CS590C: Introduction to Scientific Computing

Fall 1996.

MWF, 10:30 AM, REC 309

Professor: Ananth Grama
164D, Computer Science Building;

Questionaire

How would you rate your skills in **basic linear algebra**?

❏ I know what a matrix is; ❏ I know basic matrix operations;
❏ I know of eigenvalues and eigenvectors; ❏ I can solve a linear system Ax = b;
❏ I can solve sparse linear systems directly and iteratively.

How would you rate your skills in **calculus**?

❏ I know what a differential is; ❏ I know what a differential equation is;
❏ I know how to solve simple differential equations; ❏ I know what integral equations are.

How would you rate your skills in **mathematical and computational modeling**?

❏ I know what modeling is; ❏ I can fit a math. model for my application;
❏ I know what finite difference methods are; ❏ I know what finite element methods are;
❏ I can formulate applications as finite element/difference/eigenvalue problems.

How would you rate your skills with **computational tools**?

❏ I know what matlab is; ❏ I can program using matlab;
❏ I know what BLAS is; ❏ I can write programs using BLAS libraries;
❏ I know of visualization and modeling tools and environments;

How would you rate your **programming** skills?

❏ I know atleast one programming language; ❏ I can write a small program;
❏ I can write complex programs with thousands of lines of code;
❏ I can write complete packages integrating GUIs and underlying techniques;

How would you rate your scientific computation (**problem solving**) skills?

❏ I know how to store a sparse matrix on a computer;
❏ I can write programs for elementary matrix manipulation;
❏ I know what reordering variables for sparse matrix factorization means;

What are your expectations from this class? what would you like to learn as a part of this class?

(use other side if needed) Return to Ananth Grama, 164D, computer Sc.