

Baton Rouge Energy Camp 2015 Schedule

MONDAY July 13th			
8:30 - 9:00	BRCC Cypress C102	Teachers/Lab manager BRCC	INTRODUCTIONS/SAFETY/INITIAL ASSESMENT
9:00 - 9:30	BRCC Cypress C102	Maddie and Matt	SPAGUETTI TOWER
9:30 - 10:30	BRCC Cypress C102	Richard H.	ENERGY BASICS and challenge - Energy Cycle. Renewable and non renewable energy sources. How electricity is generated. Energy Challenge to have zero CO ₂ emissions by 2050
10:30-10:40			BREAK
10:40 - 11:45	BRCC Cypress C102	Jeannette T.	BASIC PARAMETERS activities: Density, Pressure, Heat, Electricity, Phase Change, Bernoulli. 10 minutes per table
11:45 - 12:10	BRCC Cypress C102	Jeannette/Richard	Review for JEOPARDY Game
12:15-1:00	Cafeteria	Matt and Maddie	LUNCH IN BRCC CAFETERIA :) ***pre-order. Mike Constantine 2168615
1:00 - 2:00	BRCC Cypress C103	Dr. Myungkee Sung	Projectile Motions activity – Gravitational Energy around Us
2:00 - 2:30		Matt and Maddie	PVC pipe team strategy game
2:30-3:00	BRCC Cypress C102	Jeannette T.	THE WORLD OF OIL AND NATURAL GAS
3:00 - 3:05			BREAK
3:05 - 3:35	BRCC Cypress C102	Jeannette/Richard	JEOPARDY Game (Energy/Basics Parameters/ The world of Oil and natural gas)
3:45 - 4:15	BRCC Cypress C102	Jeannette/Richard	Build an EGG DROP
4:15-4:30	BRCC Cypress C103	Richard H.	Egg drop energy calculation - Acceleration/Velocity. Review factors that help egg drop performance.
4:30 - 5:00	BRCC Parking	Matt and Maddie	EGG DROP
TUESDAY July 14th			
8:30-8:45	BRCC FRAZIER building Room 100	Jeannette T.	Introduce Today's lab
8:45 - 9:45	BRCC FRAZIER building lab	Earl Miller/ BRCC students	BRCC ACRYLICS: Distillation column, cooling water, heat exchanger, centrifugal pump, boiler, three phase separator. Take pics and work on ppt
9:45 - 10:00			BREAK (oblek optional activity)

10:00 - 11:00	BRCC FRAZIER building Room 100	Earl Miller/ BRCC students	Tour of PTEC live processes: Waste water treatment process; Extraction; ... / the remainder of the time campers will go back to any station review the process and ask questions
11:00 - 12:00	BRCC FRAZIER building Lab	Camp teachers plus team leaders	Work on 1st of 2 presentations. Each group on assigned station.
12:00 - 1:00		Matt and Maddie	LUNCH - 30 min to talk about careers at BRCC
1:00 - 2:00	BRCC FRAZIER building Room 100	Richard H.	ROBOTICS
2:00 - 2:30	BRCC FRAZIER building Room 100	Jeff Shaw- BRCC/Gulf Solar	SOLAR Power - Energy Efficient homes
2:30 - 3:00	BRCC FRAZIER building Room 100	Richard H./ Jeannette T	Activity: Temperature controlled homes
3:00 - 3:15			BREAK
3:15 - 3:30	BRCC FRAZIER room 099	Richard H./ Jeannette T	Finish working on Solar power houses
3:30- 4:00	BRCC FRAZIER room 100	Richard H./ Jeannette T	Renewable sources of power Activity: Hydrogen Power, Wind Power, Piezo (Let houses heat up while doing this activity)
4- 4:30	BRCC FRAZIER room 100	Jeannette T.	Extracting crude Oil from the ground - Chocolate Milk/ tea Activity/ calculations
4:30 to 5:00	BRCC FRAZIER building Room 100	Richard H	Solar home test
			Wednesday July 15th
8:30- 9:00	CHE Junior Lab LSU	Jeannette T.	Introduce Activities - overview of all stations. Goal/ life applications 5 minutes each rotate
9:30- 10:30	CHE Junior Lab LSU	Dr. John Flake/ Leaders	CHE. 1. Frost boss. Distillation Column, 2.Tray Dryer, 3.Water Chiller/Chilled water AC, 4.Heat Exchanger fin and shell tube, 5. gas Absorption, 6. Viscosity/cooling water tower
10:30- 10:45			BREAK
10:45- 11:30	CHE Junior Lab LSU	Leaders	Prepare presentations
11:30- 12:00	CHE Junior Lab LSU	Leaders	9 slides 20 seconds each per group. 10th slide is blank to allow groups to rotate
12:00- 12:45	CHE Junior Lab conference room	Matt/Maddie	LUNCH - UNION *** Pre-order
12:45 - 1:15	CHE Junior Lab Conference Room	Tony Cupit/ Madeleine	Go over COGEN Plant process in CHE conference room building
1:15 -	COGEN Plant	Tony Cupit/ Rick	Tour of COGEN plant

2:00			
2:00 - 2:15	walking	Matt/Maddie	BREAK - Ice Cream LSU Dairy Store - *** Pre-order
2:15- 3:15	LSU Incubator for entrepreneurs	Dr. Luis Espinoza.	From the very cold to the very hot. Energy transfer- Material science
3:15 - 4:00	LSU Incubator new	Richard Hanley (Hanley's foods)	Everything you learn and how it shapes your life. A success story. Demo kitchen
3:45- 4:45	LSU Physics 2nd Floor	Dr. Juana Moreno/ Master Students	Introduction to the nano world. Real life applications and Connection between nano technology and energy
			Thursday July 16th
8:30- 9:00	Physics 4th Floor	Dr. Hamid Zoghby	THE PATH OF AN ENGINEER
9:00 - 10:30	Physics 4th Floor	Jeannette/ Richard	TYPES OF FUELS: Make cars and car races. (Brief presentation on the different types of fuels and how they work)
10:30- 10:45	Physics 4th Floor		BREAK-
10:45 - 11:00	Physics 4th Floor	Matt and Maddie	It can include break 30 min fun activity
11:00 - 11:50	Physics 4th Floor	Dr. Les Butler	Wolfram Alpha - ROH vs gas vs gasoline BTU's – Calories
12:00- 12:30	MNHHistory		Lunch - Museum of Natural History *** pre order 2 days before
12:30- 1:00	Museum of Natural	Valery	MNH tour plus talk on natural selection. Will show some special especimens for the kids view
1:15 - 2:00	School of the Coast and Environment	Dr. Chris D'Elia	School of the Coast & Environment - Energy and the Environment
2:00 - 3:00	School of the Coast and Environment	Team Leaders	Time to work on presentations for tomorrow
3:00 - 3:15			BREAK- Walk back
3:15 - 3:30	Chemistry Conference Room	Richard H	Mini tour geology building
3:30 - 4:30	Chemistry Conference Room	Dr. Karsten Thompson	Introduction to next day PERTT (sample calculations/ activities)
4:30 - 5:00	Chemistry Conference Room	Richard and Jeannette	Talk about tomorrow's activities

			Friday July 17th
7:45	LSU PERTT lab	Steven/ Shelly	BREAKFAST for those who can to come early. New York Bagel Co. (225) 769-0224
8:00-9:00	LSU PERTT Lab	Dr. Thompson/ Randy	1st group tours the facility separated into 3 sub groups and does the U-tube demo
9:00 - 10:00	LSU PERTT Lab	Dr. Thompson/ Randy	2nd group sees the production platform and cutaway tree, then does the Christmas tree competition separated into 3 small sub groups
10:00 - 10:15	walk		BREAK
10:15- 11:00	La House LSU	Shandy Ogea	Video /tour/ Experiments
11:00- 12:00	La House LSU	Joshua Brown	Video /tour/ Experiments
12:00- 12:30	PERTT	Steven/Shelly	LUNCH Taco de Paco
12:30 - 1:30	LSU PERTT Conference Room	Jeannette T./ Richard H	Rehearse final PPT/Video
1:30 - 2:00	LSU PERTT Conference Room	Jeannette T./ Richard H	Final Assessment
2:00- 3:00	LSU PERTT Conference Room	David Esquivel	SHELL oil Reps / human resources/ engineers/ operators...round table
3:00 - 4:00	LSU PERTT Conference Room	Energy Campers	Parents, Shell staff, teachers... Final Presentations
	PERTT		Extra fruits for the parents