

FISH 503 Advanced Limnology (University of Idaho, Moscow Idaho Campus)

Data management and visualization

Day 1 - Thursday Apr 5th, 2012

- 09:00-09:15** Module overview and objectives/goals. (Room CNR 205F)
- 09:15-11:45** Data generation, complexity, capture, transfer and storage (archiving).
Conceptualizing data stream - analysis - storage (spreadsheet vs database)
- Presentation of scientific data - basics, individual visuals from students,
discussion of suitable presentation for oral, poster, and manuscript styles.
- 11:45-13:15** **Lunch**
- 13:15-15:00** Spreadsheets - tips, tricks, functions - Computer exercises (working with large data sets in spreadsheets).
Exploration of excel as a graphing tool - getting it to do what you want (Room CNR 205F)
- 15:00-15:20** Break
- 15:20-16:30** Development of individual SOP's for part of individual MS thesis projects. (Room CNR 205F)

Day 2 - Friday Apr 6th, 2012

- 09:00-10:15** Overview of visualization software and what it can do for data presentation/analysis/modeling. Introduction to CTech visualization software. Exploratory exercise. (CNR 205F)
- 10:15-10:30** **Break -**
- 10:30-11:30** Relational databases introduction/overview and exploration.
Transferring data between spreadsheets and databases, setting up a relational database and performing calculations. (Room CNR 205F)
- 11:30-12:30** **Lunch**
- 12:30-13:00** Head to ASL at Homes center UI
- 13:00-16:30** Steve McGeehan - Laboratory Director, Analytical Sciences Laboratory at University of Idaho. "The ins and outs of a functioning LIMS system: considerations and operation" as well as lab tour of EPA approved Lab facility at UI.