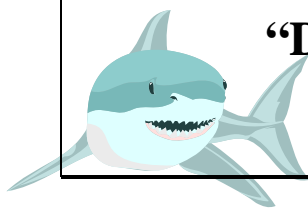


AMATYC Outer Banks Summer Institute

“Developmental Algebra Using a Function Approach”

Duck, North Carolina

June 18 – June 23, 2006



A Function Approach:

Teaching from a function approach means **using functions and function behaviors** to teach mathematics 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 modified developmental algebra materials approached through function, we will reorder the content and use function concepts and cognitive science research to develop an understanding of traditional algebraic ideas. We will capitalize on cognitive processes of associations, pattern recognition, attention, visualizations, meaning, and the enriched teaching environment. We will model how to teach developmental algebra through a function approach with graphing calculators, and demonstrate how they are crucial to teaching, learning, understanding, and remembering.

At the AMATYC Outer Banks Summer Institute we will use the **Vernier EasyLink**, and **TI-84 Plus SE™** as tools of choice when teaching remedial/developmental algebra. The course is a cooperative effort between the T³ Teachers Teaching with Technology College Short Course Program <www.math.ohio-state.edu/shortcourse/> and the AMATYC <www.amatyc.org> Summer Institute Program. **Participants may trade up to the TI-84 Plus SE VS model by trading in a working TI-83, TI-83 Plus, or TI-83 Plus SE VS calculator.**

Instructors:

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

Location:

The Institute 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.

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. 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 group dinner on Tuesday night and a Sunday evening reception. The outdoor drama “The Lost Colony” on Wednesday night is optional and is dependent on the weather.

Cancellation Policy:

The Summer Institute will be held only if a minimum enrollment is reached by May 1, 2006. If minimum enrollment is not met, the Institute will be cancelled and registration fees will be returned. AMATYC takes no responsibility for any other expenses incurred.

Tentative Schedule:

Sunday , 6:30 PM – 8:00 PM, Opening Reception	Monday-Tuesday , 8:30 – 4:30, FRF classroom.	Tuesday , 6:30 PM group dinner/activity.
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:

Mathematics graduate credit (3 quarter hours) will be available through California State University, Bakersfield for \$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

2006

AMATYC Outer Banks Summer Institute/T³ DEV Registration Form:

Name _____ First name to be used on nametag _____

College Affiliation _____

Full College Address _____

Full Home Address _____

Phone (W) _____ (C) _____ Fax _____

E-mail Address _____ AMATYC Membership # _____

Registration deadline is May 1, 2006.

Check all that apply:

- HOUSING OPTION:** Enclosed with my registration form is my check (\$525 for AMATYC members, \$600 for nonmembers) **made payable to T3 Institute.** (Please arrange for shared housing through the Institute.)
- NO HOUSING OPTION:** Enclosed with my registration form is my check (\$225 for AMATYC members, \$300 for nonmembers) **made payable to 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

Sunday Evening Reception



Classroom Activities



Relaxing after dinner on the Crystal Dawn.

