

Universal Decimal Classification —

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UDC 5/50 Exact sciences in general —
Nature study — Conservation —
Environmental sciences

UDC 025.45:5/50

Committees responsible for this British Standard

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Foreword

The English version of the Universal Decimal Classification (UDC) is being prepared and published as BS 1000 by the British Standards Institution (BSI) at the original joint request of the British Society for International Bibliography (BSIB) and the Association of Special Libraries and Information Bureaux (ASLIB), now amalgamated as Aslib. It has the approval of the Lake Placid Education Foundation, New York, proprietors of the Dewey Decimal Classification, from which the UDC derives. The English full edition of the UDC is authorized by the International Federation for Documentation (FID), PO Box 90402, 2509 LK The Hague, Netherlands.

This section is part of the English full edition. It should be used in conjunction with the Abridged English Edition, BS 1000A, which refers to many other subjects of interest not listed in this schedule, and provides a conspectus of the whole scheme, together with an introduction to its use.

For further practical information about the principles, application and utilization of the scheme, users should refer to BS 1000C.

This edition of BS 1000[5/50], which supersedes the 1974 edition, includes modifications authorized in “Extensions and Corrections to the UDC” (FID publication no. 248) up to and including Series 11, No. 2, dated April 1982. Subsequent issues of “Extensions and Corrections to the UDC” should be consulted to keep the schedule up to date. British Standards related to this Part of BS 1000 are listed on the inside back cover.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 16, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Scope

1. *Scope of UDC 5.* In general, under UDC 5 is classed information about mathematics and the natural sciences in their pure form, whereas UDC 6 is concerned with their application in industry, trade and commerce. However, many modern branches of science do not fit this generalization, e.g. social and economic sciences are classed under UDC 3, and the techniques of the arts under UDC 7.

2. *Scope of UDC 502.* Under 502 is classed information about nature in general and its study, and about conservation, including general conservation management and the protection of particular features and species.

3. *Scope of UDC 504.* Under 504 is classed information about environmental sciences, including social and human ecology, the effects of various activities on the environment, and pollution control.

Principal divisions of UDC 5

- 50 General works. Generalities
- 51 Mathematics
- 52 Astronomy. Astrophysics. Space research. Geodesy
- 53 Physics
- 54 Chemistry. Crystallography. Mineralogy
- 55 Earth sciences. Geology. Geophysics. Seismology. Meteorology. Hydrology
- 56 Palaeontology
- 57 Biological sciences
- 58 Botany
- 59 Zoology

Related subjects

- 001 Science and knowledge in general. Organization of intellectual work
- 113 General laws of nature — Philosophy
- 167 Scientific investigation — Philosophy
- 168 The scientific method — Philosophy
- 291.212 Adoration of the forces of nature and personified objects and phenomena. Myths of nature — Religion
- 312 Population statistics
- 314 Demography. Population studies
- 316.334.5 Sociology of ecological subsystems and institutions
- 330.15 Natural resources — Economics
- 330.524 Potential national wealth. Potential national assets

- 364.25 Environmental influences
- 61 Medical sciences
- 614.7 Hygiene of the air, water and soil
- 620.9 Economics of energy in general
- 622 Mining
- 626/627 Hydraulic (water) construction works
- 628.3 Sewage. Surface and foul water. Properties and treatment
- 628.4 Urban hygiene. Refuse. Refuse collection and disposal
- 628.5 Measures against industrial and other nuisances
- 63 Agriculture and related sciences and techniques. Forestry. Farming. Wildlife exploitation
- 66 Chemical technology. Chemical and related industries
- 67 Various industries, trades and crafts
- 711 Principles and practice of physical planning. Regional, town and country planning
- 712 Planning of landscapes, natural and designed. Parks. Gardens
- 719 Preservation of rural and urban amenities generally. National trusts and similar movements

Auxiliary signs and subdivisions

Full information about the common and special auxiliary signs and subdivisions (often abbreviated to “common and special auxiliaries”) will be found in BS 1000A and BS 1000C.

Colon sign of relation. For the classification of information for the public, as in abstracts and bibliographies, maximum use of colon combination rather than of common or special auxiliaries is recommended. The use of the colon sign of relation is preferable for multiple entry systems, as it will help prevent the concealment of information. This usually results in longer notation, however, and for information for more restricted use, the application of auxiliaries, where available, may be simpler and more convenient provided that there is an adequate alphabetical subject index.

Common auxiliaries. The common auxiliaries of language = . . . , form (0 . . .), place (1/9), race and nationality (= . . .), time “. . . ”, point of view .00 . . . , materials – 03 . . . and persons – 05 . . . are applicable throughout the UDC. However, they should be used mainly to express concepts not otherwise provided for in the schedules.

Special auxiliaries. Special auxiliary subdivisions are provided under 502 and 504; they may be detached and applied to any subdivision of the number under which they are listed where the result forms a meaningful combination, e.g.

- 502.057 Field measurement, recording
- 502.57 Direct damage and depredation to nature
- 502.57.057 Measurement and recording of direct damage and depredation to nature

Typographic presentation

Small type is used for cancelled numbers and text. The arrow → means either “see” or “see also” according to the context. The symbol $\cong$ “subdivide as” means that the number preceding it may be subdivided in the same way as, and with meanings analogous to the subdivisions of, the number which follows it.

SCHEDULE

5 MATHEMATICS AND NATURAL SCIENCES

50 GENERAL WORKS. GENERALITIES

501	GENERALITIES ABOUT THE EXACT SCIENCES. MATHEMATICAL SCIENCES IN THE BROADEST SENSE, INCLUDING ASTRONOMY, MECHANICS, MATHEMATICAL PHYSICS →113/119 Cosmology. Philosophy of nature 51 Mathematics	502.057	Field measurement, recording →57.087 Methods and techniques for parameter estimation and recording of biological data
502	NATURE. NATURE STUDY AND CONSERVATION. NATURE AND WILDLIFE PROTECTION <i>Comprehensive studies covering both 502 and 504 should be classed under 504</i> <i>Further particulars may be denoted by colon combination, e.g.</i> 502:061 Nature organizations, congresses etc. :17 Ethical, moral aspects of nature :330.15 Natural factors in economics. Economic resources :338 Nature and the production of wealth :343.7 Offences against property :347.2 Nature and realty laws. Property rights :351.77 Nature and public health laws :351.85 Public education, enlightenment about nature :37.03 Nature-oriented training and personality formation :379.8 Leisure, recreation aspects of nature :613 Nature and health, hygiene :616 Nature and diseases, pathology :7.04 Nature and iconography :71 Nature and physical planning. Landscape, parks, gardens :72 Nature and architecture :796/799 Nature and sport :911.2 Nature and physical geography :911.37 Nature and human settlements <i>Physiographic features may be denoted by (2) from Table 1e common auxiliaries of place, seasons by "32" from Table 1g common auxiliaries of time</i>	502.08	LABORATORY WORK, TECHNIQUES, STUDY, EXPERIMENTS 502.08 $\cong$ 57.08, e.g. 502.081 General organization of laboratories .082 Methods and equipment for laboratory specimens .084 Experiments on whole specimens, organisms .085 Experiments on parts of organisms. Organs, tissues etc. .1 In vivo study and experiments .2 In vitro study and experiments .086 Cytological and histological techniques. Microscopy etc. .087 Measurement and recording of results of laboratory work
Principal divisions (continued)			
		502.2	NATURE STUDY AND OBSERVATION. NATURAL HISTORY →502.4 Nature reserves <i>For geology, palaeontology, biology, botany, zoology</i> →55/59 <i>Further particulars may be denoted by the .0 special auxiliaries listed under 502, by colon combination, e.g.</i> 502.2.05 Field study of nature :551.5 Meteorological study. Weather lore :598.2 Bird watching .08 Laboratory study. Microscopy, measurements etc.
		502.3	NATURE AND SOCIETY. NATURE CONSERVATION IN GENERAL <i>For nature reserves, landscape protection, conservation of various features</i> →502.4/.8 <i>For social ecology</i> →504.03 <i>Further particulars may be denoted by colon combination, e.g.</i> 502.3:061 Nature organizations. Conservancies Interaction, interdependence of nature and society. Mutual benefits etc. Influence of nature on human beings and society <i>Further particulars may be denoted by colon combination, e.g.</i> 502.313:291 Influence on religious beliefs and practices :314 Influence on demographic, population factors :33 Influence on economic theory, production etc. :39 Influence on customs, tradition, folklore
Special auxiliary subdivisions for 502			
502.05	FIELD WORK, OBSERVATION AND RECORDING	.31	
.051	Field observation. Watching	.313	
.052	Identification of specimens (in the field)		
.054	Recording the sights and sounds of nature		
.2	Pictorial recording. Drawing. Photography <i>Further particulars may be denoted by colon combination with the subdivisions of 74/77</i>		
.4	Sound recording <i>Further particulars may be denoted by colon combination with the subdivisions of 681.84</i>		
.055	Field experiments. Marking, ringing etc.		