McPHERSON COLLEGE BULLETIN
SERIES XII SPECIAL NUMBER NUMBER 1A

# ROCKY MOUNTAIN SUMMER SCHOOL

OF

## McPherson College

AT

## PALMER LAKE, COLORADO

**June 9 to July 18**
**AND**
**July 21 to August 29**

**How Public School Teachers May Combine School Work and Recreation.**

## A NEW IDEA FOR SUMMER SCHOOL

The College Bulletin is issued in February, May, August and November of each year.

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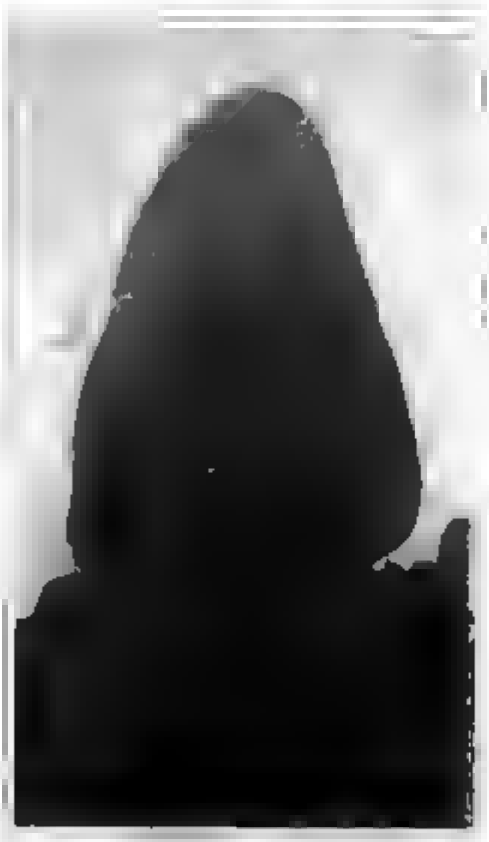

Balanced Rock, Palmer Lake
This singular spectacle rises 65 feet from its delicately poised base.

# ROCKY MOUNTAIN SUMMER SCHOOL

## THE FACULTY.

The faculty of the Rocky Mountain Summer School of 1924 will be stronger than in any previous year. Three of the regular professors of McPherson College, Miss Sadie Glucklich, supervisor of education in Salina, and Prof. John Phillips of Southwestern College will constitute the faculty The professors and their departments are as follows:

D. W. Kurtz, A. M., B. D., D. D.
Juniata College, Yale University, Leipzig, Berlin, Marburg.
Philosophy.
President of McPherson College.

H. H. Nininger, A. B., A. M.
McPherson College, Pomona College, Universit California,
Professor Biology McPherson Colleg
Nature Study.

B. E. Ebel, A. B., A. M.
McPherson College, Kansas University, Harvard University,
Professor Modern Languages McPherson College.
Spanish, French, History.

Miss Sadie Glucklich, A. B.
Kansas State College, Chicago University, Columbia University
Educational Courses.

Miss Edith McGaffey, A. B., A. M.
McPherson College, Kansas University, Chicago University,
Professor English McPherson College.
English.

John Phillips, A. B., A. M.
Southwestern College, Kansas University,
Professor Mathematics Southwestern College.
Mathematics.

## THE CALENDAR.

The Rocky Mountain Summer School will be in session twelve weeks this summer. The first term of six weeks opens Monday, June 9, and closes Friday, July 18, and the second term of six weeks opens Monday, July 21, and closes Friday, August 29.

## THE CREDITS.

A student may carry six (6) hours work during the first summer term of six weeks, which will give him six hours of college credit. An equal amount of credit can be earned during the second summer term, giving a student a total of twelve hours college credit for the Summer School. McPherson College is a fully accredited member of the North Central Association of Colleges and all work done at the Rocky Mountain Summer School receives full credit toward the Bachelors degree.

## THE PURPOSE.

The inexhaustible scientific resources of the Rocky Mountains, and the great advantages of studying the sciences by the direct laboratory method, and the ideal cool climate of that high altitude have led McPherson College to establish a summer school on the strategic Arkansas Platte Divide at Palmer Lake, Colorado. Many teachers and students are annually compelled to suspend their educational activities during the intense heat of the summer on the plains, and seek recreation at the expense of education in the mountains. A natural need has consequently given further justification for the establishment of the Rocky Mountain Summer School, where standard educational work may be continued while enjoying the recreative surroundings, which the mountains alone can afford.

## THE WEALTH OF RESOURCES.

The United States government has realized the inestimable scientific resources of the region where the Rocky Mountain Summer School is located, and has made and published

three distinct government surveys of those environments. One of these is folio No. 186 of the Castle Rock Quadrangle, the region in which Palmer Lake is located, another is folio No. 203 of the Colorado Springs Quadrangle, immediately south of our Summer School, and a third survey has been made of the Pikes Peak Quadrangle.

On a Mountain Shelf overlooking miles of country below.

With the aid of these Government Surveys our classes study a wealth of Stratifications, Mountain Ranges, Mesas, Canyons, Lava Beds, and other geological phenomena by the direct analytic method, which have hitherto been to many but indistinct mental conceptions.

The Quadrangle in which the Rocky Mountain Summer School is located offers within easy access practically every geological formation from the Quaternary stratification to the Igneous Granite formation. While a student of the plains would be compelled to travel from state to state to gain a view of the lower stratifications, at Palmer Lake the gigantic upheavals of the earth's surface and the deep erosions have laid bare in chronological succession some eighteen formations within a radius of a few miles.

The flora of that region is equally unparalleled. With the coming of the Rocky Mountain Summer School in June nature begins to unfold her treasures of spring flowers. And then in

The Upper Reservoir of Palmer Lake, a spot frequently visited by the R. M. S. S.

rapid succession the following weeks are showered with an endless variety of new plants that burst into bloom on the mountain sides in every direction.

The Rocky Mountain Summer School has analyzed and classified over 500 different species and still the supply seems inexhaustible. In trees and shrubs, too, the region abounds, and offers exceptional opportunities for study.

## THE ENVIRONMENT.

Among the most valuable assets of the Rocky Mountain Summer School is to be reckoned the wonderful cool climate that prevails during the summer at Palmer Lake. This city is 7228 feet above the sea level, and located on the Great Divide in the lap of the first range of the Rockies.

Toward the east of us lies a broad valley intersected by wooded streams, long, slowly moving railroad trains, and busy automobile highways. Beyond this beautiful broad valley we can see hills framing this scenery with a forest of evergreen trees. Immediately toward the rear stand the Rocky Mountains rising abruptly from the valley and extending in a direct line from Colorado Springs toward the north until the last peak is lost in the dim mass of the horizon. Deeply cut by canyons and gorges into separate peaks, this chain of mountains appears like a line of sentinels somber and majestic guarding the treasures of this fairy land against the encroachment of man.

A group of R. M. S. S. students following a trail into a canyon.

Occasionally our Summer School proceeds up one of these fantastic canyons into the interior recesses of these mountains. At first the path leads along the edge of a swift little

stream between two granite mountain sides a thousand feet high. Then gradually the winding path picks its way around boulders and over shoulders ever rising higher and higher on the mountain flank. Hundreds of feet below still flows the silvery little mountain stream while an equal distance overhead tower the granite peaks. The boulders on these mountain crests are weathered and worn into most fantastic figures. Some mountain peaks resemble church spires pointing toward the skies, others appear like ancient feudal castles guarding some hidden treasures, while still other boulders resemble vast prehistoric animals roaming these fantastic regions. Occasionally our path leads us by quiet mountain lakes

Sandstone Cliffs on Raspberry Butte.

"The Sentinel," wind sculpturing on Raspberry Butte.

or dashing waterfalls. Then again we pass an adjoining canyon that is literally filled with rocks and boulders as though the very mountains had fallen upon each other in ruins. It is impossible to live here and look upon this grandeur and sublimity of nature without coming into closer contact with its divine architect, and thus being made better in body and soul by his handiwork.

## COURSES OFFERED.

The Rocky Mountain Summer School offers a limited number of courses i. e. those for the teaching of which the local environment is especially adapted, and those for the teaching of which the necessary equipment in laboratory and library facilities may be conveniently transported or otherwise provided. The library facilities are supplemented by a free use of the Public Library in Colorado Springs which can be reached by ample train service or by auto.

At the doors of "Treasure Cave," guarded by vertical strata 300 feet high.

### Nature Study and Biology.

**Birds:** This course is designed to give the student an acquaintance with birds such as is needed in properly presenting the study in the high school or the grades; and also to develop an intelligent interest in the various phases of bird life. Lectures, laboratory work, and field work. Three hours credit.

**Systematic Botany:** A course offered for students having had a general course in Botany, also for students desiring to do advanced work in this line. The flora of the Rockies is unique in the abundance of species that are to be found. Laboratory and field work. By appointment.

**Descriptive Geology:** A course dealing with the general principles of diastrophism, vulcanism and gradation, with a verification of these principles in the field. The local conditions at Palmer Lake are unusually good for field work and much time is given to it. Eighteen (18) different formations are within two hours drive and many different types of erosion are presented. Castle Rock folio, U. S. Geol. Surv. is used as field guide. Three hours credit.

Adventurous members of the Geology Class on top of the World.

Geology 2 is a continuation of Geology 1, with the field work centered in the Colorado Springs Quadrangle, the folio of which is used as field guide.

## HISTORY.

1. **Modern History:** Emphasis is laid on the development of the various movements and institutions that have made the nations of Europe really modern. This course traces the

complex movements of European nations even through the World War and present existing conditions. Three hours credit.

2. **American History**: This is an extensive and detailed course covering the entire field of American History. Special emphasis will be placed upon the political, industrial, social and educational development of our nation, and its interrelations with other powers. Three hours credit.

## ENGLISH.

**Rhetoric and Composition.** — A course which aims at the mastery of the fundamentals of rhetoric through their practical application in oral and written themes, and in classroom discussions. Credit, three semester hours.

**History of American Literature.** — This course is planned to show the various forms and movements in American literature. It includes the reading of typical works, recitation and reports on assigned reading, and lectures. Credit, three semester hours.

**Browning and Tennyson.** — A study of the representative poems of Browning and Tennyson. Credit, three semester hours.

## SPANISH.

1. **Elementary Spanish**: Careful attention is given to the Castilian pronunciation. The essentials of grammar and syntax are carefully outlined and committed to memory and constantly applied in written and oral exercises. Reading and translation of easy prose. Six hours.

2. **Modern Spanish Writers**: A thorough review of the grammar. Careful attention is given to correct reading, accurate translation, and the grammatical constructions of the writings of modern authors. Exercises in composition and conversation. Six hours.

## FRENCH.

1. **Elementary French**: The essentials of Grammar. Text: Fraser and Squair. Careful drill in pronunciation, accidence

and syntax. Daily exercises in translation and elementary composition, together with conversation. Six hours.

2. **French Prose Writers:** A thorough review of the essentials of grammar. Reading and translation of selections from classical authors. Exercises in dictation, composition and conversation. Six hours.

## PRIMARY METHODS.

A study of the modern methods of teaching children in the primary grades. Special emphasis will be on the teaching of Reading, although Arithmetic, Phonics, Writing and Language will be discussed. Three hours credit.

## HAND WORK.

Practical work for teachers in hand work that will correlate with Language, Reading, and Nature Study in the primary grades. Three hours credit.

## GENERAL METHODS.

This course presents practical methods of teaching. It will discuss teaching as a scientific profession as well as a field of current educational problems. Three hours credit.

## PSYCHOLOGY.

This is an elementary course in Psychology. Special discussion of its application and practical use in the school room will be helpful to teachers. Three hours credit.

## PRINCIPLES OF EDUCATION.

A course in the using of the principles which govern modern education. Three hours credit.

## MATHEMATICS.

1. **College Algebra.** This course includes a rapid review of elementary algebra with emphasis on quadratic equations; graphs; logarithms, determinants, theory of equations, and

Horner's method of approximations. Reitz and Crathorne. Three hours.

2. **Plane Trigonometry.** The trigonometric functions, formulas, equations and solution of problems are studied in this course. Rothrock. Two hours.

3. **Analytic Geometry.** This course comprises a study of the straight line, circle, the elements of the parabola, ellipse and hyperbola; polar co-ordinates; transformation of co ordinates; a few of the higher plane curves, and a brief introduction to solid analytic geometry. Four hours.

5. **Differential Calculus.** This includes a study of fundamental principles, derivatives, differentials, maxima and minima, partial differentiation and applications to geometry and mechanics. Granville. Three hours.

6. **Integral Calculus.** The following topics are treated: Fundamental formulas, integration of standard algebraic and transcendental expressions, definite integrals and application to areas, lengths, surfaces, volumes and mechanics. Granville. Three hours.

8. **General Astronomy.** A non-mathematical course introducing the student to the most important facts known about the astronomical bodies. A few evenings of observation and use of the telescope. Three hours. Not intended for freshmen.

Three of the above courses will be offered at one time.

## EXCURSIONS.

Palmer Lake is very fortunately situated with reference to many points of scenic as well as scientific interest. And students in the past have been surprised at how small an expense all of these points of interest can be visited from Palmer Lake when done in connection with the school.

Perry Park lies ten miles to the north similar in its geologic aspects to the Garden of the Gods but much more extensive and exhibiting a greater variety of formations. Perhaps no other section in the front range of the Rockies presents so many points of interest to the average student as Perry Park. It is privately owned and is not open to the public, but through

the courtesy of Mr. Robert Lamont, owner of the ranch, we are privileged to visit it for purposes of study.

**Beaver Dams:** Few persons of the present generation have been privileged to see the beavers in their native habitats. Yet this most interesting animal is common about Palmer Lake. They are occasionally seen within the city limits and a two-hour walk will take one to where they are present in thriving colonies. One or more excursions will be made during each term back into the wilder sections where the largest colonies thrive and students will be given an opportunity to become acquainted with these most interesting animals.

**Elephant Rock:** This grotesque figure resembling an elephant, is the result of weathering in the upper layers of the Dawson Arkose, two miles east of Palmer Lake. It stands about one-hundred feet high and is approximately two-hundred feet long. From the back of the elephant an excellent view is obtained of Pikes Peak and other surrounding points. It is of special interest to students of geology, who find in it many types of erosion at work.

Another trip which proves of very great value and interest to our students is to take a basketlunch, leave Palmer Lake at 7 A. M., and visit the following points: Woodman Sanitorium, Garden of the Gods, Cave of the Winds, Iron Springs and South Cheyenne Canon, including Seven Falls. Much of educational interest is seen on this trip besides the very excellent outing. The Cave of the Winds presents some of the very best examples of cave formations.

**Petrified Forest and Gem Mines:** Probably the most unique trip of all lies via Ute Pass to the Petrified Forest and thence to Gem Mines, stopping an hour on the way for fossil digging in the Florissant Shales, which are known the world over for their richness in certain groups of fossil remains. The Petrified Forest consists of many large stumps and logs—now solid stone—some of which are 20 feet in diameter. It lies in what was once a large crater and later a lake, and on close study discloses a very complex and interesting geologic history. The Gem Mines, eight miles away, are equally worth while as here we may see tons of precious stones and the place and

manner of their recovery from the rocks. Some of the specimens to be found there are: Amazon stone, Albite, Orthoclase, Topaz etc.

Many other trips may be made on foot or on horse-back to such points as the Upper Reservoir, Balanced Rock, The Beaver Dams, The Play Blocks, Winding Stairs, The Loop, etc. Special excursions are planned for each Saturday, in which each student is welcome to participate. Special rates are made to students which bring these excursions within reach of all.

Excursion of the Summer School visiting Perry Park.

The following list for example, may be taken by a student at a transportation cost of approximately ten dollars ($10.00) for all:

1. Perry Park
2. Winding Stairs
4. Five in One, including Woodmen Sanitarium, Garden of the Gods, Cave of the Winds, Mineral Springs, South Cheyenne Canon, etc.
5. The Loop
6. Black Forest
7. Balanced Rock.

## BUILDINGS AND EQUIPMENT.

The public school building of Palmer Lake is given over to our use for the summer and two rooms have been provided with tables for laboratory purposes. The City Hall is also granted for our use in case it is needed. An auditorium of ample capacity has been purchased by the cottage owners of Glen Park and put into shape for use of public gatherings. This will be open to the Summer School for general gatherings and public meetings.

Laboratory equipment consisting of microscopes, chemicals, stuffed birds and other apparatus and supplies necessary for the courses offered are transported from McPherson. Likewise BOOKS for reference in all of the courses offered are transported from the general library at McPherson College. In cases where our own library facilities at Palmer Lake are not sufficient the public library at Colorado Springs is quite well equipped and ample train service renders it quite convenient.

## EXPENSES.

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|---|---|
| Matriculation Fee | $3.00 |
| Tuition per credit hour | 3.00 |
| Laboratory Fees: | |
| Botany | 2.50 |
| Birds | 2.50 |
| Geology | 1.00 |
| Zoology | 2.50 |
| Entomology | 2.00 |

**Living Expenses:** The Living expenses compare very favorably with like expenses in the average college town. Board and room can be obtained in hotels or private boarding houses at rates from $3.00 per week to $12.00. Many students find a considerable saving in expense by several going together and renting either rooms or a small cottage and boarding themselves. Cottages sufficiently large to accommodate three persons rent from $40.00 per season up.