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**REVISED GOAL 2 RUBRIC (FALL 2012)**

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“Students graduating from West Chester University will be able to employ quantitative concepts and mathematical methods”

Learning Outcome	1	2	3	4
A. Understand and use mathematical symbolism	Student fails to identify, or misidentifies, mathematical symbols used in statements or formulas.	Student correctly identifies mathematical symbols but fails to use them correctly in computation or argument.	Student correctly uses given mathematical symbols.	Student correctly applies new mathematical symbols as appropriate for a calculation or argument, or in a new or unfamiliar situation.
B. Employ calculations correctly to draw mathematical conclusions	Student calculates incorrectly.	Student performs simple calculations correctly but cannot put them together into a larger computation.	Student calculates correctly but fails to draw appropriate conclusions consistent with calculated results.	Student calculates correctly and draws appropriate conclusions.
C. Understand the nature and use of mathematical arguments	Student fails to recognize or understand mathematical arguments.	Student can answer some questions about the nature of some mathematical argument.	Student shows understanding of arguments but cannot independently apply them.	Student understands and can apply mathematical arguments.
D. Understand how mathematics is used to gain insight into nature and as a tool in the world of human affairs	Student shows little awareness of a connection between mathematical symbolism, calculations, and arguments and their use outside mathematics.	Student often responds incorrectly to questions about previously discussed examples of applications of mathematics.	Student can respond appropriately to questions about previously discussed examples but cannot deal successfully with new applications.	Student shows understanding of how mathematics is used and can work new examples of applications.