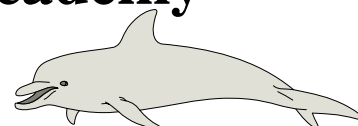


“Algebra through Function” Academy

Duck, North Carolina
June 22 – June 27, 2008



A Function Approach:

Teaching algebra from a function approach requires the use of **function and function behaviors** to teach concepts and skills such as factoring, equation solving, arithmetic operations on polynomials, systems of equations, inequalities, properties of inequalities, definitions, concept of asymptotic behavior, absolute value, slope, laws of exponents, etc. Using unique materials, we will reorder the algebra content and use function concepts to develop understanding of, interest in, and long-term memory of traditional algebraic ideas. We will capitalize on cognitive processes of associations, pattern building, attention, visualizations, meaning, the enriched teaching environment, distributed learning, and priming. We will model how to teach algebra through a function approach with graphing calculators, and demonstrate why they are crucial to teaching and learning. At the *Algebra through Function Academy* we will use the TI-84 Plus SE, CBL2, CBR2, and Vernier EasyLink, as tools of choice when teaching algebra.

Audience:

High school teachers of remedial algebra, algebra teachers, and college remedial algebra teachers

Instructors:

Debbie Crocker, Appalachian State University; Ed Laughbaum, The Ohio State University

Location:

The *Academy* will be held on the Outer Banks of North Carolina near the village of Duck at the Army Field Research Facility (FRF) <<http://www.frf.usace.army.mil/>>. The classroom is adjacent to the beach. The facility is handicapped inaccessible. The classroom is on the second floor with the only access through a set of stairs.

Lodging:

If attending as an individual and you select the housing option, you will share a vacation home with other participants of the same gender – one person to a bedroom. The rental vacation homes will be available to participants for \$300 for the full week (Sun. to Sun.). If you choose to bring your family, you may rent an entire house at your own expense. Likewise, you may also stay in a hotel (at your own expense) which usually starts around \$120 per night. Details will be sent upon request.

Transportation:

If arriving by plane, use the Norfolk, VA International Airport. It is suggested that you rent a car for the 1½-hour trip to the Duck/Kitty Hawk area. Maps to the Outer Banks can be found on the web.

Social Events:

We will have a Sunday evening reception. The outdoor drama “The Lost Colony” on Wednesday night is optional and is dependent on the weather. Lunches are provided M – F.

Cancellation Policy:

The *Academy* will be held only if a minimum enrollment is reached by May 1, 2008. If minimum enrollment is not met, the *Academy* will be cancelled and registration fees will be returned. We take no responsibility for any other expenses incurred.

Tentative Schedule:

Sunday , 6:30 PM – 8:00 PM, Opening Reception	Monday , 8:30 – 4:30, FRF classroom.	Tuesday , 8:30 – 4:30, FRF classroom.
Wednesday , 8:30 – 4:30, FRF classroom, 8:00 PM “The Lost Colony” outdoor drama (not covered in registration fee)	Thursday , 8:30 – 1:00, FRF field activities. 1:00 – 4:30, field trips.	Friday , 8:30 – 12:00, FRF classroom

Other Information:

Education graduate credit (3 quarter hours of EDUC 992) will be available through California State University, Bakersfield for approximately \$135. For further information contact Ed Laughbaum, The Ohio State University, Department of Mathematics, 231 West 18th Avenue, Columbus, OH 43210. (614) 292-7223, F (614) 292-0694, elaughba@math.ohio-state.edu

2008

Algebra through Function Academy Registration Form:

Name _____ First name to be used on nametag _____

School/College Affiliation _____

Full School/College Address _____

Full Home Address _____

Phone (W) _____ (C) _____ Fax _____

E-mail Address _____

Registration deadline is May 1, 2008 and is limited to the first 35 participants.

Check all that apply:

- HOUSING OPTION:** Enclosed with my registration form is my check for \$725 **made payable to The Ohio State University T3 Institute.** (Please arrange for shared housing through the Institute.)
- NO HOUSING OPTION:** Enclosed with my registration form is my check for \$425 **made payable to The Ohio State University T3 Institute.** (I will find and make my own housing arrangements.)
- Please send me information on local hotels. I will make and pay for my own housing arrangements.
- I will be vacationing with my family and need housing information to make my own accommodations.

Send registration form and check or PO to: Ed Laughbaum
The Ohio State University
Department of Mathematics
231 West 18th Avenue
Columbus, OH 43210

Preparing for the egg drop contest



Class Picture Day on the LARC



What math teachers do on Thursday

