GEL62: Optical Mineralogy

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SARAH LAMBART

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Office hours: Wednesday: 12-13pm or by appointment in room 1205A

 Jan Weninger, Michael Kenney Room 1205 jjweninger@ucdavis.edu, mjkenney@ucdavis.edu
 Office hours: in room 1362 Textbook: Nesse: Introduction to Optical Mineralogy, Oxford university press. REQUESTED!

On reserve at the library
Available at the bookstore
Amazon or Barnes&Noble

Optional reading:
 Guide to thin section microscopy (Raith, Raase & Reinhardt):
 Free – available on smartsite

Lectures hours: M: 12h10-1h00 **Lab hours:** M & W: 1h10-4h Practice: Monday: 8am-12pm Tu & Th: 8am-10:30am; 12pm-1pm; 4pm-7pm Wednesday: 8am-1pm Friday: 8am-5pm Attendance/arrival: mandatory/no late arrival (quizzes) Code of conduct Cell phones: must be turn off

Mid-term exam: November 2th 12h10-1h00
 Final exam: December 11 at 8am
 Final lab exam: week 10 (Nov 30- Dec 4)
 Lab quiz: every week at the beginning of the lab – questions on the previous material and on the required reading.

Grading:

30% exam (20% final exam – 10% mid-term exam) 30% lab exam 30% labwork 10% quizzes

Learn how to use a petrographic microscope: Identify minerals Determine rock type Determine crystallization sequence Document deformation history ► Constrain P-T history Note weathering/alteration

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Basalt with Porphyritic texture: phenocrysts of plagioclase & finegrained pyroxenes in groundmass

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Strain has caused the quartz crystal to deform into domains with slightly different extinction angles.

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corona texture in gneiss. Center: sillimanite; rim spinel + cordierite

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Fresh peridotite



Altered peridotite







FOR FUN

http://microckscopica.altervista.org/en/

