

STV21 : Business Math and Calculators

General Information

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Course Code (CB01) :	STV21
Course Title (CB02) :	Business Math and Calculators
Department:	STV
Proposal Start:	Spring 2025
TOP Code (CB03) :	(0502.00) Accounting
CIP Code:	(52.0302) Accounting Technology/Technician and Bookkeeping.
SAM Code (CB09) :	Possibly Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000608718
Curriculum Committee Approval Date:	05/22/2024
Board of Trustees Approval Date:	07/16/2024
Last Cyclical Review Date:	05/22/2024
Course Description and Course Note:	STV 21 increases students' basic math skills, taught in the context of payroll and banking. The course includes instruction in basic arithmetic, calculators by touch, speed development on calculators, and calculator functions. Lecture/Demonstration 160 hours. Note: Students may enter at any time, and the curriculum is individualized. The course is self- paced. Students may complete one or more sections. This is a pass/ no pass course.
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none">Noncredit
Mode of Delivery:	
Author:	
Course Family:	

Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none">Vocational (short-term): Non-Credit
Alternate Discipline:	No value
Alternate Discipline:	No value

Course Development

Basic Skill Status (CB08)

Course is not a basic skills course.

Allow Students to Gain Credit by Exam/Challenge

Course Special Class Status (CB13)

Course is not a special class.

Pre-Collegiate Level (CB21)

Not applicable.

Grading Basis

- Pass / No-Pass Only

Course Support Course Status (CB26)

Course is not a support course

General Education and C-ID

General Education Status (CB25)

Not Applicable

Transferability

Not transferable

Transferability Status

Not transferable

Units and Hours

Summary

Minimum Credit Units (CB07) 0

Maximum Credit Units (CB06) 0

Total Course In-Class (Contact) Hours 160

Total Course Out-of-Class Hours 0

Total Student Learning Hours 160

Credit / Non-Credit Options

Course Type (CB04)

Non-Credit

Noncredit Course Category (CB22)

Workforce Preparation.

Noncredit Special Characteristics

No Value

Course Classification Code (CB11)

Workforce Preparation Enhanced Funding.

Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience

Education Status (CB10)

Variable Credit Course

Weekly Student Hours

	In Class	Out of Class
Lecture Hours	160	0
Laboratory Hours	0	0
Studio Hours	0	0

Course Student Hours

Course Duration (Weeks)	18
Hours per unit divisor	54
Course In-Class (Contact) Hours	
Lecture	160
Laboratory	0
Studio	0

Total 160

Course Out-of-Class Hours

Lecture	0
Laboratory	0
Studio	0
Total	0

Time Commitment Notes for Students

This is a self-paced course in an open-entry, open-exit lab environment.

Units and Hours - Weekly Specialty Hours

Activity Name	Type	In Class	Out of Class
No Value	No Value	No Value	No Value

Pre-requisites, Co-requisites, Anti-requisites and Advisories

Advisory

ESL30 - ENGLISH AS A SECOND LANGUAGE LEVEL 3

Objectives

- Write paragraphs at the low-intermediate level with sufficient unity.
- Develop coherence and mechanical accuracy.
- Demonstrate mastery of grammatical structures studied at a level sufficient to pass unit tests and the divisional grammar mastery test for this level.
- Converse at a functional level adequate for everyday use on the campus and in the community.
- Respond to questions about recorded and live speeches, dialogues, role plays, and lectures.
- Decode 2,500-word reading passages, respond to inference and recall questions, and utilize a monolingual English dictionary to advantage.

Entry Standards

Entry Standards

Course Limitations

Cross Listed or Equivalent Course

Specifications

Methods of Instruction

Methods of Instruction Lecture

Methods of Instruction Laboratory

Methods of Instruction Discussion

Methods of Instruction Tutorial

Out of Class Assignments

N/A

Methods of Evaluation

Rationale

Exam/Quiz/Test Completion of textbook/workbook material
Exam/Quiz/Test Calculator timings for speed and accuracy
Exam/Quiz/Test Section tests
Exam/Quiz/Test Final examination

Textbook Rationale

No Value

Textbooks

Author	Title	Publisher	Date	ISBN
No Value	No Value	No Value	No Value	No Value

Other Instructional Materials (i.e. OER, handouts)

Description Instructor-textbook and supplementary materials for the Business Math and Calculator class provide numerous benefits tailored to the needs of our students. (Textbook available for purchase exclusively at the Garfield Campus bookstore for easy access.) These materials are meticulously crafted to incorporate real-world business scenarios, practical examples, and relevant exercises that enhance understanding and application of mathematical concepts in business contexts. This model enhances the overall learning experience, fosters student engagement, and supports academic success in the Business Math and Calculator class.

Author No value

Citation No value

Online Resource(s) No value

Materials Fee

No value

Learning Outcomes and Objectives**Course Objectives**

Apply functions (add, subtract, multiply, and divide whole numbers, fractions, and decimals).

Compute percentages, ratios, and proportions.

Compute payroll.

Compute mathematical computations of measurements.

Calculate measurements of central tendency.

Calculate payroll costs.

Perform bank/checking functions.

Solve word problems involving the above-mentioned mathematical principles.

Calculate by touch at least 100 strokes per minute with fewer than one error per minute.

Use the constant, add mode, memory, and round-off functions.

Solve business/accounting problems using the calculator.

Use the numeric pad on the computer.

SLOs

Apply mathematical strategies to solve business problems in areas such as banking and payroll.

Expected Outcome Performance: 70.0

STV

Analyze company financial data.

Account Clerk I Certificate

STV
General Front Office Clerk III
Certificate

Compile and edit spreadsheets using common business software and/or the calculator.

ILOs
Core ILOs

Use quantitative and/or analytical mathematical skills to solve problems and to interpret, evaluate, and process information and data to draw logical conclusions and support claims.

Develop proficiency and speed utilizing an electronic calculator.

Expected Outcome Performance: 70.0

STV
Account Clerk I Certificate

Analyze company financial data.

STV
General Front Office Clerk III
Certificate

Compile and edit spreadsheets using common business software and/or the calculator.

ILOs
Core ILOs

Demonstrate depth of knowledge in a course, discipline, or vocation by applying practical knowledge, skills, abilities, theories, or methodologies to solve unique problems.

Employ mathematical computations and common terms used in business contexts.

Expected Outcome Performance: 70.0

STV
Account Clerk I Certificate

Analyze company financial data.

STV
General Front Office Clerk III
Certificate

Compile and edit spreadsheets using common business software and/or the calculator.

ILOs
Core ILOs

Use quantitative and/or analytical mathematical skills to solve problems and to interpret, evaluate, and process information and data to draw logical conclusions and support claims.

Course Content

Lecture Content

Add, Subtract, Multiply, and Divide (35 hours)

- Whole Numbers
- Fractions
- Decimals

Mathematical Conversion (10 hours)

- Fractions to decimals and decimals to fractions
- Decimals to percent and percent to decimals
- Fractions to percent and percent to fractions

Word Problems (15 hours)

- Identifying and understanding the problem,
- Developing possible solutions,
- Choosing the correct operations
- Implementing the chosen solution

Percentages, Ratio, and Proportions (10 hours)

- Understand and practice the concept of ratio and proportions
- Solve problems related to percentage
- Make use of the concept of percentage to solve problems of profit, loss and simple interest

Bank Reconciliations/Checking Accounts (10 hours)

- Bank statement reconciliation
- Record keeping for a dishonored check
- Electronic funds transfer
- Debit cards
- Petty cash

Payroll (10 hours)

- Gross pay
- Hourly
- Commission
- Overtime
- Unit Pay
- Differential
- Rate base and portion formula

Units of Measurement: American and Standard International (SI)(10 hours)

- Length
- Time
- Temperature
- Mass
- Volume

Measurements of Central Tendency (10 hours)

- Summarize a set of data by one single number
- Distinguish between averages and medians
- Compute averages and medians
- Draw meaningful conclusions from a set of data
- Type of central tendency most useful in a particular situation

Understanding Calculator Functions (20 hours)

- Gross total
- Item count
- Constant
- Add mode
- Round off
- Total
- Correct entry
- Add/equal, subtract/equal
- Memory

Adding and Subtracting by Touch (25 hours)

- Use of right hand
- Proper posture

Timings (5 hours)

- Work on accuracy and speed

Total hours: 160

Additional Information

Is this course proposed for GCC Major or General Education Graduation requirement? If yes, indicate which requirement in the two areas provided below.

No

GCC Major Requirements

No Value

GCC General Education Graduation Requirements

No Value

Repeatability

Repeatable

Justification (if repeatable was chosen above)

Non-credit courses

Resources

Did you contact your departmental library liaison?

No

If yes, who is your departmental library liaison?

No Value

Did you contact the DEIA liaison?

No

Were there any DEIA changes made to this outline?

No

If yes, in what areas were these changes made:

No Value

Will any additional resources be needed for this course? (Click all that apply)

- No

If additional resources are needed, add a brief description and cost in the box provided.

No Value

