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| **Course Title** | Business Mathematics | | | | | |
| **Course Code** | TMAT-120 | | | | | |
| **Course Type** | This course serves as both Elective and Requirement, according to the program.   |  |  | | --- | --- | | Hospitality Diploma/Bachelor | Requirement | | All Programs | General Elective | | | | | | |
| **Level** | Bachelor (1st Cycle) | | | | | |
| **Year / Semester** | Year 1, A’ Semester | | | | | |
| **Teacher’s Name** | Mariana Pelekanos | | | | | |
| **ECTS** | 4 | **Lectures / week** | 3 | | **Laboratories / week** |  |
| **Course Purpose and Objectives** | This course aims to provide students with a good overall knowledge of the fundamental mathematical concepts, techniques and theories of Mathematics applicable to real-world problems. | | | | | |
| **Learning Outcomes** | Upon completion of this course students will be able to:   1. Define business calculus and financial mathematics, 2. Comprehend the solution methods of mathematical problems in the areas of business calculus, simple and compound interest account, use of compound interest account, loan and consumer credit 3. Connect acquired knowledge and skills with practical problems 4. Solve problems using interest account and their basic applications in practice, and comprehend the basic graphical methods 5. Explore the various applications of mathematical logic and formulas in real-life examples. | | | | | |
| **Prerequisites** | None | | | **Required** | |  |
| **Course Content** | 1. Basic business calculus:  * Ratios and proportions. * Rule of three (simple and compound). * Percentage calculus. * Division calculus (simple and compound). * Mixture calculus (simple and compound). * Chain calculus.  1. Basic interest account:    * Interest and interest rates.    * Simple interest account.    * Compound interest account.    * Types of interest rates. 2. Use of compound interest account:    * Final value of a single amount    * Present value of a single amount.    * Final value of a series of periodic payments (withdrawals).    * Present value of periodic payments (withdrawals).    * Perpetuity. Continuous compounding. | | | | | |
| **Teaching Methodology** | The course is delivered through lectures, tutorials and exercises. | | | | | |
| **Mode of delivery** | Face to face. | | | | | |
| **Bibliography** | **Required** | | | | | |
| 1. Slater, J., Wittry, M., S. (2016). Practical Business Math Procedures with Business Math Handbook. USA, NY: McGraw-Hill Education. | | | | | |
| **Assessment** | The following assessment methods are employed to assess this course:   |  |  | | --- | --- | | 30 – 50 % | Final Exam | | 20 – 40 % | Mid –Term / Tests / Quizzes | | 10 – 30 % | Assignments / Projects | | 0 – 10 % | Class Attendance & Participation | | | | | | |
| **Language** | English | | | | | |