These are items from the "Essential Terminology and Notation" sections of Nalini's book.

1. Probability Distributions
    - Cumulative distribution
    - probability density
    - the normal distribution
    - standard normal variable
    - empirical rule for normal distribution (68-95-99.7 rule)
    - location/scale distribution
    - quantiles
    - order statistics
    - empirical quantiles
    - empirical cdf
    - multinomial distribution
    - kernel-density plots
2. Hypothesis Testing
    - population parameters
    - sample statistics
    - sampling distribution
    - standard error
    - point estimate
    - biased/unbiased estimators
    - statistical hypothesis
    - hypothesis test
    - null and alternative hypotheses; one- and two- sided
    - Neyman-Pearson paradigm
    - test statistics
    - rejection region
    - Type I and Type II errors
    - significance and power
    - p-value
    - confidence interval and its interpretation
    - degrees of freedom
    - effect size
3. Fixed Effects ANOVA
    - Factors/categorical variables
    - Designed experiments
    - balanced and unbalanced designs
    - full factorial design
    - ANOVA description
    - multiple comparisons
    - contrasts
    - types of ANOVA:

    - single factor
    - two factor
    - nested

4. Linear Regression

    - linear regression model
    - simple regression
    - sample correlation
    - correlation matrix
    - multiple regression
    - underlying assumptions:
        - linearity
        - constant variance
        - normality
        - independence
    - goodness of fit measures (coeff of determination)
    - Inference on regression coefficients
    - F test
    - predictive modeling

5. More on Linear Regression

    - Spectral Theorem
        - eigenvalues and eigenvectors
        - orthogonal matrices
        - spectral decomposition
    - PCA regression
    - diagnostics
    - outliers
    - residuals
    - branch and bound

6. Generalized Linear Models

    - link functions
    - binary response
    - bernoulli distribution
    - binomial distribution
    - count response
    - Poisson distribution
    - negative binomial
    - dispersion
    - sensitity and specificity
    - the ROC curve

7. More on GLIM and related methods

    - tree based methods
    - Gini index

- Entropy

8. Extensions to ANOVA
    - fixed and random effects models
9. Dependent Data
    - time series and autocorrelation