BUSINESS MANAGEMENT (BMGT, BUSG, BUSI, HRPO, MRKG)

BUSI 2305. (T)

Business Statistics  (3-3-0)

Descriptive and inferential statistical techniques for business and economic decision-making. Topics include the collection, description, analysis, and summarization of data; probability; discrete and continuous random variables; the binomial and normal distributions; sampling distributions; tests of hypotheses; estimation and confidence intervals; linear regression; and correlation analysis. Statistical software is used to analyze data throughout the course. Prerequisites: MATH 1324 or MATH 1314 & BCIS 1305. Inclusive Access Fee: $95. Sp (5213025104)

CORROSION TECHNOLOGY (ELPT, METL, NDTE)

TECM 1343. (NT)

Technical Algebra and Trigonometry (3-3-0)

Algebraic and trigonometric applications used in technical/industrial settings. 27.0301 (Applied Mathematics, General). Note: This class is for Corrosion and Process Technology Majors only. Also, this class is not transferrable. Inclusive Access Fee: $66. (27.0301)  F, Sp, Su Note: Students who are not TSI Complete in Mathematics must concurrently enroll into specified section of NCBM 0143.

MATHEMATICS (MATH, NCBM)

Note: Students must earn a grade of "C" or better in a mathematics course in order to continue in any mathematics sequence.

MATH 0300. (NT)

Developmental Mathematics.  (3-3-1)

Institutional credit only. The course supports students in developing skills, strategies, and reasoning needed to succeed in mathematics, including communication and appropriate use of technology. Topics include the study of numeracy and the real number system; algebraic concepts, notation, and reasoning; quantitative relationships; mathematical models; and problem solving. One hour of lab time with the instructor will be scheduled each week in the Math Learning Center. This class is for students whose TSI Scores are 310 – 335 AND have an ABE Diagnostic of 3 or 4. Course fee $50; Inclusive Access Fee: $66. F, Sp, Su (3201045119). Note: Once a student completes MATH 0300 with a C or better, they are eligible to take the appropriate college level course along with the designated co-requisite support course.
MATH 0314. (NT)

College Algebra Support Course. (3-3-0)

Institutional Credit Only. This course is designed to strengthen mathematical skills and concepts included in MATH 1314. It serves as a co-requisite to MATH 1314 for students who are not TSI-complete in mathematics. Prerequisite: TSI score of 336 - 349 or TSI score of 310 – 335 AND an ABE Diagnostic of 5 or 6. Also, students must enroll concurrently into specified MATH 1314 section. F, Sp, Su (3201045319).

MATH 0324. (NT)

Mathematics for Business and Social Sciences Support Course. (3-3-0)

Institutional Credit Only. This course is designed to strengthen mathematical skills and concepts included in MATH 1324. It serves as a co-requisite to MATH 1324 for students who are not TSI-complete in mathematics. Prerequisite: TSI score of 336 - 349 or TSI score of 310 – 335 AND an ABE Diagnostic of 5 or 6. Also, students must enroll concurrently into specified MATH 1324 section. F, Sp (3201045319).

MATH 0332. (NT)

Contemporary Mathematics Support Course. (3-3-0)

Institutional Credit Only. This course is designed to strengthen mathematical skills and concepts included in MATH 1332. It serves as a co-requisite to MATH 1332 for students who are not TSI-complete in mathematics. Prerequisite: TSI score of 336 - 349 or TSI score of 310 – 335 AND an ABE Diagnostic of 5 or 6. Also, students must enroll concurrently into specified MATH 1332 section. F, Sp, Su (3201045319).

MATH 0342. (NT)

Elementary Statistical Methods Support Course. (3-3-0)

Institutional Credit Only. This course is designed to strengthen mathematical skills and concepts included in MATH 1342. It serves as a co-requisite to MATH 1342 for students who are not TSI-complete in mathematics. Prerequisite: TSI score of 336 - 349 or TSI score of 310 – 335 AND an ABE Diagnostic of 5 or 6. Also, students must enroll concurrently into specified MATH 1342 section. F, Sp, Su (3201045319).

MATH 1314. (T)

College Algebra. (3-3-0)

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included. Prerequisite: TSI complete in Math. Course Fee $20; Inclusive Access Fee $66. F, Sp, Su (2701015419). Note: Students who are not TSI Complete in Mathematics must concurrently enroll into specified section of MATH 0314.
MATH 1324. (T)  
Mathematics for Business and Social Sciences. (3-3-0)  
The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value. Prerequisite: TSI complete in Math. Course Fee $20; Inclusive Access Fee: $66. F, Sp, Su (2703015219). Note: Students who are not TSI Complete in Mathematics must concurrently enroll into specified section of MATH 0324.

MATH 1325. (T)  
Calculus for Business and Social Sciences. (3-3-0)  
This course is the basic study of limits and continuity, differentiation, graphing and optimization, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I. Prerequisites: MATH 1314 or MATH 1324 or special permission of the department chairperson. Course Fee $20; Inclusive Access Fee: $66. F, Sp, Su (2703015319).

MATH 1332. (T)  
Contemporary Mathematics (3-3-0)  
Intended for Non STEM (Science, Technology, Engineering, and Mathematics) majors. Topics include introductory treatments of sets and logic, financial mathematics, probability and statistics with appropriate applications. Number sense, proportional reasoning, estimation, technology, and communication should be embedded throughout the course. Additional topics may be covered. Prerequisite: TSI complete in Math. Course Fee $20; Inclusive Access Fee: $66. F, Sp, Su (2701015119). Note: Students who are not TSI Complete in Mathematics must concurrently enroll into specified section of MATH 0332.

MATH 1342. (T)  
Elementary Statistical Methods. (3-3-0)  
This course is a study of collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Prerequisites: TSI complete in Math. Course Fee $20; Inclusive Access Fee: $76. F, Sp, Su (2705015119). Note: Students who are not TSI Complete in Mathematics must concurrently enroll into specified section of MATH 0342.

MATH 1350. (T)  
Mathematics for Teachers I. (3-3-0)  
This course is intended to build or reinforce a foundation in fundamental mathematics concepts and skills. It includes the development of the following: sets, functions, numeration systems, number theory, and properties of the various number systems with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or an appropriate score on an additional test required by the mathematics department. Course Fee $20. F, Sp, Su (2701015619).
MATH 1351. (T)

Mathematics for Teachers II. (3-3-0)

This course is intended to build or reinforce a foundation in fundamental mathematics concepts of geometry, measurement, probability, and statistics with an emphasis on problem solving and critical thinking. Prerequisite: MATH 1314 or an appropriate score on an additional test required by the mathematics department. Course Fee $20. F, Sp, Su (2701015719).

MATH 2305. (T)

Discrete Mathematics. (3-3-0)

A course designed to prepare math, computer science, and engineering majors for a background in abstraction, notation, and critical thinking for the mathematics most directly related to computer science. Topics include: logic, relations, functions, basic set theory, countability and counting arguments, proof techniques, mathematical induction, combinatorics, discrete probability, recursion, sequence and recurrence, elementary number theory, graph theory, and mathematical proof techniques. Prerequisite: MATH 2413. Course fee $20 (2701016619).

MATH 2320. (T)

Differential Equations. (3-3-0)


MATH 2412. (T)

Pre-Calculus Math. (4-4.5-0)

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. An instructor-approved graphing calculator will be required. Prerequisite: MATH 1314, an appropriate score on an additional test required by the mathematics department, or special permission from the department chairperson. Course Fee $20; Inclusive Access Fee: $66. F, Sp, Su (2701015819).

MATH 2413. (T)

Calculus I. (4-4.5-0)

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric and transcendental functions, with an application to calculation of areas. Prerequisites: Math 1314 and Math 1316, or Math 2412, or an appropriate score on an additional test required by the mathematics department. Course Fee $20; Inclusive Access Fee: $66. F, Sp, Su (2701015919).
MATH 2414. (T)

Calculus II. (4-4.5-0) Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals. Prerequisite: Math 2413. Course Fee $20; Inclusive Access Fee: $66. F, Sp, Su (2701016019).

MATH 2415. (T)

Calculus III. (4-4.5-0) Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem. Prerequisite: Math 2414. Course Fee $20; Inclusive Access Fee: $66. Sp (2701016119).

NCBM 0143. (NT)

Technical Algebra and Trigonometry NCBO. (1-0-1)

The NCBO supports students in developing skills, strategies, and reasoning needed to succeed in Technical Algebra and Trig. Topics include the study of numeracy and the real number system; algebraic concepts, notation and reasoning; quantitative relationships; mathematical models; and problem solving. This intervention is designed specifically for students as a contextualized and/or integrated skills instructional support for a Career/Technical Education course. One hour of lab time is required each week in the Math Learning Center. Prerequisite: TSI score of 336 - 349 or TSI score of 310 – 335 AND an ABE Diagnostic of 5 or 6. Also, students must enroll concurrently into specified TECM 1343 section. Course Fee $50. F, Sp, Su. (3201045319).