

stitution, temperature movements, geologic activities, coast line phenomena: (1) the land, the geological process by which the earth's topography has been chiefly determined, and the varied topographic types which result therefrom, including the study of the origin and development of planes, plateaus, river valleys, mountains, volcanic cones, islands and sea-shore features. The effect of man's physical environment upon his distribution, his habits, and his occupations will be continually emphasized. This course is suited to the needs of those who teach Physical Geography and Physiography in Grammar or High Schools, and serves as an introduction to more advanced work in Geology.

A. J. PINEO.

12. MINERAL ANALYSIS, (minor)

Prerequisite, Course G1 or equivalent.

The student of this course learns, by the use of the blowpipe and a few simple reagents, to determine the constituents of minerals, ores and rocks. About 100 samples will be sent to the student to illustrate the lessons and for examination.

Upon the completion of this course he should be able to readily detect the presence of copper, manganese, iron, lead, silver, gold, tin, mercury, etc., when they occur in rocks or ores which he examines. Miners and prospectors would find the knowledge obtained by means of this course to be of great advantage. An additional fee of three dollars is charged for material. The necessary outfit will cost from one to five dollars.

A. J. PINEO.

J. Education.

The following courses in Education should be of practical interest to all teachers whose studies have not included the work outlined, who are ambitious to become more proficient in their professional qualifications. The courses are open to students who do not wish to take the full work of the University.

J1. EDUCATION, (major)

The aim here will be to give a general view of the process of pedagogical thought up to the present time, and to furnish a broad outline of the entire field and problems of Education as a science and art. The relation of Pedagogy, to Ethics, Psychology and Physiology will receive special attention. References will constantly be made to periodical literature, and for texts the following will be made the basis of study: Quick, Educational Reformers; Spencer, Education; Oppenheim, Study of the Child; Morgan, Psychology for Teachers.

FREDERICK EBY.

J2. EDUCATION, (major)

Prerequisite, for regular students, Course J1; special students must satisfy the instructor as to their ability to proceed intelligently with the course.