

City College Bulletin 1915-1919

MATHEMATICS.

* Starred courses are offered in the Evening Session also.

*20. SOLID GEOMETRY.

Text-book: Durell, *Plane and Solid Geometry*.

One term, three hours a week; counts 3.

*21. TRIGONOMETRY.

Text-book: Crawley, *Short Course in Trigonometry*.

One term, three hours a week; counts 3.

*22. ADVANCED ALGEBRA.

Text-book: Hawkes, *Advanced Algebra*.

Prescribed for:

{	Science students who do not present Advanced Algebra for entrance.
	Arts students who do not present Advanced Algebra for entrance, unless Mathematics 3a is elected.

One term, three hours a week; counts 3.

3a. ANALYTIC GEOMETRY (Outline).

Text-book: Wentworth, *Analytic Geometry*.

Prerequisite: Entrance Trigonometry or Mathematics 21.

Elective for students in Arts.

One term, three hours a week; counts 3.

4a. DIFFERENTIAL AND INTEGRAL CALCULUS (Outline).

Text-books: Fisher, *Infinitesimal Calculus*, Osborne, *Differential and Integral Calculus*.

Prerequisite: Mathematics 3a. Elective for students in Arts.

One term, three hours a week, counts 3.

*1. ANALYTIC GEOMETRY AND CALCULUS.

Text-books: Wentworth, *Analytic Geometry*, Osgood, *A First Course in the Differential and Integral Calculus*.

Prerequisites: Entrance Trigonometry or Mathematics 21, and Entrance Advanced Algebra or Mathematics 22.

Prescribed for students in Science, elective for students in Arts.

One term, five hours a week; counts 5.

*2. CALCULUS.

Text-book: Osgood, *A First Course in the Differential and Integral Calculus*, or Osborne, *Differential and Integral Calculus*.

Prerequisite: Mathematics 1.

Prescribed for students in Science, elective for students in Arts.

One term, five hours a week; counts 5.

5. ARITHMETIC.

Professor Saurel

Text-books: Tannery, *Leçons d'Arithmétique*; Fine, *College Algebra*.

Prerequisites: Mathematics 2 or 4a, and a good reading knowledge of French.

Fall term, two hours a week; counts 2.

[Not offered in 1916-1917]

T 6. HISTORY OF MATHEMATICS.

Professor Allen

Prerequisite: Mathematics 2 or 4a.

Spring term, two hours a week; counts 2.

7. ADVANCED DIFFERENTIAL CALCULUS.

Professor Reynolds

Text-book: Williamson, *Differential Calculus*.

Prerequisite: Mathematics 2.

Fall term, three hours a week; counts 3.

8. ADVANCED INTEGRAL CALCULUS.

Professor Reynolds

Text-book: Williamson, *Integral Calculus*.

Prerequisite: Mathematics 2.

Spring term, three hours a week, counts 3.

9. ORDINARY DIFFERENTIAL EQUATIONS

Professor Saurel

Professor Reynolds

Text-book: Murray, *Differential Equations*.

Prerequisite: Mathematics 2.

One term, three hours a week; counts 3.

10. VECTOR ANALYSIS.

Professor Reynolds

Professor Saurel

Text-book: Gibbs, *Vector Analysis*.

Prerequisite: Mathematics 2.

One term, three hours a week; counts 3.

11. DIFFERENTIAL GEOMETRY.

Professor Saurel

Text-book: Kommerell and Kommerell, *Theorie der Raumkurven und Flächen*.

Prerequisites: Mathematics 9 and a reading knowledge of German.

Fall term, three hours a week; counts 3.

12. PARTIAL DIFFERENTIAL EQUATIONS. *Professor Saurel.*
Text-books: Johnson, *Differential Equations*; Byerly, *Fourier's Series and Spherical Harmonics*.
Prerequisites: Mathematics 9 and 11.
Spring term, three hours a week; counts 3.
[Not offered in 1916-1917]
13. MATHEMATICAL THEORY OF INVESTMENT. *Professor Reynolds.*
Text-book: Skinner, *The Mathematical Theory of Investment*.
Prerequisite: The Completion of the Prescribed Mathematics.
Fall term, two hours a week; counts 2.
14. THEORY OF PROBABILITY. *Professor Saurel.*
Prerequisite: Mathematics 2 or 4a.
Spring term, three hours a week; counts 3.