

COURSE SYLLABUS



STEM Course Syllabus

COURSE: *MAT-103-01*

COURSE TITLE: *Mathematics for Business*

CREDITS: 3

INSTRUCTOR:

DAY(S) AND TIME(S):

OFFICE HOURS:

EMAIL:

A. Catalog Course Description

Fundamental principles of mathematics are applied to business situations. Topics which will be covered include Bank Reconciliation, proportions, statistical measurement, trade and cash discounts. In addition, the mathematics of buying, pricing and selling, computation of payroll, interest and Consumer credit are discussed. Financial transactions involving, compound interest, future value, present value annuities and mortgages will be explained.

B. Course Description

Basic mathematical principles will be reemphasized and then students will be exposed to a variety of business applications of these mathematical principles. Students will learn the similarity of mathematics used in both personal and business applications such as Bank Reconciliation, discounts, Payroll, simple and compound interest, credit cards. Financial analyses of Annuities, sinking funds, mortgages, depreciation and inventory will be investigated.

C. Student Outcomes/Objectives

- Enhance student's basic mathematical ability
- Provide students with a thorough understanding of the mathematics involved in business
- Students will gain personal knowledge of the mathematics which affects them as consumers and wage earners
- Recognition of the planning which must go into business decisions and how they are monitored

- Collect and organize numerical data; identify and apply appropriate mathematical techniques; interpret and present data in a variety of formats

D. TEXTBOOK REQUIRED

Cheryl Cleaves, Margie Hobbs, and Jeffrey Noble. Business Math. Tenth Edition.
Pearson
ISBN: 978-0-13-301120-3

E. EVALUATION METHODS:

Homework: Students are required to do all homework assignments on MyMathLab
Course ID: ondieki83303

<u>Evaluation Criteria:</u>	Test 1	20%
	Test 2	20%
	Test 3	20%
	Homework & Quizzes	10%
	Final Exam	30%
	Total	<u>100%</u>

FINAL AVERAGE	GRADE EARNED	FINAL AVERAGE	GRADE EARNED
90 – 100	A	75 – 79	C+
85 – 89	B+	70 – 74	C
80 – 84	B	60 – 69	D
		0 – 59	F

Course Requirements: All students are required to: (1) Attend class regularly; (2) complete assigned homework before they can take the final exam; (3) Participate in class through class discussions and solving problems on the board when necessary. (4) Students are required to take all examinations: Three exams and a comprehensive Final Exam and quizzes when scheduled. Normally, make-up exams are not given unless a student can prove why he or she did not take the exam when it was administered.

E. Detailed outline of suggested topics

Session	Topic
1	Review: Place Value and Our Number System * Operations with Whole Numbers *Fractions *Adding, Subtracting, Multiplying and Dividing Fractions *Decimals and the Place-Value System

	*Operations with Decimals * Decimal and Fraction Conversions
2	*Checking Account Forms * Bank Statements * Bank Reconciliation
3	*Equations *Using Equations to solve Problems *Percent Equivalents *Solving Percent Problems
4	*Statistics *Measures of Central Tendency *Frequency Distribution and Graphs *Measures of Dispersion
5	*Trade and Cash Discounts *Net Price and the Trade Discount *Net Price and the Trade Discount Series *Net Amount and the Cash Discount
6	*Markup Based on Cost *Markup based on Selling Price and Markup Comparisons
7	*Markdown, Series of Markdowns, and Perishables Midterm
8	*Payroll * Gross Pay * Payroll Deduction *The Employer's Payroll Taxes
9	*The Simple Interest Formula *Ordinary and Exact Time and Interest * Promissory Notes
10	*Consumer Credit *Installment Loans and Closed-End Credit *Paying a Loan Before it is Due: The Rule of 78 *Open-End Credit
11	*Compound Interest and Future Value *Present Value *Future Value of an Annuity *Sinking Funds and the Present Value of an Annuity
12	*Mortgages *Mortgage Payments *Amortization Schedules
13	*Depreciation * Depreciation Methods for Financial Statement Reporting * Depreciation Methods for IRS Reporting
14	*Inventory *Specific Identification Method *First in First out (FIFO) * Last in First out (LIFO) *Retail Inventory Method *Gross Profit Method *Turnover and Overhead
15	Final Exam

F. **ATTENDANCE POLICY:** Students are expected to attend all classes.

G. Students are responsible for material covered in classes that they have missed. **Two or more absences may result in Failure Grade of the course.**

H. **USE OF ELECTRONIC COMMUNICATION DEVICES:** Cellular phones should be turned off or put in vibration mode.

I. **INCOMPLETE**

An INCOMPLETE grade for the course is given under specific conditions when a student, because of serious and unexpected reasons, cannot complete the requirements of the course. For example, if a student did not attend the final because of illness his or her excuse must be verified by a physician. Other absences from other assigned activities must be made up at another appointed time. To arrange for an incomplete grade, the student must see the instructor before

final exam, so proper documentations could be established and submitted to Division and The office of Academic Affairs.

J. **DISABILITY SUPPORT SERVICES:**

Students with disabilities who believe that they might need accommodations in this class are encouraged to contact Disability Support Services at (201) 360-4157, as soon as possible to better ensure that such accommodations are implemented in a timely fashion. All disabilities must be documented by a qualified professional such as a Physician, Licensed Learning Disabilities Teacher Consultant (LDTC), Psychiatrist, Psychologist, Psychiatric Nurse, Licensed Social Worker or Licensed Professional Counselor, who is qualified to assess the disability that the student claims to have and make recommendations on accommodations for the student. All information provided to the Disability Support Services Program will be confidential between the program, professors involved with the student and individual student.

K. **ACADEMIC INTEGRITY**

Academic Integrity Standards

Academic integrity is central to the pursuit of education. For students at HCCC, this means maintaining the highest ethical standards in completing their academic work. In doing so, students *earn* college credits by their honest efforts. When they are awarded a certificate or degree, they have attained a goal representing genuine achievement and can reflect with pride on their accomplishment. This is what gives college education its essential value.

Violations of the principle of academic integrity include:

- Cheating on exams.
- Reporting false research data or experimental results.
- Allowing other students to copy one's work to submit to instructors.
- Communicating the contents of an exam to other students who will be taking the same test.
- Submitting the same project in more than one course, without discussing this first with instructors.
- Submitting *plagiarized* work. *Plagiarism* is the use of another writer's words or ideas without properly crediting that person. This unacknowledged use may be from published books or articles, the Internet, or another student's work.

Violations of Academic Integrity

When students act dishonestly in meeting their course requirements, they lower the value of education for all students. Students who violate the college's policy on academic integrity are subject to failing grades on exams or projects, or for the entire course. In some cases, serious or repeated instances of academic integrity violations may warrant further disciplinary action.

Detailed information on the College's Academic Integrity policy may be found in the *HCCC Student Handbook*. The handbook also contains useful information for students on completing research projects and avoiding plagiarism.

L. CLASSROOM RECORDING POLICY

Student Classroom Recording Policy

- Hudson County Community College prohibits the audio-visual recording, transmission, and distribution of classroom sessions. Classes may only be recorded with the advance written permission of the instructor. The Hudson County Community College classroom recording policy must be listed in all syllabi.
- All classroom recordings can only be used for academic purposes by students enrolled in that class. Recordings may not be shared, reproduced, or uploaded to public websites or other mediums, and these recordings may contain copyrighted material and are prohibited from any form of commercial use.
- All students and guests must be informed that the class may be recorded. Due to issues related to privacy and the possible inhibition of student participation, instructors should be mindful of the effects of permitting classroom recording.
- Instructors should retain electronic or paper copies of their written consent to grant classroom recordings.
- Students must destroy their recordings at the end of the semester.
- Students who are granted permission to record their class by the office of Disability Support Services should inform the instructor beforehand and are subject to the policies outlined in this document.
- Violation of this policy is subject to disciplinary action listed under the code of conduct as included in the Student Handbook.