



Course Syllabus

Course #: MTH 1110 Course Name: Business Math

Division: Arts & Sciences

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Class Days: Class Time:
Location: Classroom: Laboratory:
Credit Hours: 4 Contact Hours: 4 Lab Hours: 0 Lecture Hours: 4

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Instructor: Office Location:
Phone: Email Address:
Office Hours:
Division Office/Location: A202 Division Fax: 419.355.1248
Full-time Contact Person: Nina Schyllander Phone(s): 419.559.2307

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Course Description:

This course covers banking, discounts, markup and markdown, simple and compound interest, annuities, payroll, annual percentage rate, depreciation, financial statements, taxes, stocks and bonds, and basic measures of central tendency. Graphing calculator required.

Prerequisite(s): Placement Testing

Corequisite(s): None

Entry Level Skills and Knowledge:

Basic mathematics skills.

Required Texts, Supplies and Equipment:

Business Mathematics, Tenth Edition by Charles D. Miller, Stanley A. Salzman, and Gary Clendenen. Published by Addison Wesley.

Hand-held Calculator: TI-83+ or TI-84+ required

Grading:

The final course grade will be determined as follows:

Table with 2 columns: Grade Component and Percentage. Daily Grades (quizzes, homework, class participation, etc.) 25%, Tests 50%, Comprehensive Final Exam 25%

Grading scale is as follows:

90 – 100 = A

80 – 89 = B

70 – 79 = C

60 – 69 = D

0 – 59 = F

### **Learning Outcomes:**

General Education

Evaluate arguments in a logical fashion.

Technical Education

Course Outcomes:

Upon completion of this course, students should be able to perform these competencies:

1. Solve percent problems.
2. Compute trade discounts.
3. Compute cash discounts.
4. Solve problems concerning markup and markdown.
5. Handle checking accounts.
6. Solve problems involving simple interest.
7. Solve problems related to bank discount.
8. Compute compound interest.
9. Solve annuities.
10. Find effective rate for compound interest.
11. Compute statistical mean, median, and mode.
12. Compute earnings, gross and net, for hourly, salary, and commission methods of pay.
13. Solve problems concerning financial statements.
14. Compute depreciation using ACRS, MACRS, straight line, sum-of-the year-digits, and declining balance methods.
15. Solve problems concerning sales, excise, and property taxes.
16. Solve problems related to consumer credit.
17. Compute the yield and commission involved with stocks and bonds.
18. Interpret the information given in stock listings in newspapers.
19. Compute premium and coverage for auto, fire, and life insurance.
20. Compute statistical mean, median, and mode.

### **Assessment of Student Learning:**

This course may include a project that is one of several that will be used by faculty to assess student academic performance in the program. A panel of faculty will review all (projects or whatever assessment activity you are doing), then assess and summarize the academic performance of students at this point in the program. The results of this assessment will be shared among the department faculty, used to identify needed changes or improvements, and submitted to the Student Academic

Assessment Committee as part of the college's overall student academic assessment effort.

Assessment Project and Measurement in course (if any):

**Plan of Work:**

Session	Date	Activities
See topical outline attached at back of this syllabus.		

**Course Requirements:**

There will be an assignment given each class period. This should be completed by the next class meeting and will be discussed at that time.

**Policies**

**Department Policies:** The schedule of tests will be followed as closely as possible. Not all of the course work is in the text. It is important to be in class and to take notes. Students are expected to read the text before class discussion.

Tests must be taken on the scheduled day. Failure to do so will result in a ten percent (10%) penalty. Make-up tests must be taken within one (1) week of the date that the test is given in class.

It is expected that the student will participate by having assignments completed on time, answering questions in class, asking pertinent questions, being on time, and having a cooperative attitude.

**Final Exam Policy:** The final exam is comprehensive. All students, regardless of grade average, must take the comprehensive final exam for this course.

**Course Withdrawing:** If for any reason you need to withdraw from this course, be certain that you do so according to College procedure. It is your responsibility to know and follow this procedure. If you simply stop coming to class, without officially withdrawing from the course, your grade is an automatic "F." Please follow official College procedure for withdrawing from this or any course.

*College Academic Policies are located in the College Catalog. A copy of the current catalog may be picked up in any of the division offices or admissions. The list of college policies is also available online at <https://www.terra.edu/register/Collegecat/policies.asp>.*

**Support Services:** The College offers a number of support services to assist in your success in this course and all courses. Among these services are the Writing & Math Center in B105, the Office of Learning Support Services, which coordinates the campus disability services and tutoring programs, the computer labs, and the computers in the atriums.

Any student who feels he/she may need an accommodation based on the documentation of a disability should contact the Office of Learning Support Services privately to discuss his/her specific issues. Please contact the OLSS at (419) 334-8400 X 208 or visit 100 Roy Klay Hall (Building A) to coordinate reasonable accommodations.

***If you have a documented disability and are receiving academic accommodations through the Office of Learning Support Services, please schedule a meeting with your instructor in a timely manner so that we may discuss how these services will be arranged.***

Tutoring services are available to students beginning the second week of every quarter. Students requesting tutoring services should obtain a tutor request form from the OLSS in 100 Roy Klay Hall (Building A) or online at the Terra website. Please note that instructor verification and acceptance of the Student Learner Agreement is necessary for all tutoring requests. All requests should be submitted to 100 Roy Klay Hall (Building A).

**MTH 1110 Topical Outline:**

Session	Course Content	Section	Pages
1	Course Introduction		
	Writing Decimals and Fractions as Percents	3.1	83 – 90
	Finding Part	3.2	91 – 100
	Finding Base	3.3	101 – 108
2	Finding Rate	3.4	109 – 118
	Increase and Decrease Problems	3.5	119 – 128
3	Checking Accounts and Check Registers	4.1	139 – 150
	Checking Services and Credit-Card Transactions	4.2	151 – 158
4	Bank Statement Reconciliation	4.3	159 – 166
	Gross Earnings: Wages and Salaries	5.1	171 – 184
5	<b>TEST I (Chapters Three and Four)</b>		
	Gross Earnings: Piecework and Commissions	5.2	185 – 192
6	Social Security, Medicare, and Other Taxes	5.3	193 – 200
	Income Tax Withholding	5.4	201 – 214
7	Invoices and Trade Discounts	6.1	221 – 232
	Single Discount Equivalents	6.2	233 – 236
8	Cash Discounts: Ordinary Dating Method	6.3	237 – 244
	Cash Discounts: Other Dating Methods	6.4	245 – 252
9	<b>TEST II (Chapters Five and Six)</b>		
	Markup on Cost	7.1	259 – 268
10	Markup on Selling Price	7.2	269 – 280
	Markdown	7.3	281 – 286
11	Turnover and Valuation of Inventory	7.4	287 – 296
	Basics of Simple Interest	8.1	307 – 318
12	Finding Principal, Rate, and Time	8.2	319 – 326
	Simple Discount Notes	8.3	327 – 336
13	Discounting a Note Before Maturity	8.4	337 – 350
	Compound Interest	9.1	359 – 369
14	<b>TEST III (Chapters Seven and Eight)</b>		
	Interest Bearing Bank Accounts and Inflation	9.2	371 – 380
15	Present Value & Future Value	9.3	381 – 386
	Annuities and Retirement Accounts	10.1	393 – 402

Session	Course Content	Section	Pages
16	Present Value of an Ordinary Annuity	10.2	403 – 410
	Sinking Funds (Finding Annuity Payments)	10.3	411 – 420
17	Stocks	10.4	421 – 430
	Bonds	10.5	431 – 436
18	<b>TEST IV (Chapters Nine and Ten)</b>		
	Open-End Credit and Charge Cards	11.1	443 – 454
19	Installment Loans	11.2	455 – 463
	Early Payoffs of Loans	11.3	465 – 472
20	Personal Property Loans	11.4	473 – 479
	Real Estate Loans	11.5	481 – 488
21	Property Tax	12.1	503 – 510
	Personal Income Tax	12.2	511 – 526
22	Fire Insurance	12.3	527 – 536
	Motor-Vehicle Insurance	12.4	537 – 544
	Life Insurance	12.5	545 – 554
23	<b>TEST IV (Chapters Eleven and Twelve)</b>		
	Depreciation: Straight-Line Method	13.1	561 – 570
24	Depreciation: Declining-Balance Method	13.2	571 – 576
	Depreciation: Sum-of-the-Years'-Digits Method	13.3	577 – 586
25	Depreciation: Units-of-Production Method	13.4	587 – 592
	Depreciation: Modified Accelerated Cost Recovery System	13.5	593 – 600
26	The Income Statement	14.1	607 – 612
	Analyzing the Income Statement	14.2	613 – 620
	<b>TAKE HOME TEST (Chapter Thirteen)</b>		
27	The Balance Sheet	14.3	621 – 624
	Analyzing the Balance Sheet	14.4	625 – 632
28	Frequency Distributions and Graphs	15.1	642 – 652
	Mean, Median, and Mode	15.2	653 – 662
29	Course Review		
30	<b>COMPREHENSIVE FINAL EXAM</b>		