

Physics and Astronomy

Information Access Policy

Clemson University Libraries

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Introduction

This Information Access Policy is a statement of goals for building the library's collection in the subject areas of Physics and Astronomy. It should serve as a guide for library personnel in making collection development decisions, and should inform users, in general, how library materials are selected in Physics and Astronomy.

Purpose of Collection

The Physics collection supports the research and teaching needs of undergraduate students, graduate students, faculty, and staff in Physics and Astronomy. The nature of research at Clemson is interdisciplinary; the collection also supports research and education in many science and engineering fields at Clemson, including the Biological Sciences, Environmental Engineering & Earth Sciences, Materials Science, Chemical Engineering, and Mathematics. The collection provides a foundation of support for research in Clemson University's emphasis areas of Advanced Materials, Sustainable Environment, and Biotechnology and Biomedical Sciences.

Clemson's Physics & Astronomy Program

The research interests of Clemson's faculty are varied and include Astronomy and Astrophysics (Nuclear Astrophysics, Supernovae, Gamma-Ray Astronomy, Stellar Evolution, Stellar Atmospheres, and Meteorites and Star Dust), Biophysics, Condensed Matter Physics (Experimental and Theoretical), Atmospheric and Space Physics, Theoretical Quantum Physics, and more.

Programs leading to B.A. and B.S. degrees in Physics are offered at Clemson. The B.S. degree with Biophysics Concentration offers an excellent preparation for medical school or graduate work in biological sciences. Graduate studies are offered in Physics and Astronomy, for either the Doctorate (Ph.D.) or Master of Science (M.S.) Degree.

Collection Locations

The majority of the physical collection is in Cooper Library. Some older books and print journal volumes, as well as more recent print journal volumes duplicated in a stable online format (such as Science Direct titles), are available off-site at Remote Storage.

General Collection Guidelines

Languages: English is the primary language of the collection. Older foreign language materials tend to be in German or Russian. Materials in languages other than English are not actively selected.

Geographic Guidelines: No geographical limitations will be placed on the acquisition of physics and astronomy materials.

Chronological Guidelines: Emphasis is on current research and development, but an effort is made to maintain strong retrospective collections in fields where past literature remains important. Retrospective collecting may also be done at the request of faculty in support of their research and teaching.

Types of Materials Selected: Emphasis is on research materials and materials to support Clemson's Physics & Astronomy curricula. The collection includes monographs, journals and other serials, reference works, indexes and abstracts, and data collections. Graduate level texts are acquired extensively, while basic undergraduate textbooks whose primary function is instruction are usually excluded. Biography and history of Physics & Astronomy are acquired very selectively. Materials published by Clemson University authors are also acquired selectively. Indexes and abstracts are licensed as online databases; INSPEC and Web of Science are two examples of subscribed indexes most used by Physicists and Astronomers. Given that access to Physics & Astronomy journals is key to the success of Clemson researchers in many areas of science and engineering, every effort will be made to increase the size of Clemson's journals collection in Physics and Astronomy.

Format of Materials: No format is excluded. For journals, indexes, reference works, and data collections, the online versions are preferred. Books and book series are increasingly purchased in electronic format. Duplication of formats will largely be avoided.

Library of Congress Classifications: The predominant LC classifications of the collection are QB1-991 for Astronomy and QC1-999 for Physics, but supporting materials may also be purchased in other LC Subclasses, such as QD (Chemistry).

Astronomy	
LC Class	Subject
QB1-139	General
QB140-237	Practical and spherical astronomy
QB275-343	Geodesy
QB349-421	Theoretical astronomy and celestial mechanics
QB455-456	Astrogeology
QB460-466	Astrophysics

QB468-480	Non-optical methods of astronomy
QB495-903	Descriptive astronomy
QB500.5-785	Solar system
QB799-903	Stars
QB980-991	Cosmogony. Cosmology

Physics	
LC Class	Subject
QC1-75	General
QC81-114	Weights and measures
QC120-168.85	Descriptive and experimental mechanics
QC170-197	Atomic physics. Constitution and properties of matter Including molecular physics, relativity, quantum theory, and solid state physics
QC221-246	Acoustics. Sound
QC251-338.5	Heat
QC310.15-319	Thermodynamics
QC350-467	Optics. Light
QC450-467	Spectroscopy
QC474-496.9	Radiation physics (General)
QC501-766	Electricity and magnetism
QC501-(721)	Electricity
QC669-675.8	Electromagnetic theory
QC676-678.6	Radio waves (Theory)
QC701-715.4	Electric discharge
QC717.6-718.8	Plasma physics. Ionized gases
QC750-766	Magnetism
QC770-798	Nuclear and particle physics. Atomic energy. Radioactivity
QC793-793.5	Elementary particle physics
QC794.95-798	Radioactivity and radioactive substances
QC801-809	Geophysics. Cosmic physics
QC811-849	Geomagnetism
QC851-999	Meteorology. Climatology Including the earth's atmosphere
QC974.5-976	Meteorological optics
QC980-999	Climatology and weather
QC994.95-999	Weather forecasting

Selection Tools

Faculty input and research interests will be given the highest priority in selection decisions. In addition, circulation statistics, publisher catalogs, and book reviews will be used in selecting monographs. Impact

factors and available journal usage statistics may play a role in journal selection decisions. Interlibrary Loan requests will also be monitored so that materials frequently requested from other institutions may be purchased.

Access to Materials not Available at Clemson

Interlibrary Loan is the primary method of accessing both monographic materials and published articles.

Weeding

Monographic material published twenty years prior to the current date that has not circulated within the last ten years will be considered for weeding. Older materials that have not circulated recently may be kept for historical and/or reference purposes.

Books will be removed from the collection if they are in poor condition and cannot be repaired. Every effort will be made to replace high-use titles.

Print serials may be sent to off-campus storage if they are duplicated in a stable online format.