

Report of
O. C. Charlton

May 31 / 1887

Ottawa, Kan, May 31, 1887.

The Board of Trustees of Ottawa University:-

Gentlemen:- One year ago I presented to this Board my report of the first year's work of the Department of Natural Science. The phrase, Department of Natural Science was then scarcely applicable to the work in which I had been engaged as it had not then included much that could be called Natural Science.

But during the year now closing a much greater portion has been given to science work proper and the outlook is now quite favorable to the full development of science work in the college.

During the year now closing I have had classes in the following subjects including the respective number of students named.

1.	Arithmetic	27
2.	Reading.	26
3.	Grammar	48
4.	Civil Geography.	20
5.	Physiology.	24
6.	U. S. History.	42.
7.	Physical Geography.	35
8.	Physics	39
9.	Civil Government.	22
10.	Zoology.	9
11.	Botany.	9
12.	Chemistry	72

Grammar

I had the Grammar Class during the winter term. It was quite large as it included all who were not prepared for the work in English Composition. On account of its size Pres. Ward and I exchanged class-rooms one hour daily that the ^{recitation} work might be conducted in the chapel.

Reading.

In Reading the chief aim was to lead to an understanding of the text. We read in Irving's Sketch Book

Students were required to make frequent use of the dictionary, recast in writing or orally selected parts of each sketch, to read aloud daily and occasionally to read selections made by themselves.

Physical Geography.

Year by year the facilities for teaching Physical Geography are improving. The many additions to the Museum ~~are~~ furnish excellent illustrative material. It is a science that touches all other natural sciences and progress ^{of the work} in other sciences will make work in it more and more effective. An occasional afternoon ~~expedition~~ trip over the college farm has proven of benefit to the class.

Physiology.

We need a small physiological library including a few volumes on anatomy. Many good readable books on health are now available and should be accessible to our students.

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I am glad to say that while we yet need a complete skeleton and, ^{perhaps} charts, we have been given a very fine skull by Dr. M. N. Williams of Ottawa, U. S. History.

The standing in U. S. History has been determined from three things

1. Daily Class Recitation
2. Examination
3. Collateral Reading.

each of the three being graded independently. The amount and character of collateral reading done by the students has been quite gratifying. With the growth of the library the facilities for this work will be greatly increased.

Physics.

To a slight extent I have been able to put into practice some of the plans mentioned a year ago. The use of the two basement rooms has enabled the class meeting by sections to perform a goodly number of the experiments indicated

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in the text. I am in need of more working material that the experimental work may be made more varied and valuable. I expect to next year.

Botany and Zoology.

These studies have been pursued during the last term.

In Botany three kinds of work have been done.

1. Study of the text
2. Special study of from 10 to 15 plants
3. Collection, analysis and mounting of 50 plants.

Nearly every member of the class has completed all these lines of work successfully. Provision is now made in the advanced part of the Scientific Course for a continuation of botanical work.

In Zoology three kinds of work have been pursued.

- 1 Study of the text

2. Special study of a number of specimens by dissection and use of simple microscope
3. Collection and preservation of specimens.

This is the first year in which I have had a class in Zoology ~~here~~ ^{and therefore} we had almost little illustrative material to start with. We have obtained and used whatever material we could most conveniently get. I should very much like to have some friends in the East collect and ship us marine specimens and this can be done when I have money to pay expenses. It is my hope to be able to make a collection myself on the seashore a year from this summer; then will our course in Zoology have a completeness which it necessarily lacks now.

Chemistry.

The work in Chemistry did not satisfy me. I did not secure the money ^{as I had hoped} to buy chemicals

early in the fall. What I bought at the local drug stores were so inadequate for the work undertaken that our time was not used to ~~good~~^{the greatest} advantage. This year I wish to buy chemicals in July and to buy enough for the usual course in ~~the~~ General Chemistry and for Blow-pipe analysis one term, and for some little qualitative work.

Museum.

I hope the trustees present will spend a few minutes in the Museum down stairs. The most of the specimens there shown have been given outright to the college and we should have better provision for caring for them. Another case larger and cheaper than the one made last year is needed. With \$25 or \$30 I could provide for the care of the specimens as they are sent in from time to time. When so many friends are ready to

remember the museum we should be ready to properly preserve their gifts.

Needs

Of the money appropriated last year - \$100. - about \$65 perhaps has been used. None of it became available for use till in the winter. Pres. Ward kindly paid for the alcohol (one-half barrel), and I paid for other things bought during the fall. The list of chemicals made out a year ago is in my hands yet and I shall be glad to order them soon.

A plunje battery is greatly needed for electrical experiments. While I have a microscope of my own another is greatly needed for class work. Another case is needed in the museum, and I hope to secure an analytical balance during the fall though I do not ask the Board to buy it.

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Needed chemicals will cost	\$55-
One compound microscope	\$50
A Plunge Battery and other electrical apparatus.	\$20
Museum Cases	\$25-
	\$150

Now if the Board will appropriate for my department \$150 and authorize or endorse a little private begging on my part I can get the things named which are most needed and, I believe, one hundred dollars worth of other things which should be ready for use September 1st.

In closing I wish to express my pleasure in looking forward to distinctively scientific work. The enlargement of the Faculty as contemplated will enable me to give to my department that special attention which it deserves but has not heretofore had. Respectfully O. C. Charlton.