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★**Multivariate analysis.**

Second edition.

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This book provides an interesting mix of theory and practice, with greater emphasis on the latter. The text begins with a list of the most important goals for the practitioner: (i) structural simplification, (ii) classification, (iii) grouping of variables, (iv) analyses of independence and dependence, (v) hypothesis construction and testing. With these in mind the sequencing of the chapters is: (1) principal components, (2) classification and clustering, (3) factor analysis, (4) canonical correlations, (5) distribution theory, (6) regression analysis, (7) functional relationship, (8) tests of hypotheses, (9) discrimination, (10) categorized multivariate data. Chapters 2–5 deal with the general area of data compression. With the development of computer techniques, this area is currently the most important for analyzing data.

The strength of the book lies in the emphasis on what to do. The examples are generally good. (As an aside, it would be nice to bury the Fisher Iris data forevermore.) The chapter on classification and clustering could be enhanced with a discussion of several specific techniques plus some computer output. The chapters on regression and structural relations have some particularly excellent sections. Path analysis is not included and should be. The book serves well for a short course, or as complementary reading for a regular course. It is not designed or suitable for a course in which a mathematical development is pursued. Rather the entire presentation keeps in mind the question: What situations call for the use of a particular technique, and what does one have to watch for? As such it serves the general reader exceedingly well. *I. Olkin*