BUSN 1050: Business Mathematics

Fall Semester- 2009

Section 30- OFFLINE

Instructor: David C. Layne, Ph. D.

Office: G2G at Taft College, 29 Emmons Park Drive, Taft, CA 93268

Office Hours: M-F 11:00 a.m. – 3:00 p.m. unless in class, or by appointment

Student Contact Hours: The instructor is available on Friday from 8 a.m. – 12:00 p.m. to work directly with students on this course.

Phone: (661) 763-7931

e-mail: dlayne@taft.org

Prerequisites: None

Credit: 4- Semester Credit

Advisory: Eligibility for MATH 1050 strongly recommended

Total Hours: 64 Hours of Lecture
1-2 Hours Homework for each hour of lecture.

Class Meets: August 24th to December 18th, 2009

Course Description: This course (formerly BUS 21 and BUS 50) is a 4 -semester credit course designed around the use of arithmetic functions with an emphasis on business applications as a focus. Special attention is given to equations and their applications to business problems.

Type of Class: Degree Credit

Textbook: Rental Textbook: This textbook is available for rent from the bookstore.

Roueche, N. W., Graves, V. H., & Tuttle, M. D. (2005). *Business Mathematics A Collegiate Approach*, 9th Ed. New Jersey: Prentice Hall.

ISBN: 0-13-114014-0

Learning Objectives:
At the end of this course, students will be able to:
1. Demonstrate knowledge of business practices.
2. Solve business related problems utilizing mathematical tools with heavy emphasis on the use of algebraic equations.

Learning Activities Required Outside of the Classroom:
Students will typically spend a minimum of six hours each week outside of the classroom in the any or all of the following activities:

a. Reading the required text and other background materials for class;
b. Reading and preparing homework assignments;
c. Researching and reporting relevant information in professional journals;
d. Studying classroom notes in preparation for assessments;
e. Drafting and revising writing projects;
f. Creating and analyzing case studies, and
f. Collaborating with students to accomplish group projects.

Methods of Instruction:
Students will encounter any or all of the following learning strategies:

a. Group discussions;
b. Role playing using scenarios;

c. Case development and presentations;
d. Small group projects;
e. Simulations;
f. Problem-solving and situational analysis;
g. Demonstrations;
h. Visual presentations; and
g. Lecture

Methods of Evaluation:
This course will use any or all of the following formative and summative assessments:

a. Oral and written case analysis;
b. Oral and written reflections on students' learning and metacognition;
c. Portfolio construction and presentation;
d. Academic reports recorded in academic style using A.P.A. formatting;
e. Quizzes;
f. Summative assessments;
g. Presentations and demonstrations; and
h. Class participation

Grading:
Your grade will be calculated on a total point system. There will be 1000 points possible for the semester, allocated in the following manner:

•	Homework- 12 @ 50 points each	600
•	Unit Exams- 3 @ 100 points each	300
•	Final Exam- 1 @ 100 points	100
	TOTAL POINTS POSSIBLE:	1000

Homework:
Each chapter may have homework and may include True and False sections, the multiple choice sections, the matching sections, practice exercise sections, exercises sections, problems, continuing problems, and special activities. Please pay careful attention to the assignments on the syllabus to make sure you do the assigned work. *To receive full credit for homework, a student must complete all the assigned work which includes showing all the computational steps necessary to solve the problem*. Each completed assignment is worth 50 points.

Late homework will be accepted, but it may be subject to up to a 50% penalty assessed for lateness. Home work is due during the week after the theory in a chapter is completed (e.g. the homework from chapter 1 is due during week two and so-on). *No late homework will be accepted after the 14th week of the course*.

There are two options for turning in completed assignments:

1. Assignments can be mailed to my attention at Taft College, 29 Emmons Park Dr., Taft, CA, 93268. If you choose this option, the postmark must be on or before the assignment due date to receive full credit. If you would like your assignments returned, please include a self addressed stamped envelope. Assignments will be returned within 7 days of receipt.

2. Turn in assignments using the LRC located in the Taft College library.

Exams:
There will be three (3) unit exams, each worth 100 points, that will cover approximately 2 – 3 chapters of the text. Exams may include multiple-choice options, true and false questions, short answer, and computational problems. The exams are *not* directly cumulative and will consist of questions concerning information from the chapters within each unit. Each exam is designed to take 90 minutes to complete, so please make arrangements so that you will have the necessary time to complete the exam once it has been started. Exams maybe be closed-book and closed-note, proctored assessments.

Final Exam:
The final exam IS cumulative, is worth 100 points, and may include multiple-choice options, true and false questions, short answer, and computational problems. The exam are designed to take 90 minutes to complete, so please make arrangements so that you will have the necessary time to complete the exam once it has been started. This exam maybe be a closed-book and closed-note, proctored assessment.

General Course Policies:
Keys to success in this class:

1. **Be attentive to every week's assigned reading.** Actively and critically read your text and be sure to read before attempting any homework.
2. **Keep up.** Accounting is cumulative. If you fall behind it will become increasingly more difficult to get caught up.
3. **Do the homework.** Homework is 50% of your grade. You cannot learn the material without doing the homework, and you certainly can't get a good grade without it.
4. **Submit all assignments on time.** You may lose at least 10% if you do not submit assignments on time (by midnight of the due date). Do not email me an assignment except in case of EMERGENCY – my receipt of your assignment is YOUR responsibility, even if emailed. I will reply that I have received an emailed assignment – if you do not receive an email back from me you should assume I did not receive yours and make alternative arrangements.
5. **Keep me informed.** Life happens. I am willing to make allowances for late work under emergency situations IF YOU LET ME KNOW RIGHT AWAY.
6. **Use me as a resource.** I am available by phone and by e-mail, as well as my admin time before/after class or other times by appointment.

INSTRUCTOR FEEDBACK:
I believe in providing timely and effective feedback to all my students and will reply to your e-mail within 1 to 2 days. If you send me written correspondence, I will respond within 2 to 3 days, but please remember it takes time for the mail to make its way back and forth. Assignments will be graded within 1 week from the date they are due. I will provide you with a periodic "progress report" to let you know how you are doing in the class.

ACADEMIC HONESTY STATEMENT:
"Academic dishonesty is defined by this college as any illegitimate act by any student, such as plagiarism or falsifying documents that would gain that student an advantage in grading, graduating from the college, or qualifying for entrance into any academic program. It is a serious breach of student conduct and will be treated as such by administrators, instructors, staff members, and students of the college. Penalties for such conduct, depending on its severity, may range from a simple reprimand to an action that results in expulsion from the college. All flagrant instances of academic dishonesty will be reported to the Vice President of Instruction and/or the Vice President of Student Services, and appropriate measures will be taken by those officers of the college to correct the problem."
All students are expected to work independently. PLAGIARISM IS NOT ACCEPTABLE AND WILL RESULT IN A GRADE OF "F" FOR THE ASSIGNMENT. THE VICE PRESIDENT OF INSTRUCTION WILL BE NOTIFIED.

Students with Learning Disabilities or Irregular Processing Patterns:
Students with disabilities or students who believe they may have a learning disability and who need accommodations in this course are encouraged to contact Student Support Services (661) 763-7841 or (661) 763-7927 as soon as possible to implement reasonable accommodations promptly. Student Support Services provides many useful accommodations to students who qualify for additional resources, including extended time on tests, spellcheckers, audio technology, and other useful services. If you have difficulty staying focused, respond more strongly to the spoken language than written language, or suspect that you may be disadvantaged academically by the means with which you process classroom material, I urge you to contact Student Support Services. Do not be shy or ashamed. Steven Spielberg, Isaac Newton, Beethoven, and Albert Einstein are just a few of the many geniuses with learning disabilities.

Course Scope and Sequence

Date	Topic and Reading	Objectives	Homework Assignments	Due date(s)
Week 1 (8/24 – 8/30)	Introduction Unit I - Basics Review of operations • Read chapter 1	• Define and use correct terminology • Multiply efficiently • Simplify expressions containing parenthesis • Round off numbers to a specific decimal place	Pgs. 14-15 #'s 1- 11 ODD ONLY Pg. 20 #6 A-G	Ch. 1 Homework 8/31/2009
Week 2 (8/31 – 9/6)	Using equations • Read chapter 2	• Solve basic equations • Express numbers in ratios	Pg. 29 #'s 17-35 ODD ONLY Pg. 36 #'s 25-35 ODD ONLY Pg. 40 #'s 1-9 ODD ONLY	Ch. 2 Homework 9/8/2009
Week 3 (9/7 – 9/13) Note: 9/7 is a holiday	Review of percent • Read chapter 3	• Change a percent to its equivalent decimal or fractions • Use the basic equation form • Express word problems in an equation	Pg. 50 #'s 25 – 35 ODD ONLY Pg. 56 #'s 31 – 49 ODD ONLY Pg. 60 #'s 21 – 39 ODD ONLY	Ch. 3 Homework 9/14/2009
Week 4 (9/15 – 9/20)	**Unit 1Exam**	• Measure knowledge of concepts of from Unit I	Will be placed in LRC on 9/14/2008	Unit 1 Exam 9/21/2009
Week 5 (9/21 – 9/27)	Unit 2 – Retail Mathematics Commercial Discounts • Read chapter 12	• Use the trade discount formula • Understand and use sales terms	Pgs. 344 – 345 #'s 1 – 15 ODD ONLY Pgs. 351 – 352 #'s 1 – 9 ODD ONLY	Ch. 12 Homework 9/28/2009
Week 6 (9/28 – 10/4)	Markup • Read chapter 13	• Give a percentage markup • Calculate the selling price factor	Pgs. 364 – 365 #'s 1 – 15 ODDS ONLY Pgs. 370 – 371 #'s 1 – 15 ODD ONLY Pgs. 374 – 375 #'s 1 – 9 ODD ONLY	Ch. 13 Homework 10/5/2009
Week 7 (10/6 – 10/11)	Markdown • Read chapter 14	• Use formulas for percentage markdown • Find the total handling cost	Pgs. 385 – 386 #'s 1- 15 ODD ONLY Pgs. 393 – 394 #'s 1 – 9 ODD ONLY Pg. 397 #'s 1 & 3	Ch. 14 Homework 10/12/2009
Week 8 (10/12 – 10/18)	**Unit 2 Exam**	• Measure knowledge of concepts of from Unit II	The Unit 2 exam will be placed in the LRC on 10/13/2008	Unit 2 Exam 10/20/2009
Week 9 (10/19 – 10/25)	Unit 3 – Mathematics of Finance Simple interest • Read chapter 15	• Use the simple interest formula • Compute ordinary of exact interest • Compute the present value	Pg. 405 #'s 1 – 9 ODD ONLY Pg. 409 #'s 1 – 5 ODD ONLY Pgs. 412 – 413 #'s 1 – 15 ODD ONLY Pg. 420 #'s 1 - 9 ODD ONLY Pgs. 426 – 427 #'s 1 – 9 ODD ONLY	
Week 10 (10/26 – 11/01)	• chapter 15 (con't)			Ch. 15 Homework 11/02/2009
Week 11 (11/2 – 11/08)	Bank Discount • Read chapter 16	• Proceeds of a simple discount note • Determine equivalent simple interest	Pgs. 440 – 441 #'s 1 – 9 ODD ONLY Pgs. 448 – 449 #'s 1 – 15 ODD ONLY Pgs. 452 – 453 #'s 1 – 9 ODD ONLY Pg. 456 #'s 1 – 15 ODD ONLY	Ch. 16 Homework 11/09/2009
Week 12 (11/09 – 11/15) Note: 11/09 is a holiday	Multiple Payment Plans • Read chapter 17	• Credit due for partial payment accounts • Open-end charge account • Calculate installment plan purchases	Pg. 464 #'s 1, 3, 5 Pg. 470 #'s 1 – 7 ODD ONLY Pgs. 480 – 481 #'s 1 – 15 ODD ONLY Pg(s) 487 – 488 #'s 1 – 9 ODD ONLY	Ch. 17 Homework 11/16/2009

Week 13 (11/16 – 11/22)	**Compound interest** • **Read chapter 18**	• **Compute a compound amount** • **Compute present value**	**Pg. 496 #'s 1 – 9 ODD ONLY** **Pgs. 503 – 504 #'s 1 – 17 ODD ONLY** **Pgs. 511 – 512 #'s 1 – 9 ODD ONLY** **Pgs. 517 – 518 #'s 1 – 13 ODD ONLY**	**Ch. 18 Homework 11/23/2009**
Week 14 (11/23 – 11/29) **Note: 11/26 is a holiday**	**Annuities, Sinking funds, and Amortization** • **Read chapter 19**	• **Determine the amount and compound interest on an annuity** • **Compute the present value of an annuity**	**Pgs. 524 – 525 #'s 1 – 9 ODD ONLY** **Pgs. 531 – 533 #'s 1 – 15 ODD ONLY**	**Ch. 19 Homework 11/30/2009**
Week 15 (11/30 – 12/6)	• **Continue chapter 19**	• **Prepare a sinking fund schedule** • **Prepare an amortization schedule**	**Pgs. 539 – 540 #'s 1 – 9 ODD ONLY** **Pgs. 549 – 550 #'s 1 – 15 ODD ONLY**	**Ch. 19 Homework 12/06/2009**
Week 16 (12/7 – 12/13)	**Unit 3 Exam**	• **Measure knowledge of concepts of from Unit III** • **Review for final exam**	**The Unit 3 exam will be placed in the LRC on 12/7/2009**	**Unit 3 Exam 12/14/2009**
Finals Week (12/14 – 12/18) **The <u>Final Exam due date is Monday, December 14, 2009.</u> The exam will be placed in the LRC on Monday, December 7, 2009.**				

COURSE EVALUATION

**NOTE: The instructor reserves the right to change the scope and sequence to meet the needs of each class.