



Statistics Refresher for Resource Management Professionals

March 14, 15 & 16, 2011
9 a.m. to 4:30 p.m.
Community Futures Nadina, 1164 Main Street, Smithers
www.bvcentre.ca

Participants are required to bring a laptop computer loaded with the current version of R software (freeware available at www.r-project.org).

For more information, please visit Dr. Schwarz's website:
<http://www.stat.sfu.ca/~cschwarz/>.

Course Outline:

1. Review of statistical concepts on estimates, standard errors, confidence intervals, p-values etc.
2. Overview of environmental monitoring designs
3. Overview of some basic sampling strategies
 - simple random sample
 - stratified sampling
 - cluster sampling
 - two stage sampling
 - ratio estimation
4. Details on simple random sampling, stratified sampling, cluster sampling
 - how to plan
 - sample size requirements etc
 - how to analyze
 - pitfalls and which to use when
5. Overview of experimental designs (single factor, two factor)
6. Details on single factor designs
 - two-sample t-test
 - one way ANOVA
 - subsampling
 - pseudo-replication, pairing, blocking, etc.
7. Overview of regression analysis
8. Details on single variable regression analysis
9. Overview of categorical data analysis
10. Details on chi-square tests

