# **COURSE SYLLABUS**

# POFT 1325-271, BUSINESS MATH USING TECHNOLOGY FALL 2017

Time and Place: Tues. & Thurs., 11:00 AM- 12:15 PM, LC--Room 122

**Instructor:** Pat Dennis

**Office:** Lubbock Center – Room 120F, 806-716-4638

**Email:** <u>pdennis@southplainscollege.edu</u>

# **Office Hours:**

MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	ROOM
1–3 PM	3-4 PM	1–3 PM	3-4 PM	10-12 PM	Lubbock Center Room 120F
				Other Times by Appointment	

A student who enrolls in this class who may need classroom accommodations is strongly encouraged to schedule an intake interview with the special services department before enrolling in this class or prior to the add/drop date for this semester.

## **MISCELLANEOUS:**

All cellular phones and audible pagers should be turned off during class time.

### **COURSE DESCRIPTION:**

This course provides skill development in the use of electronic calculators and business mathematical functions. Emphasis is placed on business problem-solving skills using spreadsheet software and/or electronic calculator/keyboard.

#### **COURSE GOAL:**

Upon successful completion of this course, the student will be able to apply mathematical concepts to business activities. Students will develop increased competency in the fundamental mathematical and arithmetic skills through practical applications in business situations. Students will be able to demonstrate the 10-key touch system on the electronic calculator.

## **MATERIALS OF INSTRUCTION:**

- 1. Business Math Using Technology, Custom 12th Edition with Connect 2016 ISBN 9781308914213. You must have the CONNECT access code for homework assignments.
- 2. Notebook or folder for handouts, homework, and exams.

#### **ATTENDANCE:**

Students are expected to attend all class meetings. **Four** absences will cause a student to be dropped from this class. This drop will be initiated by the instructor. Two instances of being tardy are equivalent to one absence. If you are tardy, it is your responsibility to notify the instructor at the end of class that he/she is in attendance. Class starts promptly at the scheduled time. Students with perfect attendance will have **two** points added to their final average.

# **Withdrawal Policy**

It is the student's responsibility to verify administrative drops for excessive absences through MySPC using his or her student online account. If it is determined that a student is awarded financial aid for a class or classes in which the student never attended or participated, the financial aid award will be adjusted in accordance with the classes in which the student did attend/participate and the student will owe any balance resulting from the adjustment.

If for any reason the student is unable to complete the course requirements, it is the student's responsibility to initiate their own withdrawal by the drop date for the semester. An administrative drop by the instructor in this course will, in most cases, result in the student receiving an "F" (not an "X"). The last day for students to drop the course is Thursday, November 16. However, always talk to your instructor before dropping.

#### **GRADING POLICY:**

Final grades will be calculated as follows:

Exams and Final: 70% (drop lowest except for final)

10-key calculator: 15% (drop lowest) McGraw-Hill Connect! 15% (drop lowest)

Numerous exams will be given including the final exam. One exam grade will be dropped (excluding the final exam). **No make-up exams will be given**; if one is missed, a zero will be recorded. The final exam will be given at the end of the semester and **MUST** be taken to pass the course.

Numeric grades will be given on all tests and assignments based on the following scale:

90-100 = A 80-89 = B 70-79 = C 60-69 = D Below 60 = F

Homework will be assigned on a regular basis. Students are expected to do all homework assignments and be prepared to discuss them on the date due.

### COMMUNICATION WITH INSTRUCTOR

- Communication with your instructor can be by phone (806-716-4638), by messaging through the Blackboard tools menu, or by SPC e-mail (pdennis@southplainscollege.edu). Always identify yourself with your full name as well as the course name and number in the subject line when contacting me. I have many students!
- You will need to check your SPC e-mail or forward it to another e-mail of your choice. You can do this by clicking the following link: <a href="https://myspc.southplainscollege.edu/ICS/Students/Information Technology/Email.jnz">https://myspc.southplainscollege.edu/ICS/Students/Information Technology/Email.jnz</a>

#### STUDENT CONDUCT

- Students are expected to follow all guidelines of conduct as outlined in the 2015-2016 Student Guide, which is available on the SPC website. Smoking is not allowed in any SPC facility. Food or drinks will be allowed in designated areas only and are not permitted in classrooms, laboratories, library, shops, elevators, etc.
- Courteous and appropriate classroom behavior is expected at all times. Since this
  class will demand everyone's complete attention, student should avoid all forms
  of inattentive and/or offensive behavior.
- Examples of behavior that will not be tolerated include reading newspapers, surfing the web, listening to IPods or similar devices, working on assignments for other classes, napping, talking with neighbors, coming to class excessively or consistently late, leaving before class is over and without prior notice, text messaging or other cell phone usage, or any other behavior that distracts either you, other students or the instructor from the complete focus and attention of the class.
- All cell phones MUST be turned OFF at the beginning of each class.

### **COURSE LEARNING OUTCOMES:**

## **Chapter 2 - Fractions**

# **Types of Fractions and Conversion Procedures** (C5, 6, 7)

The student will be able to:

- Recognize the three types of fractions.
- Convert improper fractions to whole or mixed numbers and mixed numbers to improper fractions.
- Convert improper fractions to lowest and highest terms.

# **Adding and Subtracting Fractions** (C5, 6, 7, 15)

The student will be able to:

- Add and subtract proper fractions with the same or different denominators.
- Find least common denominator by inspection and prime numbers.
- Add and subtract mixed numbers with the same or different denominators.

## Multiplication and Division of Fractions (C5, 6, 7, 15)

The student will be able to:

- Multiply and divide proper, improper, and mixed numbers.
- Use the cancellation method in the multiplication and division of fractions.

## **Chapter 3 - Decimals**

# **Rounding Decimals; Fraction and Decimal Conversions** (C5, 6, 7, 14)

The student will be able to:

- Explain the place values of whole numbers and decimals; round decimals.
- Convert decimal fractions to decimals, proper fractions to decimals, mixed numbers to decimals, and pure and mixed decimals to decimal fractions.

# Adding, Subtracting, Multiplying, and Dividing Decimals (C5, 6, 7, 15)

The student will be able to:

- Add, subtract, multiply, and divide decimals.
- Complete decimal applications in foreign currency.
- Multiply and divide decimals by shortcut methods.

## **SUPPLEMENT: 10-KEY CALCULATOR UNIT**

# **Chapter 4 - Banking**

# **The Checking Account** (C2, 5, 6, 7, 15, 18, 19)

The student will be able to:

- Define and state the purpose of signature cards, checks, deposit slips, check stubs, check registers, and endorsements.
- Correctly prepare deposit slips and write checks.

# Bank Statement and Reconciliation Process; Latest Trends in Mobile Banking (C2, 5, 6, 7, 15, 18, 19)

The student will be able to:

- Explain trends in the banking industry.
- Define and state the purpose of the bank statement.
- Complete a check register and bank reconciliation.
- Explain the trends in mobile banking.

# **Chapter 6 - Percents and Their Applications**

## **Conversions** (C5, 6, 7)

The student will be able to:

- Convert decimals to percents (including rounding percents), percents to decimals, and fractions to percents.
- Convert percents to fractions.

# **Applications of Percents--Portion Formula** (C5, 6, 7, 15, 18, 19)

The student will be able to:

- List and define the key elements of the portion formula
- Solve for one unknown of the portion formula when the other two key elements are given.
- Calculate the rate of percent decreases and increases.

## **Chapter 7 – Discounts: Trade and Cash**

# **Trade Discounts—Single and Chain (Includes Discussion of Freight)** (C2, 5, 6, 7, 15, 18, 19)

The student will be able to:

- Calculate single trade discounts with formulas and complements.
- Explain the freight terms FOB shipping point and FOB destination.
- Find list price when net price and trade discount rate are known.
- Calculate chain discounts with the net price equivalent rate and single equivalent discount rate.

# Cash Discounts, Credit Terms, and Partial Payments (C2, 5, 6, 7, 15, 16, 18, 19)

The student will be able to:.

- List and explain typical discount periods and credit periods that a business may offer.
- Calculate outstanding balance for partial payments.

## **Chapter 8 - Markups and Markdowns**

# Markups Based on Cost (100%) (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Calculate dollar markup and percent markup on cost.
- Calculate selling price when you know the cost and percent markup on cost.
- Calculate cost when dollar markup and percent markup on cost are known.
- Calculate cost when you know the selling price and percent markup on cost.

# **Markups Based on Selling Price (100%)** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Calculate dollar markup and percent markup on selling price.
- Calculate selling price when dollar markup and percent markup on selling price are known.
- Calculate selling price when cost and percent markup on selling price are known.
- Calculate cost when selling price and percent markup on selling price are known.
- Convert from percent markup on cost to percent markup on selling price and vice versa.

## **Markdowns and Perishables** (C2, 5, 6, 7, 18, 19)

- Calculate markdowns; compare markdowns and markups.
- Price perishable items to cover spoilage loss.

# **Breakeven Analysis** (C2, 5, 6, 7, 18, 19)

- Calculate contribution margin.
- Calculate breakeven point.

## **Chapter 9 - Payroll**

# **Calculating Various Types of Employees' Gross Pay** (C2, 5, 6, 7, 15, 18, 19)

The student will be able to:

- Define, compare, and contrast weekly, biweekly, semimonthly, and monthly pay periods.
- Calculate gross pay with overtime on the basis of time.
- Calculate gross pay for piecework, differential pay scales, straight commission with draw, variable commission scale, and salary plus commission.

# **Computing Payroll Deductions for Employees= Pay; Employers' Responsibilities** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Prepare and explain the parts of a payroll register.
- Explain and calculate federal and state unemployment taxes.

# **Chapter 10 - Simple Interest**

# **Calculation of Simple Interest and Maturity Value** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Calculate simple interest and maturity value for months and years.
- Calculate simple interest and maturity value by (a) exact interest; and (b) ordinary interest.

# Finding Unknown in Simple Interest Formula (C2, 5, 6, 7, 18, 19)

The student will be able to:

• Using the interest formula, calculate the unknown when the other two (principal, rate, or time) are given.

# U.S. Rule - Making Partial Note Payments before Due Date

The student will be able to:

- List the steps to complete the U.S. Rule.
- Complete the proper interest credits under the U.S. Rule.

# Chapter 11 - Promissory Notes, Simple Discount Notes, and the Discount Process

# **Structure of Promissory Notes; the Simple Discount Note** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Differentiate between interest-bearing and noninterest-bearing notes.
- Calculate bank discount and proceeds for simple discount notes.
- Calculate and compare the interest, maturity value, proceeds, and effective rate of a simple interest note with a simple discount note.
- Explain and calculate the effective rate for a Treasury bill.

# **Discounting an Interest-Bearing Note before Maturity** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Calculate the maturity value, bank discount, and proceeds of discounting an interestbearing note before maturity.
- Identify and complete the four steps of the discounting process.

# **Chapter 12 - Compound Interest and Present Value**

# **Compound Interest (Future Value)--The Big Picture** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Compare simple interest with compound interest.
- Calculate compound amount and interest manually and by table lookup.
- Explain and compute effective rate (APY).

## **Present Value--The Big Picture** (C2, 5, 6, 7, 18, 19)

The student will be able to:

- Compare present value (PV) with compound interest (FV).
- Compute present value by table lookup.
- Check present value answer by compounding.

# **Chapter 14 – Installment Buying**

## **Cost of Installment Buying** (C2, 5, 6, 7, 18, 19)

- Calculate the amount financed, finance charge, and deferred payment.
- Calculate the estimated APR by table lookup.
- Calculate the monthly payment by formula and by table lookup.

# **Revolving Charge Credit Cards** (C2, 5, 6, 7, 18, 19)

Calculate the finance charges on revolving charge credit card accounts.

# **CAMPUS GUIDELINES**

## **CHILDREN ON CAMPUS**

Many of the students attending classes at South Plains College are also parents who value the opportunity to participate in higher education. Sometimes students are faced with the decision of whether to remain at home with their children, bring children with them to class, or be absent from class. The following guidelines address concerns for the safety of children on campus and provide for an environment conducive to learning:

- Students are not allowed to bring children to class and will be asked to leave in the
  interest of providing an environment conducive for <u>all</u> students enrolled in the class.
  Students are responsible for adherence to the attendance requirements set forth by
  the instructor in the course syllabus.
- Children may not be left unattended. In order to provide for the safety of children on campus, parents or other guardians are responsible for supervising children while utilizing services or conducting business on campus.
- 3. <u>Disruptive children will not be allowed to interfere with college business.</u> Parents or other guardians are responsible for supervising and controlling the behavior of children they have brought on campus.

### **SPC Standard Disability Statement**

Students with disabilities, including but not limited to physical, psychiatric, or learning disabilities, who wish to request accommodations in this class should notify the Disability Services Office early in the semester so that the appropriate arrangements may be made. In accordance with federal law, a student requesting accommodations must provide acceptable documentation of his/her disability to the Disability Services Office. For more information, call or visit the Disability Services Office at Levelland (Student Health & Wellness Office) 806-716-2577, Reese Center (Building 8) 806-716-4675, Lubbock Center 806-716-4675 or Plainview Center (Main Office) 806-716-4302 or 806-296-9611.

#### **Non-Discrimination Statement**

South Plains College does not discriminate on the basis of race, color, national origin, sex, disability or age in its programs and activities. The following person has been designated to handle inquiries regarding the non-discrimination policies: Vice President for Student Affairs, South Plains College -1401 College Avenue, Box 5, Levelland, TX 79336, 806-894-9611

## **DIVERSITY STATEMENT**

In this class, the teacher will establish and support an environment that values and nurtures individual and group differences and encourages engagement and interaction. Understanding and respecting multiple experiences and perspectives will serve to challenge and stimulate all of us to learn about others, about the larger world, and about ourselves. By promoting diversity and intellectual exchange, we will not only mirror society as it is, but also model society as it should and can be.

## **GENERAL SAFETY ON CAMPUS**

South Plains College recognizes the importance of safety on campus. The protection of persons and property is a responsibility that we all share. Personal safety begins with the individual. The following guidelines are intended to assist you in protecting yourself and to encourage practices that contribute to a safe environment for our campus community.

- Never leave your personal property unsecured or unattended.
- Look around and be aware of your surroundings when you enter and exit a building.
- Whenever possible, avoid walking alone, particularly after dark. Walk to your vehicle with other class members or request that the Security Guard walk you to your car.
- When approaching your vehicle, keep your keys in your hand; look under your car and in the back seat and floorboard. Lock the doors as soon as you are inside your car.

#### **FOOD AND DRINK IN CLASSROOMS**

It is the policy of South Plains College not to permit food or drink in the classrooms or laboratories.

In case of emergency, contact the following numbers but DO NOT leave a voice mail message:

894-9611, ext. 2338 - Levelland Campus

747-0576, ext. 4677 - Lubbock Center

885-3048, ext. 2923 - Reese Center (mobile 893-5705)