## PHYSICS/ASTRONOMY Bernice Hulsizer; June 1984 Revised: March 1987

## I. DESCRIPTION

A. <u>Purpose</u>: To support the instructional and research programs of the Physics and Astronomy departments as well as those of allied interdisciplinary units such as the Materials Research Laboratory. Both Physics and Astronomy are large teaching units, covering these disciplines from service courses for liberal-arts majors and pre-med students to the most rigorous approaches for doctoral candidates. Both departments have Ph.D. programs which are rated among the best in the country; that in Physics is the largest as well.

B. <u>History of Collection</u>: The Physics/Astronomy Library started out as two completely separate collections, one housed in the office of the secretary of the Physics Department, the other in the Observatory. In 1959, the Physics Department and its "library" moved to its present quarters in Loomis Laboratory where it has expanded from its (1909) 120 feet of shelving to its present 5,200 feet. In January of 1979, the Physics and Astronomy collections and their budgets merged to become the Physics/Astronomy Library under the management of one librarian. In addition to the main collection in Loomis laboratory, there is also a satellite collection in the newly occupied Astronomy Building where duplicated astronomy journals are held and astronomical atlases and maps are housed. This collection, too, is acquired and maintained by the Physics/Astronomy librarian and staff.

C. Estimate of Holdings: 80,000 volumes.

D. <u>State. Regional. and National Importance</u>: Because of its size and the breadth of its holdings, particularly in solid-state and high-energy physics and in historic journals, the library is an important resource to the state and to the country.

E. Unit Responsible for Collecting: Physics/Astronomy Library.

F. Location of Materials: 38,000 volumes in the Physics/Astronomy Library and 32,000 volumes in the Bookstacks. There is also a small, highly specialized collection in Astronomy Building. Other libraries, such as chemistry, engineering, and mathematics, have related material.

G. Citations of Works Describing the Collection:

Downs, pp. 186, 207, 328.

Department of Physics Newsletter, 1977 and 1978. (Unpub.)

## II. GENERAL COLLECTION GUIDELINES

A. Languages: All languages, but primarily English with a significant amount in Russian.

B. <u>Chronological Guidelines</u>: No restrictions. There is a strong interest in the history of physics.

C. Geographical Guidelines: No restrictions.

D. <u>Treatment of Subject</u>: The collection is predominantly research oriented with journals a primary concern together with the abstracting services that access them. Reference tools in both physics and astronomy are vital as are like titles on allied disciplines such as math, chemistry, engineering fundamentals and materials science. More elementary materials are purchased in kind and quantity sufficient to support the instructional programs of both departments.

E. Types of Materials: Standard statement.

F. Date of Publication: Standard statement.

G. Place of Publication: World-wide.

III. COLLECTION RESPONSIBILITY BY SUBJECT SUBDIVISIONS WITH QUALIFICATIONS, LEVELS OF COLLECTING INTENSITY, AND ASSIGNMENTS

SUBJECTS	ES	CL	DL	ASSIGNMENTS
ASTRONOMY	4	4	4	PHYSICS
ASTROPHYSICS	4	4	4	PHYSICS
ATOMIC NUCLEAR AND MOLECULAR PHYSICS	3	3	4	PHYSICS
BIOPHYSICS	3	3	4	PHYSICS/BIOLOGY
CHEMICAL PHYSICS	4	4	4	PHYSICS/ chemistry
CLASSICAL PHYSICS				
Acoustics	2	2	2	PHYSICS
Electricity and magnetism	3	2 3 3	23	PHYSICS
Fluid dynamics	3	3	3	PHYSICS
Mechanics	2 3 4 4	4	4	PHYSICS
Optics	4	4	4	PHYSICS
Thermodynamics	4	4	4	PHYSICS
CONDENSED MATTER				
Properties	4	4	4	PHYSICS
Structure	4	4	4	PHYSICS
GENERAL	5			
History of physics	4	4	4	PHYSICS/history of science
Instrumentation	4	4	4	ENGINEERING/ physics
Mathematical methods	4	4	4	PHYSICS

SUBJECTS	ES	CL	DL	ASSIGNMENTS
Philosophy of physics	3	3	3	PHYSICS
Quantum mechanics	4	4	4	PHYSICS
Relativity and gravitation	- 4	4	4	PHYSICS
Statistical physics	4	4	4	PHYSICS
MATERIALS SCIENCE	4	4	4	PHYSICS/ ENGINEERING
PLASMA PHYSICS (excluding fusion)	3	3	4	PHYSICS