

**CIVE 716 EROSION AND SEDIMENTATION  
FIELD TRIP TO PAWNEE BUTTES**

**Instructor: P.Y. Julien**

**Objectives:** @ **OBSERVE** erosion and sedimentation features  
@ Discussion and analysis with team members  
@ Document the five most interesting observations

**Team work?** Yes, teams of two for the field trip and report.  
Organize carpooling with teammate and/or other teams.

**Target date:** End of September/ early October

**Schedule:** 8:00 am Departure from Engineering Building  
9:45 am Arrival at Pawnee Buttes  
10:00 am Spend 2 hours on west end of trail  
Lunch and 2 hours around East Butte  
3:00 pm Departure from Pawnee Buttes  
4:45 pm Return to Fort Collins

**What to look for:** (observations by no means limited to the list below)

- Large Scale* · What are the main features of the entire area.  
· Why are the Buttes over there?
- Medium Scale* · Why are some areas so rugged, and others so flat?  
· Can you explain why and how these gullies form?  
· What can you tell me about the channel features?
- Small Scale* · Where do you see evidence of erosion and sedimentation?  
· What causes erosion?  
· What about the particle size distribution?

**Things to remember:**

- You and your teammate are responsible for the success of this trip.
- Dirt roads and trails are best traveled on dry days.
- There is no food, gas, or water anywhere near Pawnee Buttes.
- Cell phones may not work – need to check on this.
- Bring your backpack, sack lunch and plenty of water.
- Sunscreen, hats and hiking boots are desirable.
- Warm clothes and/or raincoat may be needed.
- Draw sketches and note your observations in a notebook.
- Cameras are useful but won't do it all!
- Walk around the Buttes but do not climb them, they are not safe!
- Snakes are afraid of humans but do not like to be stepped on, watch your step around thick bushes!

**What to turn in?**

- 1) The same grade will be given to the two members of the team, based on the typed double spaced team report (max 15p.). Your report should include a detailed description of your most interesting observations, your thoughts, what you learned, discovered and enjoyed. You may illustrate with photos and sketches. You can also use the web for maps, weather, etc. I am not looking for material about geology, or fragments of reports, papers, theses and dissertations.
- 2) Deadline: **October 16, 2009**

CE-716 FIELD TRIP TO PAWNEE BUTTES.



