ROWAN UNIVERSITY Department of Mathematics

Syllabus STAT 02.100 - Elementary Statistics

CATALOG DESCRIPTION:

STAT 02.100 Elementary Statistics 3 s.h.

Pre-requisite: Basic Algebra II

This course gives a basic introduction to the fundamental concepts and methods of statistics. Its topics include: basic measures of central tendency and variability, graphical displays, descriptive simple linear regression, elementary probability, the normal and t-distributions, confidence intervals and hypothesis testing. Use of a statistical calculator, graphing calculator or software package is required.

Many majors require a different introductory statistics course; students should check their major requirements before signing up for this course.

OBJECTIVES:

The objectives of this course are to provide literacy in statistics. Successful students will gain an understanding of statistical concepts and calculations common to all disciplines.

CONTENT:

- 1. The relevance of statistics in areas where statistics is used
- 2. Descriptive statistics and graphical displays
- 3. Correlation and descriptive simple linear regression
- 4. Elementary sampling and design of experiments
- 5. Elementary probability and sampling distributions
- 6. The normal and t-distributions
- 7. One-sample confidence intervals and hypothesis testing

POSSIBLE TEXTS:

*Triola, Mario P. Elementary Statistics, Pearson/Addison-Wesley. 11th edition, 2010

Mann, Prem S. Introductory Statistics, 6/E, John Wiley..

Moore, David S., The Basic Practice of Statistics, 2nd edition. W.H. Freeman, New York, 2000.

Weiss, Neil A., Elementary Statistics, 4th edition. Addison-Wesley Longman, Boston, 1999.