Biosphere-Atmosphere Research & Training (BART)

Short Course Information –Summer 2007

Technical Short Courses will provide hands-on technical training to graduate students, postdoctoral scholars, faculty members, and scientists. Each course will provide participants with the tools necessary to conduct research in a particular sub-discipline of biosphere-atmosphere interactions.

Classroom Based Short Courses provide classroom based instruction and discussion for graduate students, postdoctoral scholars, and scientists. Courses are typically led by multiple instructors lecturing on their area of expertise.

Short courses will be offered at the University of Michigan's Biological Station (UMBS), an outstanding venue for technical courses of many kinds, with extensive classroom, computing, and laboratory facilities. The University of Michigan Biological Station is located at the northern tip of the Lower Peninsula of Michigan, on the south shore of Douglas Lake.

The cost for the short courses includes lodging and dining and facility fees as well as a non-refundable $50 processing fee. For more information, contact the BART office at 888-647-0536, bartumbs@umich.edu, in Ann Arbor. Full course descriptions and registration forms are also available at our website, www.lsa.umich.edu/umbs/bart.

Essentials of Biosphere-Atmosphere Interactions

June 25th-July 3rd, 2007 Register by May 1st for Discounted Cost: $1725

This classroom based course is team-taught by experienced biosphere-atmosphere researchers and coordinated by Dr. Steven Bertman and Dr. David Karowe, both of Western Michigan University**.** Topics include: Global Climate Change, Boundary Layer Meteorology, Atmospheric Chemistry, Plant Physiology, Forest Ecophysiology, Aquatic Ecology, Global Biogeochemical Processes, Plant-Atmosphere Interactions, Water-Atmosphere Interactions, and Soil-Atmosphere Interactions.

Methods in Plant Physiological Ecology for Climate Change Research

July- 9th-13th, 2007 Register by May 1st for Discounted Cost: $1500

A technical short course in key ecophysical methods, predicated on the concept that plants mediate aspects of mass and energy exchanges between ecosystems and the atmosphere. Topics covered include gas exchange, water relations, root dynamics, and stable isotopes. The course will be taught by Dr. Peter Curtis from Ohio State University.

Flux Measurement Fundamentals

July 9th-13th, 2007 Register by May 1st for Discounted Cost: $1500

A technical short course in the use of micrometeorological methods to obtain and analyze fluxes of momentum, heat, and chemical species by eddy-covariance, eddy accumulation and related techniques. Topics covered include theory of turbulent exchange measurements, flux measurement techniques, installation and operation of an EC and energy balance measurement site, and QA/QC. The course will be team taught by Dr. Hans Peter Schmid of Indiana University and Brian Lamb of Washington State University

Ecosystem Modeling: Examples from Carbon Cycle Sciences

July 16th-21st, 2007 Register by May 1st for Discounted Cost: $1500

A technical short course in modeling fluxes of atmospheric trace gases using examples from Carbon Cycle Science. Participants will discuss process-based and inverse approaches to modeling the global carbon cycle, examine biosphere models, and construct an ecosystem carbon budget model for UMBS. Course is team taught by Dr. Anna M. Michalak, University of Michigan, and Dr. Adam I. Hirsch, University of Colorado and NOAA.

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Short Course Registration 2007

_____ Essentials of Biosphere Atmosphere Interactions June 25-July 3, 2007	_____ Flux Measurement Fundamentals July 9-13, 2007
_____ Plant Physiological Ecology July 9-13, 2007	_____ Ecosystem Modeling July 16-21, 2007

Check the course(s) in which you wish to enroll.

Participant contact information

Name	
Address	
City/State/Zip	
Phone	*Email*

Payment information

You may pay either by **check** or by **credit card**. If paying by check, send your deposit of **$150 per course** and registration form to: BART, University of Michigan Biological Station, 930 N. University Avenue, Ann Arbor, MI 48109-1055. Fifty dollars of the deposit is **non-refundable** in the event of your cancellation. **The balance of your fees will be due one month prior to the start of your short course.** If paying by credit card (Visa or Mastercard only), complete the following information and either submit online or print the form and fax it to 888-647-0536. **Registration must be received by May 1st for discounted cost (cost listed next to each course description) and will be accepted on a first-come, first-served basis; registrations after that time will be accepted on a space-available basis for an additional $200 per course (non refundable).**

Payment method:	_____ *Check* _____ *Credit card (see below)*
Credit card type:	_____ *Visa* _____ *Mastercard*
Credit card number:	*Expiration date:*
Printed name on card:	
Signature:	

Please indicate your roommate preferences. (circle only one)
smoking non-smoking

Please indicate food preferences and/or allergies. (circle all that apply)
vegetarian omnivore no red meat, chicken, fish allergies?_____

Please list the make, model, color, and license # of the vehicle you will be bringing to UMBS.

Emergency contact information

Name
Address
City/State/Zip
Phone *Email*

Send your registration and deposit of $150 ($50 non-refundable) per course by *May 1, 2007,* to:

BART Program
University of Michigan Biological Station
930 N. University Avenue
Ann Arbor, MI 48109-1048

Fax to:
888-647-0536

We will send a detailed list of items and general information about UMBS along with confirmation of your registration. *Please do not bring pets.*