

GEOLOGY 206
Hayden Hall 360

STRATIGRAPHY
Prof. Hermann W. Pfefferkorn

SPRING 2011
Tr 10:30-12
Lab Tu 1:30-3

Th	01/13	The Science of Stratigraphy, Lithostratigraphy	(B) ch. 12
Tu	18	Well Logging, Facies, Correlation	(B) ch. 12
Th	20	Biostratigraphy, Ecostratigraphy	(B) ch. 14
Tu	25	Chronostratigraphy, Geochronology	(B) ch. 15
Th	27	Magnetostratigraphy, Seismic Stratigraphy	(B) ch. 13
Tu	02/01	Sequence Stratigraphy	(B) ch. 13
Th	03	Sequence Stratigraphy	(B) ch. 13
Tu	08	Basin Analysis	(B) ch. 16
Th	10	Sedimentary Rock Classification, Rudites	(B) Intro, ch. 5.3
Tu	15-	Clastic Sedimentary Rocks	(B) ch. 5
Th	17-	Clastic Sedimentary Rocks	(B) ch. 5
Tu	22	Limestones	(B) ch. 6
Th	24	Petrographic Microscope	handout
Su	27	Field Trip through Triassic-Jurassic Graben	8 AM – 6 PM
Tu	03/01	1 st HOUR EXAM	
Th	03	Cherts, Iron-bearing Rocks	(B) ch. 7
		Sa 03/05 through Su 03/13	SPRING BREAK
Tu	15	Phosphate-bearing Rocks, Evaporites	(B) ch. 7
Th	17	Coal, Oil	(B) ch. 7
Tu	22	Sedimentology (NE GSA, Pittsburgh)	(B) ch. 1-4
Th	24	Fluvial and Alluvial Environments	(B) ch. 8.1-8.2
Tu	29	Lake Facies, Eolian Facies, Glacial Facies	(B) ch. 8.3-8.5
Th	31	Deltas, Coastal Plains, etc.	(B) ch. 9
Sa-Su	02-03	Field Exercise, Pottsville, PA	8 AM – 6 PM
Tu	04/05	Deltas, Coastal Plains, etc.	(B) ch. 9
Th	07	Beaches, Tidal Flats	(B) ch. 9
Sa-Su	09-10	Rain date for either field exercise or field trip	8 AM – 6 PM
Tu	12	Epicontinental Seas, Clastic	(B) ch. 10.2
Th	14	Epicontinental Seas, Carbonate, Reefs, Deep Sea	(B) ch. 11, 10.3
Tu	19	2 nd HOUR EXAM	
Th	21	Student Presentations	
Tu	26	Student Presentations	

LAB SYLLABUS

Tu	01-18	Lithostratigraphic Correlation
Tu	25	Biostratigraphic Correlation
Tu	02-01	Biostratigraphic and Chronostratigraphic Correlation
Tu	08	Ecostratigraphy and Facies
Tu	15	Sequence Stratigraphy
Tu	22-	Field Methods
Tu	03-01	Petrographic Microscope
Tu	08	SPRING BREAK
Tu	15	Clastic Sedimentary Rocks
Tu	22	Limestones, Cherts
Tu	29	Fe- and P-bearing Rocks, Evaporites, Coal, Oil
Tu	04-05	Grain Size Analysis
Tu	12	The Rock Record and Paleoclimate
Tu	19	Stratigraphy and Sedimentology the outlook
Tu	26	Student Presentations

TEXTBOOK:

(B) Boggs, S. Jr., 2006, Principles of Sedimentology and Stratigraphy (4th ed.). Pearson, Prentice Hall, Upper Saddle River, NJ, 662 p.

The textbook will be used for both the lecture and the lab. In addition, handouts will be used in some labs. Hand lens and pocket knife should be brought to each lab.

GRADED ACTIVITIES: First Hour Exam (20%), Field Trip Report (15%), Oral Presentation (25%), Correlation Exercise (20%), Second Hour Exam (20%)