

adequate testing and grading program in the public schools. The following types of tests will be studied: Strength tests, cardiac tests, posture rating scales, means of classification, sport tests, motor ability tests, knowledge tests, etc. Anthropometric measurements, test construction and scoring methods will also be studied. The material will be presented through outside readings, lectures and laboratory work. 9:30-10:20. Elbel.

M194. CONTENT AND METHODS OF PHYSICAL EDUCATION. Three hours credit. See Education.

200. THE THEORY AND PRACTICE OF ATHLETIC TRAINING. Three hours credit. Principles underlying the conditioning, nutrition, care and emergency treatment employed in the training of athletes. Prerequisites, 20 hours of physical education, and one five-hour course of anatomy or physiology. 10:30-11:20. Allen.

300. SPECIAL PROBLEMS IN PHYSICAL EDUCATION. Two to four hours credit. This course provides for graduate students opportunity for individual or group study of special fields in physical education. Each student will present the results of his work in the form of class reports and term papers. Prerequisite, 15 hours of physical education. By appointment. Elbel.

*39. Elementary School Playground Activities - Samis*

## PHYSICS AND ASTRONOMY

Professor: KESTER

Associate Professors: RICE, STORER

### PHYSICS

3. AN INTRODUCTION TO PHYSICS. Five hours credit. A course developed especially for the college student seeking a general knowledge of physics as it applies to our everyday living and thinking. Material will be drawn from the fields of mechanics, heat, sound, light and electricity. Fundamental concepts will be developed through lectures and class discussions, accompanied by a large number of experimental demonstrations, and through assigned library reading. Opportunity will be given students to handle demonstration apparatus. No formal laboratory accompanies the course. Prerequisites, one year each of high school algebra and geometry. 7:30-9:20. Kester.

NOTE.—Course 3 is not designed to give the student majoring in a physical science the necessary preparation in physics. If the student wishes to complete such preparation, he should continue with course 4. Courses 3 and 4 together satisfy the 10 hour general physics requirement held as a prerequisite for all advanced courses in this department and for many courses in other departments.

7b. GENERAL PHYSICS II. Electricity and light. Five hours credit. Four-hour class, one period laboratory. A continuation of course 7a. Fee, \$1.50. 7:30-9:20. Rice.

70. SPECIAL PROBLEMS IN PHYSICS. One to three hours credit in the College. Prerequisite, a year's work in advanced undergraduate physics. Laboratory fee, \$1.50 per credit hour. By appointment. Staff.

156a. ELECTRICAL MEASUREMENTS I. One to two hours credit. Direct-current measurements. Prerequisite, a year's work in general physics; some use is made of calculus. Fee, \$1.50 per credit hour. By appointment. Rice.

156b. ELECTRICAL MEASUREMENTS II. One to two hours credit. Alternating-current measurements. Prerequisite, course 156a or its equivalent. Fee, \$1.50 per credit hour. By appointment. Rice.

163. PHYSICS COLLOQUIUM. One hour credit. The members and the advanced students of the department meet once a week to report on researches published in journals of the science or on the progress of original investigations carried on by members of the colloquium. Four hours maximum undergraduate credit. By appointment. Staff.