



Education within the reach of all  
A ministry of Calvary Chapel-Port-au-Prince  
(509) 2209-5686 - [administration@uespoir.edu.ht](mailto:administration@uespoir.edu.ht) - [www.uespoir.edu.ht](http://www.uespoir.edu.ht)

## Syllabus

### Course Title

### FINANCIAL MATHEMATICS

#### Course Objectives :

This course aims to assist students in Business Administration, Accounting, and Business Management to understand the key concepts of financial mathematics used in business decision-making. Students will gain tools to make decisions regarding project profitability, purchase or lease choices, investments, etc. By the end of the course, students will be able to perform calculations related to debt repayment through installments, comprehend simple and general annuity concepts, and understand amortization.

#### Course Outline:

##### I. Simple Interest

The course is structured into five main parts, as follows:

1. Simple Interest, with four subsections covering calculations of simple interest, financial and commercial discount, as well as real or rational discount.
2. Compound Interest, which includes five subsections dedicated to calculations of future and present value, compounding period, various types of rates, and equivalence between interest rates.
3. Simple Annuities, consisting of eight subsections addressing various aspects of simple annuities, such as future or accumulated value, present or current value, irregular payments, residual value, deferred annuities, etc.
4. General Annuities, with five subsections covering different approaches to calculate general annuities, including the correction factor method, equivalence of rates method, finding the interest rate, etc.

5. Financial Amortization, with four subsections discussing different types of financial amortization, including end-of-period and beginning-of-period financial amortization for both simple and general annuities.

## **II. Pedagogy and Assessment:**

The course will be delivered through oral lectures by the professor. Students will receive course materials including theories for each chapter and a set of exercises with answers corresponding to each chapter. Assessments will be conducted in two stages: a midterm exam accounting for 40% of the grade and a final exam accounting for 60% of the grade. Additionally, students will be required to submit assignments that will contribute to the exam grades.