MATHEMATICS.

Prescribed.

Note.—All the subjects in the Academic Department must have been satisfactorily completed before these are begun; and the successful completion of every term's work is a prerequisite for the following term's work.

1-2. Plane and Solid Analytic Geometry.

Text-book: Wentworth, *Analytic Geometry*.

Prescribed in all courses in the Freshman Class for both terms.

Arts: Two recitations per week, counts 2 each term, total 4.

Science: Four recitations per week, counts 4 each term, total 8.

3-4. Differential and Integral Calculus.

Text-book: Osborne, *Differential and Integral Calculus*.

Prescribed in all courses in the Sophomore Class except in Science II.

Arts I. and II.: Two recitations per week for one term, counts 2.

Arts III.: Two recitations per week for two terms, counts two each term, total 4.

Science I. and III.: Four recitations per week for two terms, counts 4 each term, total 8.

Elective.

Note.—All prescribed work must be satisfactorily completed before any elective may be taken.

3-4. Elective in Arts I., II., III., and in Science II., in the Junior and Senior Classes.

Three recitations per week for two terms, counts 3 each term, total 6.

MATHEMATICS.

Note.—All the subjects in the Academic Department must have been satisfactorily completed before these are begun; and the successful completion of every term's work is a prerequisite for the following term's work. All prescribed work must be satisfactorily completed before any elective may be taken.

1-2. Plane and Solid Analytic Geometry. Text-book: Wentworth, *Analytic Geometry.*

Prescribed:
{ Arts Fresh.; two terms, two hours a week, counts 4.
{ Science, Fresh.; two terms, four hours a week, counts 8.

3-4. Differential and Integral Calculus. Text-book: Osborne, *Differential and Integral Calculus.*

Prescribed:
{ Arts I., II., Soph.; one term, two hours a week, counts 2.
{ Arts III., Soph.; two terms, two hours a week, counts 4.
{ Science I., III., Soph.; two terms, four hours a week, counts 8.

Elective:
{ Arts I., II., III., Jr. and Sr., } two terms, three hours
{ Science II., Jr. and Sr., } a week, counts 6.

5. Arithmetic. Text-books: Tannery, *Leçons d' Arithmetique;* Fine, *College Algebra.* Requires a reading knowledge of French.

Elective:
{ Arts, Jr. and Sr., } Fall term, two hours a week, counts 2.
{ Science, Jr. and Sr., }

6. History of Mathematics. Lectures: A reading knowledge of French and German is desirable.

Elective:
{ Arts, Jr. and Sr., } Spring term, two hours a week, counts 2.
{ Science, Jr. and Sr., }

7-8. Advanced Differential and Integral Calculus. Text-books: Williamson, *Differential Calculus* and *Integral Calculus.* Prerequisite: **3-4**, as given in Science I., or its equivalent.

Elective:
{ Sci. I., III., Junior, } two terms, three hours a week, counts 6.
{ Arts and Sci., Sr., }

very strongly manip. but not vector calc.

9. Ordinary Differential Equations. Text-book: Murray, *Differential Equations.*

Prerequisite: **3-4**, as given in Science I., or its equivalent.

Elective:
{ Sci. I., III., Junior, } one term, three hours a week, counts 3.
{ Arts and Sci., Sr., }

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10. Vector Analysis. Text-book: Gibbs, *Vector Analysis.*

Prerequisite: **3-4,** as given in Science I., or its equivalent.

Elective: $\left\{\begin{array}{l}\text{Sci. I., III., Junior,} \\ \text{Arts and Sci., Sr.,}\end{array}\right\}$ one term, three hours a week, counts 3.

11. Differential Geometry. Text-book: Kommerell and Kommerell, *Theorie der Raumkurven und Flachen.*

Prerequisite **9** and a reading knowledge of German.
Elective: Sci. I., III., Senior; Fall term, three hours a week, counts 3.

12. Partial Differential Equations. Text-books: Murray, *Differential Equations;* Byerley, Fourier's *Series and Spherical Harmonics.*

Prerequisite **9** and **11.**
Elective: Sci. I., III., Senior; Spring term, three hours a week, counts 3.

13. Theory of Functions. Text-book: Harkness and Morley, *Theory of Functions.*

Prerequisite: **3-4,** as given in Science I., or its equivalent.

Elective: $\left\{\begin{array}{l}\text{Sci. I., III., Junior,} \\ \text{Arts and Sci., Sr.,}\end{array}\right\}$ one term, three hours a week, counts 3.

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