

**Schedule for TOPCORP Workshop and Field Trips for Modules 1 and 2, August 20-24, 2013  
Colorado School of Mines (host), Penn State and The University of Texas at Austin**

**Day 1-Tuesday, August 20, 2013, Marquez Hall MZ 108**

7:30 am-8:00 am Continental breakfast provided in the classroom  
12:15 pm-1:00 pm Lunch provided in the classroom  
6:00 pm Adjourn

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8:00 am-9:30 am *Welcome to CSM, Introduction to Program, Introduce TOPCORP leadership team and course participants, course attendee initial assessment (Organizing Committee Leads-**CSM, UT and PSU**)*

9:30 am-10:30 am *1.1 Introduction to U.S. Energy Supply and Demand (Tad Patzek video-**UT**, Seth Blumsack and Jim Ladlee-**PSU**)*

10:30 am-10:45 am Coffee Break

10:45 am-12:15 pm *1.2 Resource Geology: Rocks (Hilary Olson-**UT**) and Petroleum Geology (Steve Sonnenberg-**CSM**)*

12:15 pm-1:00 pm Lunch Break

1:00 pm-1:30 pm *1.2 Resource Geology (cont.): Hydrogeology (Dave Yoxtheimer-**PSU**)*

1:30 pm-2:30 pm *1.3 Reading Surface and Subsurface Data (Mike Arthur-**PSU**)*

2:30 pm-3:00 pm Coffee Break

3:00 pm-4:00 pm *1.4 Recognizing Potential Geo-Hazards (Jon Olson-**UT**)*

4:00 pm-5:00 pm *1.5 Reservoir Engineering: Oil and Gas PVT and Chemistry (Todd Hoffman-**CSM** and Larry Lake video-**UT**)*

5:00 pm-6:00 pm Wrap Up for the day

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**Day 2-Wednesday, August 21, 2013, Marquez Hall MZ 108**

7:30 am-8:00 am	Continental breakfast provided in the classroom
12:00 pm-1:00 pm	Lunch provided in the classroom
6:00 pm	Adjourn

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8:00 am-8:30 am	<i>Review of Day 1 (Deborah Hempel-Medina-UT)</i>
8:30 am-9:30 am	<i>1.5 Reservoir Engineering (cont.): Oil and Gas PVT and Chemistry (Todd Hoffman-CSM)</i>
9:30 am-10:30 am	<i>1.6 Reservoir Engineering: Well Deliverability Estimation (Todd Hoffman-CSM)</i>
10:30 am-10:45 am	Coffee Break
10:45 am-12:00 pm	<i>2.1 Basic Principles of Drilling Operations and Well Design (Alfred (Bill) Eustes-CSM)</i>
12:00 pm-1:00 pm	Lunch Break
1:00 pm-2:30 pm	<i>2.2 Formation Evaluation and Logging (Mike Batzle-CSM and Terry Engelder-PSU)</i>
2:30 pm-3:00 pm	Coffee Break
3:00 pm-4:00 pm	<i>2.3 Reservoir Geomechanics (Azra N. Tutuncu- CSM)</i>
4:00 pm-5:15 pm	<i>2.4 Conventional vs. Unconventional Resources (Terry Engelder-PSU)</i>
5:15 pm-6:00 pm	Wrap up and evaluation

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**Day 3-Thursday, August 22, 2013, Marquez Hall MZ 108**

7:30 am-8:00 am	Continental breakfast provided in the classroom
12:00 pm-1:00 pm	Lunch provided in the classroom
6:30 pm	Group dinner and Guest Speaker (~ 1 hr talk, including questions)- Green Center, Friedhoff Hall
8:30 pm	Adjourn

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8:00 am-8:30 am	<i>Review of Day 2 (Deborah Hempel-Medina-UT)</i>
8:30 am-9:30 am	<i>2.5 Completion and Workover Technologies (Paul Bommer-UT)</i>
9:30 am-9:45 am	Coffee Break
9:45 am-11:00 am	<i>2.6 Well Stimulation Technologies (Jennifer Miskimins-CSM)</i>
11:00 am-12:00 pm	<i>2.7 Production Facility Design and Operation (Paul Bommer-UT)</i>
12:00 pm-1:00 pm	Lunch
1:00 pm-2:00 pm	<i>2.8 Gas and Oil Treatment, Surface Facilities and Transmission (Paul Bommer-UT)</i>
2:00 pm-2:30 pm	<i>Review of Day 3 (Deborah Hempel-Medina-UT)</i>
2:30 pm-3:00 pm	Break
3:00 pm-4:00 pm	<i>Preview of Field Trip (Azra Tutuncu, Steve Sonnenberg and Alfred Eustes -CSM)</i>
4:00 pm-5:30 pm	Wrap Up, Assessment and Evaluation
6:30 pm-8:30 pm	Dinner with Speaker

**Engineering Field Trip-August 23, 2013 (Azra Tutuncu and Alfred Eustes-CSM)**

7:00 am	Meet at Marquez Hall in the Petroleum Engineering Department for breakfast.
7:00 am-4:00 pm	Drilling, hydraulic fracturing and production facility visits around Denver area with a lunch break

**Geology Field Trip-August 24, 2013 (Steve Sonnenberg and Azra Tutuncu-CSM)**

7:30 am	Meet at Marquez Hall in the Petroleum Engineering Department for breakfast.
8:00 am-6:00 pm	Visits to Denver Basin with a lunch break