Course Name: Math of Finance

Course Number: MAT*E103

Credits: 3

Catalog description: An elementary course covering a wide range of mathematics commonly used in business and personal finance. Topics include: simple and compound interest, present value, wages, taxes, insurance, and marketing and retailing mathematics.

Prerequisite: Satisfactory score on placement test or MAT* E095 or MAT* E095I with a grade of C or higher, or Permission of department chair based on review of high school transcript, and eligible for ENG* E101.

General Education Competencies Satisfied:

HCC General Education Requirement Designated Competency Attribute Code(s):
None

Discipline-Specific Attribute Code(s):

☒ **MATH**   **Mathematics elective**

Course objectives:

General Education Goals and Outcomes:

None.

Course Specific Objectives:
1. To perform computations related to taxes, insurance and wages
2. To perform the computations related to interest
3. To perform the computation related to marketing and retail math
4. Evaluate the results obtained from quantitative methods for accuracy and /or reasonableness by solving problems analytically.

Course Content:

Taxes
- o Sales Tax
- o Property Tax

Insurance
- o Business Insurance
- o Motor Vehicle Insurance
- o Life Insurance

Checkbook and Cash Records
- o Checkbook Reconciliation

Wages and Payrolls
- o Salary
- o Commission
- o Hourly Rate Basis
- o Production Basis
- o Net Weekly Payrolls

Simple Interest
- o Basic Simple Interest
- o Ordinary Time and Exact Time
- o Ordinary Interest and Exact Interest
- o Simple Interest Notes
- o Present Value

Compound Interest *
- o Compound Interest (by Computation)
- o Compound Amount (using Tables)
- o Interest Compounded Daily

Annuities *
- o Amount of an Annuity
- o Present Value of an Annuity

Markup *
- o Markup Based on Cost
- o Markup Based on Selling Price
- o Marking Perishables

Markdown *
- o Actual Selling Price
- o Markdown vs. Loss

* Topics as time permits at the discretion of the instructor