# Wellesley College Calendar 1879-1880 

Wellesley College

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##  <br> CALENDAR, <br> 1879-'80.

## WELLESLEY COLLEGE.



PRINTED FOR THE COLLEGE.

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SOPHIA B. HORR,
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> MARCIA KENDALL, Teacher of German and French.

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'Teacher of Botany.

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Teacher of Vocal and Instrumental Music.

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 Teacher of Vocal Gymnastics and Elocution.
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Librarian.

HENRIETTA M. SHELTON, Superintendent of Dana Hall.


WELLESLEY COLLEGE FROM WABAN-MERE.

##  1879-80.

Post-Graduate Students, ..... 6
Students in the College Classes, ..... 208
Teachers Admitted as Students in Collegiate Courses, ..... 48
Students in Special Collegiate Studies,
67
67
Students in the Academic Department, ..... 46
Total Number of Students, ..... 375

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## QUALIFICATIONS FOR ADMISSION TO THE FRESHMAN CLASS IN 1880.

- 
* Candidates must pass satisfactory examinations in the following studies:-

Latin Grammar, including Prosody.
Jones' Exercises in Latin Prose Composition, or an equivalent in Abbott, Arnold, Allen and Greenough, or Harkness.

Cæsar, Gallic War, books I-4.
Cicero, seven Orations.
Virgil, JEneid, books I-6.
Equivalents in Latin will be accepted.
Greek Grammar.
Jones' Greek Prose Composition, with the accents.
Xenophon, Anabasis, three books.
Iliad, three books.
Preparation in Greek for 1880 is advised, but not required. In September, 188r, it will be required from all candidates for the General College Course, but not from candidates for the Scientific Course.

Arithmetic, including the Metric System of Weights and Measures.
Olney's Complete School Algebra (with additional examples from Olney's University Algebra) through Involution, Evolution, Radicals, Quadratic Equations, Ratio, Proportion, Arithmetical and Geometrical Progression.

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Olney's, Wentworth's or Chauvenet's Plane Geometry.
Modern Geography.
Guyot's Physical Geography, Parts II and III.
English Grammar.
English Composition.
A list of approved text-books that may be used in preparation will be found at page 23 .

Free instruction in Music or Art will be given in the Musical and Art Courses, to those who enter the Freshman class of the general College Course, in 1880, and afterward. See pages 37 and 43.

## PREPARATION IN LATIN.

Accurate knowledge of the grammar is indispensable. It will not be sufficient to have read the required amount of Latin. Nor is it enough that the candidates have a certain facility in careless translating - such translating as shows but little acquaintance with the language ; there should be a familiarity with the forms and thorough drill in construction.

In pronunciation the following rules are adopted: $\bar{a}$ as in father; $\breve{r}$ as in fast ; $\bar{e}$ as in there ; $\bar{e}$ as in met ; $\overline{1}$ as in machine; $\check{1}$ as in piano; $\bar{o}$ as in holy ; $\check{o}$ as in wholly ; $\bar{u}$ as in rule ; $\check{u}$ as in puss; $c, g$, and ch always hard; $j$ like $y$ in you; $s$ as in sill ; $t$ as in till ; $v$ somewhat softened. In diphthongs the sound of each vowel is preserved.

In answer to repeated requests, we make the following suggestions as to a four years' course of systematic preparation:-

The first year may be given to Jones' First Lessons in Latin, a work admirably adapted to making the study of the succeeding years easy and successful. The second year may be devoted to Cæsar, four books, and to the first half (twenty lessons) of Jones' Exercises in Latin Prose Composition. This book meets a pressing need of the preparatory course. Based

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upon Cæsar and Cicero, and intended to be used along with them, it facilitates the reading and understanding of these authors, and in this, as well as in other respects, is superior to most works of its class. The third year may be given to seven orations of Cicero and the second half of the Prose Composition. The fourth year will give time for six books of Virgil, with the careful study of the rules of Prosody, accompanied by such exercises in transposition of verses as will serve to make these familiar.

The excellent books of Professor Jones will not fail to render the preparatory work in Latin easy and thorough. If they were used by all who are fitting for the College, it would not be necessary to urge again accurate knowledge of the grammar, familiarity with the forms and thorough drill in construction.

We advise that candidates shall be taught Roman History in connection with the study of Latin. Merrivale's General History of Rome is recommended as a desirable text-book.

## PREPARATION IN GREEK.

The study of Greek is advised, but not required. The examination will be in Greek Grammar; Xenophon, Anabasis, three books; Iliad, three books; Jones' Greek Prose Composition, with the accents.*

The text-books recommended are : for the first year, either Hadley's Grammar with Boise's First Lessons in Greek, or Goodwin's Grammar with White's First Lessons in Greek ; for the second and third years, Boise's First Three Books of Anabasis of Xenophon, or their equivalent from Goodwin's Greek Reader ; Jones' Exercises in Greek Prose, and Boise's Iliad. We offer these recommendations not only that we may answer inquiries constantly made, but also because we believe they will render important aid in securing a result which we find it necessary to emphasize in the strongest possible manner as indispensable - thorough preparation To this end, there must be in the preparatory studies a definite method and a persistent

[^1]drill. The attention of students, as well as teachers, is invited to the suggestions made by the above authors, in their prefaces, upon the careful, written preparation of exercise-work, the oral class-drill upon forms and sentences, the constant use of the blackboard, for practice upon forms and for writing sentences from dictation.

The following pronunciation is recommended: $\dot{i}$ as a in father ; $\gamma$ as e in prey; $\quad$ as $i$ in machine ; $\omega$ as o in prone ; $v$ as $u$ in prune ; the short vowels should be merely somewhat shorter than the corresponding long vowels ; us as ay in aye; et as ei in height ; ut as oi in oil ; ut as ui in quit ; uv as ou in house ; $\varepsilon \boldsymbol{\prime}$ as eu in feud; "u as ou in youth ; $\gamma$ before $\kappa, \gamma, \%, \xi$, as n in anger, elsewhere hard ; it as th in thin ; \%, guttural, as ch in German, machen.

We advise that candidates shall be taught Grecian History in connection with the study of Greek. Smith's History of Greece is recommended as a text-book.

In order to encourage the study of Greek, a prize of $\$ 250$ will be given in each year to the student who enters the Freshman Class in September, i880 or 188 ı, best prepared in Latin, Greek and Mathematics, according to the requirements above stated; and the following prizes will be given to students who enter the Freshman Classes in the same years well prepared in the entrance examinations in Greek above advised. To the best student (except the one who takes the $\$ 250$ prize), $\$ 100$; to the second, $\$ 75$; to the third, $\$ 50$; and to the fourth, $\$ 25$. Students who have been fitted in the Academic Iepartment of the College will not be considered as competitors for these prizes. Candidates who desire to compete for these prizes must state this in their application, and will be examined at the College.

## PREPARATION IN MATHEMATICS.

The requirements in Arithmetic are a thorough knowledge of the fundamental operations - Common and Decimal Fractions, Compound Numbers, Proportion, Percentage, Square and Cube Root, and the Metric System of Weights and Measures. Candidates, almost without exception, are deficient in
their preparation in Arithmetic and Algebra. This has, in most cases, resulted from the very common neglect of thorough prepararion in Arithmetic, and from using easy elementary text-books in Algebra. 'We prefer that Olney's Complete School Algebra should be used as the text-book, and that the University Algebra should be used by the teacher in connection, giving the additional examples as test work. This will fully meet our requirements. If the same subjects that are comprised in Olney are studied in Wells', Todhunter's or Robinson's University Algebra, or in Ray's Higher Algebra, they will be accepted as equivalent. Some candidates are deficient from neglecting to review their Arithmetic, Algebra and Geometry. In some schools the study of mathematics is discontinued for the last two years of the course. In such cases a careful review and examination at the end of the course are necessary. In all their work the candidates' knowledge of the subjects studied should be frequently tested by written examinations, the exercises proposed being drawn from other sources than the text-book. In Geometry there should be some exercises in original demonstrations, and the student should be accustomed to the numerical application of geometrical principles.

## PREPARATION IN MODERN LANGUAGES.

We advise that all candidates, who have the opportunity, be prepared to pass an examination in French and German, though this is not required.

All who wish to take the course for Honors in Modern Languages must pass the examinations for the Freshman Class required above, also in the first part of Otto's German Grammar ; Whitney's Grammar and Reader, or their equivalent ; in French Grammar, and be able to translate easy French at sight

## EXAMINATIONS IN 1880.

The only time for examinations at the College will be at the commencement of the collegiate year, September 9th, 1880. All candidates must arrive at the College September 8th.

Candidates may be examined at the College or by the teachers who have prepared them.

## ADMISSION ON TEACHERS' CERTIFICATE.

The Trustees have, for many reasons, decided to follow the example of various other colleges, and admit candidates on the certificates of the teachers who have prepared them.

All certificates should be sent to the President of the Faculty as early as possible, that they may be approved or rejected in season to remedy any defects before September.

Certificates will be accepted from institutions of established reputation, and from private instructors of good repute.

Certificates must state the amount of work done by the candidate, and the length of time given to the study of Greek, Latin and Mathematics, respectively. They must state that the candidate has been carefully examined at the close of her preparatory course, and passed satisfactorily in all the studies required as qualifications for admission to the Freshman Class.

Examinations in Mathematics passed a year or more before application, cannot be accepted. There must be a later review, and a satisfactory re-examination.

If Olney's Algebra has not been used as a text-book, the substitute must be stated, and if not a full equivalent, it cannot be accepted.

This mode of examination will do justice to students by allowing them to be examined at home, by teachers with whose methods they are familiar. They will not be exposed to the mortification of failure at College, or the expense of a fruitless journey. They will know as soon as their schools close that they are accepted candidates, and will have two months of vacation for uninterrupted rest.

But this will throw the responsibility for thorough preparation upon the teacher presenting the certificate ; since it will be impossible for students who are not thoroughly prepared to kcep up with their classes. It will do justice to faithful teachers, and tend to raise the standard of preparatory schools.

Teachers are requested not to give certificates in doubtful cases, but to throw the responsibility upon the College. They may examine any candidate in writing upon examination papers that will be provided by the College, and submit her answers to the Faculty for their decision, or they: may request an examination at the College in September.

If, at the end of the first term., it is found that any student has been so imperfectly prepared that she cannot continue with her class, she will lose her rank.

Teachers are invited to correspond with the President of the Faculty, and, if they wish, will be furnished with printed forms of certificates.

## SUGGESTIONS TO PARENTS IN REGARD TO PREPARATION OF STUDENTS.

We cannot urge too strongly upon parents the necessity for careful preparation of their daughters. They should decide early and prepare them as patiently and systematically as boys are prepared.

In ordinary cases girls will need to study Greek and Latin, daily, for three or four years, under a good teacher, in order to be well fitted. It is best that the decision to prepare for College should be made when they are ten or eleven years old. The preparation may then be more gradual.

Parents must exercise constant watchfulness, in order to insure thorowshness in every particular. Superficial instruction by poor teachers is not only a loss of valuable time, but a serious injury to the mental powers. It is more difficult to undo poor instruction and overcome bad habits of study, than to prepare students from the beginning.

It is necessary to caution parents against many worthless private schools and seminaries of low grade, that make a pretense of instructing in Latin and Greek

When girls have the opportunity, they should join the High School classes of those who are fitting for College in the ordinary classical courses. But parents must not cease their watchful supervision.
'They must be careful that their daughters' time is devoted to the studies required for admission to the College, and not spent in those which they will be required to take in College. Girls fitting in High Schools are often urged to take various studies for the sake of graduation. The time thus lost may defeat their thorough preparation in Mathematics and Classics, while the studies pursued will be almost useless in their college course. Thus it will be comparatively useless to study Chemistry, Natural I'hilosophy, or Astronomy, in the High School. Pupils will be required to study these sciences in College, according to the best modern methods, and with the indispensable addition of careful Laboratory work.

Girls are often allowed to make the dangerous mistake of overworking, in order to fit in a short time. This is as injurious to scholarship as it is to health. All "cramming " preparation is worthless.

Students who are well prepared will receive far greater advantages in every way from the College. The number is limited. It should therefore be borne in mind, that candidates well fitted for the Freshman Class in the General College Course are always sure to be admitted, as they will have the preference over all other applicants.

## PREPARATION IN RELATION TO HEALTH.

Girls must prepare for College in health, as well as in scholarship. If there is to be a higher education of women, it must be based upon a radical reform in regard to those evils which make any true education impossible. 'The prevailing delicacy of health in American girls excites just alarm among thoughtful teachers. The reform will begin when parents also begin to be alarmed, and girls are warned against the dangers that follow from carelessness and neglect. The delicate health of school-girls is, in most cases, due to continued violation of the plain laws of nature, as to fresh air by night and day ; simple and nourishing food at regular meals; daily exercise in the open air ; regular hours, sufficient sleep and suitable dress.

The good health of the majority of stuclents at Wellesley College, demonstrates that healthy girls, under proper regulations, are usually
capable of continued hard study without injury. During the first year, of the College some were received who were in poor health. The improvement in many of these was remarkable. But most of them found that continuous study was impossible. The experience of the first year will not be repeated. Hereafter, students in delicate health will not be received The College will not be responsible for invalids. If the collegiate education of girls be an experiment, it must not be tried upon those who are broken down by violation of the laws of nature. Such a trial would be useless, and failure inevitable.

Girls must be taught that it is necessary to give constant attention to this subject. if they wish to become successful students. The same care at home that is bestowed upon the students in the College, and the observance of the same simple rules, would insure similar results.

For many years the charge has been repeated, in public and in private, that health is destroyed by hard study. It is the favorite argument of those who oppose the higher education of women. This charge is not just. The truth is, that hard study, properly directed and regulated, promotes physical health. Every experienced teacher will confirm this statement. But the unjust prejudice against the higher education of women is perpetuated because the consequences of violating the laws of nature, from earliest childhood, are charged upon study; while the real causes are disregarded, and allowed to continue their pernicious work. When the thoughtful women of our country are united in observing, protesting against and reforming the fatal causes which do indeed destroy health, this calumny, that woman's mind and woman's body are too frail to bear the pursuit of knowledge, will perish with other forgotten prejudices.

## APPLICATIONS.

Wellesley College has been established for the purpose of giving to young women seeking a collegiate education, opportunities fully equivalent to those usually provided for young men. It is designed to meet, in the
most comprehensive manner, the desire for the higher education of women which is so remarkable a feature in our national life.

Its object and aims must not be misunderstood. It is not like an ordinary seminary or finishing-school for girls. It is a College, arranged for collegiate methods of instruction only, and for courses of difficult study, such as are pursued in none but the best colleges. It is intended for those students only who have vigorous health, more than ordinary ability, and the purpose to derote their time faithfully to arduous study.

It offers peculiar advantages to those who are to be teachers. The difficult courses of study, the higher courses for Honors, and the methods of instruction, are all arranged with special reference to this object. But it is not limited to this class of applicants ; others who desire an equally advanced education will be admitted. Those who have been teachers, and wish to pursue special courses in preparation for higher work, will always receive peculiar advantages and privileges. See page 48 .

It is for young women of moderate means; therefore the charges for board and tutition are placed as low as possible. Those who are wealthy, as well as those who are not, are expected to practice economy, and to discourage display and extravagance in dress and personal expenditure.

Wellesley College will be Christian in its influence, discipline and instruction.

Students of sixteen years of age are received, but it is better that none enter the Freshman class until they are seventeen or eighteen.

All applications must state the age, health and attainments of the candidate If candidates expect to have free instruction in Music or Art in the five years' courses, they must state this in their application, in order that the arrangements necessary for their instruction may be made. Those who come in September must enter for the entire Collegiate Year; those who come later, for the remainder of the year. The number of students is limited. Those who are qualified to enter the Freshman class will receive the preference. Post-graduates and teachers will be received next in order, and special students will afterward be accepted as far as the accommodations of the College will allow.

Candidates are received at any time to fill vacancies. Those unable to enter in September may have their names registered for the first vacancy. The first term will begin September 9th, I880. The winter term will begin soon after the first of January. The summer term will begin in the second or third week of April. Accepted candidates will receive a circular, giving information as to outfit, traveling directions, etc.

## LIST OF TEXT-BOOKS RECOMMENDED TO STUDENTS PREPARING FOR WELLESLEY COLLEGE.

The following list is given in answer to frequent inquiries :-
Jones' First Lessons in Latin, published by S. C. Griggs \& Co., Chicago.
Allen \& Greenough's Latin Grammar.
Allen \& Greenough's Cæsar, Cicero and Virgil - all published by Ginn \& Heath, Boston.

Exercises in Latin Prose Composition by Elisha Jones, published by S. C. Griggs \& Co., Chicago.

Merrivale's General History of Rome, published by Appleton \& Co., New York. First Lessons in Greek, by J. R. Boise, published by S. C. Griggs \& Co., Chicago.
White's First Lessons in Greek, published by Ginn \& Heath, Boston.
Greek Prose Composition, by F.. Jones, published by S. C. Griggs \& Co., Chicago.
Hadley's Greek Grammar, published by D. Appleton \& Co., New York.
Goodwin's Greek Grammar, published by Ginn \& Heath, Boston.
Goodwin's Greek Reader, published by Ginn \& Heath, Boston.
Xenophon Anabasis, by J. R. Boise, published by I). Appleton \& Co., New York.
W. Smith's History of Greece, published by Harper Brothers, New York.

Olney's Complete School Algebra.
Olney's University Algebra.
Olney's Elements of Geometry - all published by Sheldon \& Co., New York
Otto's German Grammar.
Wilcomb and Otto's German and English Conversation.
Whitney's German Grammar.
Whitney's German Reader - all published by Henry Holt \& Co., New York.

Konig Rene's Tochter, published by Carl Schonhof, Boston.
Buchheim Deutsche Lyrik, published by Macmillan \& Co., New York.
Noel \& Chapsal French Grammar, for sale by Carl Schonhof, Boston.
Histoire de France, par Lamé Fleury, published by H. Holt \& Co., N. Y.
Higginson's Young Folks History of the United States, published by Lee \& Shepard, Boston.

Students fitting for Wellesley College, can procure these books from M. H. Sargent \& Son, No. 12 Bromfield Street, Boston, with the same discounts at which they are sold to the College.

## Courses of Study for 1880-81.

In order to carry out the leading purpose of the College, and provide various systems of study with wide differences of instruction, seven courses have been established from which the students can select.

Those who are conversant with the wants of young women (especially of teachers) seeking a collegiate education, will appreciate the importance of this provision.

Each course has been arranged with its own positive characteristics, and is controlled by a definite purpose to prepare students to be teachers, or for future special studies. It is. intended that all shall be (as far as practicable) equal in mental discipline and systematic culture.

The outline of studies in each course is stated with great particularity, and descriptions of the scope and methods of instruction are given, so that candidates may select intelligently those best fitted for their needs, and prepare accordingly.

The following are the seven courses of study : -

> The General College Course, see page 26
> The Course for Honors in Classics, see page 28 .
> The Course for Honors in Mathematics, see page 30 .
> The Course for Honors in Modern Languages, see page 31 .
> The Five Years' Musical Course, see page 36 .
> The Five Years' Art Course, see page 42 .
> The Scientific Course, see page 32 .

For 'Teachers' Collegiate Class, see page 48 ; and for students received in Special Courses, see page 52.

All the following courses of study are arranged for fifteen regular recitations per week.

## ELECTIVE COURSES AND STUDIES.

The time of a Professor cannot be given up to two or three students; and hereafter elective courses or studies will not be commenced or continued unless there are permanent classes of at least six members. All courses and studies in every department of the College must be elected subject to this condition, and subject to the approval of the Faculty.

## GENERAL COLLEGE COURSE.

This is intended for the majority of students. A description of the methods and scope of instruction will be found on page 54. All students who commence this course hereafter, must study either French or German for three years, unless they pass satisfactory examinations. The following are the studies:-

## FRESHMAN YEAR.

Latin.-Livy, one book; Tacitus, Germania; Cicero, Letters (selections); English into Latin.

Greek.-Odyssey (selections); Plato, Apology and Crito; Herodotus (selections); English into Greek from dictation.

Mathenatics. - Olney's Solid Geometry, Plane Trigonometry and University Algebra, Part III.

German, elective.-Schiller, Jungfrau von Orleans, Wilhelm Tell, Die Piccolomini; Schiller's Leben ; Essays in German and German Prose Composition.

French, clectize.-Littérature Française Contemporaine; Dictées, Compositions et Exercices grammaticaux.

History; English Literature; Essay Writing; Elocution.

Drazing.-Free-hand, Mathematical and Perspective. Drawing may be postponed to the Sophomore-year.

German and French are elective to Freshmen who have passed their examination in the Latin, Greek or Mathematics of the Freshman year.

## SOPHOMORE YEAR.

Sophomores in September, 1880, are required to take either French or German and two other elective studies, with three recitations per week in each study.

Latin, elective. - Horace, Odes, Epodes, Satires and Epistles (selections).
Greek, elective. -Thucydides (selections) ; Demosthenes (select Orations); Greek Prose Composition.

Mathematics, elective. - Spherical Trigonometry; Analytical Geometry; Differential Calculus.

German. - Goethe, Hermann und Dorothea, Ausgewählte Prosa, Egmont; Goethe's Leben ; Essays in German and German Prose Composition.

French. - Littérature Française du dix-neuvième Siècle ; Dictées et Compositions.
Chemistry, with Laboratory Practice. See page 64.
English Literature.
History; Essay Writing; Elocution.

## JUNIOR YEAR.

Latin, elective. - Tacitus, Agricola; Plautus, Captivi; Juvenal (selections) ; Ovid, Fasti and Tristia (selections) ; Latin Verse.

Greek, elective.-Demosthenes, continued ; Euripides; Alcestis and Medea ; Æschylus, Prometheus; Sophocles, Antigone; English into Greek from dictation.

Mathematics, elective. - Differential Calculus, continued; Integral Calculus; Analytical Geometry of threc dimensions.

German. - Lessing, Nathan der Weise; Barthel, Deutsche Nationalliteratur der Neuzeit ; Essays in German.

Firench. - Histoire de la Littérature Française du dix-septième et du dix-huitième Siècle; Pascal, Corneille, Molière, Kacine, Madame de Sévigné, La Bruyère, Essais.
l'hysics.
Logic.
Mineralogy, elective, including use of blow-pipe. Lithology, elective; Gcology, elcetive.

Chemistry, elective. - Qualitative Analysis and Volumetric Analysis; Lectures on Chemical Theories.

Botan', elective.
History; English Literature ; Essay Writing; Elocution.
In ISSI, French or German required with one elective for the year and one for two terms. Lougic is to be studied in the last term of the Junior year. The two preceding terms may be given to Mineralogy and Geology, or to Physical Astronomy; or, if the student can finish her French or German in the two terms, she may elect a year in Botany, Biology, or the second year's course in Chemistry.

## SENIOR YEAR.

In 1882, French or German required and two elective studies, with three recitations per week in each.

Latin, elective. - Cicero De Oratore, or Brutus, and De Natura Deorum; selections from Lucretius, Martial and other writers; Pliny, Letters (selections); Hymni Ecclesiæ.

Greek, elective. - Eschylus, Agamemnon; Sophocles, Electra; Plato, Republic (selections) ; Aristotle (selections).

Mithematics, clective.-Modern methods in Analytical Geometry; Analytical Mechanics.

German. - Goethe, Faust ; History of German literature ; Essays in German; Middle High German, Der Nibelunge Not.

French.-Histoire de la Formation de la Langue Française; Essais; Lectures et Traductions des Langues Romanes.

Astronomy (elective); Geology (elective); Chemistry (elective); Botany (elective); Biulog': (elective); Physics (elective).

Mental and Moral Philosophy.
History; Essay writing; Early English Literature.
The systematic study of the Scriptures will be continued throughout all the courses.

## COURSE FOR HONORS IN CLASSICS.

This is one of the subdivisions of the General College Course, and is prepared for those who wish to give most of their time to the study
of the classics. A description of the methods of instruction will be found on page 55 . The following are the studies :-

## FRESHMAN YEAR.

Latin. - Livy, one book; Tacitus, Germania; Cicero, Letters (selections); English into Latin.

Greek.-Odyssey (selections); Plato, Apology and Crito ; Herodotus (selections); English into Greek from dictation.

Mathematics. - Same as in the General Course.
History, English Literature, Essay Writing, Elocution, Drawing. - Same as in the General Course.

## SOPHOMORE YEAR.

German and one elective study, with three recitations per week, will be required.
Latin. - Horace, Odes, Epodes, Satires and Epistles (selections).
Greek. - Thucydides (selections); Demosthenes (select Orations); Greek Prose Composition.

German. - Students will continue German until they can read ordinary prose with facility.

History, English Literature, Essay Writing, Elocution.-Same as in the General Course.

JUNIOR YEAR.
For the first two terms of the year two electives, with three recitations per week, will be required; and, for the rest of the year, one elective.

Latin. - Tacitus, Agricola; Plautus, Captivi ; Juvenal (selections); Ovid, Fasti and Tristia (selections) ; Latin verse.

Greek.-Demosthenes, continued; Euripides, Alcestis and Medea; Neschylus. Prometheus; Sophocles, Antigone ; English into Greek from dictation.

Logic.
History, English Literature, Essay Writing, German, Elocution. - Same as in the General Course.

SENIOR YEAR.
One clective, with three recitations per week, required.
Latin. - Cicero, De Oratore, or Brutus, and De Natura Deorum; selections from Lucretius, Martial and other writers ; Pliny, Letters (selections) ; Hymni Ecclesix.

Grcek.- Nischylus, Chöephore; Sophocles, Electra; Plato, Republic (selections); Aristotle (selections).

Mental and Moral Philosophly, History, English Literature, Essay Writing, German. -Same as in the General Cuurse.

## COURSE FOR HONORS IN MATHEMATICS.

This is a modification of the General College Course prepared for those who wish to study the Higher Mathematics. A description of the course of instruction will be found on page 56 . The following are the studies:-

FRESHMAN YEAR.
Latin. - Livy, one book; Tacitus, Germania ; Cæsar, Letters (selections); English into Latin.

Greck.-Odyssey (selections); Plato, Apology and Crito; Herodotus (selections): English into Greek, from dictation.

Mathematics. - Olney's Solid Geometry; Olney's Plane Trigonometry; and Olney's University Algebra, P'art III.

Drawing. - Free-hand, Mathematical and Perspective.
History, English Literature, Essay Writing, Elocuition. - Same as in the General Course.

## SOPHOMORE YEAR.

Two electives, one of which must be French or German, will be required.
Mathematucs. - Olney's Spherical Trigonometry; Analytical Geometry; Differential Calculus.

Chemistry, History, History of Literature, Essay Writing, Elocution. - Same as in the General Course.

## JUNIOR YEAR.

In 1881, French or German required and one elective for two terms.
Mathematics. - Differential Calculus, continued; Integral Calculus; Analytical Geometry of three Dimensions.

Physics, Logic, History, English Literature, Essay Writing, Elocution. - Same as in the General Course.

SENIOR YEAR.
In 1882, French or German required and one elective.
Modern Methods in Analytical Geometry. Analytical Mechanics.
Mathematical Astronemby (elective).
Mental and Moral Philosophy.
History. English Literature, Essay Writing.-Same as in the General Course.

## COURSE FOR HONORS IN MODERN LANGUAGES.

This is designed for those who wish to devote a large proportion of their time to the study of Modern Languages. No one is allowed to take this course without the consent of the Faculty, after passing special examinations at the College. A description of the methods of instruction will be found on pages 57 and 59. Candidates desiring to take this course must pass the examination for the Freshman Class ; also in the first part of Otto's German Grammar; in Whitney's German Grammar and Reader, or their equivalent ; in French Grammar, and must be able to translate easy French at sight. The following are the studies:-

## FRESHMAN YEAR.

One elective, with three recitations per week, is required.
Latin - Same as in the General College Cuurse.
German. - Schiller, Jungfrau von Orleans, Wilhelnı Tell, Die Piccolomini ; Schiliet's Leben; Essavs in German, and German Prose Composition.

French. - Littérature Française Contemporaine; Dictées et Compositions.
History, English Literature, Essuy Writing, Elocution. - Same as in the General College Course.

## SOPHOMORE YEAR.

Two electives, with three recitations per week in each, are required.
Germann.-Goethe, Hermamn und Dorothea, Egmont; Ausgewählte Prosa; Goethe's Leben; Essays in German, and German Prose Composition.

French. - Littérature Française du dix-neuvième Siècle, Dictées, ct Compositions.
History, English Literature, Essay Writing, Elocution.-Same as in the General College Course.

> JUNIOR YEAR.

For the first two terms of the year two electives, with three recitations per week, are required ; and for the third term, one elective.

German:- Lessing, Nathan der Weise; Barthel, Deutsche Nationallitteratur der Neuzeit; Essays in German.

French. - Histoire de la Littérature Française, du dix-septième et du dix-huitième Siècle ; Pascal, Corneille, Molière, Racine, Madame de Sévigné, La Bruyère, Essais.

Logic, History, English Literature, Essay Writing, Elocution. - Same as in the General College Course.

## SENIOR YEAR.

One elective is required.
German. - Goethe, Faust; History of German Literature; Essays in German; Middle. High German, Der Nibelunge Not.

French. - Histoire de la Formation de la Langue Française; Essais; Lectures et Traductions des Langues Romanes.

Mental and Moral Philosophy, History, English Literature, Essay Writing. - Same as in the General Cullege Course.

## SCIENTIFIC COURSE.

This diverges widely from the General Classical Course. It is intended for those who do not wish to pursue the study of the classics, but desire to devote most of their time to the study of the Natural, Physical and Mathematical Sciences and the Modern Languages It embraces difficult
branches of collegiate study, and is fully equal to the classical course in mental discipline and systematic culture. Candidates wiil make the same preparation as for the General Course, except in Greek. A description of the methods and course of instruction will be found on pages 62 to 77 .

Students must continue German and French until they can read both languages with facility. The course is prepared for those who need to study both languages for three years. All who can read either language may substitute electives, and make more rapid progress in the sciences.

## FRESHMAN YEAR.

Mathematics. - Olney's Solid Geometry; Olney's Plane Trigonometry; Olney's University Algebra, Part III.

French. - Littérature Française Contemporaine; Dictées, Compositions et Exercices grammaticaux.

German. - Schiller Jungfrau von Orlears, Wilhelm Tell, Die Piccolomini ; Schiller's Leben; Essays in German, and German Prose Composition.

Chemistry with Laboratory Practice. - For description of the course in Chemistry, see page 63.

History, English Litcrature, Essay Writing. Elocution.
Drawing. - Freehand, Mathematical and Perspective. Drawing may be postponed to the Sophomore year.

## SOPHOMORE YEAR.

Mathematics. - Olney's Spherical Trigonometry; Analytical Geometry; Differential Calculus.

French. - Littérature Française du dix-neuvième Siècle, Dictées et Compositions.
German. - Goethe, Hermann und Dorothea, Egmont, Ausgewählte, Prosa; Goethe's Leben; Essays in German and German Prose Composition.

Mineralogy, Crystallography, Lithology, Geology.
Chemistry, of the second year (elective). - For description of this second year's course, see page 66.

Botany. - First year's course (elective).
History, English Literature, Essay Writing, Elocution.

## JUNIOR YEAR.

The French or German of this year may be postponed to the Senior year, and either Botany or Biology substituted.

Mathematics, clectric. - Differential Calculus, continued ; Integral Calculus; Analytical (ieometry of Three Dimensions.

Frinch. - Histoire de la Littérature Française, du dix-septième et du dix-huitième siècle ; Pascal, Corneille, Molière, Racine, Madame de Sévigné, La Bruyère, Essais.

German. - Lessing, Nathan der Weise ; Barthel, Deutsche Nationallitteratur der Neuzcit; Essays in German.

Astronom! ${ }^{\prime}$, Logic.
Phipsics. - For description of this year's course, see page 70.
Botany. -- Second year's course (elective).
Biology' - First year's course (elective).
Chemistry. - Second or third year's course (elective).
History, Litcrature, Essay Writing, Elocution.
SENIOR YEAR.
Students may pursue elective courses in Chemistry or Physics, if they have already taken one year of Botany and Biology, the selection being subject to the approval of the Faculty.

Botany.
Biology.
Mintal and Moral Philosophy.
History, English Literature, Essay Writing.
Mathematics (elective). - Modern Methods in Analytical Geometry, Analytical Mechanics.

Mathematical Astronom:' (elective).
French (electize). - Histoire de la Formation de la Langue Française; Essais; Lectures et Traductions des Langues Romanes.

German (electice). -- Goethe, Faust; History of German Literature; Essays in German ; Middle High German, Der Nibelunge Not.

## COURSE FOR HONORS IN SCIENCE.

This will be open to all who pass the Freshman entrance examinations (except in Greek), and are able to translate German and French at sight.

With this preparation they will be able to devote four years to the Natural, Physical and Mathematical Sciences. The course for the first two years will be similar to the ordinary Scientific Course ; but since no time will be required for French or German, rapid progress can be made, and more time given to advanced work during the last two years.

## Teflestry Cunseruatary of Musit.

It has become necessary to make an enlargement of the musical department, and a new building for the conservatory of music is to be erected this year. It will be placed in a central position between Stone Hall and the College, and will contain thirty-eight music rooms for instruction and practice, with a hall for choral instruction and concerts. This building is carefully planned for its proposed uses. The floors are to be "deafened," the partition walls will be double, and the rooms will have double doors, so that the students will not be disturbed by each other's practice.

The college is supplied with excellent pianos. Most of these are grand or upright pianos, from Chickering, Steinway, Weber and Knabe.

By the generosity of W. O. Grover, Esq., the College has been furnished with an organ, the best in all its appointments that is possessed by any educational institution in the country. It was built by Messrs. Hook \& Hastings, of Boston. It has three manuals, each of sixty-one notes, and a pedal of thirty notes, twenty-six speaking registers, eight mechanical registers, seven pedal movements for combination, and a crescendo pedal controlling the whole organ. The number of pipes is one thousand five hundred and eighty-four.

A pupil thoroughly trained to play upon this instrument will be able to fill any position as organist.

The principal interest in the musical department of the College centers in

## THE FIVE YEARS' MUSICAL COURSE.

This new course was introduced in September, 1878. It is deservedly popular and successful.

The advantages of combining the discipline of a thorough collegiate training with the refining influence of a scientific musical education are evident, and this course is recommended to all who have musical talent. It has the additional advantage of enabling students to do the work with less pressure than any of the four years' courses.

No students taking any of the regular courses can pursue the study of Music, because her time, during the four years, will be occupied with the prescribed Collegiate studies. For this reason the Trustees have established the Musical Course, which is extended through five years; and will enable those who take it to graduate in any of the regular College Courses, and acquire a scientific musical education. It is open to students in any of the regular Collegiate classes. The lessons in Music will be arranged so that the other studies will not be interfered with; the only change necessary being the distribution of the Collegiate studies through five years, instead of four. Students will preserve their rank as members of the Collegiate class which they enter.

It is intended for those who have peculiar musical taste and talent, and wish to attain a high standard. A full description is given, in order that candidates may understand the nature of the instruction and the careful study that will be required. It is strictly classical, and has been arranged with the object of giving a thorough knowledge of the science of Music, developing the highest degree of technical skill, and cultivating pure taste and style.

The branches taught are Piano-forte, Organ Playing and Solo Singing, Harmony, Counterpoint and Fugue, Composition, Theory, History and Æsthetics of Music.

There are three regular courses of instruction, any one of which may be selected: the Piano-forte, Organ, and Voice. Classes of two or more will be formed if desired. Students, with the consent of the Faculty may change from one course to another or take one lesson weekly in vocal and one in instrumental music. All pupils will study Harmony during the third year; Theory during the fourth year; History and Æsthetics of Music during the fifth year.

Students who enter the Freshman Class of the General College Course, in September, 1880 , and afterward, may join the five years' Musical Course, and receive free instruction in Vocal Music, or on the Piano or Organ. The instruction will be given according to the approved Conservatory method, but the classes will, for the present, consist of three only, instead of four or six, as usual. There will be two lessons weekly. The pupils can have two practice periods daily, except on the day of these lessons, when they will practice for one period only.

Students in the Scientific Course may combine with it a five years' course in Music ; but the instruction is not free, the extra expenses of the Laboratories being considered equivalent to the expenses of the Musical Course.

All students pay for the use of organs or pianos, according to the hours of practice.

## COURSE OF STUDY FOR THE PIANO-FORTE.

FIRST VEAR.
Selections from the following works: -
Cramer-Etudes; Czerny-Etudes, Op. 740, 2 Books; Czerny-" Method of Legato and Staccato," Op. 335 ; Krause-Etudes, Op. 5 ; Krause-Etudes, Op. 9 ; Loeschorn-Etudes, Op. 67, Books I and II, Op. 136; Jensen-Etudes, Op. 32 ; Mayer-Etudes, Op. 305 ; Bach's Inventions; Select pieces to be played without notes; Solo, and Piano and Violin Sonatas of Maydn and Mozart; easier Sonatas of Beethoven; Songs without words, Mendelssohn; Pieces for four hands; smaller works of best modern composers.

## SECOND YEAR.

Selectiuns from the following works:-
Clementi's "Gradus ad Parnassum" (Tausig) ; Eschmann-Etudes, Op. 22; BennettFitudes, Op. 11; Carl Mayer-Etudes, Op. II9; Moscheles-Etudes, Op. 70; Bach's six French Suites; Bach's six English Suites; C. Baermann, Jr., Op. 4.

Sonatas by Beethoven and Schubert; larger pieces of Bach, Scarlatti, Mendelssohn and Schumann; Concertos by Mozart; Concerted music; selections from best modern composers.

> THIRD YEAR.

Tausig's Daily Studies.
Selections from the following works:-
Grund’s Etucles, Op. 21; Harberbier-"Etudes-Poésies;"Eschmann-Etudes, Op. 16; Chopin-Etudes, Op. 10; Henselt-Etudes, Op. 2; Henselt-Etudes, Op. 5; Kullak's Octave Studies; Moscheles' Characteristic Studies, Op. 75 ; Bach's "Well-tempered Clavichord."

Sonatas ; Concertos by Mendelssohn, Weber, Beethoven and Hummel; Concert Pieces by Bach, Chopin, Schubert, Schumann, Thalberg, Moscheles, Liszt and Rubinstein.

## FOURTH YEAR.

Tausig's Daily Studies.
Chopin-Etudes, Op. 25; Kullak's Octave Studies; Bach's "Well-tempered Clavichord;" Sonatas; Concerted music; Concertos by Mendelssohn, Schumann, Beethoven and Chopin ; Concert Pieces by modern writers - Liszt, Rubinstein, Tausig, Raff, Chopin, Brahms, Bennett, Schumann, Mendelssohn, Reinecke, Saint-Saëns, Rheinberger, Henselt and Paine.

## FIFTH YEAR.

Selections from the following works: -
Liszt-Etudes, Rubinstein-Etudes and Preludes, Alkan-Etudes.
Sonatas, Concerted Music; Concertos by Beethoven, Chopin, Saint-Saëns and Rubinstein. Concert Pieces continued.

## COURSE OF STUDY FOR THE ORGAN.

## FIRST YEAR.

# Rink's Organ School, Books IV. and V. <br> "The Organist," by Southard and Whiting (for Instrumentation). <br> Lemmen's Organ Schocl, Book II. <br> "Arrangements from the Scores of the Great Masters." W. T. Best. <br> Preludes, Fugues and Concert Pieces by Bach, Mendelssohn, Merkel, Guilmant and other composers. <br> Introduction to extempore playing, and accompaniments for solo and chorus singing. 

> SECOND YEAR.

Mendelssohn's Sonatas, Op. 65.
Merkel's Sonatas.
Best's " Arrangements," continued.
Works of Bach, continued.
Extempore playing, continued.
Accompanying solo, choir and chorus with orchestra.

## THIRD YEAR.

Bach's Preludes, Fugues, etc., Ritter's Sonatas, Handel's Concertos, Best's "Arrangements," Concert Pieces by the best German, French, and English composers. Accompanying continued.

> FOURTH YEAR.

Rheinberger's Sonatas, Grand Studies, Preludes, Fugues, Toccatas, Fantasias and Variations, by Bach, Handel, Mendelssohn, Hesse, Rink, Guilmant, Best, Buck, Whiting, Paine, Widor and Saint-Saëns. Accompanying continued.

## FIFTH YEAR.

Bach's Trio Sonatas, Preludes, Fugues, Toccatas, Fantasias, Variations, Passacaglia, etc., Thiele's Concert Pieces, Best's " Arrangements," Grand Concert Pieces by the best masters.

Lessons as to the structure of the Organ, tuning and repairing.

## COURSE OF STUDY IN SOLO SINGING. <br> FIRST YEAR.

Physiology of the Voice. Rules for breathing, and their practical application to the formation of simple pure tones, of uniform forces. Study of the diatonic scale in slow tempo on the vowel $\ddot{u}$. Practical application of the rules for breathing to the study of blending the registers of the voice. Intonation. Study of the slow trill. Study of the diatonatic scale on the Italian vowels $\boldsymbol{o}$ and $e$.

## SECOND YEAR.

Continued study of the trill. Study of the Italian vowels $i$ and $u$. Solfeggio practice, as preparatory to pronunciation. Etudes for soprano. " 36 Leçons faciles et graduées pour le Chant." Luigi Bordese (easy studies of short range). " 24 Vocalises pour Mezzo-soprano ou Soprano," Marchesi. Etudes for Alto. Panofka, Op. 8r. Nava's Studies for Alto, arranged by Teschner, Books I and II. Nava, Op. 22, Book I. "Vocalises pour Contralti," Marchesi.

## THIRD YEAR.

Study of Italian melody. The Aria. Renewed study of the practical application of the rules of breathing, in equalizing the voice and increasing its compass. Study of the trill. Etudes for mezzo-soprano and soprano, selected from Bordgoni. Etudes for Alto; Nava, Op. 22, Book III. Analysis of English vowels and diphthongs. Mode of treatment in singing English text. Select Italian and English Songs. Studies in Expression and Phrasing.

## FOURTH YEAR.

The Aria continued. Recitative, Dramatic Accent, Advanced study of Breathing as a source of expression.

For Soprano-Lamperti's " Studies of Bravura," Books I and II. Bordogni's advanced Etudes in Bravura.

Continued study of the trill.
Alto. Continued study of Nava, Op. 22, Book III.
Selections from Operas.
Twelve Operatic Arias for Soprano;
Twelve Operatic Arias for Alto;
\}arranged from Handel by Robert Fran.
Continued study of Accent and Phrasing. Select German Songs.

FIFTH YEAR.
The Aria continued.
Further study of Recitative, Dramatic Accent and Phrasing.
Continued study of Breathing as a source of expression. Oratorio. Opera. English, German, Italian and French Songs.

To this course will be added, from time to time, at the discretion of the teacher, the study of Duets, Trios and Part-singing; also, recreations in the form of simple ballads and songs, selected according to the ability and progress of the pupils, so that they will not interfere 'with the regular and more severe prescribed study.

> THEORETICAL TEXT-BOOKS USED IN THE STUDY OF HARMONY AND COMPOSITION.

Emery's Harmony.
Richter's Counterpoint (translated by Taylor).
Haupt's Counterpoint and Fugue (translated by Eddy).

## EXTRA CHARGES FOR INSTRUCTION IN MUSIC.

For private instruction on Piano, Organ, or in Solo Singing, one lesson weekly, with three-quarters of an hour practice daily. For the College Year, \$40.00.

For a shorter time, a proportionate reduction.
For private instruction on Piano, Organ, or in Solo Singing, two lessons per week and an hour's practice daily. For the College Year, $\$ 75.00$.

For a shorter time, a proportionate reduction.
To members of the Scientific Class in the five years' course, for two lessons per week, in classes of three, with one hour's practice daily. For the College Year, $\$ 40.00$.

To members of the Scientific Course, for instruction in Harmony, Musical Theory and Composition. For the College Year, $\$ 12.00$.

Those who have longer periods of practice on the Piano, or Pedal Reed Organ, will pay at the rate of $\$ \mathbf{\$ . 2 5}$ per month for one additional hour daily.

Those who have free instruction, or who practice without instruction, will pay at the rate of $\$ \mathbf{1} .25$ per month for one hour of daily practice.

Those who practice upon the Large Pipe Organ, will pay at the rate of $\$ 3.00$ per month for one hour of daily practice.

To special students for two private lessons per week on Piano, Organ, or in Solo Singing. For the College Year, $\$ 90.00$.

To special students for the use of Piano or Pedal Reed Organ, at the rate of $\$ 1.50$ per month, for one hour of daily practice.

## THE BEETHOVEN SOCIETY

Is open to all students. Free instruction is given in class and choral singing.
PIANO AND ORGAN PRACTICE.

Students who wish to keep up their practice without taking lessons can do so at the above charges for the use of the instrument.

## Tiuk 'Onas' Trl ©atrse.

The reasons which have made it necessary to establish the five years' Musical Course, make a similar provision necessary for the study of Art.

No student can in four years pursue any of the College Courses, and at the same time pursue a thorough course of study in Art.

A regular course of five years' instruction in Art Studies will be given upon the same plan which has proved so satisfactory in the study of Music.

Students who enter any one of the regular College Courses will be allowed to combine with it this Course in Art. For this purpose their regular Collegiate Studies will be distributed through five years instead of four, and the time thus added will be given to Art Studies. Students will preserve their rank as members of the Collegiate class which they enter.

There is a large and well furnished Art Gallery connected with this department. By the liberal gifts of I. D. Farnsworth, Esq., it has been provided with an excellent collection of models, casts and copies. It is fully equipped with all the apparatus and conveniences for instruction in drawing, modeling, and painting in oil and water-colors.

The large halls of the College, as well as the Art Gallery, are adorned with a large number of statues, busts, paintings and engravings.

Free instruction in the Art Studies of the five years' Art Course will be given only to those who enter the Freshman Class of the General College Course, in September, 1880, and afterward.

This instruction will be given in three weekly lessons, each of about three hours' duration.

Students in the Scientific Course can take the five years' Art Course, but the instruction is not free, as the expenses of the laboratories, etc., are fully equivalent to the expenses of the Art Course.

## COURSES IN DRAWING, PAINTING AND MODELING.

The instruction given in the elements of the Fine Arts is arranged in two courses, each extending through five years - a course of drawing and painting, and a course of modeling. The work in these two courses is the same during the first year, and is entirely different during the last year. During the intermediate years the two courses differ chiefly in the relative amount of time given to different subjects. Throughout the five years all the students attend the same lectures.

The first year is given to the study of the elements of form, with illustrative exercises, in which the use of the lead-pencil, pen, India-ink and water-colors, and the manipulation of clay and wax, are made familiar, while drawing in chalk upon the blackboard is practiced at recitations.

During the next three years the knowledge and skill thus gained are employed and advanced in the study of the forms of leaves and flowers, and the human figure. In the study of these subjects, body-color, crayon and the stump, are added to the means already in use.

In the last year the class in drawing and painting take up painting in oil-colors, beginning with subjects in black and white, and going on to still life and drapery, the head from life and the draped figure, and to landscape. Those who prefer to do so may employ water-colors instead. The class in modeling give their whole time to that work, taking up ornament, or the human figure, as they may prefer.

Lectures, pertinent to the work in hand, are given throughout the course.
FIRST YEAR.

## Shading, in flat and in graduated tints : -

In line, with one stroke, or many, with the pencil, pen and drawing-pen.
In India-ink or color, with one or with many washes.

## THE ELEMENTS OF FORM.

Regular and irregular figures, plane and curved; vases; direct light, shade, shadow and reflected light; diffused light; line of light and shade.
Analyzing and blocking out; triangulations, proportions; planes, values.

## EXERCISES.

In all these exercises the material and method used and the scale are to be varied, line-work being copied with the brush, and color in black and white, and vice versa. Brush-work is to be practiced on a large scale.

Shading squares in line (free-hand and with the rule), with pencil and pen.

Shading squares with the brush, with India-ink and color.
Mixing colors, to study the hues, tints, etc. Matching colors.
Copying flowers and birds from Japanese prints, and from nature in the Japanese manner.

Drawing picturesque buildings from copies, with the pencil or pen, or brush.

Drawing ornament and vases from the round, observing shades, shadows, values, etc.

Drawing landscapes in flat tints, observing only the values.
Memory drawing, including subjects not drawn before.
Blackboard drawing, from sketches and from memory.
Modeling geometrical solids in clay or wax.

## LECTURES.

Shades and shadows.
Technical terms.
Theory of drawing, masses and details, planes and values, outline and modeling.

Theory of color ; classification of hues, shades, tints and tones.

SECOND, THIRD, AND FOURTH YEARS.

## I. NATURAL FORMS.

Flowers and foliage: -
Classification of leaves and flowers, according to their forms. Plant forms, and study of the tree-forms in the mass, at different distances.

## The Human Figure: -

Study of the forms and proportions of the parts, and of the whole.
Study of the apparent change of proportion in rest and in motion.
Study of the skeleton and of the superficial muscles.
Comparison of drawings and of the antique, with the life.

## II. EXERCISES.

In these exercises the point, the stump and the brush are to be employed, alternately. The drawings are to be made from the antique and from casts taken from life, with the occasional study of the life ; every drawing to be well begun in flat tints, observing the planes; only one in two or three to be finished ; every drawing to be made a second time in outline only. Every subject is to be drawn a second time in sketch-book, in pencil or color, from a slightly different position.

Studies of flowers and foliage on different scales, in color, and in black and white.

Studies of plant and tree-forms, at different distances.
Occasional copying of landscape and figure subjects, in color, and in black and white, from prints or paintings.

Eyes, nose, mouth, ears, masks, heads, hands and feet, arms, legs, back, torso.

The figure from bass-relief, and from the round.
Anatomical casts.
Drapery and still life.
The draped figure from life.
Putting bones and muscles within a given outline.
Modeling of the features, etc., in clay, and of the whole figure in bassrelief, from the flat, from the round, and from nature (Students in the course of modeling give their chief attention to this work.)

## III. LECTURES.

Perspective.
Theory of color and of form ; harmony and proportion ; contrast.
History of painting and sculpture.
Botanical analysis ; Anatomy.

## FIFTH YEAR.

I. Painting.

Painting in oil-colors or in water-colors, in monochrome from the cast, and in color from still life, drapery, and from the living model. Landscape.

Occasional drawing from the cast, and occasional work in black and white.

Time sketches.
Copying the drawings of the old masters.
II. MODELING.

Modeling from ornament, from nature, from the antique, or from life.
iII. lectures.

The chemistry of colors.
Aerial perspective.
Composition.

## EXTRA CHARGES FOR DRAWING ANI PAINTING.

Extra lessons in Drawing, Modeling and Painting, will be given to those who desire them.

The extra charges are as follows: To students in the Scientific Course who enter the Five Years' Art Course, $\$ 25$ per year for one lesson per week;
$\$ 60$ per year for three lessons per week. To all other students who take extra lessons in Drawing, Modeling, or Painting, $\$ 35$ per year for one lesson per week; $\$ 90$ per year for three lessons. The lessons for which these charges are made, are of about three hours' length.

All students pay for their own brushes and materials.

> DRAWING AND PAINTING, FOR STUDENTS NOT IN THE FIVE YEARS' COURSE.

Free class instruction in Free-hand, Mathematical and Perspective Drawing, is given to all students. Free instruction in Flower Painting and in Water-Colors, is given to all the classes in Botany.

## 

In carrying out the original design of the College to provide for the education of teachers, it has become necessary to make a different provision for those who are teachers already, but desire peculiar facilities for advanced studies. At the opening of the College some teachers entered as students, and the number increased every year. The opportunities given proved to be so valuable that it was determined to give still greater privileges, and to allow teachers to come as special students, with the choice of being resident or non-resident. For this purpose the Teachers' Class was organized, in September, 1878 , and fifty-one teachers entered it.

It is, evidently, one of the most practically useful provisions for the higher education of women, and demands increased privileges and immediate extension.

The generosity of Mrs. Valeria G. Stone has provided the College with $\$ 100,000$, to erect and furnish a new building for this Department.
 menced, and will probably be opened in September, 188 r . It is intended as a dormitory for about one hundred students, and will be provided with chambers, music-rooms, parlors, and four small dining-rooms. The plans have been carefully prepared with reference to the convenience and comfort of this class of students. The arrangements for heating, lighting and ventilation, are all that can be desired. It will be handsomely furnished, and will unite the quiet and comfort of a small family with the conveniences and luxuries of a large establishment. Students will have separate chambers.

As Stone Hall cannot be completed before 188 r , the College has opened a new boarding-house (called Dana Hall), which will accommodate twenty-five teachers. Prices for board will be the same as in the principal College building.

## COURSE OF STUDY IN 'TEACHERS' COLLEGIATE COURSE.

Teachers will be allowed to enter without examination, but will furnish the usual certificates of good character and satisfactory evidences of qualifications, to entitle them to these privileges.

They will be allowed to take the courses of study which they may desire in any of the College classes, and such as no other students are allowed to take.

A few illustrations will show the nature and value of these privileges. Thus, a teacher of Latin, seeking higher instruction, can, if it should be thought best, recite daily in three different classes; taking lessons with the Freshman, Sophomore, Junior or Senior Classes. This will enable her to give all her time to Latin, teach her the methods of instruction in every class, and afford privileges bestowed by no other institution during so short a period.

Similar adrantages will be given for the study of Greek, German, French and Mathematics. There are fifteen classes in Latin, fifteen in Mathematics, eight in Greek, eight in German and eight in French. All these classes are open to teachers; and it is obvious that with such a wide range for selection, it will be easy for them, by giving all their time to one study, to choose a sufficient number of classes to enable them to accomplish in a year the work which, under ordinary circumstances, would require three years' time. They can (if they desire it) give their whole time to Grecian, Roman, Mediæval and Modern History, or to the study of English Literature. Equally important advantages will be given to them in the Physical and Natural Sciences; they can give their whole time to the study of Chemistry, Physics, Botany or Biology. It is far better, however, that
teachers who wish to devote their time to scientific pursuits, should spend two years at the College, and select their courses and classes accordingly. A special course of instruction in the use of the Compound Microscope is given to teachers.

Instruction in science is given according to the best modern methods, with extended courses of Laboratory Practice.

A full description of the courses of study and the methods of instruction in the Scientific Course will be found on pages 62 to 77. Teachers will not be limited to the special studies referred to above, but may join any of the General or Special Courses, and share all the privileges of the College, including class instruction in Drawing and Vocal Music. They will also be allowed to attend any of the classes for the purpose of observing the methods of instruction. When Stone Hall is completed it will probably be established as a Normal College, with special courses, and grant special degrees.

## TEACHERS' REGISTRY.

Collegiate students and members of the Teachers' Department are allowed to record their names in the Teachers' Registry, giving their qualifications, experience as teachers, etc. After they leave college they will give notice of all changes of address.

Superintendents of schools and all other persons who wish to secure valuable teachers for positions in Colleges, Seminaries, High Schools and Academies, can apply by letter, stating their wishes and requirements. Full and reliable information will be given in all cases.

No charge will be made for the privileges of the Registry; it is intended as a means of communication between our students and those who wish to secure accurate and faithful teachers.

All letters should be addressed to

## TEACHERS' REGISTRY, W'ellesley College, Wellesley, Mass

## STUDENTS IN SPECIAL COURSES.

This important department in the higher education of women, is established for students who cannot give the time required for a full College Course, but wish to pursue advanced studies. Many who have graduated from other institutions desire to supply the deficiencies in their education, and enter upon special collegiate studies. Candidates for Special Courses must be capable of diligent study and not less than eightcen years of age. They will be allowed to select as one study either Vocal or Instrumental Music, or an Art study. The number of special students is limited, as the preference will be given to candidates well prepared for the Freshman Classes.

## NON-RESIDENT STUDENTS.

Students whose parents reside in the village of Wellesley may be received as day-scholars by special arrangement.

## POST-GRADUATE STUDENTS.

Graduates of this and other Colleges who desire to continue their education will be received. If they desire to be candidates for the degree of M.A., they must pursue a full course for two years, one year of which must be at the College. If the studies of the second year are not pursued at the College, there must be a satisfactory examination, and the candidate will be required to present a thesis upon some designated subject connected with her work.

## DISCONTINUANCE OF THE ACADEMIC DEPARTMENT.

When the College was opened, in 1875 , it was necessary to combine a preparatory department with it, in order to meet the wants of many students. This was announced to be "for the present" only.

It is impossible to continue this any longer, for the reason that there is no room in the College buildings for these students. The present Freshman class numbers more than one hundred, and the next year's class will probably be larger. Candidates must hereafter make early and careful preparation, at their own homes, for the Freshman Class in the General College Course or the Scientific Course.

## DEGREES.*

Students who complete the General College Course, the Scientific Course, the Five Years' Musical Course, or the Five Years' Art Course, will, on the recommendation of the Faculty, receive the degree of B.A.

Special distinction in scholarship on the part of the graduates in any of the courses will be indicated by the words "Summa cum laude."

Students who complete the Course for Honors in Classics, Mathematics, Science or Modern Languages, will, on the recommendation of the Faculty, receive the degree of B.A., and honors, if awarded, will be stated in the diploma.

If, on account of interruption, any student is unable to complete the Courses for Honors before graduation, the Faculty, in proper cases, will allow the studies to be made up in post-graduate courses.

The degree of M.A. will be granted upon the conditions stated under the head of Post-Graduate Students.
*Extract from College Charter in relation to conferring degrees: "The corporation of Wellesley College is hereby authorized to grant such honorary testimonials, and confer such honors, degrees and diplomas, as are granted or conferred by any University, College or Seminary of learning in this Commonwealth; and the diplomas so granted shall entitle the possessors to the immunities and privileges allowed, by usage or statute, to the possessurs of like diplomas from any University, College or Seminary of learning in this Cummonwealth."

## Course of ghtrstrution int ©nffegiate Deprarturat.

A description of the general plan and scope of instruction is given, in order to aid students in their selection from the seven different courses which are offered.

The general design of the College is to provide for the radical change in the education of women, which is made necessary by the great national demand for their higher education. By a gradual and almost unnoticed revolution the education of the youth of our country has, to a great extent, passed into the hands of female teachers. There are now more than three hundred thousand women engaged in teaching in public and private schools. This has been, to a large degree, the origin of the demand for a higher education. It should also largely influence the character of the instruction which is to be given to those who are to become the teachers of the country. The leading object in Wellesley College is to educate learned and useful teachers, and it is kept in view throughout all the courses of study, and in all the methods of instruction. Hence, it is necessary that there should be many different courses of study, as well as opportunities of varying these courses by means of elective studies.

## THE GENERAL COLLEGE COURSE.

This Course is best adapted to the needs of the majority of students. It corresponds to the usual Classical Course in the best American Colleges, although differing radically in some particulars. It is intended to give thorough and liberal foundations for future special study, as well as to afford the opportunities required for the education of teachers. It provides for instruction in Greek, Latin, Mathematics, French, German, the Physical and

Natural Sciences, History, Literature, Logic, Ethics, Psychology, Drawing and Elocution.

It may be widely varied by the introduction of elective studies, so as to meet the wants of individual students, and give them special training and education. But there must be limitations to this privilege of selection. The College cannot grant its degrees to students who have not prepared for future progress by a systematic course of instruction; nor can students be allowed to take elective studies from caprice, or because they are easy. For these reasons the choice of elective studies in every course is always to be subject to the approval of the Faculty. The system of electives in the General Course begins at the end of the Freshman Year. The Faculty will then have become acquainted with the student's capacity and acquirements, and can decide as to the best course to be pursued in the future.

## INSTRUCTION IN GREEK AND LATIN.

The instruction in these languages is according to the best modern methods. The wide range of authors studied has already been stated, and the selection will commend itself to scholars. An unusual proportion of time is given to writing Greek and Latin prose. Students are also taught to write Latin verse. It is the aim throughout to produce accurate and accomplished classical scholars. They are instructed in the History, Mythology, Archæology and Art of Greece and Rome. Great opportunities are given them in the unrestricted use of the numerous works of reference and illustration in the library. The books of reference used by the best classical scholars are freely provided, together with the latest and best German, French and English editions of the classics. There is a cabinet in the library, containing a large collection of copies in plaster and sulphur from antique coins, medals and gems, for the illustration of classical studies and ancient history.

## COURSE FOR HONORS IN CLASSICS.

This is for students who wish to qualify themselves to become teachers worthy of the highest positions. The list of studies pursued will be found on page 28 . It is laid out as a four years' course, for convenience of comparison and explanation. In substance, however, it begins with the Sophomore Year. During the Freshman Year the student will have finished the Mathematics ordinarily required, and will then be allowed to pursue for three years a thorough and comprehensive course of Greek and Latin. Those who select the course must study German until they are able to read it with facility, as they will be obliged to consult German books of reference in the library, and to use German text-books during a part of the time. The schedule of studies pursued does not indicate the entire range of instruction. They will be required to study Ancient History, Literature and Art. In addition to the classics they will be required to study English Literature, Modern History, Logic, Rhetoric, Essay Writing, Mental and Moral Philosophy. This course has already been adopted by many students. But those who desire to take it should observe that, in order to secure its advantages, they will be obliged to forego the study of some of the sciences pursued in the General Course.

After 1881 all who select the Course for Honors in the Classics must pass the examinations in Greek advised in the qualifications for admission to the General College Course.

## INSTRUCTION IN MATHEMATICS.

The course in Pure Mathematics requires preparation in Arithmetic, University Algebra and Plane Geometry. It is continued through two years of College the Course, and includes the study of Solid Geometry, Advanced Algebra, Plane and Spherical Trigonometry, Analytical Geometry, Differential and Integral Calculus.

The required Mathematical studies of the General College Course end with Plane Trigonometry. Those who pursue the Scientific Course
continue their Mathematics through another year, with Analytical Geometry, and Differential Calculus. All who show marked ability, and desire to pursue this science, have the Course for Honors open to them. This gives more extended work in the Calculus, Modern Geometry, Analytical Mechanics and Mathematical Astronomy. Should anyone wish to pursue this branch farther, she can do so in a Post-Graduate Course.

## COURSE FOR HONORS IN MATHEMATICS.

This is offered to students with the same general purpose as the Course for Honors in the Classics. It is open to all in the General College Course and in the Scientific Course.

In every class there will be some who have a peculiar talent for the pursuit of Mathematical studies. They will find in the Course for Honors a very desirable opportunity to prosecute the study of Higher Mathematics for three years.

It has the advantage over the other special courses for honors, that it does not involve the sacrifice of other studies. It will not be necessary that the students devote all their time to Mathematics. They will be required to study History, Literature, Logic, Mental and Moral Philosophy and Essay Writing, and can take Elective studies.

## Instruction in german.

The course in German is arranged for four years, commencing with the Freshnan Year. It is a part of the regular Scientific Course and of the Course for Honors in Modern Languages. All students are allowed to take German as an elective study. Candidates for the full course must show that they have mastered the first part of Otto's German Grammar and Whitney's Grammar and Reader, or their equivalents. Advanced scholars will be placed in higher classes. Other classes will be arranged for beginners.

In the Freshman Year three works of Schiller are carefully studied. The classes also study the life of Schiller, the history and style of his writings, and his influence in the literature of Germany.

In the Sophomore Year three works of Goethe are read. His life, his style, his influence in literature, are studied, and made the subject of essays in German. Other selections in prose and poetry are also read during the year.

The first half of the Junior Year is occupied with Lessing's Nathan Der Weise. The method of recitation changes when this book is finished. After this, the works studied (as a general rule) are not translated into English. The recitations are conducted entirely in German. Barthel's Deutsche Nationallitteratur der Neuzeit is the text-book for the remainder of the year. The study is critical and historical. Reference is made to the books in the German library, and the results are presented in the classroom in oral discussions and in essays.

In the first half of the Senior Year Goethe's Faust is read. The course of study is similar to that of the Junior Year, with frequent reference to the critical works relating to Faust. During the last half of the year the General History of German Literature is resumed.

An elective course in Middle High German may be substituted for the regular course during the last half of the Senior Year. It is offered to special students who desire to study the origin and historical development of the language and literature.

The aim throughout is to prepare the students to become teachers of German. Blackboard exercises, translations at sight from English into German, from German into English, and original essays in German, are required in each year. There are many oral and written examinations. Exactness in pronunciation is insisted upon at all times, and the classes are instructed in writing German with correctness and elegance of expression. There are frequent exercises in reading German, as well as in conversation and dictation.

There is a large and valuable library of Ancient and Modern German Literature which the students are allowed to consult. Many German

Reviews and Magazines are subscribed for, with the purpose of giving information as to the history of current literature, as well as teaching idiomatic forms of expression. Among these are Literarisches Centralblatt; Rundschau; Archiv fur Literaturgeschichte; Ueber Land und Meer; Daheim.

## INSTRUCTION IN FRENCH.

A systematic course of study of the French Language and Literature forms a part of the regular Scientific Course and of the Course for Honors in Modern Languages. French is an elective study in other courses. Those who wish to receive the full benefit of this instruction should have a thorough knowledge of the grammar, and be able to translate French at sight, and converse in French when they enter. Classes are arranged for beginners, and higher classes for those who have studied the language.

The Freshman Year is occupied with the study of selections from the most noted contemporary authors. The design of the instruction during this year is to teach a pure Parisian accent, to perfect the grammatical study of the language, and familiarize the students with idiomatic French. Students are required to write French essays, are often practiced in grammatical exercises and dictations, and are taught to converse correctly.

During the next year the same general plan of instruction is continued, but more attention is given to French Literature. The Literature of the Nineteenth Century is studied. Selections from the most celebrated poets and prose writers are read, and the students are taught to observe the characteristics of their style. The French essays during the year relate to the same subjects. Conversation in French is continued, with constant attention to accent and expression.

In the Junior Year the classes study the History of the French Literature of the Seventeenth and Eighteenth Centuries. The study is critical as well as historical. The various works upon French literature in the

Library are referred to, and the results of the investigations are given in the class-room. During the year, selections are read from the classic authors named in the list of studies.

In the Senior Year the history of the formation of the French Language is studied. The French Library affords ample opportunities for this instruction. 'The classes are required to study the history of the Early French Literature and Language, its different dialects, and to write essays upon these subjects. They also read selections in Old French.

Throughout the Four Years' Course, French may be studied as thoroughly as Greek or Latin. The students are carefully drilled in construction and pronunciation. The class instruction is given in French, and they are taught to converse correctly in the class-room, as well as at the French tables in the dining-hall. The constant aim is to prepare the students to be teachers, to instruct them in French Literature, and teach them to speak and write idiomatic French.

The French Library contains a useful selection of classical and modern authors, and an important collection of Old French works. A number of French magazines, periodicals and reviews, are received for the use of this department. Among these are:-

Revue des Deux Mondes, Magazin Pittoresque, Revue Politique et Littéraire, Gazette des Beaux Arts, Revue Historique, Revue des Langues Romanes, Romania.

## INSTRUCTION IN ENGLISH LITERATURE.

The study of Literature is pursued during the four Collegiate Years. It is essential to woman's education, and is required in all the different courses.

The Freshman Year is occupied with an outline history of Grecian and Roman Literature; the formation of the new languages after the dissolu-
tion of the Western Empire ; the Early Literatures of Italy, Spain, France and Germany, their connection and mutual influences; and the general history of English Literature, from its earliest period. This year's instruction is intended to give a connected and systematic history of the general progress of Literature. It also aims to show the influences of the political, social and religious elements, especially in the development of the great European Literatures ; and to trace some of their reflex influences upon the progress of civilization.

The Sophomore Year is occupied with English Literature, from the Elizabethan age to the nineteenth century. Different authors are selected, and the classes make a critical study of the designated portions of their works. They are also required to study the lives of these authors, and their connection with contemporary history. Abundant references are given to the biographical and historical works in the Library. The aim is to teach the classes how to study the authors for themselves, and thus to cultivate correct taste, and acquire true principles of criticism.

During the Junior Year the time is given to the study of Homer, Dante. and Shakspere.

The Senior Year is devoted to early English Literature, and is mainly given to the study of Chaucer, and the Literature prior to Chaucer. In addition to the more generally known authors of this period, many of the works published by the "Early English Text Society" are studied, not only with reference to the formation of the English language, but also on account of their literary value.

No text-books are used. The instruction is given in lectures and recitations. The original authors are studied, and references are made to the critical and illustrative works in the library. Essays upon the works read are required throughout the whole period. The instruction in Literature is not confined to the class-room work. Courses of reading are given to those who desire them. The refining and cultivating influences of this course of study and of these methods of instruction, are felt from the outset. A pure taste and healthy imagination, as well as a high standard of literary culture, are rapidly developed.

All the leading literary reviews, journals and magazines, published in England, Germany, France and the United States, are regularly received for the use of teachers and students in this department. Among some of the more rare periodicals received for the study of Early English Literature are Kolbing, Englische Studien, Archiv fiir das Studium der Neureren Sprachen und Literaturen and the publications of the Early English Text Society, the Chaucer Publication Society and the Camden Society.

A valuable Shakspere Library has been formed, to encourage the study of Shakspere. The publications of the New Shakspere Society and the "Deutschen Shakspeare Gesellschaft," are regularly received.

## INSTRUCTION IN HISTORY.

The study of History is continued during the four Collegiate Years. The Course begins with Greek History, from the heroic age to the fall of the empire of Alexander. 'This is followed by the History of Rome to the dissolution of the Western Empire. Two years are given to the study of Mediæval and Modern History ; one year is given to special historical investigations.

The instruction is given by lectures, with topical studies of the original authorities in the library. Essays upon the subjects studied are required from the students throughout the course.

## INSTRUCTION IN THE SCIENTIFIC COURSE.

This is arranged for students who desire to give the four years of College life to the pursuit of the Natural, Physical and Mathematical Sciences, and the studies necessarily connected therewith. It is intended to meet the imperative demand in the higher education of women for more extended and thorough instruction in the Sciences. The course, as laid out, gives opportunities for scientific study which are substantially the
equivalent of those given to young men in the best Scientific and Technical Schools. But it is evident that the scope of instruction must differ widely. The instruction which is especially designed to prepare men to be civil and mining engineers, or for similar professions, would be useless here.

It is arranged to meet the wants of teachers ; to open the way for future special study; and to provide satisfactory preparation for those who intend to become physicians. It embraces the study of Mathematics, Chemistry, Mineralogy, Lithology, Geology, Botany, Biology, Physiology, Physics and Astronomy, in addition to the English branches required in all the courses. The entrance examinations are the same as for the General College Course, with the exception that Greek is not required. Students will not be obliged to pursue the study of Latin any farther, but an increased amount of study of Mathematics will be necessary. It is very desirable that those who intend to take this course should come prepared to read French and German with facility. These languages are necessary to all who wish to study modern science, and to be conversant with its progress. German and French will be pursued by all until they are able to read ordinary scientific works in both languages. The studies to be pursued are stated on pages 57 and 59. Those who are making their plans for future study will perceive that they must be governed, to a certain degree, by the amount of time that will be necessary for the study of French and German.

## INSTRUCTION IN CHEMISTRY.

The instruction in Chemistry has for its object to lay thorough foundations for future studies; to teach students the laws of chemical combinations, the chemical nomenclature and formulæ, the properties of the elements, and of their most important compounds, the practical use of apparatus, the methods of analysis, the qualitative tests for the detection of the substances studied, and the connection of Chemistry with other sciences.

The instruction is given by lectures, aided by text-books and by a large collection of books of reference, to which the students have constant access. From the commencement of the course to the encl, the students reccive practical instruction in the Laboratory. Each student has a desk, with a separate cupboard and drawer assigned for her use, and is also provided with apparatus, and with all the necessary chemical re-agents. Before leaving any subject there is an examination to determine whether it has been thoroughly understood, and whether the purpose of each Laboratory experiment has been fully comprehended. An equation is required for each reaction. The students take full notes of the lectures, and make drawings of the apparatus used in the experiments, whether these are performed by the Professor or by the student herself; and these note books are submitted to the Professor.

Instruction will be given in the use of the Spectroscope and of the Compound Microscope. As most of the students are preparing to be teachers, they are required to present subjects in the class-room in the form of brief lectures, accompanied by experiments and by blackboard illustrations.

The course of studies is added in detail. Sophomores in the General Course take the Chemistry of the first year; all who desire to pursue the study of Chemistry farther can take it as an elective, and join any of the classes in the Scientific Course. Students in either of the special courses can take any part of this course in Chemistry.

## FIRST YEAR.

## GENERAL CHEMISTRY.

General Introduction. - Laws of Chemistry, nomenclature, formulæ, voltaic battery; hydrogen, nitrogen, oxygen, ozone and air, water and electrolysis, ammonia, hydrogen peroxide, nitric acid and nitrates, nitrous oxide, nitric oxide and other oxides of nitrogen ; chlorine, hydrochloric
acid, and compounds of chlorine with oxygen ; bromine, iodine, fluorine, and their compounds ; sulphur, sulphurous oxide, sulphuric acid ; hydrogen sulphide, hyposulphurous acid, the thionic acids ; selenium ; carbon, carbon monoxide, carbon dioxide, illuminating gas, carbon disulphide; silicon; boron, phosphorus and compounds ; arsenic and compounds ; antimony and bismuth.

General Introduction to Metals. - Potassium, sodium, lithium, cæsium, ammonium compounds, calcium, barium, strontium and the remaining metals ; electrotyping and electroplating.

Theory of Organic Chemistry. - Marsh gas, olefiant gas, fermentation, alcohol and acetic acid, cyanogen and compounds, oils, glycerine, soap, starch, sugar, bread, wine, beer.

Relation of Chemistry to other Sciences.

## QUALITATIVE ANALYSIS.

This subject will be commenced during the first year of the Scientific Course, and will be continued the following year. In General Chemistry the pupils will have already become acquainted with many tests for the more common acids and bases. Lectures will be given explaining the methods of preliminary testing in the dry way, viz.: in closed tube, on charcoal in reducing flame, in phosphorus-salt bead, etc.; the methods of bringing into solution the various oxides, salts and silicates; the arrangement of the bases in six groups; the methods of separating the single members of each group; the testing for acids.

All these lectures will be illustrated by suitable reactions in the class-room, and will be followed by experiments in the Laboratory, with materials both known and unknown.

Each member of the class will be furnished with a separate set of from twenty to thirty unknown substances, solutions and solids, beginning with a single compound and advancing to mixtures; these she must examine
systematically according to the plan taught, noting in her blank-book his purpose in instituting each test, the result, and her interpretation of the latter.

## SECOND YEAR.

In Stoichiometry, problems will be given under the following heads: r. Calculation of percentage composition from the formula. 2. Calculation of symbol from percentage composition. 3. Calculation of the weight of products, the factors being given. 4. Calculation of the factors required to yield a given weight or volume of the product. 5. Reduction of gaseous volumes for pressure and temperature.

## QUANTITATIVE ANALYSIS.

The experiments in Quantitative Analysis will be accompanied by lectures explaining the apparatus to be used, the re-agents and the methods.

By gravimetric methods, the analysis of eight compounds will be required. 1. $\mathrm{BaCl}_{2}$, to determine $\mathrm{H}_{2} \mathrm{O}, \mathrm{Ba}, \mathrm{Cl}$. 2. $\mathrm{MgSO}_{4}$, to determine sulphuric acid, magnesia, water. 3. Solder, to determine tin, lead. 4. Brass, to determine copper, zinc. 5. Potassium alum, to determine sulphuric acid, Al, K. 6. Ferric ammonium sulphate, to determine Fe, NH. 7. Feldspar, to determine Al, K, Si. 8. Silver coin.

By volumetric methods will be required: 1 . Preparation of normal ammonia and hydrochloric acid. 2. Soda-ash, to determine $\mathrm{Na}_{2} \mathrm{CO}_{3}, \mathrm{Na}$ $\mathrm{Cl}, \mathrm{Na}_{2} \mathrm{SO}_{4}$. 3. Pearl-ash, $\mathrm{K}_{2} \mathrm{CO}_{3}$. 4. Bleaching-powder, HOCl . 5. Ferrous sulphate, Fe. 6. Ferrocyanide of potassium, Fe. 7. Grape sugar. 8. Cane sugar. 9. A phosphate. 10. Binoxide of manganese.

## ORGANIC CHEMISTRY.

A course of lectures will be given during the second year, which will cover the most important topics in Organic Chemistry, as well as the theories which have been advanced by the leading chemists of the present century.

The following are among the topics which will be treated in these lectures: tests for carbon, nitrogen, hydrogen, chlorine, sulphur, phosphorus, in organic bodies ; empirical formulæ, how determined; six series of homologous compounds ; constitution formulæ ; isomerism ; marsh-gas series of hydrocarbons ; alcohols, monatomic, diatomic, triatomic, primary, secondary, tertiary ; esters or etherial salts, ethers ; mercaptans, amines, nitro compounds, kakodyl, aldehydes, chloral hydrate, ketones, formic acid, acetic acid, glycerine, nitro-glycerine, fats, protagon, soaps, prussic acid, nitriles, cyanogen, urea, mannite, tartaric acid, sugar, acrolein, cellulose, starch, benzol and its derivatives.

In the department of Chemistry and Mineralogy there are twe laboratories, a lecture-room, and a store-room for apparatus. The Chemical Laboratory is furnished with apparatus, cupboards and drawers, for ninetysix students working in divisions. The desks are furnished with sinks, gas, hot and cold water. The laboratory is provided with a number of convenient hoods for manipulation of noxious gases. It is furnished with the best apparatus, and all its arrangements are of the most approved construction. The laboratory and lecture-room are thoroughly ventilated, and fully supplied with all the chemicals and fixtures which can be desired. No charge is made for the use of apparatus or for chemicals used ; but the pupils will be charged cost prices for all articles broken.

Among the books of reference are Watts' Dictionary of Chemistry, Wurz' Dictionaire de Chimie, Storer's Dictionary of Solubilities, GrahamOtto's Lehrbuch der Chemie, and the works of Fresenius, Wagner, Classen, Schorlemmer, Dittmar, Barker, Cooke, Roscoe, Tilden and others.

The following periodicals are regularly received for the use of teachers and students : Journal of the Chemical Society, London; Bulletin Mensuel
de la Societé Chimique de Paris, Annales de Chemie et de Physique; Annalen der Physik und Chemie; Zeitschrift fuir Analytische Chemic; Berichte der Deutschen Chemischen Gesellschaft; Jahresberichte iiber die Fortschritte der Chemischen 'Technologie; Jahresberichte iiber die Fortschritte der Chemie.

## INSTRUCTION IN MINERALOGY AND LITHOLOGY.

After studying Chemistry a year, the students commence the course in Mineralogy. This embraces the various topics comprehended under morphology, the physical properties of minerals, and the chemical reactions employed as tests. In the Mineralogical laboratory, every convenience for Blow-pipe Analysis is provided. From twenty to thirty determinations (according to Brush) are required. Students can also determine as many other minerals as they desire.

Throughout the course they study minerals, and become familiar with their chemical and physical properties by careful observation and comparison, with the aid of the blow-pipe, the microscope and chemical re-agents.

During the recitations devoted to Descriptive Mineralogy, every student has before her a collection of hand specimens of all minerals studied, so that the whole class can examine specimens of the same mineral at the same time. There are other sets of choice specimens which they can keep for weeks in their own rooms, and still other sets of minerals which they are required, in their laboratory work, to test for their physical properties. The class have access to the extensive collections of the Cabinet of Mineralogy.

The instruction is given by lectures, aided by text-books and a reference library. Frequent oral examinations are held, in which the students are expected to recognize at sight, compare and describe the minerals already studied.

The study of Crystallography is taken up in connection with Mineralogy. This is aided by a collection of models of crystal forms and a collection of typical crystals.

The study of Lithology follows. There is a large collection of rocks specially arranged for this course. An important branch of this study is carried on with the aid of the compound microscope, the polariscope, and a collection of microscopical sections of typical rocks and their constituent minerals, prepared for the College by Fuess, of Berlin, Julien, of New York, and Dickerman, of Boston. These sections are carefully studied in the laboratory, and the results and inferences from the study are reported and discussed in the class-room.

The text-books used are the works of J. D. Dana, E. S. Dana, Brush and Collins. The following are the books of reference: Physikalische Krystallographie, by P. Groth; Elemente der Mineralogie, by Naumann; Lehrbuch der Physikalischen Mineralogie, by Schrauf; Microscopische Physiographie, by Rosenbusch; Die Krystalliten, by Vogelsaug; Mineralogie, by P. Brard; Lehrbuch der Mineralogie, by Kenngott; Phillips' Mineralogy, by Brooke and Miller; Microscopische Beschaffenheit der Mineralien, by Zirkel; Petrographie, by Zirkel ; and the works of Von Cotta, Rammelsberg, Von Kobell, Plattner and Burat.

## INSTRUCTION IN PHYSICS.

The department of Physics occupies a convenient lecture-room, with lantern and portelumiere constantly in place for the illustration of lectures, or the projection upon the screen of minute experiments. Water, wires from the battery, oxygen and hydrogen and illuminating gas, are furnished at the lecturer's desk. The costly apparatus for this department has been selected with great care from the best makers in England, France, Germany and this country. During the present year the apparatus has been largely increased. Everything necessary for instruction and illustration has been supplied. There is a Professor's Laboratory, for the preparation of experiments, and an extensive Students' Laboratory, supplied with instruments for quantitative work. This is arranged in eight separate rooms and alcoves. One dark room is supplied with a Bunsen's Photometer, for
measuring the candle power of lights, and with apparatus for Spectrum Analysis, etc. Another room is fitted up for an Electrical Laboratory, and supplied with a Wheatstone's Bridge and Resistance Coils, Thomson's Mirror Galvanometer and Lamp-stand, made by Elliot, of London, and other apparatus necessary for Electrical measurements. There is also a battery-room and a room for photography.

The instruction in Physics is given by lectures and recitations, supplemented by quantitative experiments in the laboratory performed by the students. Drawing of apparatus and a distinct record of the object and results of the experiment are required. The graphical method of showing the relation between variable quantities is much used.

## COURSE FOR FIRST YEAR.

The foundation doctrines of Motion, Force and Energy, as applied to visible masses, are first discussed. Keeping in view these established laws, Sound, Light, Heat, Electricity and Magnetism are afterward taken up. The presentation of these subjects is illustrated by ample apparatus.

## LABORATORY PRACTICE.

This includes experiments in General Physical Measurements, viz.: Estimation of Tenths in Space; Estimation of Tenths of a Second; Use of Verniers; Use of Various Forms of Thermometers; Method of Testing Thermometers; Use of Reading Microscopes; Use of Cathetometer; Use of Hook Gauge in determining the height of the surface of Liquids; Use of Hydrometers; Use of Barometer in determining Heights; Calibration by Water and Mercury; Calculation of Probable Error of Results.

In Mechanics. - Determination of the Coefficient of Friction ; of the Laws of Deflection of Beams; of the Laws of the Pendulum ; of the Laws of the Torsion of Wires ; of Specific Gravity by various methods; of the Laws of Falling Bodies, and the relations of Force and Momentum by Atwood's Machine.

In Light. - Determination of the Law of the Conjugate Foci of Lenses ; of the Radius of Curvature and Focal Distance of Lenses by the Spherometer ; of the Candle Power of Lights ; Use of the Spectroscope, mapping out the prominent Fraunhofer Lines, and the Spectra of the lighter metals, which can be volatilized by the Bunsen Burner; General Manipulation of the Microscope ; Study of the Phenomena caused by parallel beams of Polarized Light.

In Sound. - The verification of the Laws of Strings with Sonometer; Study of Overtones with set of diapasons and organ pipes from König; Study of Vibrations, with Chladni's Plates, Lissajou's Apparatus, Tisley's Pendulums, Blackburn's Pendulum and the Phoneidoscope.

In Electricity. - Measurement of Electrical Resistances ; Determination of the Law of Sine Galvanometer; Law and Force of Magnets. A telegraphic line has been set up and experiments are performed with the ordinary transmitter and receiver, and with the Telephone and Microphone.

Text-Books. - Atkinson's Ganot's Physics, and Pickering's Physical Manipulations. Vol. I.

COURSE FOR SECOND YEAR.
This year is devoted to more extended work in Light, Heat and Electricity. More difficult experiments are performed in the laboratory, and mathematical analysis is more rigidly applied. No single text-book is used. The outline is given in lectures, and the student is referred to the best works of reference on the subject in German, French or English. A thesis will be required at the close, illustrated by experiments devised by the student.

## LABORATORY PRACTICE.

In Heat. - Laws of the Expansion of Solids, Liquids and Gases; Determination of Specific Heats ; study of the Laws of Radiant Heat and Diathermancy, with the use of a complete Melloni's apparatus.

In Light. - Study of the Laws of Reflection, Refraction and Disper-
sion with the Circle of Duboscq ; Measurement of the Angle of Prisms, with the Spectrometer, and of Crystals with Wallaston's Goniometer ; more extended work with the Spectroscope, mapping out the Spectra of Gases, with the use of the Electric Spark and a seven-inch Induction Coil from Ritchie: Comparative Spectra; Constructing Spectroscope Curve, the instrument used being a spectroscope from Browning, of London, giving a dispersion of twelve prisms; Study of Absorption spectra, with the Microspectroscope ; Study of the Phenomena of Polarized Light, with a Polari-Microscope and complete set of crystals from Hofman, of Paris. In Photography. - The Action of Light upon Sensitized Plates is studied with suitable experiments. Positives on glass are taken from wood-cuts, for use with the lantern.

In Electricity. - Measurement of the resistances of Liquids and of the Electro-Motive Force of Batteries; Determination of the Galvanometer Constants; the Study of the Phenomena of Diamagnetism.

Students are taught the various departments of lantern projection. The experiments will be extended and varied according to the judgment of the instructor. It is the intention to shape the course to train the student to accuracy of observation, skill in experimenting, and clearness of statement of scientific facts.

Text-book for laboratory practice, Pickering's Physical Manipulations, Vol. II.

Among the books of reference are : Deschancl's Natural Philosophy; Wuillner, Physik; Weinhold's Experimental Physics; Frick, Physikalische Technik; Jamin, Cours de Physique ; Daguin, Traité de Physique ; Roscoe's Spectrum Analysis; Schellen's Spectrum Analysis; Helmhòltz's Sensations of Tone, and Optique Physiologique ; and the Works of Tyndall, Spottiswoode, Thomson, Jenkin, Lommel, Pereira, Tait and Stewart.

The following scientific periodicals are received for the use of this department: Comptes Rendus de l'Academie des Sciences, Philosophical Magazine, Journal of the Franklin Institute, Dingler's Polytechmsche Journal, The American Journal of Science, Popular Science Review, Annalen der Physik und Chemie.

## ASTRONOMY.

Physical Astronomy is an elective study of the Senior Year. The basis of instruction is given by lectures, illustrated by globes, charts and lanternslides. The lectures are supplemented by the constant use of the works in the Astronomical library, and by observations with the telescope. Every student is required to observe the moon at several phases, and to identify certain prominent craters and seas, also to observe the sun and planets, and certain nebulæ and clusters.

Especial attention is given to Spectroscopic Astronomy and the Constitution of the Sun. Those who wish to study Mathematical Astronomy will take the Course for Honors in Mathematics.

## INSTRUCTION IN BOTANY.

The Course of Instruction commences in the first term of the Sophomore Year, and may extend through two or three years.

The First Year includes Descriptive Anatomy, General Morphology, and Principles of Classification.

The Second Year, Histology and Vegetable Physiology.
The study of the gross and minute anatomy of the various organs of plants is followed by a consideration of the changes of form which they undergo in different species, according to their conditions of life. Plants thus studied are carefully described, compared and grouped, in accordance with their genetic relations.

Special attention is given to the orders which have been supposed to present peculiar difficulties, and which, for this reason, are often neglected. In the study of orders, mention is made of the prominent species of each, especially those furnishing useful products. In connection with the study of vegetable tissues, instruction is given in Practical Microscopy, in the use of Micro-chemical re-agents, and in preparation of Microscopical Specimens.

Succeeding this branch of the science is the study of the plant in action, and the consideration of questions pertaining to its life history. A portion of the second year is also given to the determination of dried specimens of plants, and to the study of the flora of some assigned locality.

Those who desire it may, in the third year, pursue special branches of the science beyond the time allotted to the general course.

Instruction is given by recitations, lectures, and by practical work in the Laboratory, which is regarded as the highest importance. The progress of the student is tested by frequent written and oral examinations, and each, in turn, is expected to lecture upon subjects assigned.

Students are encouraged to make independent observations and selfreliant rescarches; and, avoiding hasty inferences from partial data, to form judgments of things noted, and correctly describe the results of their obscrvations. To secure this end, they are instructed in the best methods of study and of observation.

Every object studied in the Laboratory is sketched. To give facility in this indispensable part of the work, opportunities are given to the students to receive every week, throughout the course, free instruction in drawing and painting in water-colors.

Compound Microscopes are furnished by the College for the use of all the classes. The students have access at all times to the large Herbarium, and the extensive Botanical library. Plants from the green-house are supplied during the winter.

A large and costly collection of models of plants, which was prepared for, and exhibited at, the French Exposition, in 1878 , by Auzoux, of Paris, has been lately imported for the College and added to the Botanical Department.

The following Botanical Periodicals are regularly received for the use of this department: Curtis' Botanical Magazine; Botanische Zeitung, Bulletin de la Sociétie Botanique de France; Annales des Sciences Naturelles; Bulletin Botanique ; Journal of Botany ; Journal of the Linnæan Society, and Grevillea.

## INSTRUCTION IN BIOLOGY.

The full Course in Biology extends through two years, and consists almost entirely of Laboratory work.

Every student is provided with a microscope and two or three objectives. For special demonstrations the Laboratory commands a series of lenses of the highest powers.

Every member of this class is also furnished with a complete set of dissecting instruments, and a case of twenty re-agents and coloring fluids for testing the nature and properties of the objects studied.

After a lecture upon the subject of the day, the students repair to their respective tables, each of which is provided with the organism or tissue to be studied. Drawings are made of their dissections and preparations, and these are accompanied by written descriptions, together with notes of physiological action, etc.

## COURSE FOR FIRST YEAR.

The instruction begins with a short Course in Elementary Biology. This introduces the various problems to be considered in the study of living things. A few typical animal and regetable forms are selected, beginning with the simplest on the border-land between the animal and vegetable kingdoms.

The study passes on - from these minute, structureless masses of protoplasm, having no organs of any kind - to higher types, and to the most highly differentiated plant life on the one hand, and animal life on the other.

This Course includes simple physiological experiments upon growth; the transformation of inorganic into organic matter; the decomposition of carbonic acid by chlorophyll, under the influence of sunlight, etc., Etc.

The Second Term is given to the further study of typical animal forms. A few types are chosen from the different classes, and their
structures carefully made out. In connection with this, some attention is given to Systematic Zoülogy.

The remainder of the year is devoted especially to Physiology, with the study of so much of the gross and minute anatomy of the parts and organs of vertebrates as is necessary to comprehend their actions.

## SECOND YEAR.

After the First Year of Biology, which serves as a groundwork for future study, different students may desire to follow out different lines; hence, two courses are laid out. The first is in advanced Physiology.

This Course includes some work in Embryology, Histology, Anatomy and Organic Chemistry, as well as Physiological experiments. Ova, in all stages of development, from segmentation to the formation of the perfect animal, are provided for the students. They take sections of these and watch their development.

The other line of study for the second year consists of a Course in Comparative Anatomy. This is made practical by an excellent collection of vertebrated skeletons, and by typical forms of the animal kingdom.

The Museum contains many models of invertebrated animals, as well as a manikin, models of separate vital organs.

There is a large Library of the latest works on Biology and Physiology, and a collection of journals of Physiology, Biology and Anatomy.

## MICROSCOPICAL LABORA'TORY.

There are in constant use, in the different scientific departments, sixtyfive inicroscopes of various patterns, according to the work to be done. There have been added, during the year, a microscope especially adapted to the study of rock sections, and a Polari Microscope. There is a large
battery of objectives, ranging in power from 1.25th inch down, and a variety of accessory apparatus. Pains have been taken to represent in this collection the best makers of Europe and America. Members of the teachers' class, and others who desire, may in a weekly class learn the general manipulation of the microscope and its varied applications. The meetings of the Microscopical Society afford opportunity for an exchange of results of work in the different departments, and individual work done outside, which has been found very useful.

The general Microscopical Library includes complete sets of the Microscopical Journals, English, French and American, and the most valuable works in German, French and English.


## Thy Caffege Buituings aud Graums.

It is intended that the elevating and refining influences of a happy Christian home shall surround the students in these years of education, when the future life receives its impulse and direction. The College provides all the surroundings which can make the life of the students refined
and noble. The extensive grounds and costly buildings, the comforts and luxuries, are such as are usually found only in the abodes of the wealthy.

The location is known as the most healthy in the healthy State of Massachusetts. There is no malaria in any part of this region. All the appointments of the College are so satisfactory that it is acknowledged to be the most beautiful building in the world that is devoted to the education of women. It is not necessary to describe the buildings and grounds. An article published in Harper's Magazine for August, 1876, giving a description of the College, illustrated by many engravings, may be consulted by those who desire information upon the subject.

Some particulars, however, which are connected with comfort and health, should be stated. All the rooms are carpeted and handsomely furnished. The building is warmed by steam. An abundant supply of fresh air is admitted into the basement, and there heated by contact with steam radiators. Every study-parlor has its separate hot-air flue, and the register enables the occupant to regulate the dheat at pleasure. This method of heating by "indirect radiation," as it is called, is the best method of heating large buildings like the College. But an important improvement has been added, never before introduced in an educational institution: the warm, dry air is charged with moisture by the addition of a regulated quantity of steam, before it is admitted to the flues. The degree of moisture is carefully regulated in every part of the building by hygrodeiks, and the air is kept at the established "health point," neither too dry nor too moist, and thus an equable summer atmosphere is preserved, which has an important influence upon the health and spirits of the inmates.

The building is lighted by gas, manufactured upon the College premises, and conducted into every room. But as gaslight is not the best for study, German Student Lamps, which are found to give the softest and purest light known, are also furnished in every parlor.

An abundant supply of hot and cold water is provided in every part of the building. In order to prevent the possibility of any impurities from surface water, an Artesian well has been driven, which supplies all the water that is used in the College. There are a large number of bathing-rooms,
distributed at convenient points, in every story, for the use of the inmates.

A steam passenger elevator is provided for the students, and used constantly during the day and evening. It has proved to be so valuable that it is regarded as a necessity, rather than a luxury.

The health of the family is considered as of primary importance. In the construction of the buildings this was constantly in view. Every thing possible has been done to give an abundance of light, sunshine and fresh air to the College Home.

The ventilation is a remarkable success. Indeed, it is generally conceded that there is no public building in the country so well ventilated as Wellesley College. The drainage, natural and artificial, is faultless. The College is situated on a hill upon the shore of a beautiful lake. The ground slopes from the building in every direction, and stagnant water or dampness is impossible. The artificial drainage is most satisfactory. Details cannot be given here. Intelligent parents know that the indispensable requisites for health are pure air and water, sunshine, good ventilation and drainage. They are invited to examine into all these particulars.

A lady physician resides in the College, and gives her personal attention to the supervision of the arrangements connected with the health of the family. She has daily intercourse with the students, and instructs them in the care of their health, and the laws of Hygiene. They are encouraged to consult with her frequently, and are taught how to establish proper habits of attention and systematic care. A nurse always resides in the College, and takes care of the sick, under the physician's direction. No charge is made for medicine, nor for the attendance of the resident physician. A hospitai, which can be shut off from the rest of the building, in case of contagious disease, is provided for those who need any extra care.

The College Grounds are three hundred acres in extent, and give ample opportunities for exercise and recreation. The lake affords a most desirable place for boating in summer, and skating in winter. The exercise of boating is so attractive in itself, and has been found to be so beneficial to the health of the students, that fourteen safe and convenient boats have

been furnished, which they are allowed to use daily. It will be found that everything is done for the health, the comfort and the happiness of the family in the College Home. The village of Wellesley is on the line of the Boston and Albany Railroad, fifteen miles west from Boston.

## LIBRARY AND READING-ROOM.

Among all the means of culture and refinement offered by the College, none are more appreciated by the students than the rare and costly collections of the Library. It contains nearly twenty thousand volumes, and is open at all times for the use of the students. There are five special libraries, viz.: the Botanical Library; the Library of Biology and Zoïlogy; the Chemical Library; the Library of the Physical Department ; and the Gertrude Library for Biblical study. There is also a large Reading-room, supplied with newspapers and periodicals.

More than a hundred of the most valuable literary reviews and magazines, and the best scientific journals of every kind from England, Germany, France and the United States, are subscribed for by the College for the use of teachers and students.

## GYMNASIUM.

There is a large Gymmasium, and the classes are instructed in Calisthenics.

## DOMESTIC DEPARTMENT.

All the regular students board in the College, and aid in some of the lighter domestic work of the family. The importance of this will be appreciated by thoughtful parents. This is not a novel experiment. For many years it has been the custom in other institutions. While it is not intended
to give instruction in the details of domestic work, it is desirable that all should understand, and take a practical part in, systematic housekeeping. The time thus occupied will be one hour daily, and will not interfere with the hours of study. The economy of this course should not be overlooked. It would be easier to hire a much larger number of servants than are now employed, and bear the expense of their wages and board with the accompanying waste ; but it would be necessary in that case to make the price for board and tuition much larger than it now is. This would defeat one great object of the Trustees, which is, to give opportunities for higher education to young women of moderate means. The success of this plan in the College leads the Trustees to believe that the students will cheerfully take their share in the easy and useful domestic work, when they understand that they are thus helping, in part, at least, to educate themselves. The experience of teachers in the well-known institutions in which this course has been pursued, has proved that the discipline of this domestic work, which unites all in one family as helpers for the common good, is invaluable in its influence upon the moral nature, and its preparation for social life.

## STUDENTS’ AID SOCIETY.

There are four scholarships, the income of which is appropriated to help worthy students.

Mrs. Caroline $\Lambda$. Wood has given $\$ 5,000$ to establish a scholarship as a memorial of her deceased husband.
W. O. Grover, Esq., has given $\$ 5,000$, which has been applied by the Trustees to establish the "Grover Scholarship."
D. M. Weston, Esq., has given $\$ 5,000$ to found a scholarship, which has been named the "Weston Scholarship."

A friend of the College has given $\$ 5,000$ to establish another scholarship.

The income of these four scholarships is appropriated yearly to help those who require assistance. But it is wholly insufficient to meet the wants of the numerous applicants for assistance; a hundred scholarships are needed. Colleges for young men are amply supplied. Harvard has more than one hundred scholarships, and Yale has an income of $\$ 6,000$ annually for this purpose.

Girls have not the same opportunity as boys to support themselves while in college, and at least $\$ 6,000$ per year are needed at Wellesley. To meet this most pressing need, a society of ladies has been formed, under the name of "The Students' Aid Society of Wellesley College." They receive contributions of any amount from benevolent persons interested in helping poor girls who desire to obtain an education. There is no charity more useful than to help those who are trying to help themselves. It is hoped that all who are generously disposed will correspond with the Secretary of the Society, and give their much-needed assistance.

More than $\$ 7,000$ have been appropriated by this Society during the present year to assist faithful students. The funds collected are held and controlled by the Society, and all applications for assistance must be made by letter, addressed to the Secretary, Mrs. H. B. Goodwin, 232 Clarendon Street, Boston.

## EXPENSES.

The price of board and tuition, including heating and lights, for students who board in the College, at Dana Hall or Stone Hall, is $\$ 250$ per year.

The price for tuition without board is $\$ 60$ per year.
The extra charges for Music are given on page 4 I .
The extra charges for Drawing, Modeling and Painting are given on page 47 .

Students requiring pecuniary asșistance are referred to Students' Aid Society.

Calendars will be sent when requested.
Persons desiring further information may apply by letter, addressed to

## MISS ADA L. HOWARD, President,

Wellesley, Mass.

## WANTS OF THE COLLEGE.

We ask the attention of all who are interested in the higher education of women, to the immediate needs of the College. It is now established upon such a firm footing that we can, with confidence, appeal to the public for aid. It has been filled with students from its commencement. This year it has received 375 students.

The advanced courses of study, the watchful care of the students' health, the standard of character, refinement and usefulness, are known throughout the country. Many of our students are already doing good work as teachers, and we have had the privilege, every year since the College opened, of sending a missionary from among our students to the foreign field.

We ask all who appreciate the influence of learned and refined women to aid the College by gifts or legacies.

The following donations have been made to the College during the year 1878-9:-

Mrs. Valeria G. Stone has appropriated $\$ 100,000$ to the erection of the building for the Teachers' Department. A gentleman, who does not wish to be named, has given $\$ 20,000$ to found a library of scientific books for the use of the Scientific School. Four friends have given $\$ 5,000$ each to establish scholarships. One of these donors, W. O. Grover, Esq., has also given $\$ 5,000$ for the valuable organ used in the department of Music.

Isaac D. Farnsworth, Esq., has given a large number of valuable statues busts, paintings and models to the Art Gallery. A boarding-house in the village, called Dana Hall, which is valued at $\$ 10,000$, has been given to the College.

These generous gifts, amounting to $\$ 155,000$, are reasons for profound gratitude. But, while they increase the usefulness of the College so greatly, they do not add to its income. If the present low rates of board and tuition are to be maintained, there must be permanent endowments. The bequest of $\$ 25,000$ will endow a professorship, and every such endowment adds to the income of the College.

The College needs large amounts for new buildings. The most pressing want is a laboratory building, as the accommodations of the College are insufficient for the increasing requirements of the scientific departments. An astronomical observatory, properly equipped, is also an immediate necessity.

A large amount is needed for the general College Library, and for new scientific apparatus. The art gallery needs statues, pictures, engravings, models, and other works of art. In addition to these wants general funds are required for keeping the grounds in order, repairing the buildings and replacing the furniture.

All gifts are most faithfully applied, according to the donors' wishes. The College has no debt, and the Trustees confine its expenses to the means which are furnished. Permanent funds are carefully invested by the Finance Committee of the Trustees.

The legal forms of legacies are given on the page following.

## FORMS OF BEQUEST.

I sive and bequeath to the Trustees of Wellesley College the sum of thousand dollars, to be appropriated by the Trustees for the benefit of the College, in such manner as in their discretion they shall think will be most useful.

I give and bequeath to the Trustees of Wellesley College the sum of thousand dollars, to be safely invested by them, and called the -_ Scholurship Fund. The interest of this fund shall be applied to aid deserving students in Wellesley College.

I give and bequeath to the Trustees of Wellesley College the sum of thousand dollars, to be safely invested by them, and called the - - Enndowment Fund. The interest shall be applied to the payment of the salaries of teachers in Wellesley College, as the Trustees shall deem expedient.

$$
\begin{aligned}
& \text { AGENCY FOR SUPPLYNG } \\
& \text { TEACHERS }
\end{aligned}
$$

OF GREEK, LATIN, GERMAN, FRENCH, THE MATHEMATICAL, PHYSICAL, AND NATURAL SCIENCES, ETC.

## Sumerintenumis al Sithats. <br> AND OTHERS,

DESIRIN(; RELIABLE TEACHERS FOR COLLEGES, SEMINARIES, ACADEMIES, HIGH SCHOOLS, ETC.,

Will Receive Information by applying to the Teachers' Registry.
No Charge is made for the Privileges of the Registry.

II IS ESTAPLISHED AS A MEANS OF COMMUNICATION [BETWEEN TEACHERS FIUCATED AT THF COLLEGF, AND THOSE WHO WISH FOR THEIR SERVICES. FLLL AND CONFIDENTIAL'INFORMATION WILI,

PE GIVEN AS TO (QUALIFICATIONS, ATILITY AND CHARACTER SEF PAGE 51 OF CALENDAR.

ALL L.KTTERS SHOULI BE ADDRESSED TO
Teachers' Registry, Wellesley College, Wellesley, Mass.


[^0]:    *The Academic or preparatory department is discontinued. See page 52.

[^1]:    * In 1881 all candidates for admission to the Collegiate Department must be fitted $m$ Greek, excepting those who take the Scientific Course.

