

## List of Definitions, Concepts, and Formulas for Math 125

### Definitions and Concepts

#### Chapter 1

*Controlled Experiment:* A study of the effectiveness of a drug or treatment where some of the participants are not given the treatment.

*Treatment Group:* Those who receive the treatment.

*Control Group:* Those, similar to the members of the treatment group, who are withheld treatment.

*Confounding Factors:* Other factors which make the treatment and control groups dissimilar.

*Randomized Controls:* Randomized assignment to the treatment or control group.

*Placebo:* A drug or treatment given to the control group that prevents the participants from knowing into which group they have been assigned.

*Double-blinding:* An experiment in which neither the participants or the researchers know to which group each participant is assigned, preventing bias in the response or the evaluations.

#### Chapter 2

*Observational Studies* Studies where the assignment to treatment or control is not made by the researcher; usually the subjects assign themselves to one of the groups.

*Historical Controls* Studies where the assignment to treatment or control uses two groups, supposedly similar, but observed over two different time periods.