943 • NEGOTIATING THE COLLEGE WEB AND TECHNOLOGY ENVIRONMENT (NON-ASSOCIATE DEGREE COURSE)  3.0 units
Total Lecture: 54 hours
This class is designed to introduce students with perceptual, physical, communication, or learning challenges to concepts and terminology relevant to navigating the course management system and using assistive technology suited to their specific challenges. Students successfully completing the objectives of this course will possess basic skills necessary for negotiating the college course management system, and obtain functional knowledge of keyboarding and assistive technology options. Pass/No Pass Option.

950 • ASSISTIVE TECHNOLOGY LAB (NON-ASSOCIATE DEGREE COURSE)  1.0 unit
Total Lab: 54 hours
The course is designed to give students with varied physical abilities and challenges an opportunity to practice basic skills and strategy techniques presented in special or mainstream classes. Emphasis will be on using assistive technology, software programs in the areas of reading, spelling, writing, mathematics and cognitive memory to overcome or compensate for the students’ areas of weakness. Pass/No Pass Option.

LIBRARY SKILLS (LIB)

010 • INFORMATION COMPETENCY  1.0 unit
Total Lecture: 18 hours
Advisory: CA 070A, READ 961 or Qualifying score for READ 054 on the Reading Assessment Test. Acceptable for credit: California State University; University of California
This course covers the basic elements of information competency by introducing students to the nature of research and the role of the library in research, including finding, analyzing, organizing, and presenting information and the legal and ethical aspects of research. Students are introduced to a variety of information resources including print, media, electronic formats and the World Wide Web. Students cannot get credit for both LIB 010 and LIB 010H. Enrollment in the Honors Transfer Project is required. This course may be offered via distance learning. Pass/No Pass Option.

010H • INFORMATION COMPETENCY – HONORS  1.0 Unit
Total Lecture: 18 hours
This course covers the basic elements of information competency by introducing students to the nature of research and the role of the library in research, including finding, analyzing, organizing, and presenting information and the legal and ethical aspects of research. Students are introduced to a variety of information resources including print, media, electronic formats and the World Wide Web. Students cannot get credit for both LIB 010 and LIB 010H. Enrollment in the Honors Transfer Project is required. This course may be offered via distance learning. Pass/No Pass Option.

MATHEMATICS (MATH)

000C • INTERMEDIATE ALGEBRA  5.0 units
Total Lecture: 90 hours
Advisory: Eligibility for ENGL 001A and READ 054, MATH 000B
Prerequisite: MATH 903 or MATH 903M or successful placement into the course based on the Mission College Mathematics Placement Exam.
The student studies and demonstrates knowledge of complex fractions, rational equations, quadratic equations, rational exponents and radicals, complex numbers, functions and relations, exponential and logarithmic functions, conic sections, linear systems and inequalities, sequences and series, and applied problems. This course may also be offered via distance learning. Pass/No Pass Option.

000CG • MATHEMATICS FOR THE ASSOCIATE DEGREE STUDENT  3.0 units
Total Lecture: 54 hours
Advisory: Eligibility for ENGL 001A and READ 054
Prerequisite: MATH 903 or MATH 903M or successful placement into the course based on the Mission College Mathematics Placement Exam.
This course is designed to satisfy the graduation competency requirement in mathematics for the associate degree. The student studies a wide range of mathematical thinking that may include mathematical history, mathematics in different cultures and how to communicate mathematics to others. Topics may include a variety of techniques in critical thinking, problem solving and practical applications, using mathematics at the intermediate algebra level. This course does not substitute for the Math C Prerequisite: requirement for transfer level math courses. Pass/No Pass Option.

000CM • INTERMEDIATE ALGEBRA (MAPS)  5.0 units
Total Lecture: 90 hours
Advisory: MATH 000B, Eligibility for ENGL 001A and READ 054
Prerequisite: MATH 903M or MATH 903 or successful placement into the course based on the Mission College Mathematics Placement Exam and an interview with the MAPS counselor.
Corequisite: MATH 000CMX
The students study and demonstrate knowledge of complex fractions, rational equations, quadratic equations, rational exponents and radicals, complex numbers, functions and relations, exponential and logarithmic functions, conic sections, linear systems and inequalities, sequences and series, and applied problems. MATH 000CM is the second course in the MAPS Algebra sequence that will prepare students to meet the math requirement for the associate degree. The MAPS program is designed for...
BEFORE ENROLLING IN DEGREE APPLICABLE COURSES, IT IS RECOMMENDED THAT YOU COMPLETE ENGL 001A AND READ 054.

MATH 900

Math Achievement Pathway to Success (MAPS)

Join an existing learning community for success. Enroll in Math 903M/903MX in Fall and CM/CMX in Spring on Monday through Thursday. The MAPS program offers students a team approach to success in elementary and intermediate algebra. This program is designed for students who had difficulty in their math course in the past.

What are the benefits?

• 3 additional hours per week,
• course textbook/supplementary texts included,
• working in groups and being part of a class with a clear goal of being successful in mathematics,
• gain confidence in your math ability.
the student who has had difficulty in mathematics. Extended classroom hours in this sequence allow students to participate in various conceptual activities to build a stronger foundation in the fundamental concepts. Special attention is paid to presenting the material in various modalities to meet the needs of the students. Pass/No Pass Option.

000CMX • INTERMEDIATE ALGEBRA (MAPS) 3.0 units
Total Lecture: 54 hours
Advisory: Eligibility for ENGL 001A and READ 054
Prerequisite: MATH 903 and/or MATH 903M or satisfactory score on an appropriate Mathematics Placement Test.
Corequisite: MATH 000CM
This is a lecture course that is a co-requisite for MATH 000CM. This course provides students with additional lecture time, and consequently additional required homework assignments, in order for them to fully engage and succeed in the enhanced and innovative learning strategies and activities used by the MAPS program. Pass/No Pass Option.

000D • TRIGONOMETRY 3.0 units
Total Lecture: 54 hours
Advisory: MATH 000B
Prerequisite: MATH 000C or MATH 000CM or successful placement into the course based on the Mission College Mathematics Placement Exam.
Acceptable for credit: California State University
Students will study and demonstrate knowledge and understanding of trigonometric functions including applications to triangles, circular functions, radian measure, graphs, polar coordinates, trigonometric identities, inverse trigonometric functions, vectors, and complex numbers. Pass/No Pass Option.

000G • MATHEMATICS FOR THE LIBERAL ARTS STUDENT 4.0 units
Total Lecture: 72 hours
Advisory: MATH 000B, Eligibility for ENGL 001A and READ 054
Prerequisite: MATH 000CM or MATH 000C
Acceptable for credit: University of California, California State University
This course fulfills the graduation competency requirement for Associate degree and the general education requirement in mathematics for CSU system. It introduces the student to creative mathematical thinking using fascinating examples, topics and problem solving. Range of topics may include applications of set theory, functions and graphs, linear programming, infinity, different geometries and topology, symmetry, calculus, logic, probability and statistics, history of math and math in other cultures. There is an emphasis on general problem solving techniques and how to communicate mathematics. It is intended to provide a sample of current mathematical techniques for the non-specialist. Pass/No Pass Option.

MATH 001 • COLLEGE ALGEBRA 4.0 units
Total Lecture: 72 hours
Prerequisite: MATH 000C or satisfactory score on an appropriate Mathematics Placement Exam or MATH 000CM.
Acceptable for credit: University of California, California State University
This is a college-level course in preparation for the Calculus sequence. Its contents include real and complex number systems, polynomials, algebraic fractions, exponents and radicals, linear and quadratic equations, simultaneous equations, inequalities, functions, theory of equations, exponential and logarithmic equations, sequence and series, induction and the binomial theorem. This course may be offered via distance learning. Pass/No Pass Option.

002 • PRECALCULUS AND TRIGONOMETRY 6.0 units
Total Lecture: 108 hours
Advisory: MATH 000B
Prerequisite: MATH 000C or MATH 000CM or Satisfactory score on an appropriate Mathematics Placement Exam.
Acceptable for credit: University of California (4 units only), California State University.
NOTE: UC credit may be limited. See a counselor.
This is an intensive course covering those topics traditionally found in the separate courses of college algebra (MATH 001) and trigonometry (MATH 002). This course is designed for the highly motivated and very well prepared student who desires to fulfill the requirements of MATH 000D and MATH 001 in one semester. It prepares the student for the Calculus 003A/B sequence. Pass/No Pass Option

003A • ANALYTIC GEOMETRY AND CALCULUS I 5.0 units
Total Lecture: 90 hours
Prerequisite MATH 002 or placement into the course by the Mission College Mathematics Placement Exam or MATH 000D or higher or satisfactory score on an appropriate Mathematics Placement Exam and MATH 001 or placement into the course by the Mission College Mathematics Placement Exam. This is the first part of the three-semester calculus sequence for math, physics and engineering majors. Course topics include functions, limits, continuity, differentiation and integration, maxima, minima, and other applications, and the relationship between calculus and analytic geometry for polynomial and transcendental functions. This course may also be offered via distance learning. Pass/No Pass Option.

003AH • ANALYTIC GEOMETRY AND CALCULUS I – HONORS 5.0 units
Total Lecture: 90 hours
Prerequisite MATH 002 or placement into the course by the Mission College Mathematics Placement Exam or MATH 000D or higher or satisfactory score on an appropriate Mathematics Placement Exam and MATH 001 or placement into the course by the Mission College Mathematics Placement Exam. This is the honors version of the Calculus I course and is the first part of the three-semester calculus sequence for math, physics and engineering majors. Course topics include functions, limits, continuity, differentiation and integration, maxima, minima, and other applications, and the relationship between calculus and analytic geometry for polynomial and transcendental functions. Students may not receive credit for both MATH 003A and MATH 003AH. Enrollment in the Honors Transfer Project is required. Grade only.

003B • ANALYTIC GEOMETRY AND CALCULUS II 5.0 units
Total Lecture: 90 hours
Prerequisite MATH 003A or MATH 003AH
Acceptable for credit: University of California, California State University
This course is the second part of the three-semester calculus sequence for math, physics and engineering majors. Students study and demonstrate knowledge and understanding of infinite series, parametric equations, conic sections, polar coordinates, integration techniques including inverse trigonometric and hyperbolic functions, and applications to area, volume and work. This course may also be offered via distance learning. Pass/No Pass Option.
### MATHEMATICS

**BEFORE ENROLLING IN DEGREE APPLICABLE COURSES, IT IS RECOMMENDED THAT YOU COMPLETE ENGL 001A AND READ 054.**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>004A</td>
<td>MULTIVARIABLE CALCULUS</td>
<td>4.0</td>
<td>This course is the third part of the three semester calculus sequence for math, physics and engineering majors. Students study and demonstrate knowledge and understanding of vectors in two and three dimensional space, vector-valued functions, calculus of functions for several variables, differentials, gradients, Lagrange Multipliers, multiple integrals, line integrals, and an introduction to Green's Theorem, Divergence Theorem, and Stokes' Theorem. Pass/No Pass Option.</td>
</tr>
<tr>
<td>004B</td>
<td>DIFFERENTIAL EQUATIONS</td>
<td>4.0</td>
<td>The student studies and demonstrates knowledge and understanding of ordinary differential equations, with emphasis on linear equations, and partial differential equations. Many standard methods are examined including Laplace Transforms, Fourier Series, power series and numerical solutions. Emphasis is placed on applications. Pass/No Pass Option.</td>
</tr>
<tr>
<td>004C</td>
<td>LINEAR ALGEBRA</td>
<td>4.0</td>
<td>The student studies and demonstrates knowledge and understanding of basic linear algebra and its applications. Topics include systems of linear equations and Gaussian elimination, determinants, matrices, vector spaces, transformations, eigenvalues and eigenvectors. Pass/No Pass Option.</td>
</tr>
<tr>
<td>005</td>
<td>INTRODUCTION TO MATLAB</td>
<td>2.0</td>
<td>MATLAB is widely used in many areas of mathematics, science and engineering. This course provides students with an introduction to using the software package MATLAB. Topics include programming, two- and three-dimensional graphing, data import and export, curve fitting, recursion and applications to calculus. Pass/No Pass Option.</td>
</tr>
<tr>
<td>008</td>
<td>FINITE MATHEMATICS</td>
<td>3.0</td>
<td>Course topics include linear equations, matrix systems of equations and inequalities, linear programming, set theory and mathematics of finance. Probability and statistics are introduced. Particular emphasis is placed on applications. This course may also be offered via distance learning. Pass/No Pass Option.</td>
</tr>
<tr>
<td>009</td>
<td>INTEGRATED STATISTICS II</td>
<td>5.0</td>
<td>This is the second of two courses in the Statway sequence. Students study and demonstrate concepts and methods of statistics with an emphasis on data analysis. Topics include methods for collecting data, descriptive statistics, correlation and simple linear regression, basic concepts of probability, confidence intervals and hypothesis tests, chi-square tests, and ANOVA. Particular emphasis is placed on applications. Current statistical technology packages are used. This sequence is recommended for students with majors that require no mathematics beyond freshman-level statistics. Successful completion of both Math 009 and Math 009 is required to satisfy CSU and UC transferability. Pass/No Pass Option.</td>
</tr>
<tr>
<td>010</td>
<td>ELEMENTARY STATISTICS</td>
<td>4.0</td>
<td>Students study and demonstrate knowledge and understanding of descriptive and inferential statistics including data analysis, correlation and linear regression, probability, probability distributions and assorted hypothesis testing. Particular emphasis is placed on applications. Current statistical computer packages are used. This course may also be offered via distance learning. Pass/No Pass Option.</td>
</tr>
<tr>
<td>010H</td>
<td>ELEMENTARY STATISTICS – HONORS</td>
<td>4.0</td>
<td>This is the honors version of the Elementary Statistics course. The course provides students with a comprehensive introduction to statistical methods and research. Topics include descriptive and inferential statistics, correlation and linear regression, probability, probability distributions and assorted hypothesis testing. Particular emphasis is placed on applications and data analysis. Current statistical computer packages are used. Students may not receive credit for both MATH 010 and MATH 010H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option.</td>
</tr>
<tr>
<td>012</td>
<td>CALCULUS FOR BUSINESS AND SOCIAL SCIENCES</td>
<td>4.0</td>
<td>Course topics include the intuitive concept of a limit, and simple techniques of differential and integral calculus and their most common applications in business, social science and biology. This course is suitable for business, biology, or social science majors. This course is not equivalent to MATH 003A. Pass/No Pass Option.</td>
</tr>
</tbody>
</table>
This course may also be offered via distance learning. Pass/No Pass Option.

081H • HONORS SEMINAR IN MATHEMATICS  1.0 unit
Total Lecture: 18 hours
Advisory: Eligibility for ENGL 001A and READ 054
Prerequisite: MATH 000C
Acceptable for credit: California State University, University of California
This course is an honors course involving discussion and analysis of various topics in mathematics. It introduces the student to creative mathematical thinking using fascinating examples, topics, and problem-solving. The range of topics may include: applications of set theory, functions and graphs, linear programming, infinity, different geometries and topology, symmetry, calculus, logic, probability and statistics, the history of math, and math in other cultures. There is an emphasis on in-depth understanding of mathematical theorems, general problem-solving techniques, and how to communicate mathematics. The course includes presentations by students. Pass/No Pass Option.

900 • ARITHMETIC FUNCTIONS  3.0 units
(NON-ASSOCIATE DEGREE COURSE)
Total Lecture: 54 hours
This is a course in basic computational skills and is a Prerequisite: for all other math courses. The course includes review and practice in fundamental arithmetic skills including whole numbers, fractions and decimals, ratio, proportion and percent, simple equations, problem analysis, and practical applications. This course provides a good background for students who wish to take pre-algebra. This course may be offered via distance learning. Pass/No Pass Option.

902 • PRE-ALGEBRA  4.0 units
(NON-ASSOCIATE DEGREE COURSE)
Total Lecture: 72 hours
Advisory: MATH 901
Prerequisite: MATH 900 or successful placement into the course based on the Mission College Mathematics Placement Exam.
This course is designed for students who have a solid foundation in arithmetic skills but need to develop those skills further before taking Elementary Algebra. This course is intended to serve as a bridge between arithmetic functions and elementary algebra. Topics include a review and practice in fundamental arithmetic operations involving integers, fractions, decimals and percents, some basic operations involving polynomials, solving and graphing linear equations, and some practical applications. This course may also be offered via distance learning. Pass/No Pass Option.