MATHEMATICS (MA)

MA 111U (3 credit hours)

Contemporary Mathematics

An introduction to concepts and applications of mathematics, with examples drawn from such areas as voting methods, apportionment, consumer finance, graph theory, tilings, polyhedra, number theory and game theory. This course is not available for credit to persons who have received credit in any mathematics course of a higher number with the exceptions of MA 112, 123, 162, 201 and 202. This course does not serve as a Pre-requisite for any calculus course. Credit not available on that basis of special examination. Lecture: 3 credits (45 contact hours).

Pre-requisite: Two years of high school algebra and a Math ACT score of 19 or above, or MA 108, or math placement test.

Attributes: QR - Quantitative Reasoning, Credit not permitted via STEP

exam, University Course (University of Kentucky)

Components: LEC: Lecture

University Course: University of Kentucky

MA 162U (3 credit hours)

Finite Mathematics and Its Applications

Finite mathematics with applications to business, biology, and the social sciences. Linear functions and inequalities, matrix algebra, linear programming, probability. Emphasis on setting up mathematical models from stated problems. Lecture 3.0 credits (45 contact hours).

Pre-requisite: MA 109 (UK) or equivalent.

Attributes: QR - Quantitative Reasoning, University Course (University of

Kentucky)

Components: LEC: Lecture

University Course: University of Kentucky

MA 213U (4 credit hours)

Calculus III

MA 213 is a course in multivariate calculus. Topics include three dimensional vectors calculus, partial derivatives, double and triple integrals, sequences, and infinite series. Lecture, 3 hours; recitation, 2 hours per week. Lecture: 3.0 credits (45 contact hours). Discussion: 1.0 credit (30 contact hours).

Pre-requisite: A grade of C or better in MA 114 (UK) or equivalent. **Attributes:** QR - Quantitative Reasoning, University Course (University of Kentucky)

Components: DIS: Discussion, LEC: Lecture **University Course:** University of Kentucky

MA 214U (3 credit hours)

Calculus IV

MA 214 is a course in ordinary differential equations. Emphasis is on first and second order equations and applications. The course includes series solutions of second order equations and Laplace transform methods.

Lecture: 3.0 credits (45 contact hours). **Pre-requisite:** MA 213 or equivalent.

Attributes: QR - Quantitative Reasoning, University Course (University of

Kentucky)

Components: LEC: Lecture

University Course: University of Kentucky