

Each catalog entry indicates title, instructional format, a short description of the contents (if available), and a reference to the distributor. Specific catalogue numbers, intended audiences, and prices are not included.

Though no attempt has been made to compile an exhaustive list of instructional media, items from 43 media distributors from AAAS to Ward's Natural Science Establishment, Inc. have been listed.

Catalog items appear under 14 major topic headings such as Biological Chemistry, Vertebrate Diversity, Human Biology, Ecology and Environment, and Biological Techniques. No cross-referencing has been attempted.

The catalog should prove helpful to biology teachers interested in quickly and easily locating many supplemental instructional materials for their present or proposed courses. Its use need not remain limited to college teachers. A number of listings would no doubt be appropriate for high school students as well.

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## LIVING SYSTEMS

by James M. Ford and James E. Monroe. 3rd ed., 1977. Canfield Press, a Department of Harper and Row (Keystone Industrial Park, Scranton, Pennsylvania 18512). 621 p. \$14.95.

This general biology textbook is slanted toward beginning college students, particularly those who will continue their study of biology. It is printed on good quality paper, contains numerous diagrams and tables, and four full-color inserts on tissues, biomes, human development and diversity. The book is divided into nine units and twenty-four chapters. Unit One is an overview of living systems including an introduction to evolution. The remaining eight units cover structure, living communities, metabolism, regulation, reproduction and development, behavior, evolution, and diversity of life. Each chapter ends with a list of review questions, and an annotated list of suggested readings. Half-page inserts called, "Bio-Topics," included within each chapter, are supposed to heighten student interest in the particular subject being discussed. An Instructor's Manual, Study Guide and Laboratory Manual are available.

The authors and editors should be complimented for including several important and topical issues such as: genetic engineering, selective abortion, the evolution of human culture, and bioethics. The discussion of bioethics covers a wide variety of controversial

issues and is particularly well done. The book could be improved if more of the text were devoted to these and other topics of great concern to most scientists in today's biologically troubled world. But, unfortunately, much of the text reads like an encyclopedia of biological and chemical terms. As such, it might be more useful as a reference source rather than as a textbook. This flaw is largely due to an attempt by the authors to "cover" the spectrum of biological knowledge. For example, in the chapter on the origins of living systems, the authors discuss organic evolution, natural selection, origin of the solar system, meteorites, space probes (Mariner and Viking), solar flares, fossil evidence, evolution of the horse, ozone, chromosomes, purines, pyrimidines, DNA, RNA, the works of Oparin, Miller, Fox, Windsor, Kornberg, Khorana, and several others, and more, all in twenty pages of which approximately ten are illustrations. And, in the following chapter on chemistry and life the authors present a condensed version of inorganic and organic chemistry, plus a large dose of biochemistry in twenty-nine pages (including approximately ten pages of diagrams). Subsequent chapters are less cluttered, but the author still attempts to cover too much biology in too little space.

Very few first-year college students could understand the text without substantial help. Textual material on metabolism, regulation, genetics, and evolution is given detailed and rigorous treatment. Many diagrams are unnecessarily complicated—some highly confusing.

The pedestrian writing style is unlikely to stimulate student interest in biology. My greatest concern is that most students who use this textbook would be discouraged from taking other courses in an ever-changing and exciting field of science.

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## Genetics

### HUMAN GENETICS

by Norman V. Rothwell. 1977. Prentice-Hall, Inc. (Englewood Cliffs, New Jersey 07632). 444 p. \$14.50.

*Human Genetics*, according to the author, was written to fill the need for a relatively simple, yet fairly comprehensive textbook in this field for students with little or no previous exposure to college biology. Many textbooks dealing with human genetics presuppose extensive biological and sometimes biochemical background.

The introductory chapters provide necessary basic information on cell structure, cell physiology, mitosis and meiosis. The final chapter discusses human behavior as it relates to genetics and some of the social and ethical problems which have arisen due to some research. Much of the usually included historical material is eliminated, statistics are limited and sometimes complexities of phenotype development are simplified considerably to make the mechanics more understandable. However, when the author simplifies extensively, he is careful to point out that this has been done. For a student who has some genetics background, this might be frustrating.

Many of the commonly recognized human genetic defects are discussed as well as various common non-defective phenotypes. Whenever possible, examples are based on human and other mammalian research. The author constantly tries to impress the reader with the wide variety and complexity of human genotypes and phenotypes. He is also constantly stressing the possible effects of environmental factors on human genetic potential.

I wished at times, the text would "catch-up" with figures to which reference was made. Rothwell uses few photographs but most of the diagrams and drawings are easy to follow.

Norman Rothwell has written a readable textbook that does well in explaining the various genetic concepts included. A glossary, chapter review questions (answers at end of book), and chapter references are provided. It should be usable at the college level with non-science majors who have limited background in the field and it could be used in some high school courses.

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### HEREDITY

by Gary Parker, W. Ann Reynolds, and Rex Reynolds. 2nd ed., 1977. Educational Methods, Inc. (500 North Dearborn Street, Chicago, Illinois 60610). 171 p. \$4.45.

This book is part of the EMI programmed Biology Studies. Its purpose is a mastery of basic concepts in heredity. The programmed format forces the student to concentrate and this is certainly an advantage when studying heredity. The eight chapters are sequential and skipping is discouraged. Students can test themselves with review units at the end of each chapter. Chapters are divided into frames with several questions and the answers are given at the end of each frame. Students must be honest as it is