

**CMI COURSE CURRICULUM  
COURSE ACTION**

**Course Title:** Business Mathematics    **Alpha Number:** BUS 106    **CIP No.** 27.0399

**Type of Action:**

- New Course (attach narrative justification for course creation)
- Substantive Revision (attach narrative justification for changes, including assessment and/or achievement data and feedback from the advisory committee if relevant)

Select all that apply:

- Change in number of credit hours
- Change in prerequisite
- Substantive change in course content
- Change to SLOs
- Other: Hybrid

- Non-substantive Revision

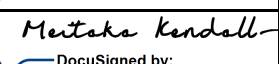
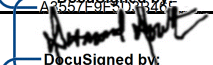
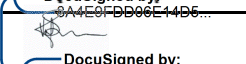

Select all that apply:

- Change in Alpha Number or Title (unless letter abbreviation has not previously been used)
- Edit to course description that does not alter the substance of the course
- Change to recommended texts
- Other: Change of contact hours from 48 to 45, rewording of SLO

Reinstitution of Archived Course (attach narrative justification for reinstitution, including evidence of demand, evidence of capacity, feedback from the advisory committee if relevant, and Commentary that speaks directly to the reasons the course was initially archived)

Reaffirmation of Course (only allowable if course completion rate exceeds ISS, the benchmark has been met for the majority of SLO assessments, and there is no evidence of inequitable levels of achievement across subpopulations; attach evidence)

**Approvals:**

	Name	Signature	Date
Department Chair	Meitaka Kendall-Lekka	 <small>DocuSigned by: A2637E9E-7D4F4E4</small>	9/20/2024
Curriculum Committee Chair	Desmond Doulatram	 <small>DocuSigned by: 9A4E9FDB06E14D6...</small>	9/19/2024
Dean	Vasemaca Savu	 <small>DocuSigned by: A658D7C0D48154E6</small>	9/30/2024
VPASA	Dr Elizabeth Switaj	 <small>89REB3BDDC23455</small>	10/1/2024

**CMI COURSE OUTLINE**

**CIP No.** 27.0399

**Version No.** 2

BUS 106  
**Alpha Number**

Business Mathematics  
**Course Title**

**Course Description:** Practical mathematical applications with emphasis on solving business problems. Reviews fundamental processes including percentages, fractions, decimals, percents, discounts, payroll, inventory, depreciation, cash and trade discounts, markup and markdowns, simple and compounded interests, present value, annuities, stocks and bonds.

**Course originally prepared by:** Business Studies Department October 2001

**Most recent revision by:** Meitaka Kendall-Lekka BSN Dept May 2024

**Course mode(s):**  Face to Face (including Zoom)  Hybrid  Distance Education

**Credits calculated by:**  Credit Hour  Clock Hour

**Contact Hours:** 45

Type	No. of Hours	No. of Credits	Maximum No. of Hours Online
Lecture/Seminar/Workshop	45	3	22.5
Clinical			
Practicum			
Lab			
Fieldwork			
Studio Time			
<b>Total</b>	45	3	22.5

**Purpose(s) of Course:** Degree Requirement Business  
 Degree Elective LA  
 General Education \_\_\_\_\_  
 Credit Certification Accounting Clerkship  
 Developmental \_\_\_\_\_  
 CTE/TVET \_\_\_\_\_  
 ABE/Adult HS \_\_\_\_\_

**Distribution Area:** Humanities \_\_\_\_\_  
 Social Sciences \_\_\_\_\_  
 Mathematics (Credit) \_\_\_\_\_  
 Science \_\_\_\_\_

**Prerequisite:** C or better in Math 90s or placement in Credit Math

**Student Learning Outcomes:**

Upon completion of this course, students will be able to:

1. Solve business math problems
2. Use a calculator to determine present value, decimal equivalents of fraction, percents, discounts and interest (simple and compound)
3. Compute gross pay, net pay, and related deductions related to payroll in the business to create documents and reports
4. Interpret business graphs and charts
5. Apply basic quantitative and spread-sheeting skills for problem solving to support a career in business

**SLO Mapping:**

Prerequisite Course SLO	Linked SLO from this Course	Explanation
<p>MATH 102 2. Solve problems involving number sequences</p> <p>6. Summarize statistical data using descriptive statistics.</p> <p>MATH 111 2. Solve real world problems by utilizing selected functions and equations.</p>	<p>1. Solve business math problems</p> <p>5. Apply basic quantitative and spread-sheeting skills for problem solving to support a career in business</p>	<p>Students need to have problem solving and algebraic properties knowledge and skills in order to properly address and solve business math problems.</p>
<p>MATH 102 3. Calculate simple and compound interest, annuities, and loans, and utilize financial mathematics in personal financial decisions.</p> <p>5. Compute and interpret probability of events utilizing the fundamental counting principles</p> <p>MATH 111 2. Solve real world problems by utilizing selected functions and equations.</p>	<p>3. Compute gross pay, net pay, and related deductions related to payroll in the business to create documents and reports</p>	<p>Students need basic excel and computing skills and knowledge of fundamental counting principles in order to create and prepare accurate RMI payroll calculations.</p>
<p>MATH 102 3. Calculate simple and compound interest, annuities, and loans, and utilize financial mathematics in personal financial decisions.</p> <p>5. Compute and interpret probability of events utilizing the fundamental counting principles</p> <p>6. Summarize statistical data using descriptive statistics.</p>	<p>4. Interpret business graphs and charts</p> <p>5. Apply basic quantitative and spread-sheeting skills for problem solving to support a career in business</p>	<p>Students need basic computing and knowledge of fundamental counting principles and be able to use data as well as interpret data shown in reports with charts or graphs.</p>

<p>MATH 111 3.Graph functions to show the relationship between graphs and equations.</p>		
--	--	--

**Links to Program Learning Outcomes:**

SLO	Linked PLO	I/P/M	Explanation of Link
<p>1. Solve business math problems</p>	<p>1: Use basic business principles to analyze information, solve problems and make informed decisions.</p>	<p>P</p>	<p>Students can link what they have learnt by applying these problem solving skills to real life context in the RMI both personally and professionally to make well informed decisions.</p>
<p>2. Use a calculator to determine present value, decimal equivalents of fraction, percents, discounts and interest (simple and compound) 3. Compute gross pay, net pay, and related deductions related to payroll in the business to create documents and reports 4. Interpret business graphs and charts 5. Apply basic quantitative and spread-sheeting skills for problem solving to support a career in business</p>	<p>2: Use language, communication, research, and technological skills to support business concepts effectively.</p>	<p>P</p>	<p>Being able to learn and use both the calculator and Excel to compute problems and create payroll report as well as interpret graphs and charts related to these computations are crucial business skills.</p>

**Course Content:**

Students in this course will understand:

1. Basic math Function
2. Fractions
3. Percent
4. Bank Services
5. Payroll
6. Taxes and Insurance
7. Purchasing Merchandise
8. Markup and markdown
9. Interest
10. Consumer credit and Mortgages
11. Annuities, stocks, and Bonds

- 12. Depreciation
- 13. Financial Statement

**Higher Order Thinking Skills: Students in this course will experience:**

- Analyzing the basic elements of an idea, experience, or theory
- Making judgments about the value or soundness of information, arguments, or methods
- Applying theories or concepts to practical problems or in new situations

**Recommended Methods of Instruction**

- Demonstration
- Lecture
- Small group discussion
- Class discussion
- Audio-Visual Aids
- Laboratory
- Supervised Practice
- Field Trips
- Other: Independent practice, student collaboration, hands-on solving problems, feedbacks

**Recommended Assessment Tool Type(s):**

- Case Study
- Critique of Performance
- Exam/Quiz In-Course
- Exam/Quiz Standardized (attach narrative describing development and validation process)
- Focus Group
- Group Project
- Individual Project
- Observation
- Portfolio Review
- Presentation
- Simulation
- Skill Performance
- Supervisor Evaluation
- Survey
- Written Assignment

**Required Forms of Regular and Substantive Interaction for Hybrid or Distance Education Courses (Select at Least Two):**

- Direct instruction through:
  - Live video lectures
  - Live audio-only lectures
  - Live text chats
- Assessing or providing feedback on a student's coursework
- Providing information or responding to questions about the content of a course or competency through:
  - Live video discussions
  - Live audio-only discussions
  - Live text chats
  - Asynchronous message boards or text chats
- Facilitating a group discussion regarding the content of a course or competency through:
  - Live video discussions
  - Live audio-only discussions
  - Live text chats
  - Asynchronous message boards or text chats

Other, specify: Use both asynchronous and synchronous assessments

*Note: for distance education courses, if only two are selected, both must occur within the course on a weekly basis. If more than two are selected, the instructor may choose which two are used during each week.*

**Equipment and Materials:** Recommended

1. Equipment/Facilities: Overhead projector, Zoom, Computer/Laptop with MS Excel, Internet, Moodle online learning platform, eBook device
2. Materials and Supplies: Hand-held electronic calculator, Rulers, Storage Device, Supplemental articles from web and CMI Library resources, Local MIJ Newspaper
3. Business Math Using Excel 2E: Microsoft Office Excel 2010 - Sharon Burton and Nelda Shelton

**College Mission:**

The College of the Marshall Islands will provide our community with access to quality, higher and further educational services, prioritize student success through engagement in relevant Academic, Career and Technical Education, and be a center for the study of Marshallese Culture. It will also provide intellectual resources and facilitate research specific to the needs of the nation.

*EC approved 4th Nov, 2020. BOR approved 1st December, 2020*

**Connection to College Mission:**

Department of Business Studies educational goals are grounded in the mission and objectives of the college in two particular facets; aiming to serve (1) students' educational needs and (2) national needs. Being able to offer unique business program pathways and basic accounting courses like this will enable our students to advance further in higher education and help prepare them to enter the workforce.

**Department Mission:**

The mission of the Business Studies Department is to serve students and the local business community by offering quality programs that provide the knowledge and skills essential for success in entrepreneurship, higher education, or employment.

**Connection to Department Mission:**

Business Math is a foundational course that covers the basic daily business-related math activities and functions. It is designed to teach students basic understanding of applied business math that can be used in both their personal and professional careers. The Business Studies Degree Program is designed to integrate both theoretical and real-life application components, and this course will help prepare students for both transfer and for the field work.

**Rationale for Change:**

Prerequisites - Old prerequisites (Math 96 or Placement Test) were not needed for this course and had to be taken out to allow students to easily register and be able to take other required courses to complete program on time and have a smoother program pathway.

Hybrid - Added this component to allow or have the option for students to join class online in case class cannot meet face to face due to unforeseen circumstances (ex. COVID, Natural disasters, health and transportation issues, etc.) as well as accommodate working students and those who with solid reason they're unable to physically come to class.