

EXPLANATION OF TERMS

LABORATORY ACTIVITIES

Laboratory activities usually follow the following format:

1. Student centered pre-lab discussions identify the relevant variables and discuss broad parameters for experimental designs.
2. Individual lab teams then develop and execute their detailed experimental procedures.
3. Each team constructs appropriate graphical and mathematical models.
4. At least one lab team, before the class, conducts a detailed post-lab defense of their experimental procedures, techniques of data analysis and model construction.

LABORATORY EXTENSION

A class discussion and/or activity that uses previously constructed models as a basis for the construction of new models that predict relationships not previously observed.

LABORATORY APPLICATIONS

These are activities that provide opportunities to make predictions about the behavior of certain systems, based on previously constructed models, and then experimentally verify these predictions.

DEPLOYMENT ACTIVITIES

Deployment activities are characteristically problem sets that have been carefully selected to address the instructional goals of each section. Individual problems within a deployment set are commonly developed during class time by small study groups and presented to the class, with oral clarification, on recitation boards. Class comments and discussion during the presentation are encouraged.