

*** Only available for nursing students*

AUHS GENERAL EDUCATION COURSE NUMBER TITLE	QUARTER UNITS
MATHEMATICS 110: Quantitative Reasoning (4 credit units/ 50 Clock Hours) Principles of quantitative reasoning, data presentation, descriptive statistics, correlation, probability, distributions of random variables, sampling distributions, interval estimation, and statistical inference, with multi-disciplinary applications.	4
STATISTICS 415: Statistics (4 credit units/ 40 Clock Hours) This course includes development and application of the following topics: Descriptive and Inferential Statistics, Mathematics of Finance, Linear Programming and Graph Theory.	4
CALCULUS 102: Calculus I (4 credit units) This course is an introduction to calculus, the subject that studies change. The concept of limit, the key idea of calculus will be introduced. Using the limit we will be able to understand the notion of instantaneous rate of change (the derivative), and the total change (the integral). The course will be presented using a conceptual approach that emphasizes understanding. <i>*Prerequisites: Mathematics 110</i>	4
CALCULUS 201: Calculus II (2 credit units) This course builds on the solid knowledge of Calculus I, particularly differentiation and integration techniques and their applications. Following the discussion of techniques of integration (including areas, volumes, work, arc length, surface area, and center of mass), the reviews the calculus of curves defined by parametric equations and curves defined in a new coordinate system called polar coordinates. The course concludes with an in-depth discussion of series and their application to the representation of functions by power series. The student will emerge knowing how to integrate combinations of elementary functions with accuracy and confidence. <i>*Prerequisites: Calculus 102</i>	4