

PETROLOGY SPRING, 2018

INSTRUCTOR: Brian Cooper
OFFICE: 300C Lee Drain Building
OFFICE HOURS: 11-11:50 a.m. Tuesday-Thursday or by appointment.
OFFICE PHONE: 294-1566 (email = bjcooper@shsu.edu)

TEXTS: Blatt and Tracy, Petrology, 3rd ed.
Hurlbut, C.S. and Klein, C., Manual of Mineralogy, 22nd ed.
Nesse, Introduction to Optical Mineralogy, 3rd ed.

ATTENDANCE: Attendance is required. Each absence in excess of 4 absences costs 5 points.
Two tardies = 1 absence. No excuses. If you miss a lecture, it is your responsibility to obtain the material presented in the lecture from a fellow student.

MAKE-UP EXAMS: Only medical reasons will be accepted as last minute excuses for missing lecture exams. Obtain an official medical note. Major events in a student's life (such as weddings, ufo abductions, etc.) that might conflict with an exam must be reported to the instructor before the exam. Make arrangements to make up the exam as soon as possible.

CLASSROOM RULES:

1. Class starts on time. Two tardies count as one absence.
2. Class ends when I say it ends. Do not delay everyone else by making a lot of noise packing your bags early.
3. Keep quiet when I am lecturing, otherwise you will be asked to leave the classroom.
4. Raise your hand if you have a question or need to leave the room for any reason.
5. Assignments received after the due date receive the lowest grade obtained on that assignment thus far, minus one for each day late, minus whatever is missed on the assignment...which means a negative score is a very real possibility. No assignment = a zero for that grade.

CHEATING: Cheaters will automatically fail. Keep your eyes on your own exam at all times. You will only be warned once, after that you receive a zero on the exam.

GRADING SCALE:

850 - 1000 points	= A
750 - 849 points	= B
650 - 749 points	= C
550 - 649 points	= D
less than 549 points	= F

POINT DISTRIBUTION:	Lecture:	First Exam	60 points
		Second Exam	60 points
		Third Exam	80 points
		Final Exam	100 points
	Lab:	Ig practical	100 points
		Mike practical	100 points
		Final practical	100 points
		Exercises	400 points
	Total:		1000 points

PETROLOGY LECTURES SPRING, 2018 (REVISED)

January	18	Introduction and the Earth
January	23	Igneous Petrology
January	25	Phase Diagrams (colored pencils) introduction
January	30	Phase Diagrams (colored pencils) one component
February	1	Phase Diagrams (colored pencils) two component
February	6	Phase Diagrams (colored pencils) melting and crystallization
February	8	FIRST LECTURE EXAM
February	13	Magmas: plate tectonic associations
February	15	Magmas: plate boundary specific production mechanisms
February	20	Magmas: diversification, component concentration
February	22	Magmas: ascent and emplacement
February	27	Sedimentary Petrology
March	1	Sediments
March	6	Transport and Deposition
March	8	SECOND LECTURE EXAM

SPRING BREAK

March	20	Sedimentary Environments
March	22	Lithification
March	27	Sedimentary Rocks
March	29	Metamorphic Petrology
April	3	Metamorphism
April	5	Metamorphic Differentiation
April	10	Metamorphic Textures
April	12	THIRD LECTURE EXAM
April	17	Metamorphic Structures
April	19	Metamorphic Zones
April	24	Metamorphic Facies vs. Plate Tectonic environments
April	26	Metamorphic Mineral Reactions
May	1	Petrogenetic Grids
May	3	Metasomatism
May	8	FINAL LECTURE EXAM 8 -10 am

PETROLOGY LABS SPRING, 2018

January	18	Minerals in Thin Sections
January	23	Igneous Textures and Classification
January	25	Minerals in Igneous Thin Sections
January	30	Mafic Intrusives
February	1	Mafic Intrusive Thin Sections
February	6	Mafic Extrusives
February	8	Mafic Extrusive Thin Sections
February	13	Intermediate Intrusives
February	15	Intermediate Intrusive Thin Sections
February	20	Intermediate Extrusives
February	22	Intermediate Extrusive Thin Sections
February	27	Felsic Intrusives
March	1	Felsic Intrusive Thin Sections
March	6	Felsic Extrusives
March	8	Felsic Extrusive Thin Sections

SPRING BREAK

March	20	Clastic Sedimentary Rocks
March	22	IGNEOUS PRACTICAL /Clastic Sedimentary Thin Sections
March	27	Chemical Sedimentary Rocks
March	29	Chemical Sedimentary Thin Sections
April	3	Lower Grade Metapelites
April	5	Metamorphic Thin Sections
April	10	Higher Grade Metapelites
April	12	Metamorphic Thin Sections
April	17	Metabasites,
April	19	Metamorphic Thin Sections
April	24	Calcareous and Ultramafic Rocks
April	26	Review
May	1	THIN SECTION PRACTICAL
May	3	COMPREHENSIVE ROCK PRACTICAL