

SIO 152 Schedule for 2015 (Subject to change as necessary)

LECTURE:

LABORATORY:

PHASE I: INTRODUCTION AND SEDIMENTARY ROCKS

Week 1: March 30 and April 1

M- Introduction to sedimentary rocks (Ch. 11-12)

W- Field trip: La Jolla Shores

M- Sed. Lab 1- Siliciclastic sedimentary rocks

W- Field trip: La Jolla Shores

Week 2: April 6 + 8

M- Siliciclastic sedimentary rocks (Ch.13)

W- Siliciclastic sedimentary rocks (Ch. 13)

M- Sed. Lab 1- Siliciclastic sedimentary rocks

W- Sed. Lab 1- Siliciclastic sedimentary rocks

Week 3: April 13 + 15

M- Mudstones and Carbonates (Ch. 14+15)

W- Mudstones and Carbonates (Ch. 14+15)

M- Sed. Lab 2- Carbonate sedimentary rocks

W- Sed. Lab 2- Carbonate sedimentary rocks

PHASE II: IGNEOUS ROCKS

Week 4: April 20 + 22

M- Introduction to igneous rocks (Ch. 1), igneous environments, and textural, chemical and mineralogical classification of igneous rocks (Ch. 3)

W- Intrusive igneous rocks (Ch. 8-10)

M- Quiz: Sedimentary rocks in thin section
and Introduction to igneous minerals in thin section

W- Igneous Lab 1- Intrusive igneous rocks

Week 5: April 27 + 29

M- Volcanism and extrusive igneous rocks (Ch. 4)

W- The origin and evolution of magmas: melting and Crystallization (Ch. 5+6)

M- Igneous Lab 1- Intrusive igneous rocks

W- Igneous Lab 2- Extrusive igneous rocks

LECTURE:

Week 6: May 4 + 6

M- Phase diagrams and igneous geochemistry
W- Petrology of igneous rocks in various tectonic environments (Ch. 8-10)

Week 7: May 11 + 13

M- Petrology of igneous rocks in various tectonic environments (Ch. 8-10)
W- **EXAM- Sedimentary and Igneous Petrology**

Week 8: May 18 + 20

M- Introduction to metamorphism (Ch. 17+18)
W- Types of metamorphism, metamorphic minerals (Ch. 17+18)

Week 9: May 25 + 27

M- **NO CLASS (MEMORIAL DAY)**
W- Isograds, facies, and P-T relations (Ch. 17+19)

Week 10: June 1 + 3

M- Metamorphic reactions (Ch. 20)
W- Review

Week 11: June 10

FINAL EXAM - Wednesday, June 10th 8:00-11:00 AM in Ritter 229

LABORATORY:

M- Igneous Lab 2- Extrusive igneous rocks
W- Igneous Lab 3- Other igneous rocks (foiid-bearing, etc.)

M- Igneous Lab 3- Other igneous rocks (foiid-bearing, etc.)
W- **Quiz: Igneous rocks in thin section**

PHASE III: METAMORPHIC ROCKS

M- Introduction to metamorphic minerals in thin section
W- Met. Lab 1- Textures and minerals of metamorphic rocks

M- **NO CLASS (MEMORIAL DAY)**
W- Met. Lab 2- Protoliths and facies of metamorphic rocks

M- Met. Lab 2- Protoliths and facies of metamorphic rocks
W- **QUIZ: Metamorphic minerals in thin section**