

## Middle Grades Earth, Life Science, Force & Motion: Grades 5-8

July 28, 29, 30, 31, 2014 John Carroll University

Instructor: John Milam, Interim Director, Center for Mathematics and Science Education, Teaching and Technology

Ohio State Standards Grades 5-8: Demonstrate an understanding of how living system function and how they interact with the physical environment. Students must demonstrate an understanding about how Earth systems and processes interact in the geosphere resulting in the habitability of Earth. Students must demonstrate an understanding of how the concepts and principles of energy, matter, motion and forces explain Earth systems, the solar system and the universe.

Earth, Life and Force & Motion are complex subjects with a lot of abstract concepts, information and terminology - It is easy to become overwhelmed!

This FOUR day workshop focuses on making *The Universe, Characteristics of Earth, Diversity and Interdependence of Life* more understandable. The workshop teaches content while modeling effective middle school science curriculum and pedagogy you can use in your own classroom with your students!

Newton's First, Second and Third Laws deal with Force & Motion – it is the foundation of the Middle School Physical Science Standards. Learning scientific concepts such as *Motion*, *Balanced and Unbalanced Forces*, *Speed*, *Direction*, *Position*, *and Velocity* becomes possible as we explore these ideas using discrepant events and projects easily transferred to your own classroom!

**Dates:** Classes are from 8:30 AM-3:30 PM.

July 28, 29, 30, 31, 2014

**Registration for this 4-day workshop is** \$250 which includes all materials.

*OPTIONAL*: Receive TWO (2) hours of non-degree graduate credit through John Carroll University at a special cost of \$320.

Note: CMSETT reserves the right to cancel workshops that do not have a minimum number of registrants. In the case of cancellation, you will be notified and a given full refund.

## Middle Grades Earth, Life Science and Force & Motion:

**Grades 5-8** July 28, 29, 30, 31, 2014

8:30 am - 3:30 pm

## PERSONAL INFORMATION PLEASE PRINT

School: District: Home Address:	
Home Address:	
City: Zip:	
Home Phone: Cell:	
Work Phone: Fax:	
Email address:	
What is your current position? (ex. 6th grade teacher, 8 <sup>th</sup> grade science teacher, curriculum specetc.):	ialist,
Mail the completed registration form with a check for \$250 payable to "John Carroll University" or send a school purchase order to:	
John Carroll University	
1 John Carroll University University Heights, OH 44118	

or fax the registration form with a purchase order to 216.397.4544.

Upon receipt of your application and payment, you will receive an email confirmation of your registration. In May 2014, you will receive another email with workshop details. Please contact The Center for Mathematics and Science Education, Teaching and Technology at John Carroll University if you do not receive this information (216.397.4575) within 10 days of your application.

**Note:** Registration fee is not refundable after June 1, 2014, however you may transfer your registration to another person at the same grade level.