

Montgomery College
MA 116 Course Outcomes
Approved Spring 2008

#	<i>Outcome: Upon completion of this course/program a student will be able to:</i>
1.	use a variety of graphical and numeric tools to explore and summarize categorical and quantitative data, including linear models of associations between two quantitative variables.
2.	demonstrate an understanding of the importance that random sampling and randomization play in producing data that allow one to draw conclusions about the underlying populations.
3.	use the results of the central limit theorems for sample proportions and sample means to predict the long-term patterns of variation of those statistics under repeated sampling based on an understanding of the normal distribution.
4.	calculate and interpret confidence interval estimates of population parameters (proportions and/or means).
5.	formulate and conduct tests of significance for population parameters (proportions and/or means) and interpret the results in the original context.
6.	understand that statistical procedures have specific requirements necessary for their application, and verify that the fulfillment of these requirements have been satisfied for the situation with which the student is dealing.
7.	use statistical software (computer or calculator based) to explore and analyze data; interpret the results produced by that software in context.
8.	express in clearly written form, and always in the context of the particular problem situation, the results of statistical investigations and analyses.