



Fundamentals of Geostatistics

Principles and Hands-on Practice



A Short Course Offered by
Prof. C. V. Deutsch and E. T. Schnetzler, StatioS LLC

June 7 – 10, 2010
Edmonton, Alberta, Canada

Location

[University of Alberta](#) Campus
Edmonton, Alberta, CANADA

Course Registration Fees:

(CCG Member): \$1,650.00 CAD

(Non-Member): \$1,800.00 CAD

Objectives

The fundamental principles of geostatistics will be covered in lectures and hands-on exercises. Each participant will have an appreciation for the variety of geostatistical techniques and tools available to address problems of heterogeneity modeling and decision making. The participants will be able to apply key techniques and software with their own data. The limitations and assumptions of different methods will be revealed.

Upon completion of this course, each participant should be able to:

1. describe situations where the application of geostatistical techniques could assist with numerical modeling
2. conduct an exploratory data analysis study for input to geostatistical modeling
3. quantify the connectivity of the variables using geostatistical tools such as the variogram
4. construct heterogeneous models
5. describe the limitations of the resulting numerical models and the geostatistical model-building techniques.

Who Should Attend

This course is primarily intended for engineers and geologists with an interest in numerical modeling. Geoscientists from any discipline would benefit from the fundamental principles covered in the course.

Students who have taken a similar course will benefit from the new course material, new software, and case study undertaken in the hands-on portion of the course.

Instructors

Dr. Deutsch is a Professor in the School of Mining and Petroleum Engineering, Department of Civil & Environmental Engineering at the University of Alberta. He teaches and conducts research into better ways to model heterogeneity and uncertainty in petroleum reservoirs and mineral deposits. Prior to joining the University of Alberta, Dr. Deutsch was an Associate Professor (Research) in the Department of Petroleum Engineering at Stanford University. His employment history also includes three years with Exxon Production Research Company and three years of experience with Placer Dome Inc. Dr. Deutsch has published two books and over 120 research papers. Dr. Deutsch holds the Alberta Chamber of Resources Industry Chair in Mining Engineering and the Canada Research Chair in Natural Resources Uncertainty Characterization.

Manu Schnetzler is an independent consultant and cofounder of Statios LLC. He has more than 10 years of experience in geostatistics including a number of years as an independent consultant and geostatistical software development for Roxar. He has undertaken numerous projects and case studies with major oil companies and software development firms. He has also taught many short courses on geostatistical theory and applications.