



Show Cave Interpretation and Education

August 5-10, 2018

GEOG 475, GEOL 475, and GEOS 510

Course Instructor: Dr. Leslie North

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Course Description and Objectives: Show caves are commonly described as any cave made accessible to the public through infrastructure such as trails, lights, and hand railings. Show cave experiences can be either guided by trained tour guides or self-directed. At show caves, there is a tendency to skew towards a pure focus on entertaining cave visitors rather than balancing entertainment with educational content. Yet, multiple surveys of visitors to show caves has revealed that visitors often want to have more educational content incorporated into their guided and self-guided cave tour experiences. The course will explore proven strategies for balancing interpretation and education through guided and self-guided show cave tours. The communication of karst educational materials through exhibit design at show caves will also be discussed. Participants will gain experience in not only developing tour scripts and establishing appropriate stops along tour routes, but also the delivery of the content in such a manner that maximizes engagement for cave and exhibit visitors. Thus, the content of the course will be pertinent to both guides at show caves as well as managers responsible for balancing the needs of cave visitors with cave and karst stewardship. We will explore multiple show caves to better understand the plethora of strategies pursued to create a visitor show cave experience. Course participants will also learn how to develop and analyze tools to evaluate visitor experience, thus ensuring a show cave tour is accomplishing management, stewardship, education, and entertainment objectives.

The course consists of classroom presentations and discussions, combined with field trips to show caves in the region. The course is available as a workshop, or for academic credit (either undergraduate or graduate). For those taking the course for academic credit, a two-week field project and written report are required by September 15 following the course. This course is held at the Hamilton Valley Research Facility near Mammoth Cave National Park.

Required Text:

- Manual of course material, reports, and articles covered in class to be provided by WKU at the start of the course.

Equipment and Supply List:

Note, to avoid potential transmission of white-nose syndrome to bats in the cave, the Park Service requires that clothes and equipment used in one part of Mammoth Cave be thoroughly cleaned before being used in another part. Our schedule changes from Mammoth during the first 3 days to Flint Ridge during the last 3 days. A disinfectant will be available to treat helmets and equipment, but for cave clothes it is easier to change to fresh items kept in a separate sealed plastic bag. White-nose syndrome has been identified in Mammoth Cave National Park, but it is still necessary to follow these precautions. WNS, caused by a fungus, is fatal to hibernating bats but does not affect humans. For details, visit www.caves.org and click on WNS.

1. **Helmet** (for caving trips) with non-elastic chin strap, quick-release buckle, and three- or four-point suspension. The helmet should stay on during a fall but be easily released if it should become wedged. The helmet will also be the mounting point for your primary light source, so any accommodation for attaching a headlamp is a plus.
2. **Sturdy boots with non-skid soles** (comfortable, hiking, water resistant is good).
3. **Caving coveralls are ideal, but a suitable alternative is rugged clothing** that can withstand outdoor activity. These include comfortable pants or jeans that you can afford to get dirty. To keep you warm in the 56° F, almost 100% humidity, underground environment you'll need to dress in layers. It is strongly advised that you have a thermal layer top (polypro or equivalent) and a bottom. If you are not using coveralls, then a long-sleeve shirt is strongly recommended. You will be underground most days, so be prepared with some clean changes of clothes. There will not be enough time to do laundry each day.
4. **Gloves** (garden type is ok, to protect hands and for gripping)
5. **Knee pads** (These are very helpful in protecting your knees). Basketball or other athletic-type knee pads are good.
6. **Small to moderate size day-pack** to hold batteries, jacket, clothing, supplies. A large backpack will be too bulky for narrow cave passages.
7. **Water Bottle** (fill before going on trips, to keep hydrated)
8. **Snack foods suitable for long underground hiking trips**— such as granola-type bars, small cans of fruit, dried fruit, trail mixes, beef or other jerky – similar to what you would take on a long day hike on the surface.
9. **Rain Gear** (layers of clothing for severe weather, umbrella, rain jacket, etc.)
10. Food if you are staying at Hamilton Valley Facility, which has a fully equipped kitchen, showers and restrooms.
11. Bedding (If staying at Hamilton Valley -sleeping bag or sheet or blanket, pillow). Hamilton Valley has 10 rooms with 4 bunks each.
12. Toiletries and Towels if staying at HV—Towels, toothbrush, toothpaste, shampoo, etc.

Attendance: Students are expected to participate in all classes and field trips, except under special conditions (e.g., health). Field trips involve easy to moderately challenging caving. In the rare circumstance that students are unable to fulfill the field requirements they will be invited to drop the course. In general the rigor of the trips are adjusted to the abilities of the class. **All participants will receive a Certificate of Participation on the last day of the class for their full**

participation in the class. This does not constitute the final grade for those taking the course for academic credit.

Grading: Courses can be taken as non-credit workshops, Undergraduate and Graduate credit, or for Continuing Education Units. For those taking the course for academic credit, a report on a two-week independent field project is required. Students will need to remain in contact with the instructor for guidance. Deadline for written reports is September 15 of year of course. Project grading is based on the insight and quality of work demonstrated, with some accommodation for those with limited background.

Grade Scale (based mainly on project, but weighted according to participation in class):

A = equivalent to the finest work that is expected of a student at this level

B = good work, but with a few flaws in procedure and interpretation

C = average work

D = poor work, sloppy presentation

F = no redeeming features, or failure to turn in project by deadline

General Class Conduct and Policies: During class periods, cell phones should be turned off and smoking is not allowed. While in cave, safety and conservation are primary concerns. We will move slowly and carefully to minimize danger and impact on the cave. On the surface, especially in the National Park, it is essential to drive carefully and to obey the speed limit. Beware of snakes, ticks, chiggers, and poison ivy. ** Cell phones should be turned off during class! ** Please treat your colleagues and their desire to learn with appropriate respect.

ADA Statement: Students with disabilities who require accommodations (academic adjustments and/or auxiliary aids or services) for this course must contact the Director of the Karst Field Studies Program, Dr. Leslie North at leslie.north@wku.edu or (270) 745-5982 so proper accommodations can be considered and made as necessary.

Schedule Change Policy: The Department of Geography and Geology strictly adheres to University policies regarding schedule changes. It is the responsibility of the student to meet all admissions deadlines. Only in exceptional cases will a deadline be waived (you will be required to fill out an appeal form). The form requires a written description of the extenuating circumstances involved and the attachment of appropriate documentation. Poor academic performance, general malaise, or undocumented general stress factors are not considered as legitimate circumstances.