Mathematics (MATH)

MATH 1A Calculus 4 Units
Department: Mathematics
Course level: Undergraduate
Terms course may be offered: Fall, spring and summer
Grading: Letter grade.
Hours and format: 3 hours of lecture and 2 hours of discussion/
workshop per week; at the discretion of the instructor, an additional hour
of discussion/workshop or computer laboratory per week.
Prerequisites: Three and one-half years of high school math, including
trigonometry and analytic geometry, plus a satisfactory grade in one of the
following: CEEB MAT test, an AP test, the UC/CSU math diagnostic test,
or 32. Consult the mathematics department for details. Students with AP
credit should consider choosing a course more advanced than 1A.
This sequence is intended for majors in engineering and the physical
sciences. An introduction to differential and integral calculus of functions
of one variable, with applications and an introduction to transcendental
functions.
Students will receive no credit for 1A after taking 16B and 2 units after
taking 16A.

MATH 1B Calculus 4 Units
Department: Mathematics
Course level: Undergraduate
Terms course may be offered: Fall, spring and summer
Grading: Letter grade.
Hours and format: 3 hours of lecture and 2 hours of discussion/
workshop per week; at the discretion of the instructor, an additional hour
of discussion/workshop or computer laboratory per week.
Prerequisites: 1A.
Continuation of 1A. Techniques of integration; applications of integration.
Infinite sequences and series. First-order ordinary differential equations.
Second-order ordinary differential equations; oscillation and damping;
series solutions of ordinary differential equations.
Students will receive 2 units of credit for 1B after taking 16B.

MATH H1B Honors Calculus 4 Units
Department: Mathematics
Course level: Undergraduate
Term course may be offered: Fall
Grading: Letter grade.
Hours and format: 3 hours of lecture and 2 hours of discussion/
workshop per week; at the discretion of the instructor, an additional hour
of discussion/workshop or computer laboratory per week.
Prerequisites: 1A.
Honors version of 1B. Continuation of 1A. Techniques of integration;
applications of integration. Infinite sequences and series. First-order
ordinary differential equations. Second-order ordinary differential
equations; oscillation and damping; series solutions of ordinary differential
equations.
Students will receive 2 units of credit for H1B after taking 16B.

**MATH 10A Methods of Mathematics: Calculus, Statistics, and
Combinatorics 4 Units**
Department: Mathematics
Course level: Undergraduate
Terms course may be offered: Fall, spring and summer
Grading: Letter grade.
Hours and format: 3 hours of Lecture and 3 hours of Discussion per
week for 15 weeks. 5 hours of Lecture and 5 hours of Discussion per
week for 8 weeks.
Prerequisites: Three and one-half years of high school math, including
trigonometry and analytic geometry.
This sequence is intended for majors in the life sciences. Introduction