

**The University of Arizona  
Geosciences Department  
The Lowell Program in Economic Geology**

**Short Course on Ore Deposits Mapping (GEOS 504B)  
Yerington porphyry and skarn mapping exercises,  
and field trip of ore-forming systems in the Great Basin  
End of August-Early September**

The trip will include a focused multi-day introduction to the “Anaconda-style” of detailed mapping in the Yerington district, Nevada. The district contains porphyry copper and skarn mineralization, but the mapping method is adaptable to any type of deposit. As part of this, we highlight how mapping can be used to understand zoning, the time-space evolution of mineralizing systems, and the relationships to the fundamental phase equilibria of hydrothermal alteration. In addition to numerous other geologic stops, the trip also anticipates to include overviews and/or tours of the following districts and deposits:

- Tonopah, Nevada [low-sulfidation epithermal Ag-Au],
- Goldfield, Nevada [high-sulfidation epithermal Au],
- Birch Creek, California [F-Be-W-(Zn) greisen/skarn],
- Humboldt, Nevada [IOCG occurrences],
- Eureka district, Nevada [partially superimposed systems, with a Carlin-type Au mine at Archimedes, a porphyry Mo-Cu to replacement Zn-Pb-Ag deposit at Ruby Hill, and the top of a F-W-Zn-Be-(Mo-Sn) system at McCullough Butte]
- Robinson district, Nevada [porphyry Cu-(Mo-Au) and related skarn and distal Au-Ag deposits].

The