

**Sedimentation-Stratigraphy, Geol 452 Fall 2006 4 cr.**

**Instructor:** Paul Link (282-3846; [linkpaul@isu.edu](mailto:linkpaul@isu.edu))

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**Text:** Boggs, S., 2006, Principles of Sedimentology and Stratigraphy, 4<sup>th</sup> ed., Pearson-Prentice Hall.

**Time:** 8:00 am to 9:15 am Tues and Thurs., Lab Wed., 2-5 (or 6 pm when we go out in the field). Please plan ahead.

**Grading: Lecture: 45%:** 2 hour exams, 15% each. Final exam 15%.

**Writing: 30%:** Two research papers 15% each **Lab 25%:** Weekly lab reports 10%, Nevada Field Trip report 5%; Lab Exam 5%, take-home lab exam, 5%

**Extra Credit** is available for attendance and preparation of a report on Department Colloquia or other geoscience talks. Each report counts 0.25% on the final course curve.

Aug. 21-25. Introduction to Class.

Local Stratigraphy and Stratigraphic code. Boggs Ch. 12, Appendix C, p. 588.

Weathering and Soils. Boggs Chapter 1.

**Lab: Stratigraphic code, Local Stratigraphy**

Aug. 28 to Sept. 1: Sandstone Mineralogy, Sediment texture, Boggs Ch. 3 and 5

**Lab: Loose sand, and Sandstones 1.**

Sept. 4 to 8. Sed structures Chapter 4.

**Lab: Field Trip. Portneuf Gap (Climb of 1,000 feet.)**

Sept. 11-15 Chapter 2. Transportation of sediment

**Lab: Sandstones 2.**

Sept. 18-22 Siliciclastic rocks Boggs Ch. 5

**Lab: Field Trip—Portneuf Gap (Climb of 1,000 feet)**

Sept. 25 to 29 Carbonate rocks Boggs Ch. 6

**Lab: Field Trip—Mink Creek**

Oct. 2 to 6. Catch up

**Exam 1 Oct. 3. (Glacier Trip)**

**Lab: Field Trip. Portneuf Gap 3,**

Oct. 9 to 13. Chapter 7 Other Sed Rocks. Continental environments Ch 8

**Lab: Carbonates 1**

Oct. 16 to 20 Chapter 9 Continental Environments,

**Lab: Lab Exam 1 Oct. 18**

Oct. 23 to 27 GSA Philadelphia *No class Oct. 24; Exam 2 Thurs. Oct. 26*

**First Research Paper Due (Summary of Stratigraphy of a Formation)**

**Lab: Sandstones 2**

Oct. 30 to Nov. 3. Ch. 9 Marginal Marine Environments., Ch. 10 Siliciclastic Marine environments., Ch. 11 Carbonate Environments

**Lab Paleozoic Stratigraphy of Southeastern Nevada.**

Nov. 6 to 10. Chap 12, Lithostratigraphy; Ch. 13. Sequence Stratigraphy, Field Trip Introduction.

**Lab: Other Chemical Rocks**

**Nevada Field Trip Fri Nov. 10 to Mon Nov. 13**

Nov. 13 to 17. Ch. 14 Bio stratigraphy, Ch. 15. Chronostratigraphy

**No Lab**

Nov. 20 to 24 Thanksgiving week off.

Nov. 27 to Dec. 1 .Ch 16. Basin Analysis.

**Lab: Detrital zircons**

**Lecture Exam 3. Thurs. Nov 30.**

Dec. 4 to 8 Review.

Dec. 7, No Class. **2<sup>nd</sup> Research Paper Due (Summary of Depositional Setting and Basin Analysis of a Formation)**

**Lab: Take home lab exam**

Dec. 11 to 15 Final Exam. Congratulations, you made it!