www.amatyc.org](http://www.amatyc.org).

I look forward to serving GMATYC as President again this year. For more information about GMATYC visit our website at [www.gmatyc.org](http://www.gmatyc.org).

## Inside this issue:

GCTM Report on 46th Conference	2
Justification for Raising Dues	2
Excellence Award	2
News from your AMATYC Vice-President	3
AMATYC Student Math League Competition	3
19th Annual GPC Mathematics Conference	4
Gainesville College Mathematics Tournament	4
Tailoring the Transition from Developmental to College Mathematics	5
GMATYC Congratulates...	5

Will you be the



recipient of the third GMATYC Teaching Award? Not unless you apply. Find details at :

[www.gmatyc.org](http://www.gmatyc.org)

The deadline for applications is December 1, 2005.

## GCTM Report on 46th Annual Conference

Don Brown, Macon State College

Recently, the Georgia Council of Teachers of Mathematics (GCTM) held its annual conference at Rock Eagle 4-H campgrounds near Eatonton, Ga. Over two thousand people attended the conference. The theme of this year's conference was Extreme Makeover: Mathematics Education which focused on the new Georgia Performance Standards (GPS). A copy of the new GPS can be found at [www.georgiastandards.org](http://www.georgiastandards.org). The new standards reflect the

changes in mathematics courses in Georgia's public schools for grades K – 12. Also, the conference provided sessions appropriate to math teachers from kindergarten to college. Next year's conference will be held October 18<sup>th</sup> – 21<sup>st</sup>, 2006 at Rock Eagle. Check out GCTM's website at [www.gctm.org](http://www.gctm.org) for more information.

At the conference, a new mathematics educators' organization held its first meeting. The group

is called Georgia Association of Mathematics Teacher Educators. The purpose of the organization is to share information about common opportunities and challenges for mathematics educators and to work more effectively towards improving the mathematics achievement of all Georgia students. For more information about the group, please contact Lynn Stallings at

[lstalling@kennesaw.edu](mailto:lstalling@kennesaw.edu).

## Justification for Raising Dues

Alice Eiko Pierce Georgia Perimeter College, Clarkston

There has been discussion concerning increasing the membership dues for GMATYC for several years. The Executive Board has decided that it is now time for GMATYC members to vote on this issue. Therefore, we will hold an electronic vote November 1-3, 2005, so that you can have voice concerning the issue of increasing the membership dues from \$5 to \$10 (effective January, 2006).

Prior to the vote, please consider

the following as justification for raising membership dues:

Currently we *spend* approximately \$1000 each year. Some of our larger expenditures include: publication of the newsletter and postage for its mailing (~\$350 to \$600 per year), the award presented to the highest scoring Georgia student on the AMATYC SML test (\$200 award plus a plaque), travel for the President to attend the annual AMATYC conference (\$200), annual contri-

bution to the hospitality room at the AMATYC conference (\$50), Gainesville Math Tournament (\$100 per year), and the Teaching Excellence Award winner (\$60 for renewal of membership in AMATYC plus a plaque every other year). We average about 125 members each year. Therefore, at \$5 per person, our *average revenue* is \$625 per year. It is clear, I think, that our expenses tend to exceed our revenue each year.

## Excellence Award Name

Donna Saye Georgia Southern University

At its June 1, 2005 meeting, the Executive Committee for GMATYC unanimously decided that we would like to honor Bill Bompert by naming the Teaching Excellence award for him. Bill was a great friend and colleague to many of us in GMATYC. He was a member of the mathematics faculty as well as an administrator at Augusta State University for many years. He last served as Vice President for Aca-

demic Affairs at Augusta State prior to his retirement. He was a long-time leader in GCTM, GMATYC, and numerous other mathematical associations. He gave many presentations at both GCTM and GMATYC conferences and was well-known for the sense of humor that he used in his presentations. He served with along with Kim Bennett and me, during the Fall of 2003, on the GMATYC committee for choos-

ing our first annual Award for Excellence in Teaching, which was presented in February 2004. He died in August, 2004. On November 1-3 we will have a vote which will allow you to voice your opinion regarding the Executive Committee's decision to name the Teaching Excellence award the *Bill Bompert Teaching Excellence Award*.

## News from your AMATYC Vice-President

Rob Kimball, AMATYC Southeast vice-president, Wake Tech Community College

For a lot of us, summer is a time to slow the pace down and even to get away for a while. A time to catch up on rest, catch up with friends, and even play a little catch with the children.

But for AMATYC, it has been anything but slow! The San Diego conference promises to be a memorable one. An extra plenary session has been added because of the well-known and exciting speakers able to participate.

You know about the city, but you may not know about the Town & Country Resort. This California-style resort, with spacious courtyards connecting detached lodging and meeting rooms will make this a very different feel for an AMATYC conference. A trolley station behind the resort provides easy access to the zoo, old town, the gas lamp district, or even Tijuana!

Start making plans now to attend! Find the low fares, find a

roommate, find the money and GO.

In San Diego, the Beyond Crossroads team will provide every participant with the latest draft of the document. But, in addition to the paper copy, you'll get to hear about the exciting **digital products** planned to accompany the paper version. I think you'll find these beneficial and may want to volunteer to help produce them.

AMATYC also was granted another NSF award. This one, MAC<sup>3</sup> (Math Across the Community College Curriculum), has already offered a summer institute and will be a great asset to the MAC movement.

You may have already seen the new logo, but have you visited the AMATYC store? Yes, you can get all sorts of things there to identify you as an AMATYC member and supporter.

Many of you catch up on your reading during the summer. So, in addition to Harry Potter or your fa-

vorite paper back, I hope you've read Beyond Crossroads as well as at least three other important documents: **The Vision** (AMATYC), the **CUPM Curriculum Guide** (MAA), and the **CRAFTY Foundations Report** (MAA). For future reading, the MAA will soon send its newest **Notes** series, this one will focus on College Algebra.

Lots of things are happening in your profession. And, as your AMATYC Vice President, I want you to know that your professional organization, because of the efforts of many volunteers as well as a great office staff, is diligent and persistent in pursuing efforts to support you as you strive to grow professionally and as you work to create a learning environment that helps all students achieve their educational goals.

I hope you have a great year.

Regards,  
Rob

## AMATYC Student Math League Competition

Alice Eiko Pierce Georgia Perimeter College, Clarkston

In 2004-2005, over 8000 students from 170 schools competed in the AMATYC Student Math League Competition. The test is given in 2 rounds – one in the Fall and one in the Spring. The team score for each round is based on the top 5 scores from a school.

Nationally, Georgia Perimeter College and Gainesville College did great! GPC came in third and Gainesville was 46<sup>th</sup>. Other schools in the top five were #1 William Rainey Harper College (IL), #2 Bellevue City College (WA), #4 City Col-

lege of San Francisco (CA), and #5 Pasadena City College (CA).

Out of the 26 schools that competed in the Southeast region, GPC and Gainesville College came in first and second, respectively. Tied for second with Gainesville were Durham Technical CC (NC), Indian River CC (FL), and Wake Technical CC (NC).

We can also be proud of the Georgia students that ranked high nationally. Out of more than 8,000 students, Mitcham Costley of GPC

ranked #7, Ben Wu (GPC) #14, Max Bernardy (GPC) #22, Jackson Tanis (GPC) #23, and Michael Stupavits (Gainesville) #46. As the top Georgia student, Mitch Costley received \$200 and a plaque from GMATYC.

For more information on the AMATYC Student Math League Competition, past results, and competition questions, go to <http://www.amatyc.org/SML/index.htm>.



## 19<sup>th</sup> Annual Georgia Perimeter College Mathematics Conference

Jessica Craig, Georgia Perimeter College, Dunwoody

The 19th Annual Georgia Perimeter College Mathematics Conference will be held at the Lawrenceville Campus of Georgia Perimeter College on Friday and Saturday, February 17<sup>th</sup> and 18<sup>th</sup>, 2006.

We are delighted to announce that the keynote speaker for this year's conference will be Mr. Robert Kimball. Rob Kimball is chair of the Mathematics and Physics department at Wake Technical Community College in Raleigh, NC. Rob has been active in professional organizations; serving the American Mathematical Association of Two Year Colleges (AMATYC) as the chair of the Technical Mathematics Committee and as a regional Vice President. Rob was on the writing team for the 1995 AMATYC CROSSROADS document and is the internal evaluator for BEYOND CROSSROADS. In 1997, he was awarded the AMATYC Teaching Excellence Award.

The title for Mr. Kimball's presentation is "From Theory to Practice: Implementing the Standards." His talk will look at how the CROSSROADS standards might affect the content we teach, the methods we use, the tools we employ, and the instruments we use to measure learning.

A variety of interesting workshops have been lined up for the conference. The workshop presenters include Dr. Fred Peskoff, Dr. Tom Banchoff, Dr. Chris Harrow, and Dr. Judy O'Neal.

We are also seeking parallel session presenters. If you are interested in presenting a parallel session related to the teaching of mathematics at the learning support or two-year college level, please send your proposal to Dr. Marjorie Lewkowicz at [mlewkowi@gpc.edu](mailto:mlewkowi@gpc.edu). Your proposal must include the following

information: name of presenter (s), college or organization, email address, daytime telephone number, mailing address, the presentation's proposed title, an abstract of 50 words or less, and a detailed list of needed equipment. The deadline for submission of proposals is November 7, 2005.

For more information, please contact the conference chair, Dr. Jessica Craig at [jcraig@gpc.edu](mailto:jcraig@gpc.edu). If you would like to have your name placed on our mailing list, please contact Albert Lu, the conference registrar, at [alu@gpc.edu](mailto:alu@gpc.edu)

For more information and updates, check the conference website <http://www.gpc.edu/~gpcmathc>

It will be an exciting and invigorating conference. We are looking forward to seeing you there.



## Gainesville College Mathematics Tournament

Gina Reed Gainesville College

The 12th Annual Gainesville College Mathematics Tournament for Two-Year Colleges is scheduled for April 8th, 2006 on the Oakwood, GA campus of Gainesville College.

With cash prizes for top students, generous scholarship offers for students interested in

majoring in mathematics at Mercer University, and a tradition of challenging tests for students, this year should be even more exciting and students and colleges from across Georgia are invited to demonstrate their excellence during a challenging and enjoyable day of competition.

For more information, contact Jerry Graveman ([jgraveman@gc.peachnet.edu](mailto:jgraveman@gc.peachnet.edu)) or Thomas Hartfield ([thartfield@gc.peachnet.edu](mailto:thartfield@gc.peachnet.edu)) or visit the tournament web site at <http://www.gc.peachnet.edu/math/tournament/>

# Tailoring the Transition from Developmental to College Mathematics

Lisa S. Yocco Georgia Southern University

Many students are entering college with poor skills in mathematics. The reasons for their math inadequacies are varied, but the fact remains that more and more students are enrolling in remedial algebra at the college- and university-level, and that College Algebra is the most dropped and/or failed course on many campuses. Developmental teachers are steadfast in their commitment to the teaching of algebra, reminding students what, how, and when to study, and they employ any tool or trick of the trade to bring students up to the level that will enable them to pass their next course. Despite all of the good teaching that takes place in the developmental classroom, there is, perhaps, a failure to prepare students for the potential rigidity or indifference that occurs in a College Algebra class. Having been handled specially, these students will enter a college mathematics class with other students and will perhaps receive no special attention. Because we cannot always change the future course, we must prepare them to survive in a more challenging environment. How can we tailor the transition for these students from developmental courses to college-level courses?

To ease this transition, we introduced several techniques in our developmental math classes designed to help improve students' ability to handle college-level mathematics courses. One technique used was to integrate study skills as applied to a mathematics course. Research has indicated that 50% of academic achievement results from a student's IQ, 25% from the quality of instruction, and 25% from factors that can be modified, such as study habits.

[Bloom, 1976] Students have seen study skills before - they know the SQ3R method for studying, the Cornell method for notetaking, time management techniques, and whether they are visual, audio, or kinesthetic learners. What they perhaps have not seen is how these study skills relate to studying math. For example, they may not have used a modified Cornell method for taking math notes, learned how to study for a math test, used tips for taking a math test (such as memory data dump), nor seen how to learn from mistakes made on tests. Reading a math textbook is certainly different from reading a history textbook, and adjustments should be made to accommodate reading a math textbook, even if the student is simply skimming the section as a preview to the day's lesson.

Secondly, students were given good organizational hints and encouraged to use them. Good organization is essential in a math course so that the student does not fall behind and can quickly reference a topic if needed. Keeping an organized notebook consisting of three sections (class notes and examples, homework, and problem log), transferring problems from the problem log to make a practice test, and making note cards with sample problems on one side and the solution on the other side are some of the methods that can help students' success in a math course. Study guides and test reviews are also helpful to (and popular with) the students, provided they do not count on the teachers' preparation of review material as their sole resource for study materials. Encouraging students to make their own "cheat sheet" is extremely beneficial

to their understanding of important concepts and how these concepts relate to each other. Reviewing notes or examples before students begin their assignment and learning to write every step of the problem without doing steps mentally can contribute to their success in later courses.

Additionally, instructors and students used precise mathematical language, to the extent that this was practical. Instructors can endear themselves by offering shortcuts or "tricks," but in the end the students may suffer. Instructors should use mathematical terms correctly but avoid being pedantic. As mathematics teachers, we have our own vocabulary - words like simplify, evaluate, graph, and factor - that often imply carrying out a list of operations to complete. We often use the same words in different ways as applied in different contexts. This can create confusion for the students. A few examples follow that illustrate how students can easily become confused.

SIMPLIFY  $(4y)^{-3}$  means rewrite the expression without using any negative exponents and carry out any exponential evaluations that are possible, while SIMPLIFY  $\sqrt{20}$  means rewrite the radical so that no perfect square factors appear under the radical.

FACTOR 40 means rewrite 40 as a product of prime numbers, while FACTOR  $x^2 - 9$  means find two polynomials that multiply together to give  $x^2 - 9$ .

## GMATYC Congratulates...

- Alvina Johnson Atkinson of Fort Valley State University who received tenure and was promoted to Associate Professor.
- Piotr Hebda of Gainesville College who was promoted to Professor.
- Nicole Krochek of Gainesville College who joined the faculty as an Instructor.
- Danny Lau of Gainesville College who received tenure.

GMATYC



<b>President Dr. Donna Saye</b> Georgia Southern University	<b>Publications Chair Alvina J. Atkinson</b> Fort Valley State University
<b>Past President Gloria Hitchcock</b> Georgia Perimeter College, Rockdale Center	<b>Webmaster Calandra Davis</b> Georgia Perimeter College, Dunwoody Campus
<b>Secretary Diane Wilson</b> Georgia Perimeter College, Lawrenceville Campus	<b>Member-at-Large Sallie Paschal</b> Georgia Perimeter College, Rockdale Center
<b>Treasurer &amp; Voting Coordinator Alice Pierce</b> Georgia Perimeter College, Clarkston Campus	

**GMATYC News**

Alvina J. Atkinson, Editor  
Fort Valley State University  
1005 State University Drive  
Fort Valley, GA 31030



**GMATYC NEWS**