



**HOUSTON COMMUNITY COLLEGE SYSTEM
BUSINESS TECHNOLOGY DEPARTMENT
HOUSTON, TEXAS**

**BUSINESS MATH AND MACHINE
APPLICATIONS
POFT 1325**



**SECRETARY'S COMMISSION ON ACHIEVING NECESSARY SKILLS
SCANS COMPETENCIES INCORPORATED
Student Learning Outcomes**

**HOUSTON COMMUNITY COLLEGE SYSTEM
BUSINESS TECHNOLOGY DEPARTMENT
COURSE SYLLABUS**

**BUSINESS MATH AND MACHINE APPLICATIONS
POFT 1325**

SCANS Competencies Included

<i>Instructor:</i>	<i>CRN:</i>
<i>Phone:</i>	<i>Time:</i>
<i>Office Hours: By Appointment</i>	<i>Campus:</i>
<i>Instructor's E-Mail:</i>	

FINAL EXAM:

TEXTBOOKS AND MATERIALS

Practical Business Math Procedures with DVD, Business Math Handbook, Wall Street Journal Insert, by Jeffrey Slater, Irwin, McGraw-Hill Publishing Inc., **Ninth Edition, ISBN: 0-07-721456-0**

LAST DAY FOR ADMINISTRATIVE & STUDENT WITHDRAWALS:

HCC COURSE WITHDRAWAL POLICY

The State of Texas has begun to impose penalties on students who drop courses excessively. That is, if you repeat the same course more than twice, you have to pay extra tuition. In addition, as of Fall 2007, students are limited to no more than SIX total course withdrawals throughout their educational career at a Texas public college or university.

To help students avoid having to drop/withdraw from any class, HCC has instituted an Early Alert process by which your professor will “alert” you and distance education (DE) counselors that you might fail a class because of excessive absences and/or poor academic performance. Contact your DE professor or a DE counselor to learn about what, if any, HCC interventions might be available to assist you – online tutoring, child care, financial aid, job placement, etc. – to stay in class and improve your academic performance.

In order to withdraw from your DE class, you MUST contact a DE counselor or your DE professor and this must be done PRIOR to the withdrawal deadline to receive a “W” on your transcript. If you do not withdraw before the deadline, you will receive the grade that you have earned by the end of the semester. Zeros averaged in for required assignments/tests not submitted will lower your semester average significantly, most likely resulting in a failing grade (“F”). Please do **not** contact both a DE counselor and your DE professor to request a withdrawal; either one is sufficient.

The final withdrawal deadline for regular term and second start classes is April 3, 2008. However, classes of other duration (mini-term, flex-entry, 8-weeks, etc.) have different final withdrawal deadlines. Please visit the online registration calendars, HCC schedule of classes and catalog, any HCC Registration Office, or any HCC counselor to determine class withdrawal deadlines. *Remember to allow a 24-hour response time when communicating via email or telephone with a DE professor and/or counselor. Do not submit a request to discuss withdrawal options less than a day before the deadline.*

MISSION/PURPOSE

The primary purpose of this course is to survey the basic arithmetic functions (addition, subtraction, multiplication, division, fractions, percentages, and decimals) and relate these functions to actual business problems and situations. With emphasis on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard.

STUDENT LEARNING OUTCOMES

1. Students will demonstrate skills and concepts for personal needs and business needs through individual project.
2. Students will demonstrate understanding of payroll and deduction processes through case scenarios.

COURSE OBJECTIVES/GOALS

1. The student should gain a sufficient understanding of business mathematical skills and concepts and be able to apply them to other business courses and to his own personal needs.
2. The student should have knowledge of basic mathematical and algebraic terms.
3. The student should improve his or her knowledge and understanding of decimals, fractions, and percentages in order to handle his or her personal finances in the most profitable manner.
4. The student should obtain knowledge and understanding of payroll and deduction processes.
5. The student should increase his or her knowledge of the various taxes: payroll deduction, city and state sales taxes, etc.
6. The student should become familiar with banking services and savings plans and become proficient at balancing a checkbook with a bank statement.
7. The student should become knowledgeable about consumer credit and the cost of using credit cards, charge cards, bank loans, etc.
8. The student should acquire an understanding of the metric system and be able to convert the basics of metric measurement into the standard American measuring system and vice-versa.
9. To apply total quality management concepts to Business Calculations.



Many sub-skills--such as the ability to use language effectively and to evaluate the quality of the student's work--are embodied in these goals. Emphasis is placed on applying these skills so that the student will be able to use the keyboard and mouse to perform electronic calculation projects effectively and to facilitate communication, which is a very marketable, universal skill.



This level integrates computer with the electronic calculator with emphasis on key stroking, and working in legal, medical, and business offices.

HCCS POLICIES

STUDENT INFORMATION

A student handbook is available on the College website: <http://www.hccs.edu>. Look under the student subheading to get detailed information concerning students attending Houston Community College

System (HCCS). Data such as withdrawal policies, refund policies, incomplete, late assignments, make-ups, extra credit, grading system, attendance requirements, and other details are included in the student handbook..

DEGREE PLAN

Students are encouraged to file a degree plan with a Counselor or the Business Technology Department for the certificate and/or degree plan. Please ask your instructor for Degree Plan information or contact the Business Technology Department at 713-718-7808 for information about filing a degree plan.

Job Connections Online Placement Services: <http://jobs.hccs.edu/>

Students and Alumni of the Houston Community College System can post resumes and search jobs online. Registration is free.

CLASS ATTENDANCE

Students are expected to attend all classes in which they are enrolled regularly. Class attendance is the responsibility of the student. Students are responsible for materials covered during their absence, and it is the student's responsibility to consult with the instructor for make-up assignments.

DISABILITIES POLICIES

"Any student with a documented disability (e.g. physical, learning, psychiatric, vision, hearing, etc.) who needs to arrange reasonable accommodations must contact the Disability Services Office at their respective college at the beginning of each semester. Faculty are authorized to provide only the accommodations requested by the Disability Support Services Office."

For questions, contact Donna Price at 713-718-5165 or the Disability Counselor at each college. Also visit the ADA web site at: <http://www.hccs.edu/students/disability/index.htm>

ACADEMIC DISHONESTY

Academic dishonesty can result in a grade of F or 0 for the particular test or assignment involved, dropped, and/or expelled from HCCS. Please refer to the HCCS Student Handbook on the Student section of the HCC website for further information regarding Academic Honesty.

INCOMPLETE

The grade of "I" (incomplete is conditional). A student receiving an "I" must arrange with the instructor to complete course work by the end of the following term (excluding summer). After the deadline, the grade of "I" becomes and "F". All "I's" must be changed to grades prior to graduation.

REPEATER POLICY

Students who take a course for the third time or more will face significant tuition/fee increases at HCC and other Texas public colleges and universities. If you are considering course withdrawal because you are not earning passing grades, confer with your professor/counselor as early as possible about your study habits, reading and writing homework, test-taking skills, attendance, course participation, and opportunities for tutoring or other assistance that might be available.

INTERNATIONAL STUDENTS: Receiving a W in a course may affect the status of your student Visa. Once a W is given for the course, it will not be changed to an F because of the visa consideration. Since January 1, 2003, International Students are restricted in the number of distance education courses that they may take during each semester. Please contact the International Student Office at 713-718-8520 if you have any questions about your visa status and other transfer issues.

EVALUATION AND GRADING

The standard Houston Community College grading system will be used to evaluate your performance in this course.

Grade	Score
A-Excellent	90-100
B-Good	80-89
C-Fair	70-79
D-Passing	60-69
F-Failure	0-59

The following grading system will be used to evaluate your performance in this course.

Chapter Exams	40%
Class Assignments/Class Participation	40%
Final Exam	20%

NOTE TO STUDENT: If you have any questions or concerns about the course and/or course assignments, please come to me so that we can resolve any issues. If your concerns are not resolved, you are encouraged to meet with my supervisor, Ms. Willie Caldwell, Department Chair, at 713-718-7808 or Room E-119 Scarcella Building or willie.caldwell@hccs.edu .

NOTE

- Assignments/Exams/Final must be turned in to the instructor only, on the specified due dates.
- This syllabus is subject to change at the discretion of the instructor to accommodate instructional and/or student needs.
- The instructor will assign required assignments from each chapter.
- Required chapter exams will be administered at the instructor’s discretion.
- Problems in Chapters 1, 2, & 3 are to be worked **without calculators**.

DAILY SCHEDULE
POFT 1325-- Practical Business Math/Calculations

WEEK	ACTIVITIES
	CHAPTER EXAMINATIONS WILL BE ANNOUNCED BY THE INSTRUCTOR
1	Orientation and Pretest Chapter 1--Whole Numbers; How to Dissect and Solve Word Problems <ul style="list-style-type: none"> • Reading , Writing, and Rounding Whole Numbers • Adding and Subtracting Whole Numbers • Multiplying and Dividing Whole Numbers
2	Chapter 2—Fractions <ul style="list-style-type: none"> • Types of Fractions and Conversion Procedures • Addition and Subtraction of Fractions • Multiplication and Division of Fractions
3	Chapter 3—Decimals <ul style="list-style-type: none"> • Rounding Decimals; Fraction and Decimal Conversions • Adding, Subtracting, Multiplying, and Dividing Decimals Introduction of the Electronic Calculator
4	Chapter 4—Banking <ul style="list-style-type: none"> • The Checking Account; Credit Card Transactions • Bank Statement and Reconciliation Process; Trends in Online Banking
5	Chapter 5—Solving for the Unknown: A How-to Approach for Solving Equations <ul style="list-style-type: none"> • Solving Equations for the Unknown
6	Chapter 6—Percents and Their Applications <ul style="list-style-type: none"> • Conversions • Application of Percents—Portion Formula
7	Chapter 7—Discounts: Trade and Cash <ul style="list-style-type: none"> • Trade Discounts—Single and Chain • Cash Discounts, Credit Terms, and Partial Payments
8	Chapter 8—Markups and Markdown; Insight into Perishables
9	Chapter 9—Payroll <ul style="list-style-type: none"> • Calculating Various Types of Employees’ Gross Pay • Computing payroll Deductions for Employees’ Pay; Employers’ Responsibilities
10	Chapter 10—Simple Interest <ul style="list-style-type: none"> • Calculation of Simple Interest and Maturity Value • Finding Unknown in Simple Interest Formula
11	Chapter 11—Promissory Notes, Simple Discounts Notes and the Discount Process <ul style="list-style-type: none"> • Structure of Promissory Notes; the Simple Discount Note • Discounting an Interest-Bearing Note before Maturity Chapter 12—Compound Interest and Present Value <ul style="list-style-type: none"> • Compound Interest (Future Value)—The Big Picture • Present Value—The Big Picture
12	Chapter 13—Annuities and Sinking Funds
13	Chapter 14—Installment Buying, Rule of 78, and Revolving Charge Credit Cards <ul style="list-style-type: none"> • Cost of Installment Buying

	<ul style="list-style-type: none"> • Paying Off Installment Loans before Due Date • Revolving Charge Credit Cards
14	Chapter 15—The Cost Home Ownership <ul style="list-style-type: none"> • Types of Mortgages and the Monthly Mortgage Payment • Amortization Schedule—Breaking Down the Monthly Payment
15	Cumulative Review
16	Final Examination
NOTE: <i>Chapters are subject to change by the instructor. Students will be notified in Blackboard.</i>	



**HOUSTON COMMUNITY COLLEGE SYSTEM
BUSINESS TECHNOLOGY DEPARTMENT**

Student Questionnaire

Name:	Last Name	First Name	MI	Social Security #
Address:	Street	Apt. #		Home Telephone
City	State	Zip Code		Cell Telephone #
E-mail address:				

Educational Plan

Have you determined your major? _____ Yes No _____

Have you filed a degree plan? _____ Yes No _____ (If no, please see your instructor or Business Technology Department Chair.)

Graduation Target Date: _____

(Must apply for graduation via the counselor's office in order to receive your certificate or degree)

Employment History

Are you currently employed? _____ Yes No _____

Is your employment _____ Part-time? or _____ Full-time?

If you are employed, please complete the following:

Employer _____

Address _____

City _____ St _____ Zip _____ Phone# _____

Comments:

If you have any questions, please call 713-718-7808, or Fax 713-718-6774 between 8:00 a.m. – 5:00 p.m.

HCC seeks to provide equal educational opportunities without regard to race, color, religion, national origin, sex, age, or disability.

Willie T. Caldwell, Department Chair
10141 Cash Road, E119, Stafford Texas 77477



Student Success
Organizational Stewardship
Business Technology Department

STUDENT ADVISEMENT CHECKSHEET

When teaching Business Technology courses, it is a **requirement** for the professor to inventory and complete the below list of advisement items from each student.

Have you been informed about **degree plans** (contractual agreement)?

Yes No

Have you been made aware of the importance of completing an application for **graduation** in order to receive your certificate or degree? Yes No

Have you been given **job placement** information including:

- Job Placement Contact Person with
 - E-mail address
 - Telephone Number
 - Location
- Website address
- Access instruction for website including directions on how to navigate the job placement website

Yes No

Name _____

Print "your" Name

I, _____, have been given

Student Signature

Information regarding the above listed items.

Date _____

Instructor Signature _____

This form will be returned to Willie Caldwell's office on date of completion.

STATEMENT OF WORKPLACE AND FOUNDATION COMPETENCIES

Houston Community College is determined to prepare students with the knowledge and skill needed to succeed in today's dynamic work environment. Towards this end, the following workplace competencies and foundation skills have been designed into the curriculum for POFT 1325-Practical Business Math/Calculations.

COMMON WORKPLACE COMPETENCIES

Resources: Identifies, organizes, plans, and allocates resources

Students in POFT 1325-Practical Business Math/Calculations must be able to allocate their time effectively in order to complete their class assignments. Students must be able to organize their own working area for maximum utilization of space.

Interpersonal: Works with others

Students in POFT 1325-Practical Business Math/Calculations must be able to share workspace, at times, with another student and thus develop competency in working effectively with others. Should conflict arise, students must be able to resolve differences effectively for the common good of all parties involved and thus develop negotiating skills.

Information: Acquires and uses information

Students in POFT 1325-Practical Business Math/Calculations must be able to acquire the proper information in order to successfully complete the course. Sources include classroom lectures, the text, and reference books available to the classroom. Most importantly, students must use computers to process this information and to perform various tasks.

Technology: Works with a variety of technologies

Students in POFT 1325-Practical Business Math/Calculations must be able to use computer hardware and software effectively in order to properly maintain the functioning of the equipment and solve and identify problems concerning the equipment and software technology.

FOUNDATION SKILLS

Students in POFT 1325-Practical Business Math/Calculations must be able to demonstrate basic skills in reading, writing, listening, and speaking. Students must learn to locate, understand, and interpret written information in text documents such as instructions, mathematical techniques, letters, reports, and tables.

Students in POFT 1325-Practical Business Math/Calculations must be able to demonstrate thinking skills, make decisions, solve problems, visualize, and reason effectively.

Students in POFT 1325-Practical Business Math/Calculations must be able to demonstrate personal qualities such as responsibility, a positive view of self, politeness towards others, self-control, self-motivation, and honesty.

EFFECTIVE JOB PERFORMANCE: The Skills Employers Want

FIVE COMPETENCIES

Resources: Identifies, organizes, plans, and allocates resources

- A. *Time*—Selects good relevant activities, ranks them, allocates time, and prepares and follows schedules
- B. *Money*—Uses or prepares budgets, makes forecasts, keeps records, and makes adjustments to meet objectives
- C. *Material and Facilities*—Acquires, stores, allocates, and uses materials or space efficiently
- D. *Human Resources*—Assesses skills and distributes work accordingly, evaluates performance and provides feedback

Interpersonal: Works with others

- A. *Participates as Member of a Team*—contributes to group effort
- B. *Teaches Others New Skills*
- C. *Serves Clients/Customers*—works to satisfy customers' expectations
- D. *Exercises Leadership*—communicates ideas to justify position, persuades and convinces others, responsibly challenges existing procedures and policies
- E. *Negotiates*—Works toward agreements involving exchange of resources, resolves divergent interests
- F. *Works with Diversity*—works well with men and women from diverse backgrounds.

Information: Acquires and uses information

- A. *Acquires and Evaluates Information*
- B. *Organizes and Maintains Information*
- C. *Interprets and Communicates Information*
- D. *Uses Computers to Process Information*

Systems: Understands complex inter-relationships

- A. *Understands Systems*—knows how social, organizational, and technological systems work and operates effectively with them
- B. *Monitors and Corrects performance*—distinguishes trends, predicts impacts on system operations, diagnoses deviations in systems' performance and corrects malfunctions
- C. *Improves or Designs Systems*—suggests modifications to existing systems and develops new or alternative systems to improve performance

Technology: Works with a variety of technologies

- A. *Selects Technology*—chooses procedures, tools or equipment including computers and related technologies
- B. *Applies Technology to Task*—understands overall intent and proper procedures for setup and operation of equipment
- C. *Maintains and Troubleshoots Equipment*—prevents, identifies, or solves problems with equipment, including computers and other technologies

A THREE-PART FOUNDATION

Basic Skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks

- A. *Reading*—locates, understands, and interprets written information in prose and in documents such as manuals, graphs, and schedules
- B. *Writing*—communicates thought, ideas, information, and messages in writing; and creates documents such as letters, directions, manuals, reports, graphs, and flow charts
- C. *Arithmetic/Mathematics*—performs basic computations and approaches practical problems by choosing appropriately from a variety of mathematical techniques
- D. *Listening*—receives, attends to, interprets, and responds to verbal messages and other cues
- E. *Speaking*—organizes ideas and communicates orally

Thinking Skills: Thinks creatively, makes decisions, solves problems, visualizes, knows how to learn, and reasons

- A. *Creative Thinking*—generates new ideas
- B. *Decision Making*—specifies goals and constraints, generates alternatives, considers risks, and evaluates and chooses best alternatives
- C. *Problem Solving*—Recognizes problems and devises and implements plan of action
- D. *Seeing Things in the Mind's Eye*—organizes, and processes symbols, pictures, graphs, objects, and other information
- E. *Knowing How to Learn*—uses efficient learning techniques to acquire and apply new knowledge and skills
- F. *Reasoning*—discovers a rule or principle underlying the relationship between two or more objects and applies it when solving a problem

Personal Qualities: Displays responsibility, self-esteem, sociability, self-management, and integrity and honesty

- A. *Responsibility*—exerts a high level of effort and perseveres towards goal attainment
- B. *Self-Esteem*—believes in own self-worth and maintains a positive view of self
- C. *Sociability*—demonstrates understanding, friendliness, adaptability, empathy, and politeness in group settings.
- D. *Self-Management*—assesses self accurately, sets personal goals, monitors progress, and exhibits self-control
- E. *Integrity/Honesty*—chooses ethical courses of action