

# SUMMER 2016

## Earth Science Outside for K-12 Educators

**Three one-credit-hour workshops. Take individually for USOE or SUU credit.  
Or...Take all 3 and fulfill an endorsement credit for Geology I, Geology II, or Earth systems.**



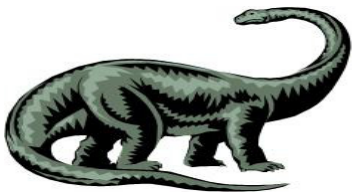
### 1--July 11-15. Earth Science Outside - Landforms - Wasatch Front

USOE OnTrack 34745. Monday through Friday. Offered mornings and late afternoon. Okay to mix AM and PM.  
*For K-12 teachers. Geological features, physical features of Earth, and earthquake hazards. Includes a field trip to observe evidence of the Wasatch fault, West Valley faults, glacial features of Little Cottonwood Canyon and shorezone features of Lake Bonneville.*



### 2--July 18-22. Earth Science Outside - Rocks and Minerals - Wasatch Front

OnTrack 34751. Monday through Friday. Offered mornings and late afternoon. Okay to mix AM and PM.  
*For K-12 teachers. Rocks and minerals, the rock cycle, and Utah's rocks and minerals. Includes a field trip to the Oquirrh near Bingham Copper Mine or to US Magnesium.*



### 3--July 26-29. Earth Science Outside - Geologic History - Wasatch Front

USOE OnTrack 34750. Tuesday through Friday. Offered mornings and late afternoon. Okay to mix AM and PM.  
*For K-12 teachers. Utah's past, and Earth systems. This course simplifies the fascinating geology of the Wasatch Front, special because so much history is exposed with many relationships that can be shared with students.*

#### THREE REGISTRATION OPTIONS (search "Earth" on OnTrack or by OnTrack course number).

- (a) Take one or more workshops for USOE OnTrack credit (relicensure points, usoe credit). Register through USOE OnTrack.
- (b) Take one or more workshops for SUU university credit. Register through USOE Ontrack. Register and write check to SUU during workshop.
- (c) Take all three workshops during the summer 2016 to fulfill an endorsement course credit for Geology I, Geology II, or Earth systems science. Register for USOE OnTrack 34752 **and register for WSU Geo5030**. WSU registration cost for 3 credit hours has been \$40 but may change in 2016. What an arrangement!. Note: this WSU option is terrific if you intend to teach for a while.

See *schedule of sessions -- reverse side of this page.*

For course details: <http://www.earthscienceeducation.org>

**SCHEDULE -- 2016 -- Earth Science Outside summer workshops --** Okay to mix and match, mornings or afternoons.

Note: these three workshops bundle into Weber State University's Geo5030 - Earth Science of the Wasatch Front. It fulfills an endorsement course credit for Geology I, Geology II, or Earth systems science. Register for both USOE-OnTrack Course #34752- Section 78541 and WSU Geo5030. Or, it's Okay to take one or more workshops for USOE or SUU university credit.

**Earth Science Outside- LANDFORMS - Wasatch Front - (USOE-OnTrack Course #34745 - Section 78506)**

July 11 Mon 8:30-11:30AM or 5 - 8 PM LANDFORMS and UTAH's REGIONS - Flat Iron Park (upper), 1675 E 8600 S, Sandy, 84093  
July 12 Tues 8:30-11:30AM or 5 - 8 PM TECTONICS - Silver Hills Elementary, 5770 W 5100 S, West Valley City, 84118  
July 13 Wed 8:30-11:30AM or 5 - 8 PM EROSION-DEPOSITION - Arrowhead Park, 598 W 4800 S, Murray, 84123  
July 14 Thurs 8:30-noon or 5 - 8:30 PM FAULTS and SHORELINES FIELD TRIP- begins at Hillsdale 3275 W 3100 S, West Valley City, 84119  
July 15 Fri 8:30-11:30AM or 5 - 8 PM GLACIAL PROCESSES - PAST CLIMATES - Silver Lake Info Center, Brighton, 84121

**Earth Science Outside - ROCKS and Minerals - Wasatch Front (USOE-OnTrack 34751 - Section 78522)**

July 18 Mon 8:30-11:30AM or 5 - 8 PM MINERALS - Wite Cemetery, 3475 W 9000 S, West Jordan, 84088  
July 19 Tues 8:30-11:30AM or 5 - 8 PM ROCKS and ROCK CYCLE - Temple Quarry Park, Little Cottonwood Rd, Sandy 84092  
July 20 Wed 8:30-11:30 AM or 5 - 8 PM LIMESTONES - Warm Springs Park, 840 N 300 W, Salt Lake City, 84103  
July 21 Thurs 8:30-noon or 5 - 8:30 PM ECONOMICS FIELD TRIP-begins at Copper Hills 5445 New Bingham Hwy (7800 S), West Jordan, 84081  
July 22 Fri 8:30-11:30AM or 5 - 8 PM ROCKS and MINERALS- Fort Douglas Cemetery, 421 S Chipeta (near NHMU), Research Park, SLC, 84113

**Earth Science Outside - GEOLOGIC HISTORY - Wasatch Front (USOE-OnTrack 34750 - Section 78536)**

July 26 Tues 8AM - noon or 5 - 9 PM THE RULES of RELATIVE AGE - Creekside Park, 1630E Murray-Holladay Blvd, Salt Lake City, 84117  
July 27 Wed 8AM - noon or 5 - 9 PM EVIDENCE of UTAHs GEOLOGIC PAST- Pleasant Green Park, 3280 S 8400 W, Magna, 84044  
July 28 Thurs 8AM - noon or 5 - 9 PM FIELD MAPPING - Mouth of Parley's Canyon, bicycle trail parking lot. 2700 S Wasatch Blvd, SLC 84108  
July 29 Fri 8AM - noon or 5 - 9 PM CLIMATE, GEOLOGIC HERITAGE, MINING- Herriman, UT 84096. City park to be announced.



*What makes these courses special? They are taught outside, by Genevieve Atwood, PhD., former State Geologist, presently with Earth Science Education. Workshops are held at different places in Salt Lake County. Genevieve teaches how to use our local magnificent geology, cemeteries, parks, school grounds, and rocks to teach Utah's science core curriculum. She role models experiential, inquiry learning. **Teacher-participants receive approximately \$50 worth of classroom supplies, text, maps and other useful materials supported by Earth Science Education donors including foundations (Quinney; Steiner; Redd), industry (USMagnesium, Rio Tinto), and individuals.***

*QUESTIONS? Course content = Genevieve Atwood ([genevieveatwood@icloud.com](mailto:genevieveatwood@icloud.com))  
On-Track = 801-538-7807 ([ontrack@schools.utah.edu](mailto:ontrack@schools.utah.edu))  
For SUU-1-credit = Kelsey Keel ([k12inservice@SUU.edu](mailto:k12inservice@SUU.edu)), or Genevieve.*