Geology of Iowa Project

Goal – Provide you an opportunity to learn about the geologic history and processes that make up the foundation of a county in Iowa.

Point distribution	Points
Content quality	100
Maps	100
Writing and references quality	30
Check point 1	20
Check point 2	20
Presentation	30

Further information

Content quality: Your paper needs to discuss each geologic time period that occurs in Iowa. E.g. If you do not have any Precambrian outcrops in your county, explain where there are outcrops in Iowa, how far away you would need to travel from your county to find Precambrian outcrops, and what type of Precambrian rock is most likely beneath your county's bedrock. Do not limit yourself to geology, include historical information (e.g. When was the county settled? What are the natural resources in the county?) Locate, use, and properly reference as many information sources as you can find.

e.g. in the paper you should reference others work at the end of the sentence where you use their information (Heinzel, 2016) or (Heinzel et al., 2016) etc.. In the references section of your paper use this format –

For books

Woodward, J.C., 1995, Archaeology and human-river environment interactions, in Lewin, J., Macklin, M.G., and Woodward, J.C. eds., Mediterranean Quaternary River Environments: A.A. Balkema, Rotterdam, p. 99-102.

For journal articles

Sadori, L., Giraudi, C., Petitti, P., and Ramrath, A., 2004, Human impact at the Lago di Mezzano (central Italy) during the Bronze Age: a multidisciplinary approach: Quaternary International, v. 113, p. 5-17.

Use figures where needed to help tell the Geologic story of your county of choice... At the end of the sentence where you discuss a figure reference it e.g. (Figure 1). You should also place a caption below the figure that further explains what the figure shows... And again don't forget to reference the figure too...



Geology cross section of Western Sicily

Figure 2. Geologic Cross-section of western Sicily. Representing the A to A' line of Figure 1 (after Tortorici et al., 2001).

Maps: Use a GIS to make maps of Iowa to help tell your county's geologic story... Each map should include a (title, north arrow, scale bar, key)... New to using ArcGIS ask lots of questions early and often...

Possible themes for your own maps...

- 1. Geography: Map showing where your county is with respect to the other 98, Cities or towns, roads etc.
- 2. Topography
- 3. Geology of your county (could be multiple maps showing each major age)
- 4. Aerial photography
- 5. LIDAR / DEM
- 6. Individual maps of areas of interest to you family farm, schools, parks etc.
- 7. Map of landforms of the state and your county
- 8. Quaternary features of your county (glacial sediment, dunes, rivers etc.)
- 9. There are many other possibilities...

Writing and references quality

Cover page, Table of contents, page numbers, and most importantly...Write well...

Check points, be up to date with our class discussions... If we are discussing the Silurian your project should contain information regarding the Silurian. You can always go back and add more detail, edit, but you should keep your project moving forward.