

THEC Applications of Algebra and Statistics IV Workshop

June 23-27, 2008,
8:30 a.m. - 3:30 p.m.
(with an hour lunch break)

at **Boyd Buchanan School in Chattanooga,**
Summer workshop to be funded by the Tennessee Higher Education Commission

- The number of participants is limited to 24 teachers who have responsibility in mathematics/science at any level. The content of this workshop is slanted towards Algebra 2 but any algebra/statistics/pre-calculus teacher should benefit. New teachers and minority teachers are encouraged to apply.
- Each participant must be employed in a Tennessee school, either public or private school.
- Each participant will receive a stipend of \$50 per day for 5 days.
- Each participant will receive a classroom packet (value roughly \$820) consisting of a TI-84+ Silver Edition calculator and view screen, a CBL2, a total of six probes, three resource books, and supplies for CBL2 experiments. Each school will receive a similar technology packet (value roughly \$770).
- Continuing Education Credit can be obtained at the rate of 1 point per clock hour (for a total of 30 points=3 CEUs) for a \$20 processing fee. Or teachers can receive 1 hour of graduate credit (UTC will waive the tuition fees for the course credit, but you will have to pay a \$25 application fee.) It is also possible that the workshop can be used to meet course competencies under the Alternative Certification Program.

Requirements:

- Principal's recommendation.
- Participation in all 5 days of the workshop.
- Discussion/preparation of classroom implementation.
- In-service discussion of the use of the equipment/content in a follow-up meeting in August/September.

Application deadline: April 10, 2008.

Selections will be made at this time and continue until the quota is reached. The application form page 3.

Brief Description of the Project

This project, a collaborative effort between the UTC and the Hamilton County, Memphis City, Polk County, Tullahoma City, and Van Buren County school systems, addresses some of the professional development needs facing these schools as well as the performance of graduates who continue on to higher education. This is done by emphasizing real world applications in the teaching of algebra/statistics and is based on our own experiences in teaching young people mathematics at the college level. The applications themselves will involve linear functions, quadratic functions, exponential functions,

logarithmic functions, linear systems, conics, probability, regression, percentiles, standard scores, normal distributions, etc.

Most of these applications readily lend themselves to the use of technology and we will utilize TI-84+ calculators and a related TI product, CBL2, which is used to analyze real-world data from a science perspective. As a result of this project the teachers should be able to make various algebraic/statistical topics “come to life” via applications and to reinforce students’ understanding of algebra and statistics through connections between the two. Certain statistical applications will be introduced involving the normal curve, linear regression analysis, etc. As a byproduct, the teachers will become well versed in the technology used, thus enabling them to adequately integrate technology in their own classrooms. However, it should be stressed that this is an “applications” workshop, not a calculator workshop.

Workshop coordinators: Dr. Francesco Barioli and Dr. Ronald L. Smith

Should you have any questions, please contact:

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