MAC: Math: Calc/Pre-Calc

Courses Credit(s) Contact Lab
MAC 1105. College Algebra
College Algebra Prerequisite: Minimum grade of C in MAT 1033C or an appropriate score on an approved assessment. Course based on the study of functions and their role in problem solving. Topics include graphing, the linear, quadratic, and exponential families of functions, and inverse functions. Students will be required to solve applied problems and communicate their findings effectively. Technology tools will be utilized in addition to analytical methods. Gordon Rule course. Minimum grade of C required if MAC 1105 is used to satisfy Gordon Rule and general education requirements.
MAC 1105H. College Algebra - Honors
College Algebra - Honors Prerequisite: Minimum grade of C in MAT 1033C or an appropriate score on an approved assessment. Course based on the study of functions and their role in problem solving. Topics include graphing, the linear, quadratic, and exponential families of functions, and inverse functions. In addition, course content will satisfy one honors program learning outcome. Students will be required to solve applied problems and communicate their findings effectively. Technology tools will be utilized in addition to analytical methods. Gordon Rule course. Minimum grade of C required if MAC 1105H is used to satisfy Gordon Rule.
MAC 1114. College Trigonometry
College Trigonometry Prerequisite: Minimum grade of C in MAC 1105 or an appropriate score on an approved assessment. Topics include a symbolical, graphical and numerical analysis of trigonometric functions; solutions of plane triangles and vectors. Applications emphasizing connections with other disciplines and with the real world will be included. Technology tools will be utilized in addition to analytical methods. Gordon Rule course. Minimum grade of C required if MAC 1114 is used to satisfy Gordon Rule and general education requirements.
MAC 1140. Precalculus Algebra
Precalculus Algebra Prerequisite: Minimum grade of C in MAC 1105 or an appropriate score on an approved assessment. Algebra preparation for the calculus sequence. Topics include a symbolical, graphical, and numerical analysis of polynomials, exponential, logarithmic, power, and rational functions; matrices, sequences, induction, binomial theorem and conic sections. Applications emphasizing connections with other disciplines and with the real world will be included. Technology tools will be utilized in addition to analytical methods. Gordon Rule course. Minimum grade of C required if MAC 1140 is used to satisfy Gordon Rule and general education requirements.
MAC 2233. Calculus for Business and Social Science
Calculus for Business and Social Science Prerequisite: Minimum grade of C in MAC 1105 or an appropriate score on an approved assessment. Introduction to calculus with applications to business and social science. Topics include differentiation and integration of algebraic, exponential and logarithmic functions, rates of change, curve sketching, and applications of the derivative and integration. Gordon Rule course. Minimum grade of C required if MAC 2233 is used to satisfy Gordon Rule and general education requirements.
MAC 2233H. Calculus for Business and Social Science
Calculus for Business and Social Science Prerequisite: Minimum grade of C in MAC 1105 or an appropriate score on an approved assessment. Introduction to calculus with applications to business and social science. Topics include differentiation and integration of algebraic, exponential and logarithmic functions, rates of change, curve sketching, and applications of the derivative and integration. Gordon Rule course. Minimum grade of C required if MAC 2233 is used to satisfy Gordon Rule and General Education requirements.
MAC 2311. Calculus with Analytic Geometry I
Calculus with Analytic Geometry I Prerequisite: Minimum grade of C in MAC 1140 and MAC 1114 or MAC 1147. Topics include limits and continuity, derivatives of algebraic, trigonometric, and transcendental functions, applications of derivatives, definite and indefinite integral. Gordon Rule course. Minimum grade of C required if MAC 2311 is used to satisfy the Gordon Rule and general education requirements.
MAC 2311H. Calculus with Analytic Geometry I - Honors
Calculus with Analytic Geometry I - Honors Prerequisites: Minimum grades of C in (MAC 1140 and MAC 1114) or MAC 1147, or an appropriate score on an approved assessment. Same as MAC 2311 with honors content. Honors program permission required.
MAC 2312. Calculus with Analytic Geometry II
Calculus with Analytic Geometry II Prerequisite: Minimum grade of C in MAC 2311 Topics include differentiation and integration, techniques of integration, conic sections, and infinite series. Gordon Rule course. Minimum grade of C required if MAC 2312 is used to satisfy Gordon Rule and general education requirements.
MAC 2312H. Calculus with Analytic Geometry II - Honors
Calculus with Analytic Geometry II - Honors Prerequisite: Minimum grade of C in MAC 2311 Topics include differentiation and integration, techniques of integration, conic sections, and infinite series. Gordon Rule course. Minimum grade of C required if MAC 2312 is used to satisfy Gordon Rule and general education requirements.
MAC 2313. Calculus with Analytical Geometry III
Calculus with Analytical Geometry III Prerequisite: Minimum grade of C in MAC 2312. Topics include polar coordinates, vectors, three dimensional analytic geometry, parametric equations, partial derivatives, multiple integration.