Math PLACEMENT/ Yes or NO

Each entering student (freshman or transfer student not having transfer credit for a specific UW mathematics course indicating student's placement) who will take Mathematics 95, 101, 112, 113, 114, 141, 171, 210, 211, 221, or 275 is required to take the placement examinations in mathematics before enrolling in any of these courses. Placement in a course is not guaranteed on the basis of the high school record; placement in the course appropriate to the student's needs and competence will be made by the Department of Mathematics on the basis of placement scores. Transfer credit does not necessarily "place" a student.

Quantitative A

The course Math 141 or any 3-credit mathematics course numbered 112 or above is sufficient to satisfy the Quantitative Reasoning-Part A General Education requirement. Students may be exempted from Part A by high school course work or placement tests. Any 3-credit mathematics course numbered 200 or above is sufficient to satisfy the Quantitative Reasoning-Part B General Education requirement.

COURSES

95 Fundamental Mathematical Skills. I; 3 cr. Covers the fundamental mathematics necessary both as survival skills in daily life and as tool for success in college. Includes arithmetic procedures and their applications. Intended for students fulfilling the remediation requirements in mathematics. P: Remedial status as determined by the University; does not count for degree credit. Open to Fr.

ELEMENTARY

Note on Math 130, 131, and 132: Courses 130, 131, 132 are designed for future teachers and are open only to students in the School of Education and in the School of Human Ecology. These courses may not be used for satisfaction of degree requirements within the College of Letters and Science.

101 Intermediate Algebra. II; 3 cr (E). Real numbers, linear equations and inequalities, integral and fractional exponents, polynomials and their arithmetic, polynomial equations and equations with fractional exponents, quadratic formula and completing the square, systems of two linear equations, graphing (linear and other basic equations, and inequalities), problem solving using algebra and graphs. P: Minimum math comp (1 unit ea HS alg & geom) & satisfactory placemt scores. Open to Fr. Stdts may not receive cr for both Math 99 & 101, nor for both Math 100 & 101.

112 Algebra. I, II, SS; 3 cr (q-E). Polynomial equations, remainder and factor theorems, functions, graphs of functions, simultaneous linear equations, logarithm and exponential functions, sequences and series, mathematical induction, binomial theorem. P: Intmed math comp (usually 3 units of HS math) & suitable placement scores, or Math 100 or 101. Open to Fr. Stdts may not receive cr for both Math 112 & 114.

113 Trigonometry. I, II, SS; 2 cr (E). Graphs, properties and geometric significance of trigonometric functions of a real variable, trigonometric equations and identities, applications, trigonometric form of complex numbers, DeMoivre's theorem. P: Adv Math comp-algebra & suitable placement scores, or completion of Math 112. Stdts may not receive cr for both Math 113 & 114. Open to Fr.

114 Algebra and Trigonometry. I, II; 5 cr (q-E). Covers Math 112 and Math 113. Not recommended for students with less than an AB in Math 100 or 101. P: Intmed math comp (usu 3 units HS math) & suitable plct scores, or Math 100 or 101. Open to Fr. Stdts may not receive cr for both Math 112 & 114 nor for both 113 & 114.

130 Arithmetical Problem Solving. I, II; 3 cr (q). This course emphasizes problem solving and mathematical writing. Topics will be chosen from: rational numbers; decimals; logic and set theory; place value; scientific notation; number theory; functions and relations; exponentiation; algebra. P: Open to Fr. Intermed math comptnce (usually 3 units HS math)&placemnt score,or Math 100 or 101. Does not count toward degree req in L&S. Open only to stdts in Educ & Sohe.

131 Geometrical Inference and Reasoning. I, II; 3 cr. Discovery, conjecture, and proof through geometric explorations in the following areas: lines; polygons; formal constructions; tesselations; polyhedra; symmetry; rigid motions; length; area and volume. P: Math 130 or cons inst. Open to Fr. Does not count toward degree req in L&S. Open only to stdts in Educ & Frcs.

132 Mathematical Models. I, II; 2 cr (r). Developing and using mathematical models to solve problems. (1) Using equations and algebraic and analytic tools; (2) probabilistic reasoning and descriptive statistics. P: Math 130 & 131, or cons inst. Open to Fr. Does not count toward degree in L&S. Open only to stdts in Educ & Frcs.

141 Quantitative Reasoning and Problem Solving. I, II; 3 cr (q-E). Quantitative reasoning for students who need to satisfy part A of the Quantitative Reasoning requirement and prepare for Qr-B courses, but do not want to continue in the calculus sequence. P: Min math competency & satisfactory placement scores. Open to Fr.

171 Calculus with Algebra and Trigonometry I. I; 5 cr (q-E). Topics in algebra, trigonometry and precalculus are integrated with elementary differential calculus. Part of a 2-semester sequence with Math 217; these two courses together are equivalent to Math 114 and 221. P: Intermed math comp (usually 3 units HS math) & suitable placement scores, or Math 101. Open to Fr.

Math transitions APA Analysis: http://apa.wisc.edu/admissions/Math_Transition_FYR_Dec2008.pdf