

Gary S. Ruderman

Loess Hills Field Trip

CAM High School Geology/Astronomy Fall 2011

- A. To introduce the landscapes of Iowa (as a continuum of world Geology/Earth Science curriculum), students will travel to the Loess Hills at the Hitchcock Nature Center north and west of Council Bluffs.
- B. There are several goals. The first is experiential learning through field research. The second is localization of Iowa's landscape geology, including the previous study of erosion and glaciations. Finally, students will conduct research to explain natural features at the Nature Center.
- C. This field trip will begin a week or two before with the introduction of vocabulary, student research into Iowa's landscape and fieldwork procedures. While at the Nature Center we will discuss what students found about this Southern Iowa Drift Plain. We will define the Missouri Alluvial Plain by topographical features we can document (like stratigraphic maps) and then see (Loess Hills). We will do visual analysis and drawings of the Loess and other geologic features. We will use the naturalist at the Nature Center for an overview and as a guide to the formations.
- D. Students will complete a worksheet of observations at the Nature Center and will receive a formative "OK" stamp as they complete certain items. The summative assessment will be a paper on the geological development of western Iowa using drawn illustrations as a primary source (of the Nature Center observations, for example) and online Iowa and USGS information as secondary sources.