# THE COURSE OF STUDY <br> IN. <br> <br> PRINCETON COLLEGE. 

 <br> <br> PRINCETON COLLEGE.}

BEING A REPORT TO THE TRUSTEES OF THE COLLEGE, NOVEMBER I 3TH, I 884, BY THE PRESIDENT.

# THE COURSE OF STUDY 

## IN

## PRINCETON COLLEGE.

The snceess of a College depends under God mainly on the excellence of its curricultum or course of study and on the efficacy of its teachers. On this occasion I am to call the attention of the governing body of our College to the former, simply remarking as to the other that our instructors. forty-one in number, are competent to carry out our system. The report bears solely on the Academic Department. At a future time I mean to summarize the branches taught in the School of Science.

In my Inangural Address on my being appointed President of the ('ollege. and in all my recommendations since, I have kept it steadily in view to have the curriculum arranger on philososophical principles so as to make it comprehensive and useful, more particularly in training the minds of the young men committed to our care. The course of study is now approaching the ideal which I have all along set before me. This has been accomplished by the encouragement, given by the Board of Trustees, by the counsel and action of the Faculty, and by the large gifts, amounting in all to between two and three millions of dollars, hestowed by our hiberal benefactors.

Keeping steadily in view first the cultivation of the minds of our students, and secondly the preparation of them for the spheres which they expect to fill in this world, I find that our branches of study have fallen into three depart-ments-Langnage and Literature. Science, and Philosophy. I hold that every well educated youth should have instruction in each of these to a certain extent, being allowed throughout, if he wishes, to give special attention to certain branches under these heads. Without some açuaintance with at least the principles in each of these, the mind will not be properly balanced, and its ideas will so far be contracted and become one-sided and prejudicen.

I hold that every branch of true learning should have a place in a thorcughly equipped College. But as life is short and young men differ in taste and eapacity, it is not desirable, in fact it is not possible, to exact a deep knowledge of every kind of useful scholarship from every young man. So in all our higher colleges the stndies are now divided into required and elective, the former being enjoined on all, and the latter provided for those who have a taste for them, or who may look upon them as fitted to prepare them for their future employments in life. In past ages there were few or no choiees of study allowed in Colleges. European or American, and this because the branches of true learning were so limited that a student could so far master them. But now they have beeome very mumerous and our Colleges are seeking to take them all in so far as their means admit, while they do not, and cannot, reguire every student to take the whole. I regard the proper distribution of the studies, Required and Elective, as about the most important point tor be settled in our Colleges at this present time.

Some (not many) of the Amer:can Colleges are seeking to draw students by giving them, younger as well ass older, an almost unlimited ehoice of subjeets throngh all the years of their course. This in my opinion is a fundamental mintake. Every one acquainted with College secrets knows that there are students who show uncommon skill in choosing among the Eleetives the subjects which require the least expenditure of thought and attention; and that professors are tempted to give high glauling marks withont exacting rigid study. I met not long ago with a student of a distinguished College who in his Semior year was contenting himself with taking two branehes of epochal history with art ant music. When such a state of things is allowed and eneomaged I hold that the edueation given, so far from being an advance mpon that given to our fathers, is a retrogression, as in the older Colleges they reguired a solid knowledge of higher branches-which is trme, I may atd, of some of our smaller Colleges at this day. I hold that there are hrunches rudimentary and fundamental. which have stood the test of time, fitted to call forth the deeper and higher faculties of the mind and opening the way to farther knowledge which all should be required to study. Such in Language are the elassieal tongues with certain European ones and above all our own tongue, all of these with their literatures. Sueh in Science are mathematics, physics, ehemistry and certain branehes of natural history. Such in Philosophy are the study of the hman mind (psyehology), logic, ethics and political economy. A young man is not liberally educated who has been allowed to omit any of these : and certain of them should be required in every year of the course to keep the mind from being dissipaterl and wasted.

## I. DEPARTMENT OF LANGUAGE AND LITERATURE.

Language is a native faenlty early developed. It has an important place allotted to it in the first two years of our conrse, and in the shape of elective studies runs throngh the whole four years. It is by words, by speech and books we get our earliest knowledge ; they put us at once into possession of the analyses
and generalisations of things which have been made in the ages and which have been embodied in the phrases of a cultivated tongue. Prose and poetry in various languages open to us the thoughts, fancies and feelings of earth's greatest men.

In our college we retain the ancient classical languages and we require such a knowledge of them on the part of all as may enable them to read an ordinary passage of the great writers of Grecee and Rome. Our faculty are happily unanimous (the scientific being as determined as the literary men) in insisting that Greek be required of those who seek the bachelor's degree. They thus insist, as they consiler Greek to loe the nohlest language of antiquity, as furnishing an admirable training for the mind, as opening to us a literature which has never been surpassed, and the tongue in which God has been pleased to make known the full revelation of his will in regard to his own nature and the duties we owe to him and our fellow men. Ir our colleges systematically discard the Latin and Greek the whole ancient world with its thonghts and deeds will remain very much mknown even to our educated men, and our knowledge would be narrowed to the last few ages in the history of our world.

But in the three or four years preparatory courses and in the four years college course there is time not only for classics but a fair knowledge of French and German to enable our yonng men to travel in the old countries and io throw open the rich treasures of prose and poetry to be found in these tongues. But much as we may appreciate other langnages we should set the highest value on our own. We give English an influential place in our college. We have three professors giving instruction in it. We do not confine it to one year, lout make it rum through all the years. Our students are all taught the principles of grammar and discourse, and have a critieal acquaintance with all our great English authors. We endeavor to keep up the ohl name of Princeton for statesmanlike oratory. We require carefully written and carefully examined written compositions every year in the course. While these branches are required of all we have several others which are elective and are taken by those who are pursuing higlaer linguistic studies, such as Anglo-Saxon by those who wish to pursue the development of our own tongue, and Sanscrit, useful to those who are going as missionaries to India. We have a learned professor combining all these by instruction in comparative language.

In Greek we have three professors, in Latin two professors and a tutor; in Modern Languages we have two professors, and mean to have a third; and in Euglish we have three professors; in all twelve in Language and Literature.

## II. DEPARTMENT OF SCIENCE.

Some in the present day are insisting that college education should now be mainly scientific. But this would be a fatal mistake, as it would leave the larger number of our mental faculties uncultivated, such as the imagination, the fancy, the sentiments, so fitted to refine and elevate the understanding even in its scientific pursuits. On the other hand, science should have a large place in all higher education, as disclosing facts to us, as bringing us into relation with realities and preparing us for practical work. The intellectual faculties which

God has given us, are cultivated by the contemplation of the works which He has set before us.

We have a larger number of instructors in this department than in either of the other two. This is required by the rapid advance of late years of all branches of science. We wish to keep up the reputation which was given to our college by such men as Henry, Dod, Alexander, and Guyot. We have younger men following in their footsteps.

We set a great value on Mathematics, pure and applied, as fitted to give concentration and coherency to thought, and employed so powerfully as an instrument in various departments of physical science. All students have not it relish for this branch, but even those who have no taste for it should be introduced to its methods. Of late we have had instruction provided in the new and advanced mathematies in quaternions, quantics, theory of functions and elliptic integrals. We have teachers who give instruction to a few of our students in these departments.

The old sciences of physics, chemistry and astronomy are thoroughly taught in this college with all the discoveries and advances that have been made of late years. In practical astronomy and electricity, the professors with their students are engaged in original research of the highest order. In comection with these we have a very full set of modem instruments and one of the large telescopes of the world.

One of the fondest wishes that I have is to establish in the college a school of Natural Science in the widest sense of the term. Already we have gathered round us a body of young men eager to advance their several departments and well acquainted with the recent discoveries in Enrope and America. Original observations and experiments are made in varions departments of biology, in some respects the rising science of the day. Every two years a body of our students make explorations during the three months of the summer vacation in the western States in botany and palaeontology and they bring home what they collect to enrich our two fine museums, the zoological and geological, which have already very extensive collections. ha the elective classes, valuable instruction is given in physical greography and the use of the microscope. We have in all eighteen instructors in science.

## III. DEPARTMENT OF PHILOSOPHY.

This embraces those branches which call forth and exercise reflective thought. They are fitted above others to widen and enlarge the mind, to give acumen and comprehensiveness, as they inquire into first principles and the causes and connections of things. Princeton has always attached a great importance to these, and I hope it will continue to do so. It has at this present time seven professors in this department.

Much attention is given to the study of the human mind (Psychology), and to Logic, both deductive and inductive, as unfolding the laws of thinking and the methods of pursuing various kinds of investigation. The principles of Ethics, both theoretical and practical, are profoundly discussed. The interesting and vital questions involved in the relation of religion and science, are expounded
and illustrated. Jurisprudence and political economy are tanght to all students as they ought to be in a country like ours, where the government is virtually in the hands of the people.

All these are Required. Other and important branches a ee Elective. Thus we have the History of Philosophy treating the mental sciences historically, Metaphysics and Physiological Psychology. We have Constitutional and International Law especially useful to those who are to follow law or enter into political life. A certain amount of historical knowledge is required of all students, and nearly all our professors give the histories of their own departments of study. The professor of History gives elaborate lectures on the philosophy and methods of history and the science of politics. We have lately established a department of Art and appointed two accomplished professors.

We have arranged the studies of these three departments in an order sinted to the age of the student.

In the Freshman Year, Latin, Greek, Mathematic's. Frencls, Rhetoric with Essays, are taught to the class divided into four sections.

In the Sophomore Year arlvanced Latin, Greek, Mathematics, and Rhetoric with Modern Languages, elementary General Ilistory and Natural History.

In the Junior Yean there are

Requiked Studies.
Psychology, Logie. Physics, English Literature and Oratory.

Elective Studies.
Philosophy of History, Greek. Latin. Modern Languages, Anglo Saxon, Nathematies, Plysical Geography.

Every student is required to take three of these Electives.
In the Senior Year :

Required Studies.
Science and Religion, Ethics, Jurisprudence and Political Economy, Chemistry, Astronomy, Geology, English, Essays and Oratory.

## Elective Studies.

In Philosophy-History of Philosophy, Metaphysics, Physiological Psychology, Science and Religion. Comparative Politics, International and Consxitutional Law, History of Art. In Literature-English Literature, Greek. Latin, French, German, Sanserit. In Science-Mathematics, Practical Astronomy, Physics, Applied Chemistry, Biology or Palæontology. Histology.

Students are required to take four subjects in the first term, and four or five in the second and third terms, of these Elective studies. Some of these electives occupy only one term, others run over the whole year.

We wish it to be understood that we do not profess in the Academical Department directly to fit young men for trades and professions. We aim at what we are competent to accomplish,-to sharpen and enlarge the mind of
those committed to our care and give them varied knowledge ; and then allow them to acquire practical skill in professional sehools and offices, in shops and farms and factories.

But we arrange to give instruction in branehes specially designed and fitted to prepare young men for work in the varions walks of life. We do not make ministers of religion, but we give those intended for the ministry high instruction in Greek, and in varions departments of philosophy, to prepare them for the profonnder study of theology. We had letter not try to license physicians and surgeons; but we give a scientific instruction in physiology, anatomy, chemistry, botany and zoölogy to furnish a scientific hasis to a medical education. We do not profess to train for business, but we give wide and varied information, which enable our yonth to take advantage of openings in trade as they present themselves. We may not be able to fit men to become farmers, but we teach chemistry and natural history, which will advance the agriculture of our comtry. It is beyond our province to teach law, but by discussions in logic and philosophy we sharpen the intellect, and we give instruction in all branches of social science, and this is fitted to raise a body-of intelligent and enlightened lawyers. We give instruction to prepare our students for teaching the highest branches in schools and colleges, and the number of young men devoting themselves to this work is increasing.

It is proper to mention that we have seven or eight fellowships, earned by competition, which demand high scholarship in certain bramehes, and secure that those who receive them devote a certain time after graduation to special study and research. A prufessor in our college has provided a chair for us in the United States marine laboratory in Massachusetts. $\Lambda$ considerable body of graduates, in all about 70, are taking advanced courses fitted to prepare them for the higher walks of life, as ministers of religion, as teachers and scientific investigators.

I must not omit to state that every student receives religions instruction once a week in classes, taught by six or seven professors whose heart is in their work, and who conduct the young men throngh large portions of Scripture.

JAMES McCOSH.

