

## ABSE22 : ARITHMETIC 1B

### General Information

Author:	<ul style="list-style-type: none"> <li>Jesus Carino</li> </ul>
Course Code (CB01) :	ABSE22
Course Title (CB02) :	ARITHMETIC 1B
Department:	ABSE
Proposal Start:	Winter 2025
TOP Code (CB03) :	(4930.62) Secondary Education (Grades 9-12) and G.E.D.
CIP Code:	(53.0201) High School Equivalence Certificate Program.
SAM Code (CB09) :	Non-Occupational
Distance Education Approved:	No
Will this course be taught asynchronously?:	No
Course Control Number (CB00) :	CCC000329270
Curriculum Committee Approval Date:	05/08/2024
Board of Trustees Approval Date:	06/18/2024
Last Cyclical Review Date:	05/08/2024
Course Description and Course Note:	<p>ABSE 22 introduces students to higher level arithmetic: statistics, measurement, and geometric and algebraic principles. This course is designed to meet the needs of students who wish to improve their math skills and to earn high school credit. Laboratory 100 hours.</p> <p>Note: This is a self-paced course in an open-entry, open-exit lab environment. Successful completion of the course results in 5 high school credits.</p>
Justification:	Mandatory Revision
Academic Career:	<ul style="list-style-type: none"> <li>Noncredit</li> </ul>

### Academic Senate Discipline

Primary Discipline:	<ul style="list-style-type: none"> <li>Mathematics-Basic Skills: Non-Credit</li> </ul>
Alternate Discipline:	No value
Alternate Discipline:	No value

### Course Development

<b>Basic Skill Status (CB08)</b> Course is a basic skills course.	<b>Course Special Class Status (CB13)</b> Course is not a special class.	<b>Grading Basis</b> <ul style="list-style-type: none"> <li>Grade Only</li> </ul>
<input type="checkbox"/> Allow Students to Gain Credit by Exam/Challenge	<b>Pre-Collegiate Level (CB21)</b> Not applicable.	<b>Course Support Course Status (CB26)</b> Course is not a support course

## Transferability & Gen. Ed. Options

### General Education Status (CB25)

Not Applicable

### Transferability

Not transferable

### Transferability Status

Not transferable

## Units and Hours

### Summary

<b>Minimum Credit Units (CB07)</b>	0
<b>Maximum Credit Units (CB06)</b>	0
<b>Total Course In-Class (Contact) Hours</b>	100
<b>Total Course Out-of-Class Hours</b>	0
<b>Total Student Learning Hours</b>	100

### Credit / Non-Credit Options

#### Course Type (CB04)

Non-Credit

#### Noncredit Course Category (CB22)

Elementary and Secondary Basic Skills.

#### Noncredit Special Characteristics

No Value

#### Course Classification Code (CB11)

Other Non-Credit Enhanced Funding.

Variable Credit Course

#### Funding Agency Category (CB23)

Not Applicable.

Cooperative Work Experience

Education Status (CB10)

### Weekly Student Hours

	In Class	Out of Class
Lecture Hours	0	0
Laboratory Hours	100	0
Studio Hours	0	0

### Course Student Hours

<b>Course Duration (Weeks)</b>	18
<b>Hours per unit divisor</b>	54
<b>Course In-Class (Contact) Hours</b>	
Lecture	0
Laboratory	100
Studio	0
<b>Total</b>	100
<b>Course Out-of-Class Hours</b>	
Lecture	0
Laboratory	0
Studio	0
<b>Total</b>	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

ABSE21 - ARITHMETIC 1A (in-development)

#### Objectives

- Identify properties of addition and multiplication.
- Perform the indicated operations and reduce answers to lowest terms.
- Simplify expressions.
- Find the perimeter and area of the figures.
- Convert decimals to percent.
- Write each percent as a fraction or a mixed number in lowest terms.

### AND

### Advisory

ESL40 - ENGLISH AS A SECOND LANGUAGE LEVEL 4

#### Objectives

- Demonstrate mastery of grammatical structures studied at a level sufficient to pass unit tests and the divisional grammar mastery test for this level.
- Decode 3,000-word reading passages, identify main ideas and supporting details, make inferences, and summarize short passages.

## Entry Standards

Entry Standards

## Course Limitations

Cross Listed or Equivalent Course

## Specifications

## Methods of Instruction

Methods of Instruction Independent Study

Methods of Instruction Multimedia

Methods of Instruction Collaborative Learning

## Out of Class Assignments

N/A

## Methods of Evaluation

### Rationale

Other

Completion of individualized contract

Exam/Quiz/Test

Unit tests

## Textbook Rationale

The common core textbooks do not have a more recent edition.

## Textbooks

Author

Title

Publisher

Date

ISBN

McKeague, Charles.

Basic College Mathematics.

San Louis Obispo:  
XYZ,

2015.

978-1630980078

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

Description

Instructor-generated background information on the mathematics being studied; duplicated handouts from books with copyright permission.

Author

No value

Citation

No value

Online Resource(s)

No value

## Materials Fee

No value

## Learning Outcomes and Objectives

### Course Objectives

Explain and calculate mean, median and mode in the set of numbers.

Perform conversion factors.

Find the perimeter and area of the geometric figures.

Compute problems using positive and negative numbers and algebraic operations.

Solve equations with one variable.

## SLOs

**Use measures of central tendency (range, mean, mode, median) to create and interpret visual representation of data.**

Expected Outcome Performance: 70.0

ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
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.

**Use measurements involving U.S. customary and metric length, weight, temperature, and liquid, and calculate conversions within and between the two systems.**

Expected Outcome Performance: 70.0

ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
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.

**Demonstrate knowledge of basic geometric vocabulary and shapes; calculate circumference, perimeter, and area.**

Expected Outcome Performance: 70.0

ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
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.

**Simplify numeric and algebraic expressions.**

Expected Outcome Performance: 70.0

ABSE NCR AHS Diploma	Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.
ABSE NCR Adult Basic Education	Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.
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.

<p><i>ILOs</i> Core ILOs</p>	<p>Analyze and solve problems using critical, logical, and creative thinking; ask questions, pursue a line of inquiry, and derive conclusions; cultivate creativity that leads to innovative ideas.</p>
	<p>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.</p>
<p><i>ABSE</i> NCR AHS Diploma</p>	<p>Apply mathematical ways of thinking to real world issues and challenges using mathematical modeling and problem solving techniques.</p>
<p><i>ABSE</i> NCR Adult Basic Education</p>	<p>Compute and solve real world problems using basic operations with whole numbers, fractions, decimals, and percents.</p>

## Additional SLO Information

**Does this proposal include revisions that might improve student attainment of course learning outcomes?**

No

**Is this proposal submitted in response to learning outcomes assessment data?**

No

**If yes was selected in either of the above questions for learning outcomes, explain and attach evidence of discussions about learning outcomes.**

No Value

**SLO Evidence**

No Value

## Course Content

**Lecture Content**

No value

**Laboratory/Studio Content**

**Descriptive Statistics (20 hours)**

- Mean, median, and mod
- Tables and bar charts
- Scatter diagrams and line graphs
- Pie charts

**Measurement (20 hours)**

- Length
- Area
- Volume
- Weight
- Conversion of measurement systems
  - Celsius and Fahrenheit
  - Metric and standard

**Geometry (20 hours)**

- Perimeter and circumference
- Area
- Volume and surface area
  - Rectangular solid
  - Cylinder

- Sphere
- Calculating missing measurements using similar figures

**Introduction to Algebra (20 hours)**

- Positive and negative numbers
- Addition with negative numbers
- Subtraction with negative numbers
- Multiplication with negative numbers

**Solving Equations (20 hours)**

- The distributive property and algebraic expressions
- The addition property of equality
- The multiplication property of equality
- Linear equations in one variable
- Applications
  - Number problems
  - Geometry problems
  - Algebraic problems

**Total hours: 100**

## 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