BUSINESS 54

Business Mathematics

BUS -054.63Z

Call #00287

Instructor: Sandra Spencer

WINTER '16

5.0 Units

De Anza College Distance Learning Center • Office Location: MLC-250 • Phone: 408-864-8969 • FAX: 408-864-8245 • E-mail: distance@deanza.edu • Web Site: http://deanza.edu/distance • Office Hours: M-Th, 8:30 a.m. - 6 p.m.; Fri: 9:00 a.m. - 4:00 p.m.



DESCRIPTION

This course is primarily a **business** course that uses mathematics as a tool to aid in the decision making process. The content of this course provides students with a basic knowledge of both business and numerical concepts; helps students translate questions into mathematical representations; and enhances ones analytical skills in terms of evaluating business options and personal finance matters.



This course covers the following topics:

- ♦ Addition, subtraction, multiplication and division using whole numbers, fractions and decimals
- ♦ Percentages
- ♦ A very thorough treatment of word problems (If you are afraid of word problems, this course is for you! The author of the textbook had great difficulty with word problems when he was a student, so his explanations are patient, thorough and very sympathetic.)
- Price markups and discounts
- Cash discounts (such as for early payment of an invoice)
- Credit terms, partial payments and outstanding balance calculations
- Payroll applications (such as calculation of gross pay, payroll deductions and net pay)
- ◆ Calculation of interest earned on a savings account and value of a savings account at the end of a specified period
- ♦ Discount notes and bonds
- Compound interest and net present value
- ♦ Annuities, sinking funds and life insurance
- ♦ Home mortgages
- An introduction to the analysis of financial statements (income statements and balance sheets)
- ♦ Depreciation and inventory valuation
- ◆ A brief introduction to business statistics

Student Learning Outcome Statements (SLO)

On completion of this course, students should be able to:

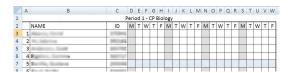
- 1) Demonstrate an understanding of the "Time Value of Money" concept in business.
- 2) Demonstrate a basic knowledge of the mathematics of pricing.
- 3) Calculate performance measures for investments such as stocks, bonds or mutual funds.

Course Objectives

- Discuss and develop strategies for success in comprehending and demonstrating mastery of business and mathematical concepts
- Analyze business problems by computing and evaluating the implications of their mathematical solutions.
- Explain and differentiate key business concepts and their impact on business decision-making.
- Apply key concepts in a variety of practical areas of business.

The course consists of 12 lessons, plus a midterm and final. It is intended to be completed in 12 weeks, working 10 to 12 hours per week. Students may complete any part of the course early, but there are grading penalties for completing assignments late.

Each lesson consists of a combination of reading assignments from the textbook (see required materials section,) online lessons, practice problems, Internet "mini-research project", self-check homework, and a Quiz graded by the instructor. Some lessons also contain instructor-graded homework assignments.



<u>Please note</u>: It is required that you <u>establish a regular and active presence</u> in the course. Your attendance is important, as it will enhance the learning dynamics in the course for everyone. It will be measured in large part by your completion of the individual interactive exercises, your group assignments AND your weekly progress report communication with the instructor.

Self-check drill problems submitted via *Connect* may be seen by the instructor, however, your level of performance on these problems does not adversely affect your final grade. The answers to the self-check homework problems are to be reviewed online via *Connect* purchased with the text (see required materials section below.). The self-check homework, reading assignments, and lesson modules are all intended to help the student achieve mastery of the material, which is then tested in the guizzes, midterm, and final.

GRADING

Grading will be based on the following scale:

% of Total Possible Points	Letter Grade
90% - 100%	A
80% - 89%	В
70% - 79%	С
65% - 69%	D
< 65%	F

Note: "Plus/Minus" grading is also an option at the instructor's discretion.

Six Components of Grade	Percentages
Twelve Quizzes:	40%
Midterm:	25%
Final:	20%
Instructor-graded Homework &	
Class participation*:	
	15%
/ *(<u>weekly progress report to instructor</u> ,	
attendance, <u>self drill problems</u> ,	
group exercises & helping others)	
Extra Credit: Video Case Assignments	5%

Forty-five percent (45%) of the grade will be based on student performance on the midterm and final, and forty percent (40%) will be based on student performance on the weekly lesson quizzes. The remaining fifteen percent (15%) is based on class participation and the instructor graded homework assignments submitted in *Connect*.

Extra Credit is available for completing the seven video cases assignments. You are to view the video, read the case material and complete the corresponding problems in the textbook providing <u>detailed</u> solutions. (See the Outline below for details, and view the grading rubric in the on-line gradebook.)

INSTRUCTOR INFORMATION: SANDRA SPENCER

Office Hours Held: From Tuesday, January 5, 2016 to Monday, March 21, 2016

Monday, Wednesday & Friday 8:30am to 9:00 am (Online)

Tuesday & Thursday 1:30 a.m. - 2:20 p.m (On campus)

Telephone: (408) 864-8932

Mailing Address: 21250 Stevens Creek Blvd, Cupertino, CA 95014

Office Location: Tuesday & Thursday F51Q; Mon, Wed & Friday - Online spencersandra@deanza.edu; sjonesspencer@alum.berkeley.edu

If you have questions at any time, I encourage you to contact me immediately. I will respond to you as soon as possible usually within 24 hours or the next scheduled office hour.



WEEKLY COMMUNICATION WITH INSTRUCTOR

You are required to post a private "progress report" message to the instructor **EVERY** week updating me on your progress in the course. This message is to be sent by Saturday **night**.

Note: To send your message, please go to the Catalyst web site and select the "Progress Report" link. It is typically the last activity listed within each weekly module.

REQUIRED MATERIALS



** NOTE: See the "Submitting Assignments" section below for more information about Connect **

"Bundle" available for purchase at the De Anza College Bookstore "DCB":

[Phone: 408-864-8323 or 864-8949 • http://distance.deanza.fhda.edu/Bookstore.html]

- 1. Slater, Jeffrey, *Practical Business Math Procedures*, 11th edition. Irwin McGraw-Hill, Inc., 2014 FULL Edition Required (22 chapters) Do <u>NOT</u> purchase the "*Brief*" edition)
- 2. Connect to accompany Practical Business Math Procedures, 11th edition (Bundled with text at DCB. Bundle also includes access to an e-book.)

 Note: A "stand alone" e-book is available on-line along with the Connect software. (ConnectPlus)
- 3. Access to the Internet at a speed of 28.8K or higher.
- 4. If using IE or Netscape, please use Internet Explorer 5.0 (or higher) or Netscape 4.0 or higher.



SUBMITTING ASSIGNMENTS

The instructor-graded assignments should be submitted via the "Connect" website. McGraw-Hill's Connect is a web based assignment and assessment tool required for this course. Connect is designed to assist you with your coursework based on your needs. Connect access codes are packaged with a new textbook in the De Anza College Bookstore, at no additional cost. Connect may also be purchased online at the Connect course web site: http://connect.mheducation.com/class/s-spencer-winter-2016---online-1.

NOTE: If you purchase Connect online, you will have the option of purchasing Connect or ConnectPlus, which includes an interactive eBook of the required text.

To register for *Connect*, please http://connect.mheducation.com/class/s-spencer-winter-2016---online-1 and click "Register Now". If you need assistance to register, please refer to the video clips on the bottom of the *Connect* screen.

<u>If you already have an access code</u> because you purchased a <u>new</u> book from the DCB, ultimately, you will select "*How to Register With An Access Code*".

If you need to purchase an access code because you either: 1) purchased a **used** book or 2) purchased the text **off-campus** or because 3) you want the <u>E-Book</u> **without** a hard copy, you will select "*How To Buy Access Online*". If you have any issues while registering or using *Connect*, please contact McGraw-Hill's CARE team at http://www.mhhe.com/support.



ASSIGNMENT CALENDAR and DEADLINES

<u>The best way to achieve mastery of the material</u> is to complete each of the activities listed below for every lesson. You are to begin with lesson one and proceed sequentially to lesson twelve.

For each lesson you are to do the following:

- ◆ **Read** the assigned chapter(s)
- ♦ **View** the *Powerpoint* presentation slides
- ♦ **Review** the *LearnSmart* tutorials (Located within *Connect*)
- ♦ Complete the assigned *Connect* Practice Problems
- ♦ Solve all of the odd numbered end-of-chapter problems
- ♦ Complete an Internet research project(s) (Listed in course website)

 Note: These are not graded unless specifically labeled and identified as a graded assignment in Catalyst.)
- ◆ Read the Kiplinger article referenced (located in the Slater text on the page indicated) <u>and</u> Post your comments to the appropriate Discussion forum
- ♦ Submit the Graded Lesson quiz. (Located within Connect)
- ♦ Submit the Instructor Graded Homework Assignments ("IGHW") when specified. (Located within Connect)









The "Assignment Calendar"* lists the assignments that contribute toward the final course grade. These graded assignments - which include quizzes, the midterm, homework, discussion postings, two Internet Research projects and the final - have due dates as indicated on the calendar. In order to complete all course requirements by the end of the quarter, I strongly encourage you to adhere to the schedule as closely as possible. Therefore, please plan to submit the assignments **each week** on the indicated dates.*

(* See Assignment Calendar document.)

