

Fundamentals of Geostatistics: Principles and Hands-on Practice

A Short Course by Clayton V. Deutsch and Emmanuel Schnetzler

June 7-10, 2010

8:30am to 4:30pm

Markin/CNRL Natural Resources Engineering Facility

Room 2-020

Department of Civil & Environmental Engineering

University of Alberta

Edmonton, AB

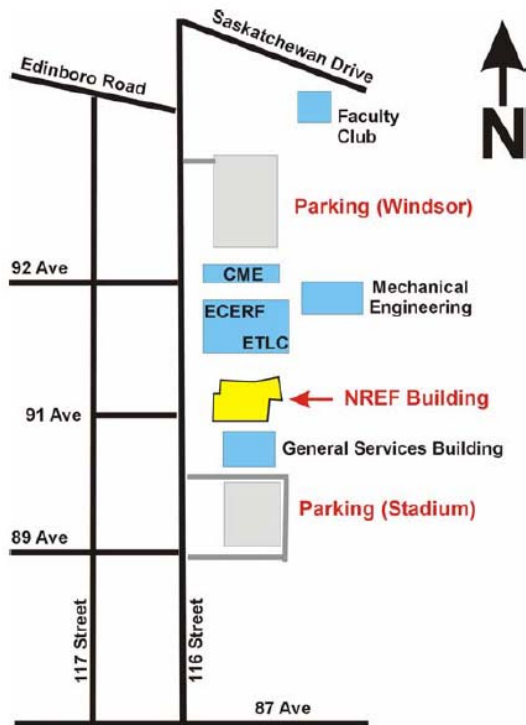
Day One	Overview of Geostatistics for Heterogeneity / Uncertainty Introduction to Course Software Elementary Statistical Analysis / Data Cleaning Declustering for Representative Statistics Monte Carlo Simulation and the Bootstrap Coordinate Transformation / Geometric Modeling
Day Two	Variogram Calculation and Interpretation Variogram Modeling Variogram Scaling / Models of Coregionalization Volume Variance Relations Kriging for Mapping Applications Cross Validation
Day Three	Sequential Gaussian Simulation (SGS) SGS with Colocated Cokriging Postprocessing Multiple Realizations Sequential Indicator Simulation (SIS) Other Cell-Based Facies Modeling Techniques / Image Cleaning Object Based Modeling
Day Four	Connectivity and Ranking of Geologic Models Model Verification and Cross Validation of Simulation Methods Quantifying Uncertainty with Indicator Kriging Simulated Annealing for Geostatistical Applications Decision Making in Presence of Uncertainty Case Studies / Tradecraft

This course schedule will be modified on the fly to meet the objectives of the group.

Logistical Details

- There will be a practical (“hands-on”) component to the course, **so laptops are strongly recommended**. If this is not a feasible option, please notify Colette Freitas, freitas@ualberta.ca or at +1-(780)-492-7041 by May 17, 2010 so that alternative arrangements can be made.
- Morning and afternoon refreshments and snacks will be provided
- Course notes and electronic files of the presentations/data will be provided
- Notes on travel:
 - Fly to the Edmonton International Airport, which is 25 miles south of Edmonton
 - Taxi to hotel would be about \$50-\$60, shuttle \$20-\$25, or
 - Rent a car at the airport (all major companies are present)
- See page 4 for ideas on local accommodation.
- During the month of June, Edmonton has an average temperature of about 14°C, with a high of about 21°C and an average overnight low of about 7°C. It is best to expect anything, since Edmonton’s weather is unpredictable. Precipitation during this time of year averages about 39mm, and Edmonton receives 15-16 hours of sun.
- Parking is available on campus





See <http://www.campusmap.ualberta.ca/> or www.mapquest.com for more details.

Instructions for taxi: *The NREF Bldg. at the corner of 91st Avenue and 116th Street*

If you are driving: *Get onto 116th Street going north (normally from 87th Avenue), park in Stadium Car Park (South) or Windsor Car Park (North), find your way to the NREF Bldg.*

Contact: Colette Freitas
 Telephone: +1 780.492.7041
 E-mail: freitas@ualberta.ca or colette@staios.com
 3-081 Markin/CNRL NREF Bldg.

HOTEL INFORMATION

Hotels (in order of closest to University of Alberta):

1. Campus Tower – across the street from campus
2. The Mettra Hotel - 30 min. walk to location, close to shops and restaurants
3. Varscona – 30 min. walk to location, close to shops and restaurants
4. Westin Hotel – 5 min train ride to campus, Close to Edmonton downtown.

Lister Hall is also an option, but is a university residence; 5 min walk from location.

Campus Tower Suite Hotel

www.campustower.com

11145 – 87 Avenue

Telephone: (780)-439-6060

Toll Free: 1-888-962-2522

Varscona Hotel

www.varscona.com

8208 – 106 Street

Telephone: (780)-434-6111

Toll Free: 1-888-515-3355

Metterra Hotel

www.metterra.com

10454 – 82 Avenue

Telephone: (780)-465-8150

Toll Free: 1-866-465-8150

Westin Hotel

www.westin.com

10135 – 100 Street

Telephone: (780)-426-3636

Lister Hall

On campus

<http://www.uofaweb.ualberta.ca/conferenceservices/>
