

The Math department separated the required Math sequence into one 4-credit course and two 2-credit courses. 1501 and 1502 were replaced by this new sequence.

### AP CREDIT AWARDED

College Board Calculus AB	Score of 4 or 5	MATH 1551
College Board Calculus BC	Score of 4 or 5	MATH 1551 and 1552
IB Standard or Higher Mathematics	Score of 5+	MATH 1551

### TRANSFER CREDIT EQUIVALENCY

MATH 1X51 $\approx$ MATH 1551	MATH 2X51 $\approx$ MATH 2551
MATH 1X52 $\approx$ MATH 1552	MATH 2X52 $\approx$ MATH 2552
MATH 1X53 $\approx$ MATH 1553	MATH 26X3 $\approx$ MATH 2603

### CORE REQUIREMENTS FOR MATH

**AREA 2:** MATH 1552 OR MATH 1712

**AREA D:** (1551 and 1553) or (1550 and 1553) or 1711

### SEQUENCE OPTIONS\*

1. MATH 1711 **and** MATH 1712 [8 CREDIT HOURS]
2. MATH 1551 + MATH 1553 **and** MATH 1712 [8 CREDIT HOURS]
3. MATH 1551 + 1553 **and** MATH 1552 [8 CREDIT HOURS]
4. MATH 1550 (**SUMMER FRESHMEN ONLY**) + MATH 1553 **and** MATH 1712 [9 CREDIT HOURS]
5. MATH 1550 (**SUMMER FRESHMEN ONLY**) + MATH 1553 **and** MATH 1552 [9 CREDIT HOURS]

\* It is not recommended that students take more than one math course per semester. MATH 1711 can only be combined with MATH 1712 to form a sequence.

### COURSE DESCRIPTIONS

**MATH 1550 INTRODUCTION TO DIFFERENTIAL CALCULUS** - Differential calculus including applications and the underlying theory of limits for functions and sequences. Covers material from MATH 1551 plus some precalculus. **Only offered for summer freshmen.** Credit not awarded for both MATH 1550 and MATH 1501, MATH 1503, or MATH 1551. **THREE CREDIT HOURS.**

**MATH 1551 DIFFERENTIAL CALCULUS** - Differential calculus including applications and the underlying theory of limits for functions and sequences. Replaces first half of MATH 1501. Credit not awarded for both MATH 1551 and MATH 1501, MATH 1503 or MATH 1550. **TWO CREDIT HOURS.**

**MATH 1552 INTEGRAL CALCULUS** - Definite and indefinite integrals, techniques of integration, improper integrals, infinite series, applications. Replaces the last half of MATH 1501 and first third of MATH 1502. Credit not awarded for both MATH 1552 and MATH 1502, MATH 1504, MATH 1512 or MATH 1555. MATH 1550/1551 must be taken prior to this course. **FOUR CREDIT HOURS.**

**MATH 1553 INTRO TO LINEAR ALGEBRA** - An introduction to linear algebra including eigenvalues and eigenvectors, applications to linear systems, least squares. Replaces the last two-thirds of MATH 1502. Credit not awarded for both MATH 1553 and MATH 1522, MATH 1502, MATH 1504, MATH 1512, MATH 1554 or MATH 1564. **TWO CREDIT HOURS.**

**MATH 1554 LINEAR ALGEBRA** - Linear algebra eigenvalues, eigenvectors, applications to linear systems, least squares, diagonalization, quadratic forms. Similar to MATH 1553 with more material. **FOUR CREDIT HOURS.**

**MATH 1711 FINITE MATHEMATICS** - Linear equations, matrices, linear programming, sets and counting, probability and statistics. **FOUR CREDIT HOURS.**

**MATH 1712 SURVEY OF CALCULUS** - Techniques of differentiation, integration, application of integration to probability and statistics, multidimensional calculus. **FOUR CREDIT HOURS.**