

BU MISSION EARTH JULY 2019 SUMMER WORKSHOP & TRAINING

MONDAY - JULY 22, 2019

Time	Topics
8:30 – 9:30 Peter Evangeline	Introduction to Workshop: Overview of GLOBE <ul style="list-style-type: none"> ● Agenda ● Purpose/History/Goals/Projects ● Connection to 3D NGSS -- Science Practices ● Connection between GLOBE, SRS Projects, and Landmarks ● Ice Breaker
9:45-12:00 Returning Teachers Evangeline	Returning GLOBE Teachers' Scaffolding Talk and Favorite GLOBE Lessons <ul style="list-style-type: none"> ● Show samples of student work ● Discuss projects they did with their class ● Question and Answer session between Returning Teachers and New Teachers ● What is the Needs Assessment?
12:00-12:30	Lunch (working) <ul style="list-style-type: none"> ● Survey 1: Needs Assessment Survey
12:30-1:15 Peter & Kathleen GLOBE team & teachers	Project Based Learning in Context: Grade and Time Appropriate <ul style="list-style-type: none"> ● The role of questions in PBL ● The process of developing research questions ● GLOBE supported development of research questions ● Handout of timeline and guidelines for SRS <p>Share what has been done at other symposia</p>
1:15-2:00 BU Team & teachers outdoors	Introduction/Review Taking Air Temperature and Surface Temperature Measurements
2:00-3:00	Breakout Groups by GLOBE-Activity Interest and Grade Level <ul style="list-style-type: none"> ● Grades 1-5 with mentoring by Experienced GLOBE teachers, Caleb, & Kathleen ● MS with Peter, Bruce, & Melissa ● HS with Tracy & Evangeline ● Discuss Landmark lessons and GLOBE <ul style="list-style-type: none"> ○ Create a Driving Question Board (will add to throughout the week) ● Just-in-time protocol and activity practice
3:00-3:30 Evangeline	Complete Reflection Questions for the day (3 Questions)

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TUESDAY - JULY 23, 2019

Time	Topics
8:30 – 9:00	SurveyMonkey: Science Teacher Efficacy Belief Instrument
9:00-10:00	Introduction to Data Entry <ul style="list-style-type: none"> Download Necessary GLOBE Apps <ul style="list-style-type: none"> GLOBE Observer GLOBE Data Entry WeatherLink (for Davis Weather Station) Setting up a site Entering collected data into GLOBE Website, either on computer or on phone
10:00 - 10:30	GLOBE Science Research Symposia Timeline Discuss different symposia. Distribute timeline. What is a good research question?
10:30-12:00	Breakout Groups by Grade and Interest <ul style="list-style-type: none"> Just-in-Time Protocol and/or Activity Demos Brainstorm and Discuss an integrated Landmark Lesson <ul style="list-style-type: none"> What are the target teaching standards? ES stay in room 157 MS in room 156 HS in Room 156
12:00-12:30 GLOBE Team Supporting this	Working Lunch (Share local school's weather station data) Solar noon and satellite flyover -- GLOBE Observer?
12:30-1:30 Evangeline	Discussion of Differentiation in Implementation of GLOBE for ELL and SPED populations
1:30-3:00	Continue working groups from morning <ul style="list-style-type: none"> Draft Landmark Lessons with GLOBE <ul style="list-style-type: none"> What are the target learning outcomes? Add to Driving Question Board Small-group demos of Just-in Time Protocols by interest
3:00-3:30	Complete Reflection Questions for the day (3 Questions)

BU MISSION EARTH JULY 2019 SUMMER WORKSHOP & TRAINING

WEDNESDAY- JULY 24, 2019

Time	Topics
8:30-9:00	GLOBE Data Entry <ul style="list-style-type: none">● Enter measurements from your home
9:00-11:00	My NASA Data Presentation <ul style="list-style-type: none">● Elizabeth Joyner for NASA Langley presents introduction for all grade levels
11:00-12:00	My NASA Data Breakout by Grade Level <ul style="list-style-type: none">● Elizabeth Joyner Discussions with Grade-level Groups● BU Team supports other groups
12:00-12:30	Lunch - 2019 GLOBE Project Based Learning Survey
12:30-1:30	Prepare and share out preliminary Project Based Learning ideas
1:30 - 3:00	Working Groups by School: Discuss Draft Landmark Lessons and GLOBE <ul style="list-style-type: none">○ Add to Driving Question Board● Small-group demos of Just-in Time Protocols as needed
3:00-3:30	Complete Reflection Questions for the day (3 Questions)

BU MISSION EARTH JULY 2019 SUMMER WORKSHOP & TRAINING

THURSDAY- JULY 25, 2019

Time	Topics
8:30-9:00	GLOBE Data Entry <ul style="list-style-type: none">• Enter measurements from your home
9:00-10:00	Introduction to GLOBE Campaigns (eg Urban Heat Islands) https://www.globe.gov/do-globe/measurement-campaigns/by-sphere Discussion of GLOBE Packets and Bundles
10:00-12:00	GLOBE protocol workstations Continue working groups by interest <ul style="list-style-type: none">• Continue draft Landmark Lessons with GLOBE<ul style="list-style-type: none">○ Organizational Questions Board
12:00-12:30	Lunch
12:30-3:00	Work in Groups by Interest Finish and Document Draft Landmark Survey: Interviews
3:00-3:30	Complete Reflection Questions for the day (3 Questions)

BU MISSION EARTH JULY 2019 SUMMER WORKSHOP & TRAINING

FRIDAY- JULY 26, 2019

Time	Topics	Resources
8:30-10:00	GLOBE Data Entry <ul style="list-style-type: none"> • Enter measurements from your home • Discussion of this week's data and integration into classroom • Data visualization with GLOBE 	
10:00-10:30	SurveyMonkey: Post Workshop Survey	
10:30-12:30	Review/expand/share landmark lesson plans (Elementary School) Review GLOBE Demonstrations and Activities (Middle School)	
12:30-1:30	Lunch Provided Round table: Bringing GLOBE into your teaching? <ul style="list-style-type: none"> • What do you need? • What resources are available to you in Providence? • What can the BU Team advocate for in Providence? • Building a Communication Network! 	
1:30-3:00	GLOBE, SRS Projects, and Landmarks: <ul style="list-style-type: none"> • Develop and Discuss Research Questions • Which Instruments will you need? Gathering Resources and Materials <ul style="list-style-type: none"> • Ordering Materials • Resources from GLOBE (teachers have a Google sheet they can use to specify/request GLOBE-related resources they need us to supply) 	
3:00-3:30	GLOBE Certificates!	