

Mathematics

MAT1015, CALCULUS WITH ANALYTIC GEOMETRY I T, 5 hours.

(Fall Only) Limits, derivatives, integrals and applications. (Fall Only) Prerequisite: Either successful completion of C or better in both College Algebra (MAT 1083/MAT 1084) and Trigonometry (MAT1093/high school trigonometry) or a minimum score of 24 on the math portion of the ACT).

MAT1025, CALCULUS WITH ANALYTIC GEOMETRY II, 5 hours.

(Spring Only) Other transcendental functions, techniques of integration, indeterminate forms, improper integrals, infinite series, conic sections, parametric equations, polar coordinates. Prerequisite: MAT1015 with a grade of C or better.

MAT1063, QUANTITATIVE REASONING T, 3 hours

Covers math topics including mathematical modeling, critical thinking and logic, estimation and measurement, probability and risk, statistics, personal finance, and various applications of real-world situations. Placement: ACT of 21 or above, Accuplacer of 263 or above, or 3.0 High school GPA.

MAT1065, QUANTITATIVE REASONING WITH REVIEW T, 5 hours.

Review of basic math skills required for the topics of this course. Covers math topics including mathematical modeling, critical thinking and logic, estimation and measurement, probability and risk, statistics, personal finance, and various applications of real-world situations. Required for Placement Scores not met for MAT1063.

MAT0161, QUANTITATIVE REASONING LAB, 1 hour.

Quantitative Reasoning Lab is a supplemental course for students who score below the college-level mathematics placement. The lab course provides an extra hour per week for small-group instruction that will reinforce what is covered in Quantitative Reasoning. During this time, students will be able to ask questions and work on homework assignments as well as take time to work on study skills and math anxiety.

MAT1083, COLLEGE ALGEBRA T, 3 hours.

Covers algebra at the college level. Equations involving higher degree

exponents, radicals and rational exponents, inequalities, graphs, functions, zeros of polynomials, exponential and logarithmic functions, and systems of equations and inequalities. Placement: ACT of 21 or above, Accuplacer of 263 or above, or 3.0 High school GPA.

MAT1084, COLLEGE ALGEBRA WITH REVIEW T, 4 hours.

This course covers algebra at the college level. Review of factoring and complex numbers. Equations involving higher degree exponents, radicals and rational exponents, inequalities, graphs, functions, zeros of polynomials, exponential and logarithmic functions, and systems of equations and inequalities. Required for Placement Scores not met for MAT1083.

MAT0181, COLLEGE ALGEBRA LAB, 1 hour.

College Algebra Lab is a supplemental course for students who score below the college-level mathematics placement. The lab course provides an extra hour per week for small-group instruction that will reinforce what is covered in College Algebra. During this time, students will be able to ask questions and work on homework assignments as well as take time to work on study skills and math anxiety.

MAT1093, TRIGONOMETRY T, 3 hours.

(Spring Only) Trigonometric functions using right triangles, applications (including vectors), graphs and inverse functions, identities and formulas, trigonometric equations, oblique triangles, and complex numbers Prerequisite: MAT 1083 with grade of C or better.

MAT1123, ELEMENTS OF TECHNICAL ANALYSIS, 3 hours.

This math course is designed to provide a foundation of basic mathematics concepts for technology students. The focus of the course will be on units of measurement, solving word problems, accuracy in measurements, use of calculators, applied mathematical concepts, beginning algebra, solution of equations, use of graphs, applied trigonometry, and introduction to estimating. Heavy emphasis will be placed on the application of these skills to technical areas. The content may be oriented to specific technical areas each semester depending on the particular field of the students enrollment.

MAT2033, CALCULUS III, 3 hours.

(Fall Only) Vectors and surfaces, partial differentiation, multiple integrals, vector calculus. Prerequisite: MAT 1025 with grade of C or better.

MAT2043, MATH FOR EDUCATION I, 3 hours.

(Spring Only) This is the beginning math course for elementary education majors. The second course, Math for Education II-MAT 304 is offered at Pittsburg State University. MAT 2043 includes topics of problem solving, sets, functions, probability and statistics.

MAT2253, ELEMENTARY STATISTICS T, 3 hours.

(Fall only) Basic concepts of statistics and probability applicable to all disciplines. Topics include data analysis, probability, estimation, statistical hypotheses, regression and correlation. Placement: ACT of 21 or above, ACCUPLACER of 263 or above, or 3.0 High school GPA.

MAT0151 ELEMENTARY STATISTICS LAB, 1 hour.

Elementary Statistics Lab is a supplemental course for students who score below the college-level mathematics placement. The lab course provides an extra hour per week for small-group instruction that will reinforce what is covered in Elementary Statistics. During this time, students will be able to ask questions and work on homework assignments as well as take time to work on study skills, math anxiety, and exploring technology to speed up calculations.

MAT2763, BUSINESS MATH, 3 hours.

Business math provides a background for those who plan to enter a business program or operate a business of their own. This course provides a quick and intensive review of the fundamental mathematics processes and business concepts used in making business decisions. Meets the math requirement for the AGS and some AAS degrees, see program requirements for specific requirements.

T This course is approved by the Kansas Board of Regents for System Wide Transfer among all Kansas public postsecondary institutions offering an equivalent course. Additional courses may also be eligible for transfer. Please visit the FSCC Registrar to learn more. *Offered on demand only. +Offered in 1 to 3 hour increments.