

COURSE SYLLABUS

PO Box 1189 1042 W. Hamlet Avenue Hamlet, NC 28345 (910) 410-1700 www.richmondcc.edu

COURSE: MAT 143 **QUANTITATIVE LITERACY**

HOURS: Lab/Shop: 2 Lecture: 2 Work Exp/Clinical: 0 Credits: 3

COURSE DESCRIPTION:

This course is designed to engage students in complex and realistic situations involving the mathematical phenomena of quantity, change and relationship, and uncertainty through project- and activity-based assessment. Emphasis is placed on authentic contexts which will introduce the concepts of numeracy, proportional reasoning, dimensional analysis, rates of growth, personal finance, consumer statistics, practical probabilities, and mathematics for citizenship. Upon completion, students should be able to utilize quantitative information as consumers and to make personal, professional, and civic decisions by decoding, interpreting, using, and communicating quantitative information found in modern media and encountered in everyday life.

Note: In accordance with the Comprehensive Articulation Agreement, this course has been approved to satisfy the Universal General Education Transfer Component requirement for mathematics in the A.A. degree program. This course has been approved to meet the mathematics requirement in A.A.S. degree programs.

PREREQUISITE(S): DMA 010-050 or MAT 003 Tier 2 or BSP 4003 Tier 2 or MAT 043, DRE 098 or ENG 002 or BSP 4002 or ENG 111

COREQUISITE(S): None

TEXTBOOK(S) & OTHER SPECIAL REQUIREMENTS:

Open Educational Resources (OER) are listed in the course Moodle.

STUDENT LEARNING OUTCOMES:

Upon successful completion of this course, the student will be able to:

- 1. Judge the reasonableness of results using estimation, logical processes, and a proper understanding of quantity.
- 2. Utilize proportional reasoning to solve contextual problems and make conversions involving various units of measurement.
- 3. Identify, interpret, and compare linear and exponential rates of growth to make predictions and informed decisions based on data and graphs.
- 4. Differentiate between simple and compound interest and analyze the long-term effects of saving, investing, and borrowing.
- 5. Describe, analyze, and interpret statistical information such as graphs, tables, and summarized data to draw appropriate conclusions when presented with actual statistical studies.
- 6. Determine probabilities and expected values and use them to assess risk and make informed decisions.

7. Analyze civic and/or societal issues and critique decisions using relevant mathematics.

***Please refer to the online version of the Richmond Community College Program & Course Catalog and the Student Handbook for current academic and general information.