

Grading: 20 % quizzes and midterm exam
 20 % final
 60 % assignments
 assignments accepted on due date; 10% percent off each late day.

Course goals:

- 1) Learn how to learn computers and software
- 2) Become familiar with some of programs and operating systems currently used here.

some links:

[mathematical formulas and definitions](#)

[geological map symbols](#)

[binomial calculator](#)

[radioactive decay](#)

[transmissivity](#)

[time loop](#)

[cone of influence](#)

Tuesday lecture - 8:00 AM CSL 427	Thursday lecture- 8:00 AM CSL 427	Thursday Lab - 11:00 AM CSL 427
Jan. 12 Digital and analog, bit and bytes	Jan. 15 PC hardware basics	Computer hardware; assignment 1; Get account on rohan
Jan. 20 Files, programs, and OS	Jan. 22 Unix, telnet, ftp, google	Unix, Mac, and PC
Jan. 27 Internet,georef	Jan. 29 Databases	Excel & powerpoint
Feb. 3 Image and drawing	Feb. 5 3D images and visualization	Illustrator and photoshop Sheep Mountain
Feb 10 Statistics	Feb 12 more statistics	Excel, statistics, & Schmidt
Feb 17 line-fitting	Feb 19 confidence intervals	Schmidt analysis, Excel data
Feb 24 Geoids & DEM's	Feb 26 Intro to Matlab	Surfer & Matlab- DEM data files
March 2 Programming; Review for midterm	March 4 on your own	Lab midterm
March 9 Programming - symbolic	March 11 Programming- Theis	Matlab- modeling the Theis equation
March 22 GIS - arcview	March 25 Cartography, GPS and Arcview	GPS and arcview, data files
March 30 Arcview	April 1 Optimized finite element code	Arcview and Hawaii, image
April 6 Visual basic	April 8 Visual basic	Visual basic - Theis
April 13 Visual basic & seismic	April 16 no lab	rest
April 20 seismic	April 22 seismic	Kingdom Suite, L207, L113
April 27 - pictures	April 29 - lab review &	TBA

	make-ups	
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Data for the final: [datafile](#)

It will be necessary to purchase blank CD's, zip disk and/or a portable RAM (strongly recommended).

No required books - the following may be helpful

Essential MATLAB for scientists and engineers Brian D. Hahn, 1997, John Wiley \$39.95