

KARST HYDROGEOLOGY

Tentative Class Schedule

May 7- 13, 2023

Day 1 (Sunday) – May 7

5:00-7:00PM

Welcome mixer. Mandatory meet and greet. We will spend 1-2 hours introducing ourselves, preparing participants for the coming week, orienting everyone to Hamilton Valley, Mammoth Cave National Park, and addressing any questions and/or concerns. This will also provide participants that have arranged to stay at Hamilton Valley the opportunity to check into their rooms. **The Meet & Greet is mandatory for all participants – not just for those staying at Hamilton Valley.** By addressing questions/concerns, gear-related issues, etc. on Sunday night, we can avoid dealing with these issues on Monday and delaying class and field trips.

Day 2 (Monday) – May 8

9:00 Principles of Karst Hydrogeology
10:15 Break
10:30 Hydrogeology of the MACA region
12:00 Lunch on your own
1:00 Field trip (surface): Why is the world's longest known cave here?
5:00 Dinner on your own
6:30-8:30 Field Trip (in-cave): Historic Area of Mammoth Cave

Day 3 (Tuesday) – May 9

9:00 Introduction to Carbonate Geochemistry
10:00 Groundwater Monitoring Techniques
11:00 Lunch on your own
12:30 Field Trip (surface/in-cave): Great Onyx Groundwater Basin:
hydrogeology/water quality/water quantity
6:00 Dinner on your own

Day 4 (Wednesday) – May 10

9:00 Dye Tracing Tools and Techniques
10:30 Break
10:45 Dye Tracing Applications/Design a Dye Trace
12:00 Lunch on your own
1:30 Field Trip (surface/in-cave): Mammoth Cave Dye Trace
5:30 Dinner on your own
7:00-9:00 Student Presentations

Day 5 (Thursday) – May 11

- 8:00 Field Trip (surface): Environmental Problems and Karst Hazards, Lost River Cave, Bowling Green
- 11:15 Crawford Hydrology Lab Tour and Lab Methods Demonstration
- 11:45 Picnic lunch or pre-order restaurant (Group decision)
- 1:00 Field trip(surface/in-cave): Urban Karst Issues and Applied Hydrogeology – Hidden River Cave, Horse Cave
- 6:30 Dinner on your own (Group decision: restaurant or at HV).

Day 6 (Friday) – May 12

- 8:00-5:00 Field Trip: To the Springs!! Green or Nolin River Canoe Trip (pack your own lunch, coolers will be provided)
- 7:00 Cook-out at Hamilton Valley (Meal provided by Crawford Hydrology Lab).

Day 7 (Saturday) – May 13

Students staying at HV are expected to assist in clean-up of the field station before checking out.