### **Accelerated BS in Nursing Prerequisite Course Descriptions**

# **Anatomy and Physiology I**

Study of the structure and function of cell, skeletal, muscular, and nervous systems in the human body. Integration and regulations of system function from an applied perspective through clinical applications. The UMass Amherst courses are Kinesiology 270/271.

## **Anatomy and Physiology II**

Study of structure and function of the following systems: endocrine, digestive, urinary, respiratory and cardiovascular systems. Integration and regulation of system function from an applied perspective through clinical applications. The UMass Amherst courses are Kinesiology 272/273.

### \*Human Growth and Development Throughout the Lifespan

The study of human growth and development from a lifespan perspective, emphasizing the evolution of the whole individual. Gross and fine motor development, cognitive growth, language development, and social growth at each age level. The interaction of such variables as culture, ethnicity, class, and gender. Major trends and issues with a focus on individual, institutional, contextual, and cultural influences and effects. UMass Amherst Course N210 offered each Fall semester.

\*\*The following Psychology courses are accepted for the Human Growth prerequisite provided **all three are taken**: Child Psychology 350, Adolescent Psychology 355, and Psychology of Aging 365.

# **General or Medical Microbiology**

Overview of the microbial world including a survey of the structure, functioning, and diversity of microorganisms. Introduction to the fundamental concepts of microbial physiology, ecology, genetics, and pathogenesis. The UMass Amherst courses are 310/390B. Medical Microbiology 255 is only open to the Traditional Prelicensure nursing students.

#### **Human Nutrition**

Introduction to the science of human nutrition. Relationship of health to food intake. Description, digestion, absorption, metabolism, interactions and functions of nutrients. Nutrient and energy requirements of young adults, athletes, older individuals. Nutrient deficiency symptoms. Body weight control. Eating disorders. Vegetarianism, other dietary preferences. Planning adequate diets that fit life-styles. The UMass courses are Nutrition 130 or 230.

#### **Statistics**

Descriptive statistics, elements of probability theory, and basic ideas of statistical inference. Topics include frequency distributions, measures of central tendency and dispersion, commonly occurring distributions (binomial, normal, etc.), estimation, and testing of hypotheses. The UMass Amherst courses are: Statistics: Statistics 111, Statistics 240, ResEcon 211 (Spring) or ResEcon 212 (Fall).