Chair's Letter

As Chair of the Department, I ask myself what I can write in this space that will be most meaningful. Many issues and problems lay before us such as space, over loaded classes, overworked faculty, staffing, curriculum revisions, and departmental chemistry. Amongst all these, the most important are the issues affecting people. We can solve any problem as long as we work together as a team – all pulling together. We must believe we can tackle anything thrown at us. The people of the Department are our most important asset and that must be built on. This is where I want to focus my comments.

Daily, I am thankful for all the support that the faculty has given me and for the exemplary work this faculty is doing in the classroom, in scholarship and in service to the Department. I cannot begin to do justice to those individuals who roll up their sleeves and tackle departmental chores without a murmur. This brand of service is so important to the day-to-day life of the Department.

As the saying goes, all good things must come to an end. Mr. Charles Lauffer retired in August of this year. We thank him for over three decades of service in teaching mathematics to generations of students. We also welcome Mr. Alfred de la Rosa as instructor to our department. He has a Master of Science in Mathematics from Lamar. Dr. Jennifer Fowler has joined the mathematics faculty. She is a fresh new Ph.D. in algebra from North Carolina State University. She comes to us with a lot of ideas about teaching and, of course, brings new energy to our faculty and programs. In that vein, we also have approval to search for a new faculty member. We hope to find someone in mathematics education, statistics or modeling but most importantly we want to find someone who can enhance the core of teacher-scholars we now have.

And, allow me to introduce to you our new Administrative Associate, Mrs Alicia Bach. Already, after just a short time, she has demonstrated that she is energetic and is thorough. She will add to the professionalism at the front desk and play a most important part in the future development of the Department of Mathematics.

As I begin my second year, I am becoming more involved with the upper level students. I like what I see! The innate ability is there. I suspect that we have some real talent in our present pool of mathematics majors. The changes we anticipate in our programs should facilitate mathematical maturity and should inculcate in our students the idea that mathematics is an exciting and fun subject.

At any rate, I wish all a great year full of successes. Keep the faith!

Charles A. Coppin

Retiring Faculty/ New Faculty

Professor Charles Lauffer retired at the end of summer 2003 after 40 years of teaching for the Department. Thanks to Mr. Lauffer for his many years of dedicated service to our department. We will miss Charles and his greeting “What do you know good?”. We wish Charles the very best in his retirement.

We are pleased to welcome Dr. Jennifer Fowler as the newest addition to our faculty. An East Texas native, Dr. Fowler received her undergraduate degree at the University of New Orleans and her Ph. D. at North Carolina State University. Her area of expertise is algebra; in particular, symmetric spaces, Lie algebras, and Lie groups with focus on writing algorithms to compute the structure of local symmetric spaces. We also welcome Mr. Alfred de la Rosa as instructor to our department, Alfred is a resent M.S. graduate from our department.
The following, contributed by Dr. MaryE Wilkinson, is a description of the annual AP Calculus reading. Dr. Wilkinson has a dual appointment in the Department of Professional Pedagogy and the Department of Mathematics. She has participated in the annual reading for the last several years.

"More than 200,000 high school students take an AP Calculus AB or BC Exam in May, spending 105 minutes on multiple choice questions and 90 minutes on free response questions. While the multiple-choice sections are machine scored, people – about 650 Readers – score the free response questions. Students who earn composite scores of 5 are considered “Extremely Well Qualified” to receive credit and/or advanced placement at many universities. Other composite scores are 4 “Well Qualified”, 3 “Qualified”, 2 “Possibly Qualified”, and 1 “No Recommendation”. With so much riding on each student’s AP score, grading the free response sections is a complex issue.

The free response sections of the AP Calculus AB or BC Exam consist of six problems. Students are allowed to use calculators for the first 45 minutes and the first three problems. Once the calculators are put away, students unseal the other three problems. If time permits, students may return to work on the calculator problems, but are not allowed to retrieve their calculators. Solution presentations are often more important than final answers in the free response sections of the exam. This may be the ultimate partial credit test!

It is essential that every student be held to the same standard; that every student’s work be evaluated fairly and consistently. The Chief Faculty Consultant, Question Leaders, Table Leaders, other content experts, and, finally, the Readers share this responsibility. Much of the effort to ensure consistency is completed before the Readers even arrive.

The process of scoring a free response question begins when preliminary standards are developed along with the problem. A draft of scoring guidelines is reviewed, revised, and tested on randomly selected student papers during the week prior to the reading. Finally, in sessions involving all Readers, ambiguities are considered and a final set of scoring guidelines is established. At this point, scoring begins.

There are other checks and balances to ensure that students receive fair and accurate scores. With 650 individual Readers, every effort must be made to ensure consistent scoring. Since all identifying information is concealed, Readers never know who a student is or what school he or she attends. Readers carefully review individual exam ID numbers to be sure that no Reader grades more than one question for any particular student. Each Reader has a Table Partner, another Reader to help with any little guideline question. Each group of 12 or 14 Readers has two Table Leaders to whom they can go for a second or third review. During the early part of each question reading, the Table Leaders “back read” at least one set of exams for every person in the room. If a problem with the scoring guidelines can’t be resolved within the room, it may be taken to the Room Leader, Question Leader, and, finally, the Chief Faculty Consultant.

Who are the Readers? From around the world, they are selected from applications submitted by high school calculus teachers in public and private school and university and community college professors and instructors. Some are retired mathematicians and mathematics educators. The Chief Faculty Consultant is a college professor who has served as Reader, Table Leader, and Question Leader. Information and an application are available at http://apcentral.collegeboard.com/article/0,3045,154-180-0-4136,00.html

How do 650 people read 1,200,000 questions in one week? I don’t know – but we do! I have attended the last four readings in Fort Collins, Colorado. I can tell you that we work hard. It is absorbing in a way I can’t explain. I experience delight while reading that one beautiful, sometimes elegant, solution, sadness while reading the solution that just misses the mark; and something close to anger while reading a solution that highlights a lack of preparation.

The folks at Educational Testing Service and College Board make every effort to provide a comfortable and rewarding experience. From travel arrangements to dorm accommodations and meal cards to twice a day snacks, they think of most everything – even a generous stipend. Fort Collins is beautiful beyond description and the people in and around the university are friendly and generous.
Perhaps the most important experience for me is being among so many people who love mathematics. Conversations about mathematics and mathematics classrooms abound. Every year I meet new people and renew existing friendships. I delight in finding last year’s Table Partner or dorm suite mate.

I can’t explain the attraction – all that hard work and being away from home for a full week – but when I get that invitation letter in December, I’ll be sending it right back with a great big YES, THANKS.”

Putnam Team

Twelve members of the Putnam team under the direction of Dr. Baker and Professor Read participated in the Putnam competition at the end of the fall term. Six of the twelve members taking the exam scored on the exam Team members were Jeremy Loukas, Jason James, Carl Price, Amanda Arnold, Natalie Beaug, Natasha Diggs, Frances Read, Katie Tyler, Dena Yoder, Clint Jones Josh Fuller and Elizabeth Gunter. Congratulations to these fine students. This year’s team has been formed and is hard at work in preparation for the exam. This year’s members are Tiffany Stafford, Jessica Clark, Joni Espinosa, Clint Jones, Katie Tyler and Frances Read. Good Luck!

Scholarship Recipients

Departmental academic scholarship recipients for the 2003-2004 academic year and their donors are:

Ralph and Ruth Brookner Scholarship - Tiffany Stafford
Annie Sue and Richard T. Green Memorial Scholarship - Joni Espinosa & Katie Tyler
Homer Dennis Memorial Scholarship - Jessica Clark
Norman and Harold Orton Scholarship - Frances Read
Margaret Lumpkin-Lakie Scholarship - Clint Jones

Congratulations to these outstanding students!

Annual Spring Luncheon

The department held its annual awards luncheon this past May. The luncheon was held at the Olive Garden and was well attended by students, retired faculty, current faculty, and special guests. Students were recognized for their academic accomplishments. Jason James was selected as our Outstanding Senior. Top finishers of the annual Homer Dennis Freshman Mathematics Contest were also recognized. Congratulations to P. J. Couch, our first-place winner.

Pi Mu Epsilon/ Math Club

Pi Mu Epsilon is under the direction of Dr. Andreev. This past year Pi Mu had three students recognized in the College Mathematics Journal for solving two of the problems in the problem session of the journal. The students were Daniel Schultz, Jim Weir and Santitissadekorn Naratip. Congratulations to these fine students. The officers for 2003-2004 are President – Clint Jones, Vice President – Joseph Young, Secretary – Frances Read, Treasurer – Satesh Velmala.

This year the Math Club is under the direction of Dr. Daniel, Dr. Fowler and Dr. Wilkinson. The Math Club is in the process of having their initial organizational meeting.

Successes of Recent Graduates

We are pleased to continue to report the successes of our recent graduates. Mr. Ravi K. Nukala (M.S., ’02) is an Instructor at Kilgore College in Kilgore, Texas. Mr. Alfred de la Rosa (M.S., ’03) is presently teaching in our department. Ms. Mandy Arnold (B.S. ’03) and Mr. Jason James (B.S. ’03) have entered the M.S. program and Ph. D. program, respectively, in mathematics at University of Texas at Austin. Congratulations to each of these alumni - we are proud of you! If you are a mathematics alumnus, be sure that you are
registered in the alumni database on the departmental website http://www.math.lamar.edu/.

Congratulations also to Sunnee Stevenson and Loretta Morgan. They are the first graduates (May, ’03) of the recently created M. Ed. with Specialization in Mathematics.

Sabbatical

Dr. Alec Matheson is on sabbatical during the academic year 2003-2004. He is at SUNY – Albany working with Dr. Michael Stessin and other researchers; their work focuses on spaces of analytic functions.

Recent Publications, Research Announcements, and Presentations of Faculty and Students


P. Chiou, “Confidence bounds of scale parameters using pilot samples,” Journal of Statistical Research, Vol. 37, No. 1, pp. 21-29


A. Matheson, “Isometries into functions algebras,” to appear in Houston Journal of Mathematics

M. Wilkinson, Contributed presentation: “Why do the big kids invert and multiply?” Conference for the Advancement of Mathematics Teaching, Houston, TX


Funding

The Department is grateful to the University and to Entergy Texas for funding MathFest! activities for 2003-2004.
Problem Section

Given three parallel lines, show that an equilateral triangle can always be constructed with a vertex on each line.

Prove that the sum of 1 and the product of any four consecutive integers is a perfect square.