Delivery Modalities

This manual and laboratory kit are part of an intensive laboratory course that explores the basic concepts and principles of physical geology. This physical geology laboratory can be offered in a complete distance learning or blended/hybrid environment.

The 14 lessons follow a sequence that progresses through the basics of topographic maps, plate tectonics, seismology, minerals and rocks, and geologic time and concludes with overarching topics such as Earth's major geologic features and economic geology resources.

This comprehensive laboratory package includes:

• Printed laboratory manual with full instructions.
• Geology laboratory kit with tools, rock and mineral samples and topographic maps.
• Access to the course website with a variety of interactive games and simulations, videos, images, and quizzes.

Students will be able to effectively apply concepts, principles, and theories of geology to make accurate observations and identify samples/structures/landscapes. They will also analyze data, formulate and test hypotheses, solve problems, and come to supportable conclusions given various scenarios and research topics.

There is NO FEE charged to instructors or institutions when adopting an online laboratory course from Coast Learning Systems. This laboratory, designed specifically as an off-campus learning experience, is provided in the same manner. Students purchase the lab kit, and the lab manual includes a one-time use serial access number printed on the inside front cover.

Laboratory Kit Contents List

• Laboratory Manual
• USGS Topographic Map of Yosemite Valley, CA
• USGS Topographic Map Symbols Pamphlet
• Mineral Identification Kit
  (glass plate, magnet, magnifying hand lens, nail, porcelain streak plate)
• 10 Mineral Samples
• 10 Igneous Rock Specimens
• 7 Sedimentary Rock Specimens
• 8 Metamorphic Rock Specimens
• 5 Bags of Sedimentary Grains (various types, 100cc each)
• Ruler, 12" Standard/Metric
• Protractor, Solid Center
• Compass, Silva Base Plate
• Pencil Compass, Plastic Blunt Tip
• Fault Model Cutout on Cardstock
• Foam Material, 4” x 11” (one each of blue, red, and white)

Online Multimedia Content

The online portion of the laboratory is provided in Moodle and contains interactive exercises, graded exercises & activities, quizzes, and streaming video featuring charts, graphs, expert interviews, and demonstrations.

Production Partner

Kendall Hunt