*Course Competency Report*
# by Code

Code: AUA2

## Graphing, Proportional Reasoning and Equations/Inequalities (AUA2)

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| Course of Study: | AUA2 - Graphing, Proportional Reasoning, and Equations/Inequalities |
| Course Level: | Graduate |
| Course Division: | First Year Master's |
| Discipline: | Mathematics |
| Course Type: | |
| Department: | Capstone |

| COMPETENCY # | COMPETENCY NAME | COMPETENCY TEXT |
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| 201.5.1 | Coordinate Pairs and Graphing Knowledge | The graduate understands ordered pairs, and graphing points and lines in a Cartesian coordinate system, including the following key concepts: slope, intercepts, quadrants, coordinate plane, vertical and horizontal lines, function, and the relationship of ordered pairs to other areas of mathematics and allied fields. |
| 201.5.2 | Coordinate Pairs and Graphing Instructional Strategies | The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies concerning coordinate pairs and graphing, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities concerning graphing. |
| 201.6.1 | Ratios and Proportional Reasoning Knowledge | The graduate understands rations, proportions, and rates and uses this understanding to model and solve non-algebraic as well as algebraic problems. |
| 201.6.2 | Ratios and Proportional Reasoning Instructional Strategies | The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies concerning ratios and proportional reasoning, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities concerning ratios and proportionality. |
| 201.7.1 | Equations and Inequalities Knowledge | The graduate understands how to solve linear and quadratic equations and linear inequalities and uses this knowledge to model and solve problems. |
| 201.7.2 | Equations and Inequalities Instructional Strategies | The graduate analyzes, critiques, modifies, develops and evaluates lessons and instructional strategies involving equations and inequalities, analyzes common student errors and misunderstandings, and determines necessary prerequisite skills required for students to complete given activities involving equations and inequalities. |