Foundational Physics

**Foundational Physics** will use:

- Research-based reform of physics instruction at all grade levels to meet the needs of diverse students
- Sustained professional growth and support for physics and physical science teachers

---

**Course:** EDUC 600: Physical Science Modeling Instruction: Survey  
Workshop only or 4 graduate credits available

**Teachers:**  
eighth grade physical science teachers,  
*Active Physics* teachers, and  
middle/high school special education science teachers

**Dates:**  
July 2 - July 20, 2007, Monday-Friday, 8:00-3:00, (no class July 4)  
Saturday, February 9 (March 8 snow make-up day) and April 5, 2008, 9:00-2:00

**Place:**  
Robinson Secondary School, 5035 Sideburn, Fairfax, VA 22032

**Stipend:**  
$750 stipend for successful completion of the course, ~$600 in equipment and materials, and lunch during the summer

**Instructors:** Melissa Booker ([Melissa.Booker@fcps.edu](mailto:Melissa.Booker@fcps.edu)) and  
Greg Matthes ([Greg.Matthes@fcps.edu](mailto:Greg.Matthes@fcps.edu))

**Optional:** Pre-workshop for Technology, June 28-29, 2007, 8:00-3:00  
Graphical Analysis, Logger Pro, setting up probeware

**Registration:** Opens January 15, 2007, closes June 20, 2007, submit application below.  
Space limited to 20 teachers on a first come, first served basis.

The Center for Restructuring Education in Science and Technology ([http://gse.gmu.edu/centersoffices/crest/](http://gse.gmu.edu/centersoffices/crest/)) at George Mason University, in collaboration with Alexandria City Public Schools, Arlington Public Schools, Fairfax County Public Schools, and Manassas City Public Schools will offer **Foundational Physics for Middle Level Science Teachers**.  
This course will count for Highly Qualified Teachers. The participating school divisions will provide one substitute teacher day to observe modeling instruction. The course is available for 4 hours of graduate credit. There is no fee for those not seeking GMU credit. If you want credit for this course, you will bring a check to class the first day!

Aligned with the highly successful program developed at Arizona State University, the workshop thoroughly treats pedagogy and content for introductory mechanics, electricity and magnetism, and light and sound. Content is organized around basic models to increase structural coherence for learners. Using course materials, participants work through activities alternately in the roles of student or teacher, as they practice techniques of guided inquiry and cooperative learning. Homework assignments include extensive reading, written lab reports, and journals. Two physics and physical science teachers will lead the workshop, both trained at Arizona State University in modeling.

---

**Modeling Instruction in Physics**  
*No Child Left Behind*

Funds for this project were provided by a grant from the federal Improving Teacher Quality State Grants (Title II, Part A,) Professional Development Program administered by the State Council of Higher Education for Virginia.
Physical Science/Physics Modeling Workshop Application

Name:____________________________________________ Email address:_______________________

School:___________________________________________

School Address:________________________________________________________________________

What school division do you teach in? (Please check)
   _____ Alexandria City Public Schools
   _____ Arlington Public Schools
   _____ Fairfax County Public Schools
   _____ Manassas City Public Schools
   _____ Other (please name) _______________________________

Home address:________________________________________________________________________

Home phone:____________________________

Current teaching assignment(s):___________________________________________________________

Number of years teaching:_____________________

What grade and subject are you most likely to teach? (Check all that apply)
   _____ eighth grade physical science
   _____ *Active Physics*
   _____ middle/high school special education science

Will you require graduate credit for this course?__________________

Please send this application by email attachment to:

Melissa Booker
   Melissa.Booker@fcps.edu
   Robinson Secondary School
   5035 Sideburn
   Fairfax, VA 22032

Questions? Please contact Donna R. Sterling, GMU at dsterlin@gmu.edu or Instructors Melissa Booker (Melissa.Booker@fcps.edu) or Greg Matthes (Greg.Matthes@fcps.edu).