



GACE® Program Admission Assessment Test II (211) Curriculum Crosswalk

Required Coursework Numbers

Subarea I. Number and Quality (30%)															
<i>Ratios and Proportional Relationships</i>															
– Understand ratio concepts and use ratio reasoning to solve problems															
– Analyze proportional relationships and use them to solve real-world and mathematical problems															
<i>The Real Number System</i>															
– Apply understanding of multiplication and division to divide fractions by fractions															
– Compute fluently with multi-digit numbers and find common factors and multiples															
– Apply understanding of operations with fractions to add, subtract, multiply, and divide rational numbers															
– Know that there are numbers that are not rational, and approximate them by rational numbers															
– Work with radicals and integer exponents															
<i>Quantities</i>															
– Reason quantitatively and use units to solve problems															

Required Coursework Numbers

Subarea II. Algebra and Functions (30%)															
<i>See Structure in Expressions</i>															
– Apply understanding of arithmetic to algebraic expressions															
– Solve real-life and mathematical problems using numerical and algebraic expressions															
– Use properties of operations to generate equivalent expressions															
<i>Reasoning with Equations and Inequalities</i>															
– Understand the connections between proportional relationships, lines, and linear equations															
– Understand solving equations as a process of reasoning and explain the reasoning															
– Reason about and solve one-variable equations and inequalities															
– Solve equations and inequalities in one variable															
– Analyze and solve linear equations and pairs of simultaneous linear equations															
– Represent and solve equations and inequalities graphically															
<i>Functions</i>															
– Interpreting Functions															
– Building Functions															

Required Coursework Numbers

Subarea III. Geometry (20%)																
<i>Congruence</i>																
– Draw, construct, and describe geometrical figures and describe the relationships between them																
– Experiment with transformations in the plane																
<i>Similarity, Right Triangles, and Trigonometry</i>																
– Understand and apply the Pythagorean theorem																
<i>Circles</i>																
– Understand and apply theorems about circles																
<i>Geometric Measurement and Dimension</i>																
– Solve real-life and mathematical problems involving angle measure, area, surface area, and volume																
– Explain volume formulas and use them to solve problems																
<i>Modeling with Geometry</i>																
– Apply geometric concepts in modeling situations																

Subarea IV. Statistics and Probability (20%)																	
<i>Basic Statistics and Probability</i>																	
– Develop understanding of statistical variability																	
– Summarize and describe distributions																	
– Use random sampling to draw inferences about a population																	
– Investigate chance processes and develop, use, and evaluate probability models																	
– Investigate patterns of association in bivariate data																	
<i>Interpret Categorical and Quantitative Data</i>																	
– Summarize, represent, and interpret data on a single count or measurement variable																	
– Interpret linear models																	
<i>Make Inferences and Justify Conclusions</i>																	
– Understand and evaluate random processes underlying statistical experiments																	
<i>Use Probability to Make Decisions</i>																	
– Use probability to evaluate outcomes of decisions																	